# Financial Accounting for <br> Management 

Fourth Edition

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Previously, he has been a consultant with several government and nongovernment agencies in various countries including Cambodia, India, Laos, Sri Lanka, Thailand and Vietnam.

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He had also worked as residential academic in many international locations including Denmark, Nigeria, Singapore, and U.A.E. His research work has been supported by the London Business School and the National Stock Exchange of India. He has been ranked by Social Science Research Network (SSRN) as one of the top authors (2007) in this profession, and has been conferred the Best Young Teacher Award (2005) by the Association of Indian Management Schools (AIMS).

Dr. Kakani's areas of interest include Accounting and Financial Analysis, Corporate Finance, Corporate Strategy and Business Groups.

# Financial Accounting for Management 

## Fourth Edition

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This book is about accounting and, more specifically, accounting for the non-specialist.
Let us begin with something that may surprise many readers. Accounting in the present form is at least six centuries old. It has evolved with every change in the organized economic activity. In the recent past it has become well structured with a better theoretical basis with the advent of an era of accounting standards issued by professional bodies.

The first chapter, therefore, deals with the evolution of accounting. We believe that the historical developments that led to the development of accounting are essential to an understanding of its present state and future directions it may take. An insight into the historical development of accounting will also highlight the inherent strength of the basic methodology. Some of the ideas such as capital maintenance run as a core to the accounting practice. Keeping these insights at the back of your mind will lead to better judgment when it comes to taking accounting decisions.

The emphasis here is not so much on the mechanical practice but on the conceptual understanding of the methodology. The objective is to ensure that the study of this book enables the reader to understand accounting numbers in a clearer and better perspective.

There is no dearth of textbooks on accounting. So it may be pertinent to ask why we need another book. This is not a book that is written as a book. This book is evolved from the notes prepared for satisfying the needs of students whom the first author taught for nearly quarter of a century at Indian Institute of Management (IIM), Calcutta. The only motivation was to explain accounting in a logical manner, whereby one could master the methodology based on a deeper insight into the basic structure of accounting.

This book is written primarily with the objective of addressing it to users of accounting information. Accountants may benefit by the logical explanation for most of the ideas taken for granted in practice. It is also targeted towards graduate students of management, as well as anyone dealing with management and investments, who did not have the facility of prior formal training in accounting.

The purpose of the approach followed in this book is also to prepare managers with ability to understand and evaluate accounting reports. A deeper insight into the methodology alone can provide the insight required to unravel complex reporting produced by the practitioners.

The entire accounting methodology consists of two parts, the form and content. Most people mistake the form for the content. In order to master the methodology, one needs to concentrate more on the content and not to get bogged down with the form. The emphasis all along is on the content, and the form is used only to familiarize with the presentation.

The treatment in the book although is based on clearer theoretical understanding as a basis for better practice. The method of learning if effectively followed could substantially minimize the time required to master the subject. A student may feel comfortable to deal with any business transaction and its treatment in accounting after completion of this book.

The accounting methodology we deal with today is rooted in reporting. Information about the business was primarily reported to the owners of the business. All others concerned with the business also utilize these reports. The primary concern, therefore, is in reporting on the wealth of the owners, that is, equity. The whole business is captured in the form of a summarized report, which describes the business as a bundle of assets, or values; and these values claimed first by the outsiders as liabilities and the residual belonging to the owner. This simplification makes the methodology timeless and adaptable. The whole accounting methodology is only an expansion from this basic structure of reporting assets as equal to liabilities plus the owners' equity.

It is only logical to expand and explain revenue and expenses as nothing but an integral part of owners' equity. It will also be interesting to note that this fundamental idea gives the form to accounting. Since business can be viewed only as an equality of two countervailing quantities, all the elements making up this equality should also follow the basic algebraic requirement. This in turn gives the basis for an account as a summarization of increases and decreases with a matching counterpart.

Various aids have been included in the book not only to facilitate learning but also make it interesting. Please see the Visual Walkthrough for details on new features included in the book. We have made use of technology to help in better assimilation through:

- Web Based Learning Resources: We have uploaded a large number of web based learning material for instructors and students on McGraw Hill Education's Online Learning Center (OLC) at http://www.mhhe.com/fam4e. Students seeking conceptual clarity, more information and knowledge will find it very useful. We have included illustrations and exercises, sample annual-report basedassignments, sample project reports, solutions to exercises and questions, Internet Assignments etc.
- QR-code Based Learning Resources: We have included more than 45 Quick Response (QR) codes to enable readers access additional content on their mobile devices. This is a new feature that will make reading easy and interesting.

If this approach builds confidence in the minds of students about accounting methodology and makes it possible to understand and apply it logically, we as the authors of this book will accomplish our goals.

Here's an overview of what each chapter in the book entails:
Chapter 1 tries to place the subject matter of the book in proper perspective. It is intended at clarifying the theoretical foundations of accounting and the meaning of accounting numbers.
Chapter 2 deals with the balance sheet, its structure and content and develops it as the nucleus of accounting. The basis of balance sheet equation and its significance in understanding accounting is emphasized. The expanded multi-item balance sheet is nothing but a simple objective description of a business.
Chapter 3 expands the balance sheet equation to show that income summary or profit and loss account is the expansion of one of the terms in the balance sheet, namely owners' equity.

Chapter 4 elaborates on the statement of cash flow by building on the balance sheet and income statement from a dynamic viewpoint by explaining the process of working capital funds flowing through the system. The logical flow of transactions in an operating cycle enhances the understanding of the cash flowstatement. The treatment in this chapter is unique and highly enhances the understanding of business and its resource needs.
Chapter 5 tries to demonstrate that accounting records are nothing but the mechanical part of the conceptual understanding acquired in the previous chapters. Transaction analysis through recording and summarization along with trial balance worksheet provides an integrated view of the accounting process to the students. The emphasis is on generic accounts than a plethora of accounts, which could be very confusing to a beginner. The approach in this chapter, including chapter exercises, is to give the students a feel of accounting on a completed venture basis. We have added a few more multi-period problems to take the readers through the complete complexity of the process of accounting records.
Chapter 6 adapts the accounting knowledge acquired in the previous chapter to the special case of joint stock companies. The objective is to demonstrate that it is the same accounting adapted to a legal entity. The company law and other regulatory framework take prominence in the accounting of joint stock companies due to the need for protecting investor interest.
Chapter 7 covers the analysis and interpretation of the financial statements from a structural and relational viewpoint. The common size financial statements help understand the statements from its structural viewpoint. It also forms a good basis for inter-unit comparisons. Analysis of relations using ratios and disaggregating of ratios shows the structural relationship among various elements of the financial statement.
Chapter 8 builds on the earlier foundations and takes the reader through the practical hurdles faced in constructing and interpreting the accounting records and the framework of accounting policies. In this chapter, we also look into the common yet complex issues faced by organizations and explain how to deal with various items such as bank reconciliation statements, fixed assets, inventories, intangibles, investments, negotiable instruments, and debentures.

Chapter 9 presents the details of the important accounting standards and makes us aware of the framework behind accounting practices in preparing, and presenting financial statements. Among others, accounting standards related to disclosure practices, changes in accounting policies, fixed assets, contingencies, cash flow statements, and revenue recognition are discussed in detail.
Chapter 10 is new to this edition and focuses on contemporary issues of internal reporting practices, computerization, creative accounting, corporate governance norm and such. It builds on the existing nine chapters and presents the financial reporting practices and corporate governance issues in this age and time.

To enable readers in having an enriching and practical exposure we have included one appendix at the end of the book giving details of a comprehensive project to have hands-on experience of creating, presenting, and understanding financial statements. To simplify understanding, Glossary is given at the end of the book with a number of key words and their explanations.

Neelakantan Ramachandran Ram Kumar Kakani



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We take this opportunity to dedicate this work to our parents.
Comments from readers are most welcome. Please write to ramkumarkakani@gmail.com with your feedback.

## Teaching Plan

As we have discussed in the preface, this book, Financial Accounting for Management, has consistently met the needs of the introductory accounting course at the business schools we taught for over three decades. Having decided that the objective of the textbook was creation of conceptual clarity and connecting learners to accounting in practice, the chapter wise sequencing has also been made in a different fashion to meet these needs.

Deciding on the sequence of chapters in a textbook is a challenge. Every instructor has a desired way of organizing his or her own course. Our loosely constrained sequence of chapters facilitates diverse approaches to teaching and learning.

We believe that there are two broad approaches to teach the subject of financial accounting Conventional Approach and Modern Approach. The Conventional Approach of instructing financial accounting is to teach the students the mechanics of creating accounting records and then take them through the process of creating financial statements and interpreting them. On the other hand, the Modern Approach of instructing is to ensure that the students appreciate the need for all the three financial statements viz., balance sheet, profit and loss account, and cash flow statement and then take them through the process of recording and processing accounting transactions. This approach actually follows accounting through its fundamental logic. The assets liability equity equality form the sum of the business and changes in these quantities as transactions and therefore accounting records and the methodology follows from logical understanding of these fundamental statements.

Though the chapters have been tailored to suit the modern approach of teaching, we believe that our colleagues comfortable with the conventional approach of teaching accounting can easily adapt this book. We suggest the following two chapter wise sequencing to those colleagues who feel comfortable in using the conventional route:

| Start with Chapter 1 | Start with Chapter 1 |
| :---: | :---: |
| $\downarrow$ |  |
| $\downarrow$ |  |
| Chapter 5 |  |
| $\downarrow$ | Chapter 5 |
| Chapter 2 | $\downarrow$ |
| $\downarrow$ | Chapter 2 |
| Chapter 3 | $\downarrow$ |
| $\downarrow$ | Chapter 3 |
| Chapter 6 | $\downarrow$ |
| $\downarrow$ | Chapter 7 |
| $\downarrow$ |  |
| Chapter 8 | $\downarrow$ |
| $\downarrow$ | Chapter 4 |
| $\downarrow$ |  |
| Chapter 4 | Chapter 6 |
| $\downarrow$ | $\downarrow$ |
| Chapter 9 | Chapter 8 |
| $\downarrow$ | $\downarrow$ |
| Chapter 7 | Chapter 9 |
| $\downarrow$ | $\downarrow$ |
| End with Chapter 10 | End with Chapter 10 |

As an example of the book's flexibility, consider our treatment of recording accounting transactions. We introduce accounting records in Chapter 5 and then go on to explain the complexities involved in treating and understanding accounting transactions in Chapters 8 and 9 (while introducing the relevant accounting standards at the same time). Indeed, instructors may consider the option of moving from accounting records in Chapter 5 immediately to Chapters 8 and 9 without interruption in the flow of the material.

As explained earlier, this book has been launched after being convinced that there existed a gap for a textbook that introduces the reader to Financial Accounting in a non-mechanical fashion yet giving him or her good practical inputs.

We have always observed that the classroom environment enlivens the moment an instructor takes the students through a real-world illustration. In fact, we have observed that the student satisfaction levels are positively correlated to the number of real life examples discussed by an instructor. We have spent large amount of time and other resources in interacting with the accounting executives and understanding corporate events to interweave company illustrations to underscore particular concepts and procedures.

A sample list of real world organizations used in the textbook is as follows:

- Ambuja Cements
- Andhra Pradesh Paper Mills Limited
- Arvind Limited
- Ashok Leyland
- Asian Development Bank (ADB)
- Bajaj Auto ltd
- Bank of India
- BCCI
- Bharti Airtel
- BHEL
- Blue Dart Express
- Café Coffee Day (CCD)
- Chambal Fertilizers and Chemicals
- Coal India Limited (CIL)
- Colgate Palmolive India
- Deepak Fertilizers and Chemicals
- Deepak Fertilizers and Petrochemicals Corporation Limited (DFPCL)
- DHL
- Educomp Solutions
- Financial Technologies (India)
- Fortis Financial Services
- Garware Marine
- Global Trust Bank (GTB)
- Hatsun Agro Product Ltd.
- HDFC Bank Limited
- Hero Honda
- Hexaware Technologies Limited
- Hindustan Unilever
- ICICI Bank
- ICICI Lombard General Insurance
- Indiabulls Real Estate Limited
- IndiGo
- Infosys Technologies
- International Finance Corporation (IFC)
- ITC Limited
- ITI
- IVRCL Limited
- Jet Airways
- Kaushalya Infrastructure Development Corporation
- Kilburn Chemicals
- Lawreshwar Polymers
- Lehmann Brothers
- Linc Pen and Plastics Limited
- Mahindra Satyam
- Marico Industries
- Maxwell Industries
- McDonald's
- MMTC
- MRO-TEK
- Mukand Engineers
- Mukta Arts
- Nagarjuna Fertilizers and Chemicals
- NALCO
- Narayan SewaSansthan
- Nestle India
- Neuland Laboratories Limited
- Noida Toll Bridge Co.
- NTPC
- Oil and Natural Gas Corporation Ltd.
- Pantaloons Fashion \& Retail Limited
- Pioneer Distilleries Ltd.
- Power Trading Corporation
- PTC India Limited
- Raymond Limited
- Reliance Industries Limited (RIL)
- Revathi Equipment
- Riba Textiles Ltd
- Rohit Paper \& Pulp
- Satyam
- Seshasayee Paper Mill
- Siam Cement Thailand
- Siemens
- Silverline Technologies Limited
- SJVN Ltd
- SKS Microfinance Limited
- Sterlite Industries
- Sun Pharmaceuticals
- Tanla Solutions Limited
- Tata Consultancy Services Limited (TCS)
- Tata Motors
- Tata Steel
- Television Eighteen
- Tesco PLC
- Tools India Limited
- Torrent Power Limited
- TV Today Network
- Vakrangee Software
- Vijaya Bank
- Vinyl Chemicals
- WimPlast Limited
- Wipro Technologies
- Zee Telefilms


## Pedagogy

We have imparted many pedagogical improvements in this textbook to assist student learning:

1. The beginning of each chapter contains a list of learning objectives followed by the structure of essential topics to be covered. It holds a real life clip to boost student interest.
2. Wherever need for an exhibit, visual aid and flowcharts existed, we have included them. For example, consider the introduction of operating cycle in Chapter 2 to elucidate various items under current assets.
3. To ease learning, the concepts in Chapters $2,3,4,7$ and 10 are clarified over running illustrations. Similarly, Chapters 5, 8 and 9 have been split into easily identifiable individual parts wherein each part ends with an illustration for self-study.
4. To give students a feel of the differences in Indian accounting standards (Ind-AS) vis-à-vis International financial reporting standards an exclusive annexure has been devoted. Same has been to ensure capturing of the differences in Indian accounting standards vis-à-vis earlier accounting standards in India (known as, AS)
5. At the end of each Chapter, we have a 'annual report based assignment' series (preferably done in a group) to consolidate on a student's learnings momentum.
6. At the end of each Chapter, we have added a list of useful annexures containing supplementary reading material, solved illustrations, exercises and case material for the students.
7. At the end of the book, we have included a comprehensive project (as appendix) and glossary to give students a feel of going through the tough reality and yet connect with the concepts.
8. A separate website has been created to accompany this textbook. The Online Learning Centre which can be accessed with url: http://www.mhhe.com/fam4e, contains valuable links, blogs, self-assessment quizzes, and much more. The site will be updated periodically to include new features.

## Continuous Assignment Material and Project Material

Our teaching experience shows that the students learn the subject most when they actually do a long project and continuous assignments on their own. In fact, our old students always talk about the high learning value of these projects and assignments in our course. A successful completion of a project and hands on experience of annual report based assignments gives a student the confidence of being able to construct accounting records and understand financial statements. We have included the Comprehensive Assignment as a book-end Appendix. We have also included a few sample assignments on the Online Learning Center of the book.

## Teaching Tools for Instructors

The key teaching tools available to instructors on the OLC include Instructor's Manual, Test Banks, and PowerPoint Presentations.

The comprehensive instructor's resource material pulls together the teaching tools so that instructors can use the textbook easily and effectively in the classroom.

The Test Bank contains a large bank of questions made up of multiple choices, case-based, and quantitative problems with various levels of difficulty.

The PowerPoint presentations for each chapter can be viewed electronically in the classroom or can be printed as black-and-white transparency slides.
Relationship between
Financial Accounting, Management Accounting and Cost Accounting
The information flow diagram below gives an account of information flow exclusive and common to financial accounting, management accounting and cost accounting.

Management Accounting
(P): Information flow exclusive to financial accounting
(Q): Information flow common to both financial accounting and management accounting
(R): Information flow exclusive to management accounting
(S): Information flow common to both management accounting and cost accounting
(T): Information flow exclusive to cost accounting

## Learning Objectives

After studying this chapter, you should be able to:
LO 1 Understand the historical development of accounting as a product of economic environment
LO 2 Categorize the basic pillars on which the accounting methodology is built
LO 3 Describe the focus of accounting as information involving measurement and valuation
LO 4 Discuss the classical and modern forms of business entities
LO 5 Explain the basic framework of accounting and accounting standards

## Learning Objectives

Each chapter begins with learning objectives as per Bloom's Taxonomy to enable outcome based learning. It outlines what each chapter aims at achieving and what the reader should know on its completion.

## Not So Funny Accounting Problems @Tesco

Tesco PLC is a British multinational grocery and general merchandise retailer. In 2014, it came in news in the wake of an unfortunate accounting scandal. It was found to have overstated its profits by about $₹ 2,500$ crore after revenue recognition irregularities were spotted in its half-yearly results. This trick was as old as book-keeping itself: the premature recognition of revenue.

Suppliers make payments to supermarkets that meet certain sales targets for their products, run

## Opening Vignette

Chapter-opening real cases offering insights into the topics under discussion.
promotions or place the goods in eye-catching places, such as at the end of aisles. Tesco managers appear to have been very ambitious in capturing these "rebates". Perhaps, they also underreported the costs of stolen and out-of-date produce. The supermarket originally predicted its half-year trading profit would be around $£ 1.1$ bn, but this figure was cut back by $£ 263 \mathrm{~m}$. The above discussion brings some interesting questions:

While reading the news section of a popular newspaper, you often come across statements such as 'Airline Industry to Lift Annual Profit $80 \%$ on Indian Surge'. What Does that Mean? It means that the industry is having a good time due to increased demand from the Indian contingent. And no wonder among financial statements, people talk most about Statement of Profit and Loss.

The primary motive of running a business enterprise; say, Google Inc. is its income/profit. Yes, owners of Google Inc. would be happier with a high-profit firm than a non-profit making firm. Hence, the profits are the compensation derived by an entrepreneur for the capital invested and risks incurred in running a firm (think of the reasons for the existence of Google and its benefits to its owners).


Features across crucial chapters to introduce the subject under discussion in a lighter vein.

## Spotlight

Boxed inserts offering additional reading material on the pertinent topic, mostly in the form of examples.

## SPOTHGHT 1.1

## Accounting Profession in THE TWENTY-FIRST CENTURY

Given large changes in the business environment and information computing (say, cloud computing and hoisting), the accountant, the accounting firm, and the accounting profession of the twenty-first century are quite different from what existed earlier. In contrast to a bookkeeper manually recording entries in a large bound volume (khata), an accountant is now responsible for information regarding all facets of a business and is dependent on the latest technology for processing that information. In contrast to small local firms (say, local accounts firm in New York), accounting firms now can be varying-sized international organizations located elsewhere (say, Pune) with reported revenues of thousands-to-billions of dollars.

## Walkthrough

|  |  | Illustration 5.1 |
| :---: | :---: | :---: |
| The following information relates to Manoranjan's Enterprise for a month. |  |  |
| Date | Transaction | Amount (₹) |
| January 1 | Starts business with | 1,00,000 |
| January 8 | Buys merchandise and stores them | 80,000 |
| January 10 | Receive order for half the merchandise from A |  |
| January 15 | Delivered the merchandise, customer invoiced | 50,000 |
| January 17 | Received order for other half of merchandise |  |
| January 31 | Customer A pays | 50,000 |

## Example 9.1

Ms. Madhu Toshniwal, has 100 percent investment in Mad Max and Co, and is a director of M/s Saifiya \& Co. Further, $\mathrm{M} / \mathrm{s}$ Beck \& Co. has 100 percent investment in M/s Saifiya \& Co.

For M/s Saifiya \& Co financial statements, Mad Max \& Co. is related to M/s Saifiya \& Co because Ms. Madhu

## Examples

 Toshniwal controls Mad Max and Co. and is a member of the key management personnel of M/s Saifiya \& Co. For M/s Saifiya \& Co financial statements, Mad Max \& Co. is also related to it if Ms. Madhu Toshniwal is director of $\mathrm{M} / \mathrm{s}$ Saifiya \& Co. and not of $\mathrm{M} / \mathrm{s}$ Beck \& Co.Thought-provoking, short cases offering deeper insights on the topics discussed.

### 3.10.8 Operating Expenses

The cost of goods sold normally includes all those costs of making the inventory available for sale, and are directly traceable to the inventory to be sold. All those expenses, which are necessary to run the business enterprise or the organization, which are not directly associated with the company's output on a cause and effect relationship, are usually termed as operating expenses. Usually, these expenses include all items of expenses with respect to administration and provision of supports for the operation of business. It is a usual practice to segregate these expenses as falling under two broad groups, 'selling expenses' and 'general administrative expenses'. It is also possible to accumulate the expenses on the basis of material, personnel and other expenses, as in the case of the financial statement of Tools India Limited.
 "What are operating Expenses?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/529


## QR Codes

Enable readers to access additional reading material on their mobile devices

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) Cash payments relating to forward contracts are held for dealing/trading purpose will be classified as investing activity.
(h) Cash payments to acquire shares or debt instrument of other enterprises and interests in joint ventures will be classified as investing activity.
(i) Cash repayments of amount borrowed will be classified as operating activity.



A set of questions for quick review.

## Summary

Provides easy recapitulation on the concepts discussed in the chapter.

## SUMMARY

The flow of chapters till this point involved simplistic illustrations focusing on financial accounting of small-sized organization's to capture the underlying concepts and theoretical concerns. Delving further on financial accounting's reality connect involves increasing the maze of issues faced. This process started in this chapter. As the size of the organization increases in terms of its size, the number of transactions, variety of transactions, and such results in increasing the number of practical accounting issues.

Valuation and book treatment of tangible fixed assets, non-tangible fixed assets, non-current investments, and other such assets are one aspect of accounting challenge. We dealt with the same in this chapter by discussing accounting treatment of investment, depreciation and amortization norms. Valuation and book treatment of working capital items including cash, bank balances, inventory, receivables and payables are the other aspects of accounting challenge. We dealt with the same in this chapter by discussing accounting

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Asset Efficiency
- Common Size Statements
- Long-term Liquidity
- Comparative Financial Statement

Financial Ratios

- Financial Statement Analysis
- Financial Statements
- Gearing
- Index-based Statements
- Long-term Solvency
- Margin-based Ratios
- Operational Efficiency
- Profitability
- Short-term Liquidity
- Solvency Ratios



## Key Words

Facilitates easy retention of important accounting terminologies.

## Solved Problem 6.1

## Solved Problems

Numerical problems with step-wise solutions for students to hone their problem solving skills.

Dhanush Sports Goods Ltd issued $2,00,000$ shares of ₹ 100 each, at a premium of ₹ 20 per share, to Shyamlal, on which he paid ₹ 40 on application, but failed to pay ₹ 40 (including premium) on allotment. On a subsequent failure to pay the first and final call of ₹ 40 , his shares were forfeited. Pass the necessary journal entries.

## Walkthrough

| EXERCISES |  |
| :--- | :--- |
| Multiple Choice Questions | LO 1 EASY |
| 1. Depreciation is related to |  |
| (a) Evaluating the efficiency of an asset |  |
| (b) Valuing the asset |  |
| (c) Distributing the cost of the asset over its useful life |  |
| (d) None of the above |  |
| True or False | LO 1 EASY |
| 1. Fixed assets with an indefinite life are not depreciated. |  |
| 2. All cheques are bills of exchange, but all bills of exchange are not cheques. | LO EASY |

## Discussion Questions

1. What is the difference between the 'straight-line method of depreciation' and the 'written down value method'? Which method is more appropriate for reporting earnings? LO 1 MEDIUM
2. What is the difference between a 'bill of exchange' and a 'promissory note'? LO 5 MEDIUM

## Review Questions

1. Pappu \& Gappu Textiles began operations in 2010. At the beginning of the year the company purchased a machinery of $₹ 1,00,000$, with an estimated useful life of 10 years and no residual value During the year, the company had made an expense of $₹ 20,000$ and $₹ 80,00$ as salary and other expenses, respectively. The purchase and sales of inventory are as follows:

## INTERNET ASSIGNMENTS

## Assignment 7.1 Financial Statement Analysis

## Internet Assignments

Web-based assignments for self-practice and assessment.

## Exercises

Practice questions comprising MCQs, True or False, Discussion Questions, Review Questions, etc.

On the website of this book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.
To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online website.

## MINI CASES

## Case 5.1 Ram Traders: Accounting Records

This case is in continuation to Mini Case 2.6 of Chapter 2, on Ram Traders Limited and his chilli business. Please solve the same problem using book-keeping process of recording entries and creating financial statements.

Case 5.2 Third Period of Kataria Plastics
LO 5, 6 DIFFICULT
This case is in continuation to Solved Problem 5.2 of this Chapter on Kataria Plastics. The promoter of the firm, Kattu provides you with its third period of transactions. You are required to prepare its trial

Mini Cases [with Questions]

## Real-life challenging short cases with discussion questions for critical thinking.

Level of Difficulty
Lelf-Assessment Questions
LO 1 EASY

1. Explain the process of preparation of an accounting standard.
2. Take up any seven accounting standards and mention the accounting principles behind them.
LO 4 MEDIUM understanding levels as Easy, Medium GAAP. Mention the significant differences.


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Conceptual Basis of Accounting

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Understand the historical development of accounting as a product of economic environment
LO 2 Categorize the basic pillars on which the accounting methodology is built
LO 3 Describe the focus of accounting as information involving measurement and valuation
LO 4 Discuss the classical and modern forms of business entities
LO 5 Explain the basic framework of accounting and accounting standards
LO 6 Explain the objectives of accounting along with the accounting concepts
LO 7 Categorize users of accounting information with their primary purposes
LO 8 Review the institutional layers in a globalized world behind creation of accounting norms
LO 9 Illustrate the various branches of accounting and their utility for various users

Chanakya on Accounting ...
'It is possible to know even the path of birds flying in the sky but not the ways of government servants who hide their (dishonest) income' [Kautilya's Arthashastra, p. 283].

Chánalkya (350-283 BC) was an adviser of the first Maurya Emperor Chandragupta, and was the chief architect of his rise to power. Chanakya wrote the Arthashastra, the science of wealth and welfare, during the latter half of the 4th century B.C. The Arthashastra is a theoretical treatise, designed to instruct kings everywhere and for all times.

The Arthashastra contains 150 chapters, which are classified by topic, in 15 books. It contains a reasonably well developed part on policies related to economic development, taxation, labor management and financial management. It also includes a discussion on the critical role of accounting (see Annexure 1.5 on the Online Learning Center i.e., OLC).

Chanakya's contributions to accounting may be classified under four headings:
(i) The development of principles of accounting
(ii) The specification of the scope and methodology of accounting
(iii) The codification of financial rules and regulations and the creation of an organizational structure to reduce the potential for conflicts of interest, and
(iv) The role of ethics in the restraint of fraudulent accounting, in the maintenance of law and order, the efficient allocation of resources, and the pursuit of happiness.
According to Chanakya, the major underlying factor for resorting to 'false accounting' (a synonym for aggressive 'creative accounting') is excessive greed, and he attempted to contain it through moral persuasion and legal means. He considered these as essential conditions under which, honesty and systemic efficiency could be ensured.

For instance, he suggested comprehensive schemes of rewards and punishments to increase compliance. He suggested ways to handle problems that may arise whenever a principal (owner, shareholder, or even a king) entrusts financial operations to his agents (managers). Chanakya then emphasized on the importance of systematic record keeping, periodic accounting, budgeting, and independent auditing.

He was aware that ethical values encompass much more than the social values codified in rules and regulations. Thus, he emphasized on the role of virtue ethics in building a good team.

Source: Balbir Sihag, "Kautilya on the scope and methodology of accounting, organizational design and the role of ethics in ancient India," The Accounting Historians Journal (2004): 125-148, Print.

The purpose of this chapter is not only to introduce you to the area of accounting, but also to give you an understanding of the basis of the existing accounting concepts, postulates, principles and standards.


Figure 1.1 Functions of Accounting

An important question that pesters young minds is - What functions does accounting render to business? Basically accounting is a service function, largely advisory in nature. Figure 1.1 lists some of the functions served or supported by accounting.

Accounting has been introduced here in two aspects: financial accounting and accounting analysis (see Figure 1.2). The first aspect deals with financial accounting, which involves preparation and reporting of the financial transactions of an entity, to the outside world. The second aspect deals with the analysis of the accounting information, which is concerned with providing information to investors or managers, for planning, control and decision-making.


Figure 1.2 Two aspects to accounting
Carrying on business in the modern world, without using the accounting methodology, is unthinkable. The contribution of accounting to economic development, as the world has seen during the last two centuries, has been substantial. We will try to emphasize on the 'how' and 'why' of the accounting methodology, so as to enable its logical learning.

Financial accounting is one of the most widely used information processing systems in business. It is also perhaps one of the oldest, structured management information systems. The structure of the methodology has made it universally acceptable. We start by briefly tracing its evolution and development.

### 1.1 EVOLUTION OF ACCOUNTING

## Understand the historical development of accounting as a product of economic environment

Since time immemorial, human beings existed but it is hardly six centuries that Accounting as a profession journeyed. So, Accounting is a comparatively young profession; a product of the economic environment. This fact will be borne out by gaining an insight into the history of accounting. Quickly think of the amount of organized business being done during thirteenth century! Zilch has to be your answer.
Economic transactions form the basis of accounting. Thus, the development and acceptance of the organized form of accounting took place only around the fourteenth century (see Annexure 1.5 on the OLC). Merchants were using a system of recording transactions, recognizing the benefit and sacrifice aspects.

Accounting as an information processing system, has constantly changed ever since, to meet the demands of commerce, industry, government and other economic activities of the society. The scope and nature of accounting is, therefore, closely associated with the changes that have taken place in the field of organization and management of economic activity.

### 1.1.1 Accountant: A Historian with a Difference

In a broad sense, an accountant can be perceived as a historian - a person who, keeps records for posterity. However, an accountant is a historian with a difference. As a historian, the accountant has the duty to respect the facts. This duty is not exhausted by the obligation to see that the facts are accurate. The accountant must also seek to bring into focus all known or knowable facts, relevant in one sense or another, to the issue at hand. The accountant must also provide an interpretation for the history proposed.

### 1.1.2 Origin of Accounting

The origins of the organized form of accounting that we use today, can be traced to Italy. The recognition in record keeping, of the fact of the duality of values - the benefit to the entity on the one hand, and its sacrifice on the other-can be considered to be the crux of the modern accounting system.

We look upon the Franciscan Monk Fra Luca Pacioli (1445-1515), as the father of modern accounting. His work published in 1494, is considered as the first text on accounting. His next text in 1509 so well respected that Leonardo da Vinci contributed several engravings for his text (see Annexure 1.5 on the OLC). Although Pacioli is not the inventor of the accounting system, his codifying, publishing and standardizing of the system has rightfully earned him the title of 'Father of Accounting'.

### 1.2 DEVELOPMENT OF ACCOUNTING

Early records of medieval commerce were merely agency book-keeping, to enable an agent or partner to report on his activities, for and on behalf of the principal or other partners. The reference for most of the reporting was a specified venture, a voyage or the acquisition and sale of a consignment of merchandise.

With the expansion in the volume of business, and especially, the development of joint stock companies, a new dimension was added to reporting - that of reporting to the proprietors. This was necessitated by the growth of enterprises operated by individuals who were not the entrepreneurs. It was around this time that enterprises came to be treated as the unit of accounting, as an entity distinct from its owners. This shift in the reference of accounting, from a particular venture to owners and their equity, was an important development in accounting.

The accounting system during the thirteenth and fourteenth centuries, confined itself mostly to Italy, until the sixteenth century. With the expansion of commerce, accounting gradually spread to the whole world. This accounting system can be considered as a major influence on the past economic development. Apart from this, investment banking institutions providing loans to government and businesses, necessitated keeping records for inspection, conducted by these institutions or their agents. The government also required the maintenance of records by enterprises, for the determination of the revenues. In a sense, the development of capitalism itself, perhaps, owes substantially to the system of accounting.

### 1.2.1 Growth of Accounting Profession to Financial Reporting

Two basic principles - the form of the 'account', that is, the basic information formats; and the equilibrium of the complete set of accounts - form the foundation of the accounting system.

Accordingly, merchants had been using the system of recording transactions, recognizing the benefit and sacrifice aspects using Pacioli's published text. This methodology of the middle ages, faced its first serious challenge with the coming into being of the manufacturing industry, as a result of the industrial revolution. However, accounting could easily adapt and accommodate the demands of modern manufacturing industry. Not only did it adapt to the demands of the modern manufacturing industry, it developed and extended its scope, to meet the new information and control requirements. This adaptability and versatility of the accounting methodology has been its inherent strength. It is perhaps the main reason why the system got further strengthened with successive changes in the business organizations and the technological environment.

For instance, the accounting system got a further impetus from the rise of large scale manufacturing giants (say, Ford Inc. and General Motors). The creation of artificial juridical entities, based on a common stock of capital collected from a large number of investors, managed by their representatives, demanded high standards of performance from the accounting function and the profession. This was so, because, to a great extent, the very survival of the corporate organization (say, Bank of America and East India Company) depended on the trustworthiness of the accounting reports supplied to the owners. Accounting came to shift its emphasis from completed ventures to a continuing enterprise. This naturally led to the development of periodic financial reporting.

### 1.2.2 Arrival of Modern Professional Accounting

A way to state would be that in the nineteenth century, the function of accounting had been relatively simple. It mostly consisted of the recording and summarizing of business related events or transactions for the purpose of financial reporting. The essence of accounting was to record transactions in order to report. To ensure trust in financial reports, the profession of independent auditors (such as, Deloitte and Ernst \& Young) also developed simultaneously, because there arose the need for an independent verification of the records in order to trust them.

In the information technology intensive environment of today, wherein knowledge-based firms are gaining in importance, we see that accounting is getting increasingly adapted to the new situation and getting integrated into software packages (such as, Finacle and Tally) and enterprise resource planning software
(such as, Microsoft Navision and SAP) at the organization level. Twenty-first century has been referred to as the century of the service sector wherein human capital is valorized - and thus was born human resource accounting. This specific area is in its infant stage wherein the aim is to depict the potential of the employees in monetary terms.

Further alterations in accounting profession are already palpable to ensure that it seamlessly adapts towards an increasingly globalized context. A case in point is its adaptation to an increasingly smaller globalized world wherein most firm's converse in one language (English) and regional disparities are being diluted; a result of changing the profile of owners, regulators, supply chain partners, customers and other stakeholders. Accounting has adapted to this context as well - by graduating itself to more uniformity in treatment of transactions and presentation of the financial statements across the globe (such as, IFRS).

## SPOTLTGH『 1.1

## Accounting Profession in THE TWENTY-FIRST CENTURY

Given large changes in the business environment and information computing (say, cloud computing and hoisting), the accountant, the accounting firm, and the accounting profession of the twenty-first century are quite different from what existed earlier. In contrast to a bookkeeper manually recording entries in a large bound volume (khata), an accountant is now responsible for information regarding all facets of a business and is dependent on the latest technology for processing that information. In contrast to small local firms (say, local accounts firm in New York), accounting firms now can be varying-sized international organizations located elsewhere (say, Pune) with reported revenues of thousands-to-billions of dollars.

In addition to the traditional audit/attest information, accounting firms provide their clients with tax services, financial planning, system analysis, consulting, and legal services. Today, the profession is comprised of millions of people working in public and private firms as well as profit and non-profit enterprises (such as, Deloitte, KCSPL and WNS).

Source: Carol Normand and Charles Wootton, Accounting: Historical Perspectives, Encyclopedia of Business and Finance, 2nd ed, 2007, Encyclopedia. Web, 21 Dec 2015.

Business has been using the system of accounting for over eight centuries. In the upcoming sections, we will realize how simple accounting is.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) Historically, accounting developed as a system for reporting information to the managers.
(b) Modern management accounting is intended at reporting the activities of the entity to owners so as to enable them to plan and control the activities of the entity.

### 1.3 FOUNDATIONS OF ACCOUNTING

## Categorize the basic pillars on which the accounting methodology is built

As we have seen earlier, it was the rapid changes in the economic environment that acted as the major impetus for the growth of accounting. However, three basic ideas, which gained currency along with the growth in economic activity, can be considered as the foundation on which the accounting system was built up. These three basic ideas of accounting are illustrated in Figure 1.3.


Figure 1.3 Foundations of Accounting

## Illustration 1.1

## A Farmer, His Five Daughters, and the 'Language of Business'

There lived a rich farmer having five daughters owning 90 hectares of lush green agricultural fields of Arunachal Pradesh. Due to sudden illness, he expired leaving behind a will to distribute land equally among all the daughters.

In the piece of land allotted, the eldest daughter decided to carry on with the parent's profession. The second one converted her piece of land into a residential complex. The third one took up aquaculture on her piece of allotted land. The fourth one decided to exploit the piece of land to extract rich mineral resources beneath the ground, viz. copper. The last one was lazy and was thus left the piece of land as it was.

After ten years, the farmer came into the dreams of each daughter and asked them to know who was doing well. Think of response!

When you probe further on this issue to compare using a specific monetary metrics for the above businesses, we realize that the foundations of language of business ought to capture the notions of capital maintenance, productive capital and profitable operations, and in that order.

### 1.3.1 Capital Maintenance

The preservation and maintenance of resources used for generating wealth is the main pillar of economic activity. This idea also implied the generation of wealth, while keeping intact, the resource used for such generation (see, Illustration 1.1 for a practical relation). In a different sense, it posed the problem of separating the stock of resources used in economic activity from the flows of resources generated by the stock. For example, in Illustration 1.1, in case of eldest daughter's business, how do you separate land (resources) from agricultural produce (flows of resources generated by the stock)? It is also this problem that poses the most important challenge to accounting for all times - the measurement of profit.

The idea of capital maintenance ensures that the capital consumed in the business (or production) is fully recovered from the revenue, in the income determining process. The income should be measured as the excess of capital at the end of the year, over the capital at the beginning of the year, so that there is no chance of capital erosion by way of withdrawals out of such capital.

Capital maintenance is very important as it is directly related with the survival of the organization. If the capital is not maintained, there is every possibility that the capital itself would shrink, which may result ultimately in the winding up of the organization. In other words, we can state that the business will eat up its own capital. This is because increased revenue cannot be expected when the capital is decreasing. For example, in Illustration 1.1, take the case of fourth daughter's business, how do you separate extracted copper (revenue) from depletion of copper mine (capital is decreasing)! So, every entity needs to ensure that its capital is maintained properly.

### 1.3.2 Productive Capital

A productive organization of the modern industrial society is founded on the use of capital - 'wealth' is used for the generation of further wealth. For example, in Illustration 1.1, compare the youngest daughter with other sisters in the family: for youngest one, it is a case of existing wealth being not used for generation of further wealth vis-à-vis all others. The accumulation and deployment of largescale productive capital involves the problem of maintenance and preservation of such resources. This also throws up the important information function of the valuation of such resources. For example, in Illustration 1.1, just look at the businesses of third and fourth daughters - there are large issues of maintenance and preservation of resources. As aquaculture can happen only on salt water - thus, think of the cost of converting this land for any other purposes. In case of the fourth daughter, mining depletes existing resources.

### 1.3.3 Profitable Operations

When productive capital is to be used on a large scale for economic activities, the idea of profit becomes the motive force, which will induce one to go in for future consumption in preference to present consumption. Further, resources can be deployed for a large number of alternative uses. Illustration 1.1 with five different purposes of land is exactly conveying this. As aquaculture can happen only on salt water - thus, think of the cost of converting this land for any other purposes. In case of fourth daughter, mining depletes existing resources. The idea of profitable operations, thus, would imply an important criterion for making decisions in the exercise of choice. In other words, capital will seek the most profitable operations from among the available alternatives. This, coupled with the idea of maintenance of capital, makes the problem of measurement of profit crucial to accounting.

These ideas, in isolation, could not have caused the development of an information processing system known as accounting. The environmental support for such a development was provided by: the expansion of commerce - the exchange of goods and services; credit - the present use of future goods and services, money - a medium of exchange, unit of measurement and a common denominator; and above all arithmetic and language.

Favorable economic and social circumstances, along with commerce, credit, money and arithmetic, produced the accounting methodology. This methodology is a plan for systematically rendering useful information, for supporting economic activity.

Accounting literature looks at capital and its maintenance in three ways. Annexure 1.1 gives further details of these three approaches.

### 1.4 ACCOUNTING AS A MEASUREMENT AND VALUATION SYSTEM



## Describe the focus of accounting as information involving measurement and valuation

Having grasped the progressive evolution and adaptation of accounting with time and knowing its pillars, we now look at the focus of accounting as an information processing system for economic activity.

### 1.4.1 Accounting Postulates and Practice

Accounting is primarily concerned with the measurement and valuation of economic events. All transactions resemble an event but, all events not necessarily are a transaction.

The table given below clearly differentiates between the two:

| Events that does not resemble Transactions | Events that resemble Transactions |
| :--- | :--- |
| Walk-ins for a product inquiry | Purchase of the product |
| Hiring employees | Remuneration in cash or kind to an employee |
| Announcement of Bonus | Receiving Bonus |
| Strike by Trade Unions | Compensation to workers for avoiding strike |

Financial accounting theory, concerned with this measurement and valuation, is mostly derived from practice. It is largely descriptive. As we have seen earlier, the basic orientation of the theory and practice of financial accounting is income determination. It is oriented towards an entity, mostly, a business unit. This business entity is considered to be distinct and separate from the individuals behind it, an abstraction.

Since, good accounting practice cannot be based on trial and error approach -given the huge costs and the longer term ramifications. To justify good accounting practice, accounting tries to prescribe a series of concepts, principles and standards. All these are cast into the accounting system. It should be noted that the fundamental purpose of these concepts is to clarify the meaning underlying the accounting reports.

Accounting theory, as a doctrine, is explanatory in nature and the underlying justifications are related to practice. Since accounting deals with a complex subject matter, it is not possible to prescribe a set of precise principles for it, without considerably reducing its utility. The effort of accounting theory has all along, been to reduce the possible biases in valuation and measurement, rather than eliminating them. This background makes it very difficult for one to attempt at an exhaustive and precise definition of accounting.

The American Accounting Association (AAA) defines accounting as the process of identifying, measuring and communicating economic information, to permit informed judgments and decisions by a user of the information. It is an application of the general theory of information, to the problem of efficient economic operations. ${ }^{1}$

One can easily appreciate the accounting systems focus on measurement and valuation of economic events, if we just think of one specific business arena/sector (say, land or consultancy) and observe the sequence of transactions and thus the transformations of value therein.

[^0]
### 1.4.2 Measurement in Accounting

Measurement is the assignment of numerals to objects or events, according to certain rules. It is also the process of assigning numbers to represent qualities. As a measurement system, accounting aids the process of decision-making. Measurement in accounting, necessitates valuation as a basis for measurement. Accounting measurements are based on monetary valuations (see, Illustration 1.2). One of the essential requirements of measurement in accounting is the amenability of the subject matter to monetary conversion.

## Illustration 1.2

## Auction of Players in the Cricket Premier League

Mumbai Indians is a franchise cricket team representing the city of Mumbai in the Cricket Premier League (CPL). Imagine, you being part of the bidders for Mumbai Indians cricket team during the auction of this year's cricket players!

The questions that come to your mind would include: How do I assign monetary tag to each of the cricket player on auction? How can we value someone's playing skills?

Measurement here might involve assigning numbers to specific qualities of the players (say, their team building skills). This measurement system aids the process of your decision-making.

The duality of value herein implies that there is a benefit (of getting an additional player as part of the auction) as well as a sacrifice aspect (reflected by the amount of bidding) involved in every economic transaction. Assuming a winning bid for Mumbai Indians, the transformation of values involving the exchange of a utility differential for a monetary differential is palpable. The causal networks of relationship among values may be traced through the network of transformations between the auctioned player, the CPL team winning the player, the event organizer, and others forming the basis of all economic activity.

### 1.4.3 Valuation in Accounting

Valuation in accounting revolves around three major aspects, namely, the duality of values, the transformation of values and the causal network among values. The recognition of these three aspects (see Figure 1.4 and Illustration 1.2) is necessary for understanding the nature and property of valuations in accounting.


Figure 1.4 Valuation in Accounting

The duality of value implies that there is a benefit as well as a sacrifice aspect involved in every economic transaction. The benefit and sacrifice implication of every transaction has to be clearly recognized in order to understand valuation in accounting.

Economic transactions generally involve the transformation of values, that is, every economic transaction involves the exchange of a utility differential, for a monetary differential. The very basis of an exchange is the perceived benefit by both parties involved in the exchange. When one exchanges money for a product or service, the buyer perceives that the product or service received is more valuable than the money parted with. The seller applies the same rationale.

Valuation is to be perceived as a representation of causal networks. For example, there is a causal relationship between labor, goods and money. Valuation can trace values through the entire network of transformations, which forms the basis of all economic activity. In a monetary economy, it involves the exchange of money for commodities (raw materials and labor) and finally, back to money (in exchange of goods sold).

Valuation is also important in accounting for the purpose of aggregation and/or dis-aggregation of data relating to economic transactions. Operations of addition, subtraction and relation necessary in any form of summarization, are inconceivable without valuation. Such summarization, to be performed, validly necessitates a uniform basis of valuation of separate items. We cannot add apples and mangoes unless we are in a position to convert them to a common denominator.

### 1.4.4 Value and Objectivity in Accounting

In financial accounting 'value' generally means the value in exchange. The value in exchange is recognized on the basis of historical costs and realized benefits. This also implies that any change in a value is recognized only when an exchange takes place. The exchanges need to be arm's length transactions, in order that these valuations are performed objectively (see, Illustration 1.3 to relate).

Objectivity in the accounting context implies freedom from bias of the valuer. Objectivity would also imply that a set of independent observers would arrive at a consensus with respect to the measurement of a given economic event. It has to be impersonal and independently verifiable. It has to be, as far as possible, independent of time and place. In the context of accounting, it boils down to the narrow, matter of fact, historical and monetary cost relating to a transaction.

Illustration 1.3

## Valuation of a Machine

Keshubhai, a cotton yarn manufacturer, purchased a machine by paying cash of $₹ 27,70,000$. At which value would
you record this transaction?
Sounds simple! So, we tackle it below!

At first thought, Illustration 1.3 looks simple. The complexity starts when one starts thinking and looking at the various ways in which the measurement and valuation of an item can be done. The problem may not become easy, by assuming that all transactions and events are to be recorded in terms of money only. Quantitative information may also be needed to supplement the monetary information.

There are four generally accepted measurement bases. These are: a) Historical Cost; b) Current (replacement) Cost; c) Net Realizable Cost; and d) Present Value.

Historical cost is the cash or equivalent, actually paid. Therefore, the historical cost for the machine purchased by Keshubhai is $₹ 27,70,000$. Historical cost is ordinarily adjusted subsequently for the decrease in the economic utility/life of the item.

Current (replacement) cost is the cash or equivalent that would have to be paid for a current acquisition of the same or an equivalent item. Suppose today, the cost of a similar machine (equally old and used) is $₹ 25,50,000$. So, as per the current cost base, the machine's value is $₹ 25,50,000$.

Net Realisable value is the cash or equivalent expected to be received for an item in the due course of business, less reasonable further costs to make the item ready for sale. Suppose Keshubhai found that he could get $₹ 22,00,000$ if he sells the machine purchased earlier, less ₹ 75,000 involved in readying the machine for the sale. In this case, the machine should be recorded at ₹ $21,25,000$.

You will all accept that $₹ 1,000$ in hand today, is very different from $₹ 1,000$ in hand after two years. The reason being the 'time value of money', i.e., you could invest this money for two years and earn interest on it. So, making the money receivable at a future date, equal with the money of the present date, is called discounting of future money.

The Present value is the value of an amount today, of some future payment to be paid or received later, discounted at some interest rate. Suppose we are looking at the machine as on January 1, 20X5 and the machine purchased by Keshubhai can work for another 10 years and is supposed to generate cash @ $₹ 400,000$ per annum. Assuming a discount rate of 12 percent, on computation, we get the value of the machine to be ₹ $22,60,090$. ${ }^{2}$

## Illustration 1.4

## Valuation of Indian Cricket Captain!

This is slightly high level. However, you can aim higher ... and mull about it. Extending Illustration 1.2, readers can think on the monetary tag at which bidding for specific players' happens by various cricket clubs and IPL teams (say, popular sportsman and Indian Cricket Captain) as part of the IPL auction process. And, after the transaction is completed (say, Kolkata Knight Riders team winning the Captain), at what price the organization should record the player in their accounting books?

Based on the discussion in the above section and due to its many advantages, historical cost is the most commonly used measurement base in the field of accounting. We now move to section 1.5 to check out the various forms of business entities.

## Let's Check Our concepts!

## State whether the following statements are True or False:

(c) Ideas of capital maintenance, productive capital, and profitable operations supported by commerce and credit, form the pillars up on which accounting is built.
(d) Accounting as a measurement and valuation system, recognizes the doubleness of values by taking into account, both the benefit and sacrifice involved.

[^1]
### 1.5 FORMS OF BUSINESS ENTITIES



Discuss the classical and modern forms of business entities

Think of yesterday's monetary transactions done by you. Almost all of them must have involved some form of business entity or the other. For example, an electronic transaction on your mobile/tab would have meant (such as, search and purchase of a movie ticket) coming across some of the following business entities (say, Airtel, Google, Network 18, PVR Cinemas, Samsung, State Bank of India, and VISA).

### 1.5.1 Traditional Business Entities

Broadly, three types of Traditional business entities used to exist, namely, sole proprietorship, partnership, and company. Sole Proprietorship is an entity with one proprietor. The vast majority of all small businesses start out as sole proprietorships (such as, the local general store). One person, usually the individual who has the day-to-day responsibility of running the business, owns that firm. A sole proprietor is entitled to all the profits of the entity and is also responsible for all of its debts. He also assumes complete responsibility for any of its other liabilities.

A Partnership is an entity with at least two partners (see Case 1.1 for McDonald's Chain starting phase). The partners should have a legal agreement that sets forth how decisions will be made, profits will be shared, disputes will be resolved, how future partners will be admitted to the partnership, and what steps will be taken to dissolve the partnership, when needed. Like in sole proprietorships, the law does not recognize a distinction between the business and its owners. If the enterprise fails to pay up its liabilities, the partners have to pay from their personal funds.

## Case $1.1>$ McDonald's Chain: From Partnership to Company

Ray Kroc mortgaged his home and invested his entire life savings to become the exclusive distributor of a fivespindled milk shake maker called the Multimixer. Hearing about the McDonald's hamburger stand in California running eight Multimixers at a time, he packed up his car and headed west. It was 1954. He was 52 years old.

Ray Kroc had never seen so many people served so quickly when he pulled up at Dick and Mac McDonald's Restaurant, San Bernardino, California, to take a look. Seizing the day, he pitched the idea of opening up several restaurants to the brothers Dick and Mac McDonald, convinced that he could sell eight of his Multimixers to each and every one. "Who could we get to open them for us?" Dick McDonald said. "Well," Kroc answered, "what about me?"

In 1965, McDonald's went public with the company's first offering on the stock exchange. A hundred shares of stock, costing US $\$ 2,250$ that day, would have multiplied into 74,360 shares worth over US $\$ 7.6$ million on 2015 .

Source: McDonalds's history, McDonalds, web, 10 Dec 2015.

A company differs from other legal forms of business in that the law regards it as an artificial being possessing the same rights and responsibilities as a person (except voting rights during elections; see Case 1.1 on McDonald's). So, a company can be taxed; and it can be sued and prosecuted; it can enter into contractual agreements. The owners of a company are its shareholders. The shareholders elect a board of directors to oversee the major policies and decisions. The corporation has a life of its own and does not
dissolve when ownership changes. While a sole proprietorship and a partnership work on an unlimited liability basis, a company works on the concept of limited liability. So, the liability of the owners, i.e., the shareholders, is limited to the extent of the ownership, i.e., the share capital held by them. Chapter 6 contains a more detailed discussion on a company and its various forms.

Table 1.1 looks at the important differences in the features of these three types of Traditional entities (see Annexure 1.5 on the OLC for more).

Table 1.1 Essential Features of the Three Types of Traditional Business Entities

|  | Sole Proprietorship | Partnership | Company |
| :---: | :---: | :---: | :---: |
| Owner | Sole Proprietor | Partners | Shareholders |
| Number of Owners/ Shareholders | One Person | Min: 2 <br> Max: 100 | Private Co - <br> Min: 2; Max: 200 <br> Public Co - <br> Min: 7; Max: No Limit |
| Legality | Not a separate legal entity | Not a separate legal entity | It is a separate legal entity |
| Governed by | Not Applicable | Indian Partnership Act 1932 | Companies Act 2013 |
| Management Control | Proprietor | Partners | Board of Directors |
| Liability | Unlimited | Unlimited | Limited |
| Legal Registration | No Provision | Voluntary | Compulsory |
| Flexibility | Maximum | Depends on Partners | Comparatively Less |
| Source of Equity Funds | Proprietor brings in the funds | Partners bring in the funds | Shareholders bring in the funds |
| Examples | M/s S\&S Traders; Anil Pan Shop; | M/s Batliboi \& Purohit; M/s Paradise Foam Industries; | Medinfi Healthcare Private Limited; <br> Reliance Industries Limited; |

Note: Limited liability companies can be further bifurcated into two types - private limited and public limited. Even within the public limited companies there can be further bifurcation into two types - listed and unlisted companies.

### 1.5.2 Hybrid Business Entities

As the waves of economic changes swept the globe, it led to creation of two new types of business entities. The decade of 2000s led to the creation of the Limited Liability Partnership (LLP), a hybrid combining the advantages of company and partnership. It was a recent and popular concept in many countries such as Japan, Qatar, Singapore, USA and now also in India (such as, big Indian audit firms). LLPs are similar to a normal partnership, in which the partners share the risk, profits and responsibilities. The main difference though is that the liability of the partners is limited to the amount of investment they made in the partnership or personal guarantees provided. Both, individuals and corporates can be partners. It has legal entity separate from its partners and there is perpetual succession. Annexure 1.2 (on the OLC) provides more details on LLPs. Although found in many business fields, the LLP is an especially popular form of organization among professionals, particularly lawyers, accountants and architects.

The decade of 2010s led to the creation of the One Person Company (OPC), a hybrid combining the advantages of a sole proprietorship and company. This idea of OPC was propagated in 2005 by the J.J. Irani Committee which had been set up for the sole purpose of incorporating necessary changes in the former Companies Act, 1956. Annexure 1.3 (on the OLC) provides more details on OPC. They made
observations regarding the changing economy and the need for giving a chance to individuals to operate in the economic domain on their own and contribute efficiently. Table 1.2 gives the important features of these two types of Hybrid entities (see Annexure 1.5 on the OLC for more details).

Table 1.2 Essential Features of the Two Types of Hybrid Business Entities

|  | Limited Liability Partnership | One Person Company |
| :--- | :--- | :--- |
| Owner | Partners | Sole Proprietor |
| Number of Owners/ <br> Shareholders | Minimum:2 <br> Maximum: No Limit | One Person |
| Legality | It is a separate legal entity | It is a separate legal entity |
| Governed by | Limited Liability Partnership Act, 2008 | Companies Act, 2013 |
| Management Control | Designated Partners | Board of Directors |
| Liability | Limited | Limited |
| Legal Registration | Compulsory | Compulsory |
| Flexibility | Depends on Partners | Comparatively Less |
| Source of Equity Funds | Partners bring in the funds | Sole Shareholder (Proprietor) brings in <br> the funds |
| Examples | S.R. Batliboi \& Associates LLP; <br> Singhania \& Co. LLP | Bronco Technologies Private Limited (OPC); <br> Amseem Business Solution (OPC) Private |

Note: There are specific operational size restrictions on both the LLP and OPC. For example, the law requires every LLP to have at least two Designated Partners and at least one of the Designated Partners shall be a resident of India. Please see annexures for specific details.

Thus, while starting a business, an entrepreneur has many options on the choice of business entity that they could start with and larger options results in larger chance of confusion. This decision of selecting (or changing towards) the right entity is crucial and depends upon certain factors such as liability, nature of business, number of owners, and scale of business.

## SPOTLGMr 1.2

## What Type of Business Entity Should One Prefer?

Business owners are required to choose the optimal business structure not only at the beginning, but they also must continually reassess their original choice. The appropriate choice will inevitably shift, as the business evolves (for example, see Mini Case 1.3 of chapter one). Some of the factors that enable the owners in making the appropriate choice are:

- Size of the capital and its availability
- Legal structure of a country
- Purpose and scope of business
- Size of business operation
- Tax structure of a country for different types of organizations


### 1.6 BASIC FRAMEWORK OF ACCOUNTING

## 105 <br> Explain the basic framework of accounting and accounting standards

The importance and utility of the measures of the financial position and income of business enterprises, and of the several components involved in making up these measures, need hardly be emphasized. We make the implicit assumption that financial transactions have been defined and recorded based on such definition. The reporting of the financial position and income of an enterprise is based on these implied definitions.

### 1.6.1 Progression to Accounting Principles

The fundamental concepts in accounting have become crucial to the process of measurement and valuation. We have to accept the fact that in the presentation of the financial position and income of an enterprise, we will encounter several alternatives. These fundamentals are designed to help in selecting among the various attributes, those that accounting aims to measure. For instance, in Illustration 1.3, while there were many ways of valuing the machine, however, we ended up justifying the discussion that historical cost of recording in accounting books will be more preferable.

The concepts also set forth the basis on which they are to be measured. In the absence of a unified theory of accounting, its fundamentals are evolved over a period of time. It is a continuous process. The necessity for this process to continually evolve can easily be understood by realizing that the subject matter of accounting operates in a continuously changing environment. Accounting fundamentals can be seen as evolving through four stages, namely: concepts, standards, postulates and principles.

A concept refers to an idea, a general notion or thought. Standards are something established for use as a rule, intended to act as a basis of comparison and reference in measuring, quantity, and/or quality, and assigning a value to it. Postulates are assumptions; they are taken to be true or real. They are resorted to as a basis for an argument or as a prerequisite. Principles refer to a law, the method or a rule of conduct. Accounting principles are evolved over time through this process of development of concepts to standards to postulates and finally, to principles (see Figure 1.5).


Figure 1.5 How Accounting Principles Evolve
Thus, as an example, a corporate farming company might turn to 'accounting concepts' to understand cash. Refer to 'standards' for appreciating 'agriculture output'. Turn to 'postulates' for identifying the time of transactions. Principles for the valuation of machinery.

### 1.6.2 Generally Accepted Accounting Principles

Given that accounting is the art of recording and reporting economic data, the users should be able to interpret and understand accounting reports. This, in turn, necessitates that the accountant understands the needs of the users and accumulates and reports the financial data in a useful form. It is this basic purpose of accounting, which brings to the fore, the need for certain generally accepted concepts and postulates on which to base the recording and reporting of economic data. This framework, consisting of concepts, standards, postulates and principles, has been evolved by general acceptance. Before judging
the correctness of the accounting treatment of a transaction or report, the accountant consciously checks to see that it conforms to the generally accepted conventions, that is, it falls under the heading GAAP, which stands for Generally Accepted Accounting Principles.

GAAP is a combination of authoritative standards (set by policy boards) and the accepted ways of doing accounting. These differ from country to country, depending upon the accounting principles and standards adopted in that country. These are the rules that business entities are expected to follow while preparing their financial statements. Table 1.3 gives a list of professional bodies determining the GAAP in select countries.

Table 1.3 Accounting Standards-setting Organization in Selected Countries

| Country | Policy Setting Board |
| :--- | :--- |
| Australia | The Australian Accounting Standards Board (AASB) sets GAAP in Australia |
| China | PRC GAAP are issued by the Ministry of Finance of the People's Republic of China |
| India | The Accounting Standards Board (ASB) of the Institute of Chartered Accountants of India (ICAI) is the <br> body entrusted with the work of preparing the standards. The standards are issued under the authority <br> of the council of the ICAI. |
| U.K. | The Financial Reporting Council (FRC) is the UK's independent regulator responsible for issuing <br> accounting standards. |
| U.S.A. | Financial Accounting Standards Board (FASB) is the body solely in charge of US GAAP |

## SPOTLTGHI 1.3

## Country-wise GAAP and its Analogy with Eating Habits

Imagine you are on world tour. And you have dinner invitations from local families in internal areas of China, Europe and India. By default, your style of eating will have to adapt to local context. In other words, while the purpose at everyplace is same (food consumption), yet you should be prepared to eat with chop-stick in China; with knife \& fork in Europe; and such. Thus, local context necessitates different requirements.

Similarly, across the globe, the basic purpose of using financial information remains unchanged yet we may observe the country-wise GAAP being molded by the local business environment (culture, traditions, business norms, tax laws and such). Table 1.3 illustrates this in brief.

### 1.6.3 Other Regulatory Requirements and IFRS

The law imposes a requirement for companies to prepare accounts (financial statements) and provides detailed rules regarding the contents and methods of presentation of those accounts. The Companies Act, 2013 determines the minimum information to be disclosed and prescribes formats for accounts. The capital market regulator, i.e., the Securities and Exchange Board of India (SEBI) and the different stock exchanges wherein a firm is publicly listed (such as, Bombay Stock Exchange), can increase the disclosure requirements for companies within their jurisdiction.

The stock exchange rules, SEBI guidelines and the statute law do not specify how the various amounts disclosed in the accounts should be calculated. For this, the accountant must turn to such sources of authority
as the accounting principles and conventions established over many years, as well as to the recommendations and standards issued by relevant professional bodies (see Table 1.3). Table 1.4 gives a simpler interpretation between GAAP and accounting standards (combine it with Section 1.6.1 for appreciating it better).

Table 1.4 Interpreting GAAP and Accounting Standards

| GAAP | Accounting Standards |
| :--- | :--- |
| Accounting practices holding sway in a country | Authoritative standards (set by policy boards) |
| Analogous to genus | Analogous to species |
| Country specific | International standards exist |

Lately, due to globalization and increasing number of Indian firms having international transactions and ownerships, Government of India through its various arms and bodies has been (rightly) coercing Indian corporates to adopting the International Financial Reporting Standards (IFRS) created by a globallyrecognized independent standard setting body, International Accounting Standards Board (IASB). Thus, with this change in the economic environment, for Indian GAAP, the pecking order to be followed is:

- IFRS, if applicable to the organization
- Indian Accounting Standards laid down by ICAI, in statutes such as the Insurance Acts, etc. (if applicable).
- Statements issued by the ICAI.
- Guidance notes issued by the ICAI.
- Expert Advisory opinions issued by the ICAI
- Technical guides and monographs issued by the ICAI.

With this increased clarity over the Indian GAAP, we move to remove the haze around the conceptual basis.

## Let's check Our Concepts!

## State whether the following statements are True or False:

(e) Business entities once selected cannot change their form with time.
(f) The conventions of accounting are inflexible, and not much is left to the judgment of the individual accountant.

### 1.7 CONCEPTUAL BASIS OF ACCOUNTING

Concepts are essential ideas that permit the identification and classification of phenomena or other ideas. A concept must state all that the given class includes and all that it excludes. Thus, we must have the concept of an asset, to be able to separate assets from those items that are not assets. In this section, we shall review some of these basic concepts of accounting (see Annexure 1.5 on the OLC) which have been accepted over time as principles.

### 1.7.1 Property Rights

Property rights are used in a broad sense in accounting. By implication, the term means the right of accounting entities to possess and alienate property-value. As can be observed, this is a sine qua_non for any meaningful economic transaction and as such, is an essential condition for accounting. Used in the context of accounting, this implies that the things of value to an entity can be transferred from one entity to another (say, machinery). This, in fact, is the basis of economic transactions.

### 1.7.2 Business Entity

The concept of a separate business entity means that the entity is separate and distinct from the owners and the entity is liable to the owner. This is the reason that the amount of capital invested by the owner and his share in the profit of the business is treated as a liability of the entity. Accounting records are maintained for identifiable business entities. These entities are defined as distinct and separate from their owners. It is due to this reason that the accounting entries are generally made (and kept) with the view of entity only. For example, in a limited liability company, the enterprise is liable to the owner (shareholder) to the extent of the proportion of capital investment (share capital) made by the latter.

This entity may be quite distinct and different from the legally or generally accepted


To know more on "Business Entity Principle" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/520 ideas of an entity (say, Tata Motors Axle Division instead of Tata Motors Limited). In this context, transactions, which are to be recorded, are defined in relation to the entity for which the records are being maintained. On a few occasions, this concept remains only an accounting fiction, as the law does not accept the distinction (see Table 1.1).

Also, the accounting entity so identified may have no physical existence and this enables us to identify the entity as an entity acting on behalf of other entities that may be real. The relationship of accounting entities with other entities is based on transactions, and hence, are contractual. For example, if Advocate Jyoti Bhengra, a senior lawyer in the Delhi high court, wants to start up her own coaching center in order to earn income over and above her regular source of income, she would have to maintain a separate set of books to record the transactions relating to her coaching business only. In this set of books, she cannot record the income or expenses of her regular source of income. In the same way, she will have to maintain a separate set of accounts for all the separates events related to her court work.

### 1.7.3 Going Concern

The accountant assumes that business entities have a life of infinite duration, unless facts are known that indicate otherwise (such as, any recently bankrupt airline company). Management, events and opportunities may come and go, but the business remains. This notion implies that existing resources will be used to fulfill the objectives of a continuing entity. So, the basis of valuation of resources is influenced more by their future utility to the business entity, rather than by their current market valuation (see Section 1.4.3 for an illustration).

## Illustration 1.5

## A CFO believing in Astrology

One day, a popular astrologer, Billu Badshah, predicted that the world is going to end in $20 X 8$. The Chief Financial Officer (CFO) of Amdani Group, Bharti, has a strong belief in his predictions. She decided to show the accounts by taking business having a finite duration. Is she correct?

Of course, she is not! Business has eternal life unless facts indicate otherwise! Hence, it is assumed that the business has neither the intention nor the need to liquidate or curtail materially the scale of its operations.

This concept is also important from the point of view of profit measurement. Profits are measured for accounting periods - segments of the infinite life of the entity based on realized gains. In this process, opportunity gains are ignored till they're not realized (see, Section 1.7.9 for more details). It is also assumed that the claims against the entity will be paid on the maturity of such claims (say, loan will be repaid when matured).

### 1.7.4 Monetary Expression in Accounts

Money measurement is used as a means of converting qualities and/or quantities to a common denominator. Accounting measures business transactions only in terms of


To know more on
"Assessing Going Concern" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/521 money (see, Section 1.4.2 for more detail). This implies that values, which cannot be measured in monetary units, cannot be expressed in accounts. Like a mother looking after a child. However, if a nanny looks after the child and is being paid for it, this becomes a monetary transaction. For example, if a business owns: Cash ₹ $10,000 /$-, a car, a large printing machine, and an office - this information is not meaningful until and unless they are expressed in monetary items which, in turn, helps in better estimation of assets of a business.

The obvious advantages of monetary expression in accounts are:
(a) It provides a simple measuring device to represent many different facts in a common denominator (say, Indian Rupees); and
(b) When things can be expressed in monetary terms, they are amenable to summarization by using addition, subtraction and relation.
It should, however, be noted that such a scheme leads to a subjective valuation of certain items, the values of which cannot be readily and accurately assigned. For example, the technical knowhow, reputation or goodwill and other similar qualities of an entity, are valued and accounted for, based on subjective valuations and only when there is an explicit transaction involving them. The same problem is encountered when one has to recognize the resources utilized by the entity, such as the environmental damage caused by an enterprise in the process of its operations. Further, certain qualitative factors, which are vital to the health of a business entity, may not be accounted for at all. Brand image, business contacts/relations (networks), quality of manpower and the advantage of a particular location are all examples of such qualitative factors, which are not effected in the accounting records.

Allied to the principle of monetary expression in accounts is the assumption of a stable monetary unit. This assumption is necessary to make accounting practical and feasible. However, one should not ignore the fact that during times of inflation (or deflation), records based on realized historical costs might be far from realistic.

### 1.7.5 Matching Concept

The matching concept is useful in determining the profitability of business operations during a particular period. It means, determining the profits after charging the expenses of a period with the revenues earned in the same period. While using this concept, we consider only those costs that resulted in revenue generation in a particular period, as the expenditure for the year.

Suppose, a school plans to start French and Yoga classes for its students and receives the fees for the same in the month of February 20X6. The classes for both Yoga and French are expected to start in the month of May 20X6, and completed by December 20X6. If the school considers the fees received in February 20X6 to be a part of the revenue (or proceeds) for the financial year ending March 31, 20X6, it will result in a wrong picture of the income, since all the expenses of the French and Yoga classes, starting in the next financial year, will be met in the next financial year and that too, without any further receipt of fees. This will show inflated profits for the year ending on March 31, 20X6 and lesser revenue or higher expenses (for the additional work done) for the year ending March 31, 20X7, since there will be only expenses on account of the French and Yoga classes in that year, without any receipts against them. The proper way of accounting as on March 31, 20X6, would be to treat the amount received as an advance for the courses to start in the next financial year. It would be a good idea to take it as revenue in the next year (ending March 31, 20X7) and adjust the expenses incurred in taking those classes, with this revenue (or proceeds), to determine the profits of that year.

### 1.7.6 Realization Concept

The concept of realization determines the point of time when revenue and returns (or profits) can be recognized objectively, unbiased, and with certainty. It is important to note that the recognition of revenue has nothing to do with the receipt of cash. In case of sale of goods, the cash may be received before the sale, at the point of sale or even after the sale, but the revenue and profits are recognized only at the point of sale, when the ownership is passed on to the buyer. Passing the ownership means transferring the risks and rewards relating to the goods/services, to the buyer. For example, if goods are sold in the month of March, for which the payment is received in the month of April, revenue and hence, profits will be considered to have been earned or realized in the month of March, and not in the month of April. Similarly, if an advance is received in the month of March, for sales to be made in the month of April, revenue is required to be considered as earned or recognized in April, not in March.

Chapter 3 will have an elaborate discussion on the matching concept, along with the concept of revenue realization. Both the accounting principles, matching and realization, are combined to be popularly known as Accrual principle.

### 1.7.7 Consistency between Accounting Periods

If two kids were to study and pass out from the same school, you would expect their yearly grade sheet (or marks sheet) to be having the same basis of evaluation for every year. Neither would you like one year to be grade system and the other to be percentage of marks, nor would you like the basis of report (i.e., grades or percentages) for the same kid to change in any consecutive year. ${ }^{3}$ Similarly, consistency between different

[^2]accounting periods is necessary not only for the purpose of adherence to the accounting standards, but also for the purpose of ensuring comparability of measurement and valuation across the years.

Under the GAAP, many transactions can be validly treated in accounts differently. For example, depreciation, which is an expiration of cost, may be recognized in accounts using different methods. Resorting to different methods of treating these and similar items, using different assumptions, during different accounting periods, may have the effect of distorting the results obtained. The principle of consistency demands that once a choice is made for the treatment of a transaction the same has to be consistently followed. This principle does not preclude the possibility of changes. All a firm needs to do is to clearly disclose the change, provide an explanation for the change, and mention its effect on the accounts after effecting changes in the choice of principles whenever felt necessary.

It is because of this approach that any company consistently follows single accounting policies and in case of any change due to compliance with any statute or law, it shall disclose the same in the financial reports with the date of effect. The consistency approach enables the end users of financial statements to number crunch the Inter-firm, Intra-firm or Industry-wise financial figures without any difficulties.

## SPOTLTGHT 1.4

## A Take on Flexibility of Accounting

One of the largest Indian public sector enterprise in the steel industry was having interviews for promotion of their accountants. The interview panel asked the first candidate, "What do you believe our income will be this year end?" The accountant said, "₹4,600 crores." The panel asked the other candidate the same question, and the answer was, "What would you like it to be?" Now, you can think of who got promoted?

The accounting principles offer practical flexibility, it is important that a consistent treatment be provided from time to time, otherwise it would be tough to interpret financial statements. Perhaps no choice of methods should be permitted in accounting. Give us your thoughts?

Source: Interview with Syed Shabbirul Haque (MBA, IIM Kolkata), Ex-Employee \& Junior Manager, Steel Authority of India Limited, 23 Dec. 2014.

### 1.7.8 Diversity among Independent Entities

Accounting principles have to take into account the reality of wide variations in the organization and operation of entities. The basic accounting principles will have to take into account such diversities. The requirements and demands of a complex manufacturing organization (say, RIL) are different from those of a trading concern (say, Adani Enterprises). The requirements of a service organization (say, Tata Consultancy Services) are different from those of a manufacturing concern (say, Tata Steel), and so on. It must also be recognized that even though the same accounting principles will be used in all these cases, the complexity and nature of the accounting system used in different entities could be very different. These differences also apply to large and small entities (say, Bata India and Lawreshwar Polymers in footwear industry).

### 1.7.9 Conservatism

Conservatism (also known as, prudence) means selecting that method of measurement, which ensures 'the quality of being prudent: cautiousness'. This attitude on the part of accountants is reflected in such working rules as: 'anticipate no gains, but provide for all possible losses' and 'if in doubt, write it off'. This principle usually results in an understatement of profits and values.

Adherence to this concept also shows its close nexus with one of the fundamental objectives of accounting, namely, capital maintenance (see, Section 1.3.1). It is also not difficult to perceive that this idea is necessitated by the assumption of going concern and the need for having accounting periods. Over the entire life of an entity, the aggregate result will not be different, though resort to this principle could produce


To know more on
"Conservatism :
How Conservative Should One be?" scan the QR code, or visit: http://qrcode. flipick.com/index.php/522 different results in any particular accounting period.

This principle of Conservatism helps in prohibiting "window dressing" of financial statements. Hence, one should record actual income, actual cost and expected losses.

### 1.7.10 Materiality

Materiality is a concept necessitated by practicability and feasibility. The need for accuracy and dependability of records is not expected to take the accountants to the extreme where they would have to waste much resource and time dealing with trivials. In accounting, a balance is always struck between accuracy and the costs of achieving it. Taking the cue from a legal dictum, de minimis non-curat lex (court will not consider trivial matters), the accountants too, do not bother about trivial items.

For example, in the area of valuation, trivial assets of small value may usually be written off as expenses of the period, rather than being carried on as an asset. Thus, while a paper weight (or a pen holder) might have a life of over one year for large corporate office, yet it makes sense to expense it out. Likewise, small expenses such as postage and stationary can be grouped together and shown as miscellaneous expenses. However, the idea of triviality has to be understood in the right context. For example, an item of ₹ 5,000 may be trivial for a firm whose operations amount to several billions. This may not be the case for a firm whose turnover is a few thousands.

Taking this concept to the word - even misstatement of any information that could influence a decision of a user of the financial statements shall be deemed to be material information and shall be disclosed properly in the same.

### 1.7.11 Timeliness in Financial Reporting

Would you like to have your educational degree performance report (or grade sheet) after five years? The immediate answer has to be NO. Any information which is not provided at the right time, is no information. This principle is equally applicable to accounting as an information processing system. The idea of accounting periods is used so as to ensure the regularity and timeliness of the reporting. However, the use of accounting periods poses the problem of a large number of transactions that remain incomplete at the time of reporting. These incomplete transactions warrant an estimation by the accountants so as to ensure timely reporting. Examples of such transactions arise in the area of revenue realisation, cost expiration and expense recognition. To get over such problems, estimations are based on GAAP.

## SPOTLTGH゙ 1.5

## Ind AS 1 on Concepts

IFRS converged Indian Accounting Standard 1 (Ind AS1) on "Presentation of Financial Statements" states that the fundamental accounting assumptions are going concern, consistency and accrual. They are usually not specifically stated in financial statements because their acceptance and use are assumed. Disclosure is necessary, if they are not followed.

### 1.7.12 Dependability of Data through Internal Control

The data, which forms the very basis of accounting records, has to be dependable. Internal control systems are expected to ensure such dependability. The nature and magnitude of the business may condition the extent and structure of such control system. It is well known that the reliability of records will ultimately depend on the reliability of the data forming the basis of such records. This will also be necessary to satisfy the standards of verifiability expected of accounting records.

It is always expected that the accounting entities will maintain the standard of their internal controls to ensure that the data used as the basis of accounting records are controlled and their quality ensured. This quality assurance is a process internal to the accounting entities.

To encapsulate, it is well recognized in accounting theory and practice that the accounting information is subject to the criteria of relevance, verifiability, freedom from bias and quantifiability. One can add to these, the all-inclusive criterion of usefulness. The application of these accounting principles is subject to objectivity and feasibility. It will not be very difficult for you to appreciate that without these useful standards, preparation of accounting records may be well nigh impossible.

Basic Accounting Principles are the general laws established for best achieving the objectives of accounting. They include recording, measurement, classification, modification and reporting. These are more entangled with practice and do not exist as abstractions. They are solid foundations and thus accounting rules cannot be mixed up with these principles. Accounting rules are pragmatic specifics, concerned with the action aspect.

### 1.8 ACCOUNTING POLICIES

Accounting policies are the specific accounting principles and the methods of applying these principles for the preparation and presentation of financial statements of an enterprise. These policies are based upon the accounting concepts followed by the enterprise. Since different enterprises follow different accounting concepts, there cannot be a single set of accounting policies, which can be applicable to every type of enterprise, under all the situations.

The way food will differ from community to community, accounting policies of different enterprises also differ. The areas where different types of accounting policies are used by different enterprises are:

- Valuation of Inventories
- Valuation of Investments
- Treatment of Depreciation
- Treatment of Goodwill
- Treatment of Contingent Liabilities
- Treatment of Foreign Exchange Transactions

There are many other areas that lead to the adopting of different accounting policies, depending upon the laws, customs, usage, and the business environment.

As the number of available alternatives kept on increasing, the presentation and comparison of the financial statements became complicated. In order to facilitate better presentation and comparison, the ICAI, in the recent past, has been issuing guidance notes on accounting standards (see, Section 1.6.3), thereby reducing the number of alternative accounting policies available.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) The process of management reporting involves the provision of information for decision making with respect to only making plans for the future.
(h) Accounting has some broad guidelines, such as, going concern, business entity, prudence, and consistency, which are to be used as guideposts for assistance.

### 1.9 OBJECTIVES OF ACCOUNTING

Explain the objectives of accounting along with the accounting concepts

Accounting practice emanates from a sound framework of objectives. Some of the universal objectives of accounting are 'income determination', 'financial reporting' and 'disclosure'.

- Income determination is needed for rational economic decisionmaking (including investment policy), taxation, national statistics, and reporting on stewardship.
- Financial reporting would include reporting on the financial position of the entity. The idea of an entity makes this aspect simple and feasible. At any point of time, the financial position of an entity can be summarized taking into account all the things of value owned by the entity and all the claims against these possessions.
- Disclosure is one of the dimensions of financial reporting which requires that all the relevant and pertinent information is supplied to the information users. Even though the specific purposes of the different information users may be different and the information users may be many and varied, a single set of broad based financial statements form the basis of accounting disclosure. Information users use appropriate analytical tools to adapt the information to their specific purposes.


### 1.10 PURPOSES OF ACCOUNTING INFORMATION

Accounting is concerned with information processing relating to business events. The major purposes of accounting can be viewed as score keeping, attention directing and problem solving (see Figure 1.6). We discuss them in this section.


Figure 1.6 Accounting Information-Purposes

### 1.10.1 Score Keeping

The score keeping function is one of the primary purposes of any accounting system. It is concerned with reporting on the financial health of the organization. In essence, it is intended at answering the question: How are we doing? It should enable the receiver of the information to make his own conclusions. The answer to the question could be good, bad or indifferent. A moment's reflection would show that it is not that simple. It would need to address many possible queries. What is doing well? What is doing badly? Is profit earned well? Is an investment in the firm safe? These problems have been raised only to show that we can go on and on in terms of asking questions. It is this possibility of going on and on that necessitates the need for some standards for providing information (see Annexure 1.5 on the OLC).

Score keeping has two possible angles. One is that of keeping record of the actual data on performance, a constant process of measurement and valuation. The other aspect is concerned with putting the data in relation to predetermined standards. In order to answer the question about the performance of the entity, we have to have a constant process of comparison against some benchmarks. This is achieved by preparing a series of reports based on a comparison of the actual data with that of a planned data.

### 1.10.2 Attention Directing

Attention Directing is nothing but the process of giving a signal to the user of the accounting information, about the need to take a decision. In other words, the user is prompted to take a decision. An accountant's report, comparing the actual performance data against the budgeted data, is a score keeping report. In the hands of a decision maker, it is an attention directing information. This would enable him to immediately focus his attention on the deviations or variances from the plan or the budget. This could trigger a whole series of actions - evaluations of the reasons for the deviations, remedial actions for the deviations, feedback on modifications or changes in course for the future and so on.

### 1.10.3 Problem Solving

The Problem Solving function of accounting information involves the provision of such information that would enable the managers to find solutions to the problems. There are many problems which accounting information could highlight and for whose solutions, it could provide support. Decisions on 'make or buy' with respect to components, parts or products; decisions with respect to the continuation or the dropping of a product line, or a division; leasing or acquisition decisions regarding assets, are all examples of the problem solving purpose of accounting information. In its problem solving role, accounting enables the quantification of the different alternative solutions and their relative merits and demerits.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(i) Universal objectives of accounting practice includes 'income determination'.
(j) Accounting system is also concerned with the provision of information for solving tricky situations.

### 1.11 ACCOUNTING AND MANAGEMENT CONTROL

One of the major tasks of the management is to control the operations of an organization. Control can be easily understood as the process of keeping the organization on its planned course. This process of ensuring that the organization is on course, involves measurement. Accounting is closely connected with the control system in an organization in that it provides the measurement system and the required information to the controller for ensuring that the organization is on its course and making corrections whenever required.

Let us try to identify and define a problem in a hypothetical setting. Suppose you are managing a firm that sells three products, $\mathrm{P}_{1}, \mathrm{P}_{2}$ and $\mathrm{P}_{3}$. You are now confronted with the problem that the profit of your firm is declining. The falling profit may be due to many reasons. The first thing you would like to do is to identify the problem more clearly before you set about solving it.

Some of the possible hypotheses you would like to examine are:

- All the three products are earning less money.
- Two of the products are losing money.
- Only one of the product is losing money.
- Some products are earning more money, but others are losing more than that.

You can go on and on when you really attempt a blind search. But in practice, it can't be that bad. You will be able to zero in on a more focused questioning. The summarized accounting information triggering these questions is provided in Table 1.5.

Table 1.5 Summarized Income Statement

|  | Year 1 | Year 2 |
| :--- | ---: | ---: |
| Sales | ₹1000 | ₹1000 |
| Less: Cost of goods sold | 400 | 500 |
| Gross margin | 600 | 500 |
| Less: Depreciation | 200 | 200 |
| Other operating expenses | 100 | 100 |
| Profit | $₹ 300$ | $₹ 200$ |

From the above data, we see that the decrease in the profits during the period happened as a result of an overall increase in the cost of goods sold. This identification naturally triggers the next logical question:

Which product is losing money?

Table 1.6 Breakup of the Summarized Income Statement

|  | Year 1 |  | Year 2 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P1 | P2 | P3 | P1 | P2 | P3 |
| Sales | 300 | 300 | 400 | 400 | 400 | 200 |
| Less: Cost of goods sold | 150 | 150 | 100 | 200 | 200 | 100 |
| Gross margin | 150 | 150 | 300 | 200 | 200 | 100 |

Sales of $\mathrm{P}_{1}$ and $\mathrm{P}_{2}$ have increased (see, Table 1.6). The costs of sales of these products have retained the same relationship with the sales. Sales of $\mathrm{P}_{3}$ have decreased. The ratio of cost of sales to sales of $\mathrm{P}_{3}$ has doubled. We now have a clearly identified problem. At this stage, managers step in. Thus, the function of accounting as an information processing system, is to provide information to decision makers.

Alternatively, this process can be easily visualized by having a look at the structure of a control system in an organization. Look at the control system given in Figure 1.7. You know that an organization is made up of inter related parts and is linked to the environment. The organization depends on the environment for its inputs and for disposing off its output. The process of control implies that we have to measure the inputs, processes and the output. Environment, which provides the input, would impose output standards, such as will be acceptable in exchange for providing the inputs. The control, therefore, would imply measurement comparisons and feedback. The process of evaluation brings out the deviations, which provide the basis for the feedback.

From the illustration and Figure 1.7, it is obvious that the controller (accountant) and managers obtain such information, which enables them to diagnose the situation. They are in a position to identify and define the problem.


Figure 1.7 Structure of Control in an Organization

### 1.12 USERS OF ACCOUNTING INFORMATION

The accounting principles we discussed are not the end in themselves. They are intended at making the financial statements useful to its stakeholders. Stakeholders are the ones who have an interest in what happens as a result of the entity's activities. Apart from the top management of an organization, the other important stakeholders of an organization are its investors, employees, lenders, customers, suppliers, public, and finally the government and its various agencies. To appreciate this point clearly, try your hands on the simple activity given in Activity 1.

## Activity 1

Match the following: Users and their Need for Organizations 'Accounting Numbers'

| 1. State Government | i. Is my supplier going to be a regular reliable source at low cost in the <br> long run? |
| :--- | :--- |
| 2. Central Government, Ministry of <br> Finance | ii. Is the organization paying appropriate corporate income taxes? |
| 3. SEBI, RBI and such Regulatory <br> Bodies | iii. Will a change in local Goods and Service Tax (GST) rates influence <br> the firm to move to a newer location? |
| 4. Top management | iv. Can these numbers reveal the quality of receivables (to be potentially <br> funded)? |
| 5. Employees union | v. What level of wage increment should we bargain for (in the next <br> meeting)? |
| 6. Public | vi. Are the securities listing norms being adhered to by this publicly <br> listed organization? |
| 7. Long-term lenders | vii. Is this firm exploiting the local community? |
| 8. Banker-cum-working capital | viii. Is the firm open to taking long-term debt? If yes, what type of long- <br> term loan structure will make this firm take it next debt from us? |
| 9. Investors | ix. Is this firm eligible for taking next working capital finance from us? <br> And at what terms? |
| 10. Equity analysts | x. Is the firm investing enough to sustain the past growth opportunities <br> and enhance them further? |
| 11. Mutual fund managers | xi. Which past projects were more successful? And, should we invest <br> further in them? |
| 12. Present customer | xii.Should I invite this firm in my 'request for proposal' for the next <br> turnkey power plant? <br> 13. Likely customer <br> xiii. Can I ask this firm to change its trade terms and trade incentives to <br> $h a n n e l ~ p a r t n e r s ~ b e t t e r ? ~$ |


| 14. Dealers, stockists, and wholesalers <br> partner | xiv. To keep track on the company's social and cultural upliftment <br> activities. |
| :--- | :---: |
| 15. Supplier of materials | xv. To decide on giving incentives/subsidies to a specific industry |
| 16. Trade financier | xvi. What should be the ideal win-win vendor trade terms of this <br> company to ensure that both of us benefit? |
| 17. Environmentalists | xvii. Are financially sustainable business firms also environmental <br> friendly? |
| 18. Local community | xix. Doe the accounting characteristics of this firm matching with the <br> capital market optimism? <br> generate returns? |
| 19. Stock traders (speculators) | xx. Does the company have financials to give quick returns? |
| 20. Central Government, Ministry of <br> Commerce and Industries |  |

Financial statement users could be classified into internal users and external users. Internal users are managers, who are concerned largely with the operating and strategic decisions about the business. Internal users being managers of the business, have complete access to the internal information system. Even then, financial statements do provide an integrated picture of the whole organization, to them.

There are many classes of external users of financial statements (see Activity 1). Some of them are directly concerned with the company. A principal group of external users of financial statements include the creditors and equity investors. Equity investors, both existing and potential investors, need to base their decisions about their investments while choosing among alternatives. Creditors need to monitor their investments for safety and returns.

A host of other groups or individuals are interested users of the financial statement information of an organization. Merger and acquisition analysts, business competitors, regulatory authorities and trade unions are all important consumers of the financial


To know more on "Accountants in India: Bright Prospects" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/523 statement information (see Activity 1).

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(k) The process of management reporting involves the provision of information for decision making with respect to control of day to day operations of the entity, as well as for making plans for the future.
(I) Financial statements is for internal users of the company, to aid in their decision-making function, and hence, needs to be confidential in nature.

### 1.13 GLOBALIZATION AND ACCOUNTING STANDARDS



## Review the institutional layers in a globalized world behind creation of accounting norms

During the last couple of decades, efforts have been made by accounting authorities all over the world, to improve upon the qualities that make accounting information useful (see Section 1.6.3 for preview). The International Accounting Standards Board (IASB) is an independent accounting standard setter. Its goal is to develop a single set of high quality, understandable and enforceable, global accounting standards, which require transparent and comparable information in financial statements. It has been highly successful in this.

One can say that International accounting convergence is a way to find out the appropriate way to work together to build a global system of high quality financial reporting. It not only helps to maintain the global economic stability but also helps to link the country's economy with that of world. The IASB publishes its standards in a series of pronouncements called the International Financial Reporting Standards (IFRS). So, IASB brings out accounting standards, which are recommended for adoption by the member countries. Furthermore, IASB cooperates with national accounting standard setters, to achieve convergence in accounting standards around the world. Already the resistant countries (such as China, India, and USA) have accepted it and are in various stages of implementation. Annexure 1.4 (on the OLC) gives the road map of convergence of Indian accounting norms with IFRS as per the core group constituted by the government.

## SPOTLTGHT 1.6

## "Benefits of IFRS would start from 2018"

In an interview to the Business Standard newspaper, Ian Mackintosh, vice-chairman, IASB, told that greater transparency in financial reporting and higher level of disclosure are likely to lower the cost of capital for Indian businesses in the long term. Edited excerpts:

- Has the accounting profession become more globalized with the adoption of IFRS in the past 10 years?
... the number of countries using the standard (IFRS) has been growing. In an in-depth survey of 140 countries, we found 114 used the IFRS. This means for accountancy, there is a common language. In some ways, this is globalization of the accountancy profession. So, people can move from country to country with the basic background of IFRS. It has been quite a revolution in past 14 years. What drove it essentially was the globalization of the markets. It became obvious you needed a common language for financial reporting, as everyone had a different financial reporting standard. We are very happy that India is joining in at this stage.
- How well prepared is corporate India and the government?

The government announced it in its Budget last year and seems determined to achieve it this time - April 1, 2016. The Reserve Bank of India has put out a consultation paper for making banks compliant by 2018. The gap after that is of insurance companies.

The next challenge is to get companies organized. Europe introduced IFRS in 2005, and their companies are happy that it has lowered the cost of capital. Over the long term, Indian companies should also expect tangible benefits.

- How long will it take for companies to start getting those benefits?

Generally, results start to come out after two years of applying the standards. It would be reasonable to expect the benefits would start to flow in around 2018. For foreign investors looking at India, it takes time to trust and understand the financial situation that companies are in.

Source: "Benefits of IFRS would start to flow in 2018: Ian Mackintosh," Business Standard 29 Nov. 2015, Print.

In India, the attempt to attain convergence with IFRS fundamentally appears to be a by-product of the country's rapid economic growth rather than its facilitator. Even within the rapid economic growth, the prime reason is the needs of the growing Indian equity markets from 1990s onwards - with large amounts of money coming from foreign institutional investors demanding internationally comparable financial statements. However, banking and business sectors are still steeped in culture, tradition and agendas. Nevertheless, convergence with modifications reflecting "Indian conditions" is steadily on its way.

### 1.14 BRANCHES OF ACCOUNTING



The complex society of the present day has influenced accounting also in as much as it has had to adapt to a high degree of specialization. Based on the same fundamental principles, as displayed in Figure 1.8 , accounting itself has branched off into specialized branches.


Figure 1.8 Branches of Accounting

### 1.14.1 Enterprise-Level Accounting

Enterprise accounting specifically addresses the issues of measurement and valuation in the context of business enterprises. The ownership of the business enterprise does not influence enterprise accounting to any great extent. The objective and orientation of enterprise accounting is profit determination. Since the enterprises are varied in size and activities, there is a considerable amount of adaptations of the generally accepted accounting principles, so as to suit the particular business situation. For example, the nature of the business and the transactions in a trading business, are those of different from a manufacturing business and both the trading and manufacturing businesses, are different from a contracting business, and so on.

Enterprise accounting, in the course of its evolution, branched off into two distinct disciplines. Even though there is a considerable amount of interaction and integration between the two branches, they even have their own separate professional bodies. The accounting system is the major quantitative information processing system in almost every organization. We can identify three major purposes of an accounting system, which are:

1. Internal reporting to managers, for use in planning and controlling of the day-to-day operations.
2. Internal reporting to managers to enable them to formulate major plans and policies.
3. External reporting to different stakeholders, such as the shareholders, government and other outside agencies.
The external reporting purpose stresses on the historical, stewardship and custodial aspects of accounting. This area is covered under financial accounting. We have also seen that by the very nature of its purpose, it is entangled with a more 'legalistic' sort of approach. Financial accounting is heavily constrained by the generally accepted accounting principles. Since it is concerned with information for external users, regulatory agencies and legal authorities also ensure that certain minimum expectations are met with respect to the contents, timeliness and so on, of the information.

### 1.14.2 Financial Accounting for Enterprises

Financial or equity accounting is visualized as being primarily concerned with the providing of financial information relating to the entity, to 'outsiders', or to those who are not involved in the day to day management of the enterprise. These outsiders include shareholders (owners), creditors, bankers, government, financial analysts, investors and a host of other people who are concerned with the entity.

Financial accounting has greatly influenced the other areas of accounting. In this book, our focus will be on financial accounting, the theory and practice behind it and the forces that have shaped it. We also intend to clarify the meaning and usefulness of the underlying fundamentals, and to take stock of the efficiency of the accounting concepts, postulates, principles and practices.

Historically, accounting developed as a system for reporting information to the owners. In the process of its evolution, accounting branched off into two distinct directions - one dealing with information processing for external users and the other dealing with information processing for internal or managerial uses.

We have seen that the major purpose of financial accounting is to report the position of the entity as on the reporting date, as well as the performance of the entity during the period covered by the previous report date and the present reporting date. It is the aggregate of the revenues earned during the reporting period and the expenses incurred for the purpose of earning that revenue, which is reported in the income statement. The balance sheet, on the other hand, reports on the position of the entity in terms of the assets, liabilities and owners' equity. These reports are mainly aimed at outsiders, including the owners of the business, who do not participate in the day-to-day operations of the entity.

### 1.14.3 Management Accounting for Enterprises

Modern cost and management accounting, on the other hand, aims at reporting the activities of the entity to the managers, so as to enable them to plan and control the activities of the entity vis-àvis other (competing) entities. We will use the terms 'cost accounting' and 'management accounting' interchangeably, throughout this text. Cost accounting is indistinguishable from management accounting as the major purposes of providing information for controlling, the day-to-day operations of the entity and of providing information for formulating plans and policies, are common to both. It should, however, be noted that traditionally, cost accounting was concerned with the determination of product costs and inventory valuation and in this respect, it was an extension of financial accounting.

The process of management involves taking decisions with respect to day-to-day operations of the entity, as well as making plans for the future. Thus, managers depend on the accounting data for guiding their managerial decisions. Decision-making in this context, is the process of exercising a purposeful choice from among a set of alternative courses of action.

The purposes of internal reporting, for controlling the day to day operations and providing information for formulating plans and policies, is to focus on the managerial uses of information. This information need is met by management accounting. Management accounting is not that much constrained by the generally accepted accounting principles as financial accounting. However, the structure of information processing, specifically, the account format, is widely used in management accounting as well.

## Table 1.7 Difference between management accounting and traditional cost accounting

## Management Accounting <br> Traditional Cost Accounting

Management accounting is the identification, measurement, accumulation, analysis, preparation, interpretation and communication of information that assists managers in fulfilling organizational objectives.

Traditional cost accounting systems had a more narrow focus and were aimed at accumulating the costs of products and services of an organization, in order to determine the cost of goods sold and the value of the inventory.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(m) Accounting can be broadly divided into two branches, social accounting and government accounting.
(n) ICAI is progressively working towards convergence reflecting "Indian conditions" in the IFRS.

Cost accounting, with its emphasis on determining the costs of products or services produced by an organization, provides all that the management accounting provides and supports a small part of financial accounting. The product costing function provides information that is crucial for profit measurement in financial accounting. The cost of products, to be considered while determining the expiration of costs with respect to the revenues earned, or the cost of goods sold is provided by the cost accounting system. Thus, the product costing function provides important information for external reporting.

## SUMMARY

Historically, accounting developed as a system for reporting information to the owners (stewardship accounting). Modern management accounting, on the other hand, is intended at reporting the activities of the entity to managers so as to enable them to plan and control the activities of the entity.

The fundamental ideas of capital maintenance, productive capital, and profitable operations supported by commerce and credit, form the pillars up on which accounting is built. The process of management reporting involves the provision of information for decision making with respect to control of day to day operations of the entity, as well as for making plans for the future. Accounting as a measurement and valuation system, recognizes the duality of values by taking into account, both the benefit and sacrifice involved.

Accounting as an information processing system, is concerned with the provision of information on score keeping, as well as for attention directing and problem solving. The conventions of accounting are flexible, and much is left to the judgment of the individual accountant. However, there are some broad guidelines, such as, going concern, business entity, prudence, and consistency, which are to be used as guideposts for assistance.

Accounting for enterprises can be broadly divided into two divisions, management accounting and financial accounting. While the former is for internal users of the company, to aid in their decision-making function, and hence, needs to be more timely and confidential in nature, the latter is essentially meant for external users. We can say that financial accounting is concerned with (a) recording of transactions which are at least partially financial in nature; (b) summarizing and presenting financial information in reports; and (c) analyzing the financial reports.

Globally, over time, financial information needs required by both managers and investors have changed. India, propelled by globalization, has been no left over; and has seen a dramatic change in its business scenario. Thus, India has been gradually adopting itself to the guidelines issued by the International Accounting Standards Board (IASB), a body meant to harmonize guidelines on financial reporting throughout the world. The Institute of the Chartered Accountants of India (ICAI), India's standard setting body, is progressively working towards this convergence with modifications reflecting "Indian conditions" in the International Financial Reporting Standards (IFRS).

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Accounting
- Accounting Policy
- Accounting Postulates
- Accounting Principles
- Accounting Theory
- Attention directing
- Business entities
- Conservatism
- Consistency
- External audit
- Financial Reporting
- Full-disclosure
- Generally Accepted Accounting Principles (GAAP)
- Going concern
- Institute of the Chartered Accountants of India (ICAI)
- Internal audit
- International Financial Reporting Standard (IFRS)
- Management control
- Materiality
- Monetary expression
- Problem solving
- Property rights
- Score keeping
- Timeliness


## EXERCISES

## Multiple Choice Questions

1. A profit making business operation as a separate legal entity and in which ownership is divided in the proportion of investment is known as a:

LO 4 EASY
(a) Limited Liability Partnership
(b) Partnership
(c) Limited Liability Company
(d) All of the above
2. Financial Accounting information is:

LO 1 MEDIUM
(a) A summary of historical events, both financial and non-financial
(b) The result obtained from appropriate measures
(c) Enhanced by management's explanation
(d) All of the above
3. According to which concept, tangible fixed assets are depreciated on the basis of expected life rather than on the basis of market value.

LO 6 MEDIUM
(a) Conservatism concept
(b) Money measurement concept
(c) Going concern concept
(d) Consistency concept
4. Although accounting information is widely used by a variety of external parties, financial reporting is primarily directed toward the information needs of:

LO 7 MEDIUM
(a) Customers
(b) Employees
(c) Equity Analysts, and Credit Rating Agencies
(d) Investors and creditors
5. Which of the following you do not agree to:

LO 5 DIFFICULT
(a) The auditor is the chief information officer of a firm.
(b) Book keeping involves measuring and recording business transactions.
(c) Gains or a loss in a series of transaction(s) is an event.
(d) SEBI is the capital market regulatory authority prescribing its own compliance guidelines to firms under its jurisdiction.

## Fill in the Blanks

LO 6 MEDIUM

1. $\qquad$ concept applies when Abdul Agro Limited bought a grinding machine and recorded the purchase at the amount of cash paid to purchase it.
2. Using the same method of accounting over a considerable period is referred to as the $\qquad$ principle.
3. If an accountant overstates a business entities resources (or material assets) then we can state that he is violating the $\qquad$ principle of accounting.
4. M/s Gagan Cycle Ltd. ...
(a) The accounts of M/s. Gagan Cycle Ltd. show a profit of ₹ 88,000 for the year. This includes an amount of ₹ 25,000 relating to an order just received. Based on this information, what will be the profit?
(b) The corrected profit would be ₹ $\qquad$ because we should apply the $\qquad$ concept.
5. M/s Manish Boutique Ltd. ...

During the year, Manish Malhotra had taken home some clothing fabric from his boutique, to present his wife a new suit for her birthday. He has included the cost of this stock ( $₹ 12,000$ ) as a business expense while calculating the profits, which came to ₹ 62,000 . Based on this information, what will be the profit?
(a) The $\qquad$ concept applies here and the profit figure should be ₹ $\qquad$ .

## Discussion Questions

1. Look at the chapter opener wherein Chanakya's views on accounting are shared. Times have changed! Would you like to still agree with his views on accounting? Discuss. LO 1 MEDIUM
2. What is Conservatism? Can you think and give illustrations of this concept being misused?
3. On a scale of 1 to 10 , wherein 1 stands for just one page summary information and 10 stands for detailed information on each and every accounting transaction:

LO 7 MEDIUM
(a) As a retail investor, what level of financial detail of information would you like to have in the periodical financial reports? Give reasons.
(b) Will your position change, if you were to look from the perspective of a supplier to the organization. Discuss.
4. Chirag Shah desires to open a sole proprietorship to do the business of managing "spiritual road shows" to be attractive. He decides to start his own business at Timbaktu [with a plan to expand it down south till Tirupur].

LO 4 DIFFICULT
a) What are the merits and demerits of opening a sole proprietorship?
b) What is the procedure of opening/registration of the same? How is the process different from opening a partnership or a company?
Should Chirag consider any other alternative form of business entity?
5. Under what type of situations might a firm disguise itself as a "going concern" in its accounting reports [even if its business model does not convey the same]? How can the users of accounting information make out such discrepancies?

LO 6, 7 DIFFICULT

## MINI CASES

## Case 1.1 Warren Buffet Investment Club

LO 2, 6 EASY

The Warren Buffet Investment Club's board is composed of 10 students from a new school of management. The club members also take care of investing the student's pool of funds. As part of their annual work, members complete a full qualitative and quantitative analysis of a chosen industry, and finally, recommend a company each, from 10 different industries. Finally, these members make a presentation of their investment recommendation.

This year, the selected members for the club includes Aamir, Jackson, JK, PK, Ranga, Rohit, Saradha, Shalini, Shaniya and Yourself. During the discussion, various ideas were suggested for identifying the industries, such as industries with successful products; industries with cheap raw material costs, industries with less competition and industries with high-technology inputs.


## Case Question

(a) Prepare a set of five decisive factors (not measures) that you would use while selecting these ten industries (to invest). Give supporting reasons for each of the factors.

## Case 1.2 Arijit Singh Purchases Bolbo

LO 3, 7 EASY

Arijit Singh recently purchased a Bolbo car and fell in love with it - to the extent that he renamed himself as Bolbo Arijit Singh. Yet, he stuck to his business plan of releasing albums. He estimated the yearly cost in producing his next album to be INR 1 crore. Sales were estimated to be INR 2 crore. On the close of the year, he got a report stating cost was INR 1.5 crore and sales was INR 2.25 crore. He was happy as album sales had exceeded the targets and awarded bonus for the staffs. For the second
year, he created two new albums. The second years report stated the costs to be INR 3 crore and sales as INR 4.5 crore. Like always, he is happy to award incentives to staffs and feels that profit margin has been maintained consecutively.


## Case Questions

(a) Suggest, if any, measures to Arijit's business for further improvement along with reasons.
(b) What other factors do you think are essential while doing business analysis and awarding incentives?

## Case 1.3 Amar, Akbar, Anthony \& Amarpreet

Amar, Akbar, Anthony and Amarpreet were four school time friends. After passing from school, the four met with each other and were discussing about their future plans. All four were sure that they would take up to doing business after finishing their graduation.

Amar was very ambitious and always thought of growing fast and managing a large business empire. He was contemplating the setting up of a retail chain of beauty parlors across the country (replicating the McDonald model). Akbar never believed in such large dreams and had always believed in being self-reliant. Akbar was planning to start a sponge iron unit. Anthony always believed in being a team member. He was planning to start an event management firm. Amarpreet being a doctor by profession believed in serving the people and hence, planned to run his own hospital with help of his professional group of friends.

## Case Questions

(a) Suggest the type of business entity that would fit the profile of each individual. Give your reasons.
(b) In the above case, should the type of business being taken up, influence the type of business entity? Discuss.
(c) What other factors do you think are essential while deciding on the type of business entity?

## Case 1.4 Lehman Brothers and Global Rules

LO 1, 4, 8 MEDIUM
Lehman Brothers Holdings Inc. was a global financial services giant which, until declaring bankruptcy in 2008, participated in investment banking business and related areas. It was a primary dealer in the U.S. Treasury securities market. Its subsidiaries included Lehman Brothers Inc., Aurora Loan Services, Inc., SIB Mortgage Corporation, and Lehman Brothers Bank. The firm's headquarters were in New York, with regional headquarters in London and Tokyo.

A March 2010 report by the court-appointed examiner indicated that Lehman executives regularly used cosmetic accounting gimmicks at the end of each quarter to make its finances appear less shaky than they really were. As, the investment bank wasn't able to persuade its own lawyers in the United States that the relevant deals it did in the US constituted real deals with outsiders, so, it routed them through its British subsidiary. (Actually, they were fictitious deals but they wanted to make it look real.) That meant they came under the British legal system, and the UK-based law firm Linklaters was able to opine that the transactions counted as true and fair. The US accounting standards apparently did the rest, allowing

Lehman to shuffle US $\$ 50$ billion of assets off its balance sheet. Ernst \& Young were the firm's auditors.
The investigators commented that if Lehman had stayed entirely at home, using both United States laws and accounting standards, it would have failed. Similarly, if the firm had hopped over the Atlantic and applied international accounting standards as well as British law, the scheme would also have failed. A senior official inside the company warned that the use of such treatment would present "reputational risk" to the company, if the public found out.

Source: Company website and various news articles.


## Case Questions

(a) Why should firms create their own subsidiaries especially while operating in other countries?
(b) Forum shopping occurs when there is the combination of an inducement to go to an alien forum (i.e., foreign jurisdictions) and an opportunity for the plaintiff to bring proceedings there. It is also known as regulatory arbitrage. In this case, can we say that Lehman indulged in forum shopping? If yes, whose help would it have possibly taken to do the same?
(c) How can regulators in different jurisdictions close such gaps?

## Case 1.5 Koya's Kabs

LO 2, 3 DIFFICULT
Koya was driving the Pajero Sports Vehicle of Sayed Abdul Rehman Alsagoff of Arab Merchant Llc. He returned to Kozhikode and decided to operate cabs.

He bought a Tata Safari costing ₹ $7,85,000$ on road. This included ₹ 30,000 annual insurance, ₹ 60,000 on 15 -years road tax, and $₹ 3,000$ on "expenses" for registration. He paid $₹ 2,85,000$ from his savings as down payment and took a mortgage for the remainder. The mortgage was structured as 36 EMI payments of ₹ 18,000 each.

His only source of income was the fare collected from the cab. During the first year he had the following information on money spend by him, which he had noted down in his pocket diary:

| Item | Amount (in ₹.) |
| :--- | ---: |
| Groceries purchased | 48,275 |
| Clothes bought for his daughters | 2,850 |
| Books and fees for his daughters | 850 |
| Uniform for himself and the driver's badge | 2,785 |
| Food and drinks while driving | 18,000 |
| Sari bought for his wife on wedding anniversary | 1,250 |
| Diesel and oil | 157,500 |
| Paid to his wife for domestic expenses | 11,000 |
| EMI paid | 198,000 |
| Paid in the Savings Bank account | 7,490 |

At the end of the year, he organized a small party for his family. His wife, Jhamela, pointed out that Koya has put in all his savings in the cab. Did you make any profit? He did some mental arithmetic and told her: ‘As of now I made a loss of ₹2,77,510!’. Ente Rubbe!!, was her response.

However, she was not very convinced about Koya's accounting skills. So she decided to consult her cousin Abdulla, an IIM alumus. He told her that the accounts need to be prepared taking into consideration "the framework" as developed by the International accounting Standards Board, if we are to really determine the profit or loss.

(a) Do you agree with Koya's loss calculation?
(b) Discuss the framework and issues to be considered in order to prepare the accounts of Koya’s Kab, as suggested by Abdulla.

## INTERNET ASSIGNMENT

## Assignment 1.1 Accounting Concepts and Annual Reports

In the online website of this book we have provided annual reports on the following seven companies, listed on the Bombay Stock Exchange:

- IVRCL Limited (Size: Medium; Key Sector: Infrastructure Constructions \& Contracting)
- ITC Limited (Size: Large; Key Sector: Fast Moving Consumer Goods)
- Linc Pen and Plastics Limited (Size: Small; Key Sector: Printing \& Stationary)
- PTC India Limited (Size: Medium; Key Sector: Trading)
- Raymond Limited (Size: Medium; Key Sector: Textiles Woolen \& Worsted)
- Tanla Solutions Limited (Size: Small; Key Sector: IT Software)
- Torrent Power Limited (Size: Large; Key Sector: Power Generation \& Distribution)

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online URL.

Your first assignment would answer the following two questions:

1. Show the proofs of the fundamental concepts of accounting in the latest given company's annual report, say, Going concern, Business entity, Conservatism, Timeliness, Reliability of data and such
2. Mention specific sample name of each category of stakeholder(s) as mentioned in the annual report (to the extent available) and identify the information that would be useful to them from the annual reports (for example, Salaries) and how?

## Answers

## Answers to "Let's Check Our Concepts!"

(a) False
(b) False
(c) True
(d) True
(e) True
(f) False
(g) False
(h) True
(i) True
(j) True
(k) True
(1) False
(m) False
(n) True

## Answers to Activity 1

Note: While there can be multiple answers in the above match the following, we are providing the most appropriate matches herein:

| 1. (iii) | 2. (ii) | 3. (vi) | 4. (xi) | 5. (v) |
| ---: | :---: | ---: | ---: | :---: |
| 6. (xiv) | 7. (viii) | 8. (ix) | 9. (x) | 10. (xviii) |
| 11. (xix) | 12. (i) | 13. (xii) | 14. (xiii) | 15. (xvi) |
| 16. (iv) | 17. (xvii) | 18. (vii) | 19. (xx) | 20. (xv) |

## ANNEXURE 1.1

## Three Ways of Capital Maintenance

Capital maintenance in an organization can be attained by any of the following three ways:
(a) Financial capital maintenance
(b) General purchasing power financial capital maintenance
(c) Maintenance of productive capacity

## Financial Capital Maintenance

Under the concept of financial capital maintenance, 'Capital' means the net assets (i.e., the excess of assets over liabilities) or equity (i.e., share capital plus reserves and surplus) of the entity. Therefore, income is the amount of increase in the net assets or equity of the entity, over the period. This excess, even if distributed as dividend, will not result in a reduction of capital.

For example, if the total assets and liabilities of a firm at the beginning of a year are $₹ 1,00,000$ and $₹ 80,000$ respectively, the net assets of the firm at the beginning amount to ₹ 20,000 (being assets less liabilities). Now, if at the end of the same period, the amount of assets and liabilities are ₹ $1,50,000$ and $₹ 1,25,000$ respectively, the net assets at the end of the period would become ₹ 25,000 . Here, the income for the period can be calculated as the excess of net assets at the end of the period, as compared with the net assets at the beginning of the period, which comes to ₹ 5,000 . This amount, even if distributed, will not reduce the capital. This concept is also known as Money Capital Maintenance. During periods of high inflation, the profits under this concept are inflated; as a result, the maintenance of the real value of capital may not be feasible.

## General Purchasing Power Financial Capital Maintenance

The concept of general purchasing power financial capital maintenance means the purchasing power of the financial capital invested is required to be maintained. The income for the period is the change in the net assets, expressed in monetary units of the same purchasing power. Continuing with the above example, if the rate of inflation is assumed to be at 5 percent, the net capital at the beginning of the period is restated to ₹ 21,000 (adding a 5 percent increase to $₹ 20,000$ due to inflation). Thus, using this method the income for the period becomes $₹ 4,000$ (being $₹ 25,000$ less $₹ 21,000$ ), which can be distributed as dividend without reducing the capital.

## Maintenance of Productive Capacity

The concept of maintenance of productive capital suggests that the productive capacity of a firm should be maintained when the income is determined. In other words, income means the excess of productive capacity at the end of the year, over the productive capacity at the beginning of the year. Taking the same example, if we assume that the net assets required to maintain the existing productive capacity is $₹ 23,000$, the income for the period would be ₹ 2,000 ( $₹ 25,000$ less ₹ 23,000 ).

The selection of the appropriate method of capital maintenance depends on the needs of the users of the financial statements.

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 1.2: Limited Liability Partnership
- Annexure 1.3: One Person Company
- Annexure 1.4: India's Roadmap of Convergence with IFRS
- Annexure 1.5: Additional Reading Material
- Annexure 1.6: Auxiliary Test Material
- Annexure 1.7: Internet Assignment

Balance Sheet

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Understand the basis of a balance sheet
LO 2 Paraphrase the balance sheet as an accounting equation
LO 3 Explain the concepts of revenue and expenses
LO 4 Know the content of balance sheet
LO 5 Classify the assets and liabilities
LO 6 Categorize the owners' equity
LO 7 Compare the formats of balance sheet

In FY2015, BCCI's Funds Increase by ₹1,300+ Crore
In FY2015, for the first time in its nine-decade history, the Board of Control for Cricket in India (BCCI), India's national governing body for cricket broke the ₹ 5,000 crore barrier. As on $31^{\text {st }}$ March 2015, the material possessions of BCCI were at ₹5,437 crore. We present few more details below:

| Items Owned by BCCI (from its Balance Sheet) | FY2015 |  | FY2014 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount in ₹ Crore | (Asset Weight \%) | Amount in ₹ Crore | (Asset Weight \%) |
| TDS <br> (Tax Paid Under Protest) | 2,587 | 47.6\% | 2,218 | 54.2\% |
| Cash \& Bank Balance | 2,159 | 39.7\% | 1,341 | 32.8\% |


| Receivables, etc. | 625 | $11.5 \%$ | 442 | $10.8 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Training \& Fitness <br> Equipment | 5 | $0.1 \%$ | 7 | $0.2 \%$ |
| Other Assets | 61 | $1.2 \%$ | 81 | $2.0 \%$ |
| Total Items Owned <br> by BCCI | $\mathbf{5 , 4 3 7}$ | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{4 , 0 8 9}$ | $\mathbf{1 0 0 . 0 \%}$ |

While the headline shows a beautiful picture wherein the wealthiest cricket body of the world was shown further consolidating its position at the top, yet the table above displays a not-so-rosy picture.

A number of questions arise in an inquisitive mind, such as:
■ Why should BCCI show TDS as an item that it owns? What if the appellate authority refuses to reverse the tax paid under protest by BCCI?

- Why should BCCI keep such huge amount of money as 'Cash \& Bank Balance'? Is the huge jump in 'Cash \& Bank Balance' during FY2015 a good signal? Why can't these funds be invested in stock markets for higher returns?
- Why should BCCI have receivables of such order? And who would be the parties from whom this amount is expected? Are these parties reliable?
- Why should BCCI have just a meagre $0.1 \%$ of its material assets as training \& fitness equipment (even a small Gym of Mumbai will have more funds stuck in their fitness equipment than above)?
In sum, we conclude that the discussion above on BCCI makes us appreciate about the need to understand the balance sheet better. Our discussion in this chapter might provide a few pointers to the above questions.
Source: The Board of Control for Cricket in India Annual Reports, BCCI, Web, 16 Dec, 2015.

One of the basic objectives of accounting is to convey information, which can help one in making a considered opinion on the status and performance of an entity. This is achieved through the different accounting reports prepared by an entity. One of the most important of these reports is the Balance Sheet.

While reading the appointments section of a popular newspaper, you often come across statements such as 'We are looking for an HR professional who speaks the language of businesses.' What Does That Mean? It means that the organization is looking for professionals who know the role financial statements play in making decisions. And no wonder among financial statements, people talk more about balance sheet.

The balance sheet is concerned with the reporting of the financial position of an entity at a particular point in time. This position is conveyed by listing all the things of value owned by the entity as also the claims against these things of value. The position as represented by the balance sheet is valid only until another transaction is carried out by the entity.

The balance sheet is a quantitative ${ }^{1}$ summary of a company's financial condition at a specific point in time, including assets, liabilities and net worth. It is a snapshot of the financial health of an entity.

[^3]It is a basic financial statement that measures the positions of a company's assets, liabilities and shareholders' equity, as on a given date, and allows comparisons with the financial status on the same date, in the previous fiscal year. It also facilitates comparison between multiple entities, especially with respect to financial health.

### 2.1 CONCEPTUAL BASIS OF A BALANCE SHEET

Understand the basis of a balance sheet

The concept we discussed in the previous paragraph can be elaborated by the following example.

## Illustration 2.1

I want to purchase a car costing ₹5,00,000. To do so, I have to borrow. A bank agrees to finance me if I can invest ₹ $1,00,000$ on my own.

Now let us follow the sequence, starting from when I approach the bank with the proposal. For measuring my ability to repay the loan, the banker will ask two specific questions:

1. What are the things of value you own?
2. How much do you owe, and to whom?

In other words, the banker would like to know what I am worth in material terms. My replies to these questions could be tabulated as follows:

| Things of value owned by me | $₹$ | Amounts owed by me | $₹$ |
| :--- | ---: | :--- | :--- |
| Savings deposit in bank | 50,000 | Loan from a friend | 50,000 |
| Term deposit in bank | $\mathbf{1 , 5 0 , 0 0 0}$ |  |  |
| Other personal possessions | 50,000 |  | $\mathbf{5 0 , 0 0 0}$ |
| Total | $\mathbf{2 , 5 0 , 0 0 0}$ | Total |  |

The above statement shows that I own ₹ $2,50,000$ worth of 'things of value'; out of which ₹ 50,000 can be withdrawn at any time, in cash. We say I have ₹ 50,000 in liquid form. Another $₹_{1,50,000}$ is in a monetary investment and the remaining $\mathrm{F}_{50,000}$ is invested in a non-monetary property (say, a bike and a television). Further, I owe ₹ 50,000 to a friend of mine. In other words, he has got a claim against the 'things of value' owned by me, to the
 claims against my worth is) ₹ 50,000 and hence, my 'net worth' is ₹ $2,00,000$. This implies that ₹ $2,00,000$ are my own claims against the things of value owned by me, or $₹ 2,00,000$ is my net worth.

Now, I can present my financial position in the following form:
Financial Position Statement - 1

| Things of value owned by me | $₹$ | Claims against things of value |  |
| :--- | ---: | :--- | ---: |

 of my term deposit in bank to pay cash). After the purchase of the car, my financial position statement would change as follows:

Financial Position Statement-2

| Things of value owned by me | $₹$ | Claims against things of value | $₹$ |
| :---: | :---: | :---: | :---: |
| Savings deposit in bank | 50,000 | Loan from a friend | 50,000 |
| Term deposit in bank | 50,000 | Own claim or net worth | 2,00,000 |
| Car | 5,00,000 | Bank loan | 4,00,000 |
| Other personal possessions | 50,000 |  |  |
| Total | 6,50,000 | Total | 6,50,000 |

Now, as a result of this transaction, my worth would increase from ₹ $2,50,000$, to $₹=6,50,000$. However, since there is also an equal increase in the claims against my worth, in the form of a mortgage or loan from the bank, my net worth remains the same.

Things of value possessed by an entity are referred to as 'assets'. Accountants use the term assets to describe things of value, measurable in monetary terms.

The amount owed by an entity, expressed in monetary terms, which represents a claim of outsiders against its assets, is referred to as liabilities. Liabilities are claims of outsiders, against an entity, and they are legally enforceable. The value of the assets owned by the entity, less the liabilities (or outsider's claims) is the net worth of the owner(s) of the entity. Since the net worth represents the claims of the owner(s) in case of an entity, it is referred to as owners' equity. It typically consists of funds contributed by the owner for the business (in form of cash or any other asset) and profit from the business which belongs to the owner(s) (called retained earnings).

Now we can understand that the financial position statement is a summary of the assets and liabilities and the net worth, as at a particular point in time. The balance sheet of an entity is the position statement prepared at any point in time. A comparison of the two position statements of before and after the purchase of the car will help clarify some of these ideas.

Comparative Financial Position Statements

| Assets |  | II | Liabilities and Net Worth | I | II |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Savings deposit in bank | 50,000 | 50,000 | Loan from a friend | 50,000 | 50,000 |
| Term deposit in bank | $\mathbf{1 , 5 0 , 0 0 0}$ | 50,000 | Own claim or net worth | $2,00,000$ | 2,00,000 |
| Car | - | $5,00,000$ | Bank loan | - | $4,00,000$ |
| Other personal possessions | 50,000 | 50,000 |  |  |  |
| Total | $\mathbf{2 , 5 0 , 0 0 0}$ | $\mathbf{6 , 5 0 , 0 0 0}$ | Total | $\mathbf{2 , 5 0 , 0 0 0}$ | $\mathbf{6 , 5 0 , 0 0 0}$ |

The following points may be noted from the above illustration:

1. Even after purchasing the car, my net worth remains the same. This is due to the fact that the increase of $₹_{4}, 00,000$ in the total assets was balanced by increase of $₹_{4}, 00,000$ in the liabilities. However, it should be
noticed that the $₹_{1,00,000}$ decrease in the term deposit in bank, represents a transformation of my assets from a bank term deposit to a car.
2. Outsiders' claim has priority over the owners' claim on the assets and hence, the net worth or owners' equity is always a residual claim against the assets. It follows from this that at any point in time, for all accounting entities, owners' equity and liabilities will be equal to the assets owned by that entity.
Therefore, we see that the balance sheet is prepared to give a synopsis of the present economic standing of the organization to understand in an easy way. It can be done by simply listing down all the possessions and holdings of an organization on one side and all the borrowings and the dues on the other side. The balance is by default funds contributed by the owners of a business; is also often known as Total Shareholders' Funds (see Annexure 2.1 for another illustration).

Having gone through the example, we are now in a position to understand that the balance sheet is a snapshot of the financial health of an entity at a particular point in time. In other words, information is true only at that particular point in time at which the balance sheet is prepared. Since there could be frequent transactions that a business entity gets into, the balance sheet position of a company could also change quite rapidly.

### 2.2 BALANCE SHEET EQUATION

Paraphrase the
102 balance sheet as an accounting equation

The idea we learned in Illustration 2.1 is fundamental to accounting, and could be expressed as an equality given below:

$$
\begin{equation*}
\text { Assets }=\text { Liabilities }+ \text { Owners' Equity } \tag{1}
\end{equation*}
$$

We also learned that the outsiders claim or liability has primacy over the owners' claim and this would mean that the owners' claim is only a residual claim. We could, therefore, define owners' equity as follows:

$$
\begin{equation*}
\text { Owners' Equity = Assets }- \text { Liabilities } \tag{2}
\end{equation*}
$$

It can be easily understood that the position statement (2) is nothing but the equality shown in statement (1). In simple terms, a position statement shows the balance between the assets owned by an entity, and the liabilities owed by the entity and the owner's equity. This position statement is referred to as a 'balance sheet'. Our position statements were based on a personal situation and a single transaction. In a business situation, there can be scores of such transactions. However, these impacts can be reflected on the fundamental equality in the same way.

This equation represents the corner stone on which the accounting edifice is built up, from the structural point of view. It shows the duality represented by 'benefit-sacrifice', from the point of view of an entity. From a different perspective, the assets of an entity will always be claimed by the outsiders first, and the remainder by the owners. Since the owners' claim is expressed as the remainder, the equality will always hold true. This equality enables us to treat all possible transactions in terms of its impact on this equality.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) Assets $=$ Owners' Equity is also a possible scenario.
(b) Outsiders' claim against the business is a residual claim.

### 2.3 BALANCE SHEET CHANGES

The balance sheet or position statement of an entity represents the position at a particular point in time. Any material transaction or exchanges can change this position.

Normally, any increase/decrease $(\uparrow / \downarrow)$ in the asset side is offset by an equal increase/decrease ( $\uparrow / \downarrow$ ) of liability or owner's equity or vice versa. Alternatively, any increase/decrease ( $\uparrow / \downarrow$ ) in the asset or the liability side may be offset by a corresponding decrease/increase $(\uparrow / \downarrow)$ in the same side. It is possible for us to generate a set of possibilities with respect to changes that can take place in a balance sheet. Rather, the balance sheet equality enables us to reduce the impact of all transactions in terms of six possibilities. Table 2.1 lists these six possibilities with examples using Illustration 2.1.

Table 2.1 Possibilities that Change Balance Sheets

| Possibility Example | Example |
| :--- | :--- |
| 1. An $\uparrow$ in assets followed by an $\uparrow$ in <br> liabilities and vice versa. | Purchase of a tractor of ₹400,000 using a bank loan. The asset side will show <br> the extra entry of the tractor while the amount of bank loan of ₹400,000 will be <br> shown on the liability side. |
| 2. A $\downarrow$ in assets followed by a $\downarrow$ in <br> liabilities and vice versa. | Using savings deposit in bank to return the loan of ₹50,000 from a friend. The <br> amount owed to the friend is reduced by an amount of ₹50,000 and at the same <br> time the cash kept at bank, which is our asset, is reduced by ₹50,000. |
| 3. An $\uparrow$ in assets followed by an $\uparrow$ in <br> equity and vice versa. | Interest of ₹5,000 earned on the savings deposit has the effect of increasing <br> the net worth. Here, the funds kept in the bank (asset) will increase by ₹5,000 <br> and at the same time the owners' equity will show a rise by ₹5,000 as a result <br> of the profit earned. |
| 4. A $\downarrow$ in assets followed by a $\downarrow$ in <br> equity and vice versa. | Theft of a printer worth ₹3,000. Here the assets side will register a decrease of <br> $₹ 3,000$ and at the same time will result in a decrease in the owners' equity by <br> ₹3,000 because of the loss suffered. |
| 5. An $\uparrow$ in assets followed by a $\downarrow$ in |  |
| another asset and vice versa. | Using your savings balance in the bank to purchase a laptop worth ₹28,000. Your <br> savings bank balance (asset) will come down by ₹28,000 but another asset, i.e., <br> a laptop worth ₹28,000 will be added in your balance sheet. |
| 6. An $\uparrow$ in one liability followed by a <br> $\downarrow$ in another liability and vice versa. | Taking a new bank loan to return the loan from a friend. Essentially, one loan <br> is replaced by another loan, triggering a simultaneous increase and decrease <br> in the company's individual liability items (but the overall balance of liabilities <br> does not change). |

So, we see that whatever happens, the sanctity of the balance sheet remains intact.

### 2.3.1 A Simple Business Balance Sheet

Now, let us examine how the ideas we have learned so far can be used in a business situation. Please recall that, based on the entity principle, we shall be dealing with the 'business' as distinct and separate from the owners. The first step in accounting is, therefore, the 'creation' of the entity. In other words, if you start a business, we start accounting for the business by treating the business as an 'entity or person' different from you (for more, refer to Section 1.5). You, as the owner of the business, now have a relationship with the business, being an outsider of a special nature, the owner. We shall demonstrate this by means of an illustration (Illustration 2.2).

## Illustration 2.2

Ram starts a store on January 1, 2016, with an investment of $₹ 20,000$, brought in from his personal savings. He decides to call his venture Ramstore.

We have to prepare the balance sheet of Ramstore on January 1, 2016. How do we proceed? In order to prepare a balance sheet for the business, based on the equality we have studied, we need to answer the following questions:

1. What is the value of the assets owned by Ramstore on that date?
2. What is the amount of liabilities owed by Ramstore on that date?
3. What is the amount of owner's equity in Ramstore on that date?

If we have an answer to the first two questions, it also follows that assets minus liabilities would be Ramstore's equity and this information would complete the equality and hence, the balance sheet.

The answer to the first question is that the only asset of Ramstore on January 1, 2016 is ₹ 20,000 , in cash. The answer to the second question is that Ramstore has no liability on that date; or in other words, it does not owe anything to outsiders. Thus, it follows that the only claim on the assets is that of Ram, the owner. These answers can be presented in the form of a balance sheet as shown below:

## RAMSTORE

Balance Sheet as of January 1, 2016

| Assets | Amount (₹) | Liabilities and Owners Equity | Amount (₹) |
| :--- | :---: | :--- | :---: |
| Cash | 20,000 | Owners equity | 20,000 |

Let us follow the business through its other transactions during January.
On January 2, the store purchases a shop for ₹50,000, paying ₹ 10,000 in cash and signing a mortgage for ₹ 40,000 .
This transaction will change the balance sheet as of January 1 , as follows:

1. Cash is reduced by ₹ 10,000 on account of the payment for the shop premises; hence, cash balance is ₹ 10,000 .
2. A new asset, the shop premises, is acquired, which is worth $₹_{50,000}$.
3. A new liability, that is, a mortgage on the shop, is contracted to the tune of $₹_{40,000 \text {. }}$
4. Owner's equity $=$ Total assets - liabilities, that is, $₹ 20,000=₹ 60,000-₹ 40,000$.

This shows that there is no change in the owner's equity since the increase in the value of the assets is accompanied by a decrease in cash (asset) and an increase in the liabilities. Thus, the new balance sheet will be as shown ahead.

\left.|  | RAMSTORE |  |  |
| :--- | :---: | :--- | :---: |
| Balance Sheet as of January 2, 2016 |  |  |  |$\right]$

On January 3, the store purchased merchandise for ₹5,000, paying cash. The store also purchased merchandise for ₹ 15,000 on credit from Dhruva.

The impact of the above transactions is that the assets in the form of merchandise inventory, increase by ${ }^{2} 20,000$. These assets are intended for resale and hence, have a short lifespan with the business. However, a part of this increase is accounted for by a decrease in another asset, cash by the amount of $₹_{5}, 000$. The other part, that is, the $₹_{15,000}$ increase in assets, is accounted for by the liability owed to Dhruva. The amount payable on account of the purchase of merchandise is usually referred to as 'accounts payable' or 'sundry creditors'. Usually, these are short duration liabilities, to be paid at the end of the normal trade credit period.

The balance sheet on January 3, 2016 will reflect the new financial position of the business, after these transactions.

## RAMSTORE

Balance Sheet as of January 3,2016

| Assets | Amount (₹) | Liabilities and Owners' Equity | Amount (₹) |
| :--- | :---: | :--- | :---: |
| Cash | 5,000 | Mortgage on shop | 40,000 |
| Merchandise inventory | 20,000 | Accounts payable | 15,000 |
| Shop premises | 50,000 | Owners' equity | 20,000 |
| Total | 75,000 | Total | $\mathbf{7 5 , 0 0 0}$ |

On January 4, the store sells the entire merchandise inventory for ${ }^{2} 25,000$ cash. Apparently, this transaction shows the transformation of an asset for another asset, at a higher monetary valuation. This is the basis of economic transactions, where, business profit is earned in the process of exchange of a 'utility differential' for a 'monetary differential'. The balance sheet, after this transaction, will clarify some of the conceptual issues arising out of this transaction.

## RAMSTORE

Balance Sheet as of January 4, 2016

| Assets | Amount (₹) | Liabilities and Owners' Equity | Amount (₹) |
| :--- | :---: | :--- | :---: |
| Cash | 30,000 | Mortgage on shop | 40,000 |
| Merchandise inventory | - | Accounts payable | 15,000 |
| Shop premises | 50,000 | Owners' equity | 25,000 |
| Total | 80,000 | Total | 80,000 |

You will note the change in the owner's equity figure. For the first time since we started following the transactions of Ramstore, the owner's equity figure has changed. How did this come about? The answer is simple. We followed the balance sheet equality: "Assets - Liabilities = Owners'Equity". The increase in the owner's equity is the result of an increase in the assets, arising out of the exchange of merchandise inventory for cash at a higher monetary valuation. Here, we find that the owner's equity increased to the extent of sales revenue earned over the cost of earning that revenue. In this case, the asset, that is, the cash received is $₹ 25,000$. The value of the sale of merchandise is usually referred to as sales revenue. The direct cost of earning was the revenue with which the merchandise inventory parted, that was worth $₹ 20,000$. We refer to this cost as the cost of goods sold.

### 2.3.2 Importance of Balance Sheet

The balance sheet is widely recognized as one of the best indicators of the financial position of a company. It provides information to various stakeholders about the company. For instance, a large customer may look at the balance sheet to assess the capability of the company to take up the order (in case of a longterm contract and to even work out the terms of the long-term contract). At the same time, lenders may want to know about the capacity of a company to pay back the borrowed money. The government may be interested in the balance sheet for tax computation purposes (say, wealth tax). Figure 2.1 illustrates this aspect for most users.

Analyzing the balance sheet of a company for one particular period may not give you a clear picture of the financial health of the company (see Annexure 2.2 on the Online Learning Center i.e., OLC for an illustration). Ideally, one would prefer to have data for more than a single period to get a reasonable picture of the company. This is the reason why we generally see balance sheets of two consecutive years being presented simultaneously. It provides us with financial position of the company over the years. ${ }^{2}$

### 2.4 REVENUE AND EXPENSES



Explain the concepts of revenue and expenses

We can understand the situation better by disaggregating the sale transaction. If we take the cash received in the amount of ₹ 25,000 , it results in an increase in the asset value. Simultaneously, the owners' equity increases by the same amount, to satisfy the balance sheet equality. This increase in the owners' equity, to match the asset increase realized from a sale transaction, is referred to as revenue. The merchandise inventory parted with decreases the assets by an amount of ₹ 20,000 . The effect of this decrease in the assets is that the owners' equity decreases by the same amount again, following the balance sheet equality. These decreases in the owners' equity, to match the decreases in the assets, suffered to earn revenue, are referred to as expenses.

We can generalize this result of the sale transaction. Revenues increase the owners' equity and the expenses decrease the owners' equity. The net result of this is that the owners' equity increases or decreases to the extent of the profit or loss earned by the entity.

Another important fact should also be noted in this context. All along, we represented the assets on the balance sheet, at their original costs. Based on the principle of conservatism, any unsold inventory should still be valued at the original cost. In our case, there is no inventory. This is an important convention

[^4]

Figure 2.1 Balance Sheet Users and their Aspects
we follow in the preparation of a balance sheet. As a general principle, all assets are typically valued at their original historical costs (for more, refer to Section 1.4.4).

The increase in the owners' equity is equal to the profit earned out of trading. Normally, it is profitable operations which increase the owners' equity. Therefore, owners' equity could be understood as comprising two parts, namely, contributed capital and retained earnings. Retained earnings are the profits earned and not withdrawn by the owners. This relationship could be expressed as equality:

$$
\begin{equation*}
\text { Owners' Equity = Contributed Capital }+ \text { Retained Earnings } \tag{3}
\end{equation*}
$$

Profit could be understood as a change in the owners' equity over a period of time, arising out of business transactions (refer to Section 1.3.1). As an illustration, we can represent it as follows:

| Owners' equity on January 4, 2016 | 25,000 |
| :--- | ---: |
| Less: Owners' equity on January 1, 2016 | 20,000 |
| Profit earned during the period | 5,000 |

The above illustration shows a complete cycle of the venture and the profit earned from the venture is ₹ 5,000 . In reality, we will be confronted with situations where the transactions and ventures will be in different stages of completion. It is possible that only a part of the inventory is sold.

For example, on January 4, if the store sold only half the merchandise inventory, that is, ₹ 10,000 worth of inventory, the cost of goods sold will be ₹ 10,000 only. The balance of the inventory will still be valued at its original cost of acquisition in the balance sheet, that is, at ₹ 10,000 .

As we have delved over a couple of illustrations, let us now take stock of our illustration and evaluate the balance sheet in the context of the accounting principles discussed in Chapter 1.

1. The dual aspect principle has particular relevance to a balance sheet. This is shown by the equality of assets with the liabilities and the owners' equity.
2. All the figures are expressed in monetary units, irrespective of the nature of the item. For example, in our illustration, we had cash, merchandise inventory and shop premises, all expressed as monetary quantities.
3. All the transactions we consider were those that were related to the business entity, 'Ramstore' only. Rather, the methodology was applied to the specific entity.
4. All the valuations were based on the assumption of a going concern, and not based on the liquidation or breakup value.
5. All the asset valuations were based on their historical costs.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(c) An increase in an asset always results in an increase in the owners' equity.
(d) An increase in the assets could be equated by an increase in the liabilities.

### 2.5 CLASSIFICATION OF ITEMS ON A BALANCE SHEET

## Know the content of balance sheet

The balance sheet lists assets, liabilities and capital separately. It is an accepted convention that these are usually grouped into subgroups and listed in the order of their liquidity. Liquidity implies the length of time required for converting them into cash. The usual groupings followed are based on the liquidity of the items. Assets, that are likely to be converted into cash in the near future, are grouped as current assets. Similarly, liabilities, that are due for payment in the short run, are classified as current liabilities. Assets and liabilities are listed in the ascending or descending order of their liquidity. Yet, the listing sequence in the format specified by schedule III of the Indian Companies Act, 2013, is mildly different. Progressively, we will be discussing this in detail.

### 2.5.1 Balance Sheet Contents

Having examined the conceptual basis of the balance sheet, we try to study the balance sheet itself. We have seen that every financial transaction affects the financial position of an entity. Since it is not feasible to draw up a balance sheet after every transaction, it is usually prepared at the end of a specified period, usually, a year. This period is referred to as the accounting period, fiscal year, or financial year. This period, as a convention, has become one calendar year, though there is no accounting justification for it.

Illustration 2.3 is a typical summarized balance sheet. We shall follow this balance sheet for our subsequent discussions. The balance sheet, as prepared at the end of the accounting period (in our case, December 31, 2015) shows the status of each of the assets of the firm and the various claims on these assets at the start of the new financial year (in our case, the financial year would be January 1, 2015 to December 31, 2015). We could also say that the balance sheet shows the new balances or starting balances in the asset, liability and capital accounts.

| Illustration 2.3 |  |  |  |
| :---: | :---: | :---: | :---: |
| Ramsons LimitedBalance Sheet as of 31 December $2015 \quad$ (all figures are in ₹ 'ooo) |  |  |  |
| Assets | ₹ | Liabilities \& Shareholders' Equity | ₹ |
| Current Assets | Current Liabilities |  |  |
| Cash | 500 | Notes payable | 600 |
| Marketable securities | 200 | Accounts payable | 1,000 |
| Notes/Bills receivable | 300 | Accrued liabilities | 800 |
| Trade receivables 1,000 |  | Income tax payable | 400 |
| Less: estimated loss on collection 100 | 900 | Bank overdraft | 200 |
| Prepaid expenses | 500 | Total Current Liabilities | 3,000 |
| Merchandise inventory | 1,100 | Non-Current Liabilities |  |
| Total Current Assets | 3,500 | Debentures | 1,000 |
| Non-current Tangible Assets |  | Long-term loans | 2,000 |
| Land | 2,000 | Total Non-current Liabilities | 3,000 |
| Buildings, plant and machinery | 3,000 | Shareholder's Equity |  |
| Less: accumulated depreciation 1,000 | 2,000 | Equity share capital | 2,000 |
| Total Tangible Non-Current Assets | 4,000 | Capital reserves | 500 |
| Non-current Intangible assets |  | Reserves \& surplus | 1,500 |
| Goodwill | 1,500 | Total Shareholders' Equity | 4,000 |
| Deferred expenditure | 1,000 |  |  |
| Total Intangible Non-Current Assets | 2,500 |  |  |
| Total Assets | 10,000 | Total Liabilities and Shareholders' Equity | 10,000 |

Illustration 2.3 presentation of balance sheet is known as 'horizontal format' and is standardized for analysis purposes. On the other hand, Illustration 2.4 presents the same figures using order sequence in the Schedule III format specified by the Indian Companies Act, 2013. Observe the differences in some items and we can gauge subtle variations. For instance, bank overdraft in earlier illustration is classified under the heading short-term borrowings. We will get to know of a few more things as we comprehend further.

## SPOTLTGHT 2.1

## "How do you Present Balance Sheet?"

While the Illustration 2.3 above shows that assets should be on the left side and liabilities on the right side. We also come across standard format of presenting balance sheet which are reversed, i.e., wherein we have liabilities and owners equity on the left side and the assets on the right side. Which of these is a correct way of presenting? The answer is both the formats are right! It depends on the discretion of the accountant as to how does he prepare the balance sheet. Generally, the format with Assets on the left side and Liabilities on the right side is more accepted internationally; whereas the other way is followed in the United Kingdom, India and few other erstwhile British Colonies. This is the reason why we should be careful while referring to a side of the Balance Sheet as the Assets side and Liabilities side, and not as the right and the left side, in order to reduce confusion.

## Illustration 2.4

## Ramsons Limited <br> Balance Sheet as of 31st December 2015 (all figures are in ₹ 'ooo)

Particulars
Figures as at the end of current reporting period
I. EQUITY AND LIABILITIES

| (1) Shareholders' funds |  |  |
| :--- | :---: | :---: |
| (a) Share capital | 2,000 | 4,000 |
| (b) Reserves and surplus | 2,000 |  |
| (2) Non-current liabilities |  |  |
| (a) Long-term borrowings | -000 |  |
| (b) Deferred tax liabilities (Net) | - |  |
| (c) Other long-term liabilities | - |  |
| (d) Long-term provisions | $\mathbf{2 0 0 0}$ |  |
| (3) Current liabilities | $\mathbf{1 , 6 0 0}$ |  |
| (a) Short-term borrowings | 800 |  |
| (b) Trade payables | 400 | $\mathbf{3 0 0 0 0 0}$ |
| (c) Other current liabilities |  |  |
| (d) Short-term provisions |  |  |
| TOTAL |  |  |


| II. ASSETS |  |
| :--- | :---: |
| Non-current assets |  |
| (1) (a) Fixed assets |  |
| (i) Tangible assets | 4,000 |
| (ii) Intangible assets | 1,500 |
| (iii) Capital work-in-progress | - |
| (iv) Intangible assets under development | 1,000 |
| (b) Non-current investments | - |
| (c) Deferred tax assets (net) | - |
| (d) Long-term loans and advances | - |
| (e) Other non-current assets | - |
| (2) Current assets | 200 |
| (a) Current investments | 1,100 |
| (b) Inventories | 1,200 |
| (c) Trade receivables | 500 |
| (d) Cash and cash equivalents | 500 |
| (e) Short-term loans and advances | - |
| (f) Other current assets |  |
| TOTAL | 10,000 |

### 2.5.2 Classification of Assets

Assets are classified usually by taking into account their purpose in the business in the first instance. On this basis, the assets could be classified into two broad categories:
(i) The first group consists of assets which are held for final transformation into cash at the earliest opportunity, during the normal course of business. This would include all those items held with the motive of holding them to transform them into cash at the earliest opportunity.
(ii) The second group of assets would include all those assets which are held with the objective of being used in the business. These assets would be transformed into cash only in the event of their becoming redundant to the business.
The first groups of assets, which are held for conversion to cash, are referred to as Current Assets; and the second groups of assets, which are held for use, are referred to as Non-current Assets or Longterm Assets, or more commonly Fixed Assets. Going back to Illustration 2.2, the merchandise inventory kept for selling would be an example of a current asset, while the shop premises would be an example of a non-current asset.

Technically, it is not the time frame for which they are held which forms the basis of this classification, but the purpose and intention of the business. It is possible for a business to have the same kind of asset classified in both the categories. For example, an automobile dealership will classify the inventory of cars for sale as current assets, and the car used by the salesman for making sales calls, as fixed asset.

Apart from these classifications, the non-current fixed assets may be classified further into tangible or intangible assets. Other sections will clarify these concepts in some more detail. The forthcoming chapters will deal with the accounting aspects of all these items in depth.

### 2.6 CURRENT ASSETS

Classify the assets and liabilities
'Current' literally, means a flow and in accounting, we use it in the same sense, to indicate the flow of assets through the business. Current assets are assets, which will normally be converted into cash within a fiscal year, or within an operating cycle. The operating cycle is the duration of time taken by a unit of cash to circulate through the business operations and return as cash. For example, in a simple trading operation, we use cash to buy merchandise and sell it to recover cash. The operating cycle starts when the inventory is purchased and ends when the inventory is sold and cash realized. In this case, the operating cycle will consist of the period for which cash, merchandise inventory, and accounts receivable are held. The cycle starts with cash and ends with the collection of cash. This cycle is very important for the management. Figure 2.2 gives us a picture of an operating cycle in a conventional manufacturing firm (see Annexure 2.9 on the OLC for more). One of the means to achieve more efficiency is to minimize the cycle time.


Figure 2.2 Operating Cycle Concept
The items comprising current assets are listed in the order of their relative liquidity in the balance sheet (see, Illustration 2.3).

### 2.6.1 Cash

Cash is usually taken to include currency (legal tender), cheques or any other instrument that circulates as cash. Cash is usually classified as a current asset when it is available for a firm's day-to-day operations. It includes cash kept in the cash chest, as also deposits on call or current accounts with banks. If cash is specifically earmarked for any purpose and not available for transactions, it is better classified as 'other assets'. One of the important features of cash is that it has the same numerical value at all times. For this reason, foreign currency held is not a part of cash. Ramsons had a cash balance of ₹5 lakh in both forms of balance sheet, Illustrations 2.3 and 2.4.

On the other hand, in the modern day, corporates use the term "Cash and cash equivalents". It includes a wide range of items such as cash (as mentioned above); balances with banks; and similar others (to be specified). Within these items, care is taken to separately state items that cannot be rapidly converted/
used as cash currency, namely, earmarked balances with banks (for example, unpaid dividend and thus cannot be used for entity purposes); margin money/security balance with banks to the extent held against the borrowings, guarantees, and such other commitments; cash balances with repatriation restrictions, if any; and bank deposits with over 12 months' maturity.

### 2.6.2 Marketable Securities

It is not essential that a firm holds temporary investments or marketable securities. Whenever firms have short-term, excess cash, it may be invested in readily marketable securities. These securities may include almost all financial securities, such as bank term deposits, liquid funds, shares, debentures, foreign exchange and government securities. These assets are usually readily marketable (or can be easily liquidated) and can be sold whenever cash is required. It is classified as current assets only when these investments are held with the objective of realization within a short period of time.

These investments are usually recorded at the cost at which they are acquired. Since they are only held for a short duration and should reflect their recoverable cash value, the principle of valuation applied for marketable securities is 'the lower of cost or market price'. That is, if the realizable value is lower than the original cost, they are valued at their market price or realizable value. When the firm values its securities at cost or market price, whichever is lower, we say that the firm is conservative. That is, whenever presented with two alternatives, the firm chooses the one which shows the lower valuation of the assets or the higher valuation of the liabilities.

Apparently, the valuation rule, 'lower of cost or market price', may look contradictory. Why should one not value the securities at a value higher than the cost? This distinction has been made on the basis of the generally accepted accounting principles. We do not anticipate gains, though losses are anticipated. Gains are recognized in accounting only when an outside transaction takes place. This is the essence of the Conservatism principle in accounting. The logical reasoning for this choice arises from the idea of capital maintenance. This idea becomes clear if we appreciate the fact that by taking into account unrealized gains as gains we enable the business to take out some profit, and thereby, the value of the capital will not be maintained. While the Illustration 2.3 shows Ramsons' marketable securities separately, Illustration 2.4 categorizes them as part of current investments.

### 2.6.3 Trade Receivables

In most of the businesses, transactions take place on credit basis. 'Trade receivables' represent the amounts owed to the company by 'debtors', for the purchase of goods or services. This amount usually represents money to be received from several customers and that is the reason why we also use the term 'sundry debtors' to denote the accounts receivable. In usual practice, sundry debtors are unpaid customer accounts only. Amounts due from other parties, arising out of transactions other than sale of goods or services, are not included in this amount. For example, if a firm sells land or other fixed assets and the amount is to be received later, the receivable arising from this transaction will be shown in the balance sheet as a separate item, and not as accounts receivable. In the balance sheet of Ramsons Limited, these represent amounts owed to the firm by the customers, on the balance sheet date. These are also known as 'accounts receivables' or 'trade debtors', since they arise out of the normal trading transactions. Trade receivables arise directly from credit sales, and as such, provide important information to the management and outsiders. In most situations, these accounts are unsecured and have only the personal security of the customer.

It is quite normal that some of these accounts default and become non-collectible. These collection losses are called bad and doubtful debts. It is not possible for the management to know beforehand, as to exactly which accounts and what amount will not be collected. However, based on past experience and the knowledge of the existing market conditions, it is possible for the management to estimate the probable future loss on the receivables or sundry debtors as a whole. Such estimates are used to reduce the gross value of the accounts receivable, to their estimated realizable value. In Illustration 2.3, we observe that Ramsons Limited is using $10 \%$ of the gross receivables to decide on its trade debtors.

| Accounts Receivable | $1,000,000$ |
| :--- | ---: |
| Less: Estimated collection loss | 100,000 |
| Net realizable value of accounts receivable | $\mathbf{9 0 0 , 0 0 0}$ |

The estimated collection loss is variously referred to as 'reserve for doubtful debts', and 'reserve for bad debts'. It is also not an uncommon practice to refer to this as a provision instead of reserve, that is, 'provision for uncollectible', or 'provision for collection losses'(see Annexure 2.3 on the OLC for implications).

### 2.6.4 Notes or Bills Receivable

Credit sales give rise to accounts receivable; and it is a usual practice for debts to be evidenced by a formal documentation, say, by converting them into promissory notes or negotiable instruments, such as, a 'Bill of Exchange'. Thus, the difference between a promissory note and a bill of exchange is that a bill is transferable and can bind one party to pay a third party, which was not involved in its creation. ${ }^{3}$ Both these transferrable instruments are written promises to pay or acceptance of an order to pay. They can be drawn by individuals or banks and are generally transferable by endorsements. Illustration 2.3 shows that Ramsons Limited has bills receivable worth ₹ 3 lakh in its favor. Figure 2.3 showcases a sample promissory note (see Annexure 2.9 on the OLC for another sample promissory note).

In business, these formal documentary debts, represented by notes receivable or bills receivable, are essentially accounts receivable. These instruments used in trade, are regulated by the law regulating negotiable instruments and hence, they enable the trader to assign his receivable to another party or a bank, and realizing immediate liquidity. It is also usual for an account receivable to be pledged or assigned, mostly to banks, against short-term credits in the form of 'cash credits' or 'overdrafts'. Thus, Schedule III of the Companies Act, 2013, prescribes clubbing them along with other trade debtors in the summarized balance sheet (see Illustration 2.4). There are also specialized institutions, such as 'factors' that will buy trades receivable.

### 2.6.5 Short-term Loans and Advances

In many situations, as a custom, some of the items of expenses are usually paid in advance, such as rent, taxes, subscriptions and insurance. The rationale behind including these prepayments as current assets is that in case these prepayments had not been made, they would have required a use of cash during the period. Some firms call this item as 'prepaid expenses'. They also include the short-term loans that a

[^5]

Figure 2.3 Sample Promissory Note
firm might have given to others. Festival advances to employees, caution deposits before the customs authorities, or advances paid on contracts, could be good examples of the above.

It may happen that sometimes, the benefit of certain expenses arises in the subsequent year(s). For example, a big deposit (equivalent to a two-months' bill), kept with a nearby local canteen for the supply of tea and other items, would be treated as a prepaid expense. Obviously, this amount will be adjusted (expensed) periodically, as and when the day-to-day consumption of canteen products takes place. This means that canteen expenses for a period of two months have been paid as advance. Similarly, if for the year ending March 31, 2016, the annual advertisement expenses are paid on October 1, 2015 (see Table 2.2), amounting to ₹ 12 million. This means that advertisement expenses for a period of six months, have been paid as advance. Following the matching concept, only ₹ 6 million, that is, the proportion of the expense that is related to the financial year 2016, is to be charged as an expense, and the balance of ₹ 6 million would be treated as a prepaid expense, and would be shown in the balance sheet as of March 31, 2016.

Table 2.2 Prepaid Expense and its Adjustment with Periodic Costs
(All figures in table below are in ₹ million)

| Month Ending $\rightarrow$ | Oct- $15$ | Nov 15 | Dec15 | $\begin{gathered} \text { Jan- } \\ 16 \end{gathered}$ | Feb- $16$ | Mar16 | Apr16 | May 16 | $\begin{gathered} \text { Jun- } \\ 16 \end{gathered}$ | $\begin{gathered} \text { Jul- } \\ 16 \end{gathered}$ | Aug16 | Sept16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash Inflow $\rightarrow$ | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Expense for the Period (Outflow) $\rightarrow$ | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |
| Balance in Books (as Prepaid Expense) $\rightarrow$ | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

### 2.6.6 Inventory

In a trading firm, 'inventory' is merchandise goods held for sale to customers in the ordinary course of business. It is common to refer to inventory as stock-in-trade. Inventory is usually valued on the basis of 'lower of cost or net realizable value'. Net realizable value is the going market (sales) price minus the cost of making the sale. So, the market price can also be taken to mean the cost of replacement. We observe from Illustrations 2.3 and 2.4 that Ramsons had an inventory worth $₹ 1.1$ million in its balance sheet.

As a general principle, inventory is valued at cost, at the location where it will be utilized. It implies that all normal costs incurred so as to make the goods available at the place from where it can be sold or used, are treated as cost of the inventory. Hence, in trading firms, merchandize inventory costs include freight-in, transit, transit insurance costs, import or entry duties, levies and taxes, as also the invoice cost. However, periodic costs including warehouse costs, handling costs, insurance, costs in storage, and interest costs are also not included. They are treated as expenses of the firm for the relevant period. Similarly, the levies and taxes whose credit can be availed do not form part of cost of inventory.

In case of manufacturing firms, the term 'inventory' has a subtly different meaning from that in a trading firm. In case of the trading firm, the merchandise purchased is sold without any further processing or transformation. However, in the case of a manufacturing firm, inventory purchased is seldom sold in the same form. Either the inventory is transformed into another product or assembled together to produce another product before being sold. Thus, a manufacturer's inventory would mainly consist of materials and components required for the manufacturing of the finished goods, goods in the process of conversion remaining with the factory at various stages of completion; and finished goods awaiting sales. Apart from these, there might be an inventory of stores and supplies. Thus, a manufacturer will have four types of inventory: (i) raw material, (ii) work in process, (iii) finished goods and (iv) stores \& supplies inventory (see Annexure 2.9 on the OLC).

Consequently, valuation of manufacturing inventory costs involves more complexity. Raw materials and components inventory is valued on the same lines as merchandise inventory, that is, purchase cost plus all those costs required to make them available at the manufacturer's location. The valuation principle would be as usual - 'lower of cost or net realizable value'. In case of work in process and finished goods, costs added to the purchased materials are tracked and as a general rule, all costs of materials, labor and plant facilities used for manufacturing the goods are included in the valuation of the inventory.

# Let's Check Our Concepts! 

## State whether the following statements are True or False:

(e) Losses result in an increase in the owner(s) equity.
(f) Inventories would include packaging material.

### 2.7 FIXED ASSETS

As with current assets, Illustrations 2.3 and 2.4 show that even non-current assets has several line items included within. In this section, we will look into most of these line items. "Fixed Assets" are often the largest item within non-current assets. The purpose of holding the fixed assets is very different from that of holding current assets. These assets are to be used in the business, and hence it is not possible to trace them in the value of the goods or services sold by the firm. The benefit of these assets is available not only in the accounting period in which the cost is incurred, but over several accounting periods. Current assets provide benefits to the organization because they can be exchanged for cash. On the other hand, fixed assets add value by facilitating the process of production or trade. In other words, benefits from fixed assets are indirect rather than direct.

They are further distributed into tangible fixed assets, intangible fixed assets, capital work in progress and intangible assets under development.

### 2.7.1 Tangible Fixed Assets

Fixed tangible assets are tangible, relatively long-lived items, owned by the business. Though all manmade things have a limited life. In accounting, we are concerned with the useful life of the assets. The useful life is the period for which a fixed asset can be economically used. This implies that the benefits from the fixed assets will flow to the organization throughout its useful life. Another aspect of this is that the cost incurred in the period of purchase of the asset, will be providing benefits over the useful life of the asset.

Valuation of the fixed assets is usually made on the basis of the cost of making the asset available and ready for use. However, since the assets have a limited life, the cost will expire along with the expiration of the life. Thus, the valuation of the asset is reduced in proportion to the expired life of the asset. Such expired cost is referred to as depreciation in accounting. We shall discuss this idea in more detail in a subsequent chapter. The conceptual basis can be clarified with an example.

Suppose a trader buys a delivery van at a cost of ₹ 1 million. Assume that the van will have to be discarded as junk at the end of five years. Thus, at the time of purchase, the asset value is:

Delivery van at cost $=₹ 1,000,000$
At the end of the first year, it will be represented as:

| Fixed Assets: | Amount (in ₹) |
| :--- | ---: |
| Delivery Van - at cost | $1,000,000$ |
| Less: Depreciation to date | 200,000 |
| Net | $\mathbf{8 0 0 , 0 0 0}$ |

At the end of second year, it will be:

| Fixed Assets: | Amount (in ₹) |
| :--- | ---: |
| Delivery Van - at cost | $1,000,000$ |
| Less: Depreciation to date | 400,000 |
| Net | $\mathbf{6 0 0 , 0 0 0}$ |

Similarly, at the end of five years, the valuation of the asset will be zero. The value of the assets at cost is usually referred to as 'Gross Fixed Assets' or 'Gross Block' and the amount of depreciation to date, as 'Accumulated Depreciation'. Net value of the asset is usually referred to as 'Net Fixed Assets'or 'Net Block'

$$
\text { Net Value }=\text { Gross Fixed assets }- \text { Accumulated depreciation }
$$

Please note that the amount of depreciation we reckoned by equally dividing the cost of asset over its useful life. This is the simplest method of determining the annual depreciation of the assets. Thus, we can say that the annual depreciation over the useful life of the asset shall not exceed its 'net cost'. We say net cost because the actual cost of the asset to be depreciated is its purchase cost, less any salvage value at the end of its useful life. Hence, the depreciable cost of the asset is its net cost, which is equal to the original cost minus the salvage value. Please note that depreciation is charged at the end of each accounting period. The relationship between cost and depreciation can be visualized as given in Figure 2.4.



Figure 2.4 Cost-Depreciation Relationship

Depreciation represents the cost expiration of the fixed tangible assets. While earning the revenue in an accounting period, the expiration of the cost of fixed assets is an expense of the period. Theoretically, it is intended to account for the decrease in the future economic utility of the asset. Illustration 2.3 gives details on Ramsons fixed tangible assets. It includes gross assets of building, plant $\&$ machinery worth ₹ 3 million with an accumulated depreciation worth ₹ 1 million; and thus having a net value of ₹ 2 million.

As stated earlier, fixed assets are valued on the basis of the cost of making the asset available and ready for use. Thus, the cost includes the price as well as the cost of delivery, unpacking, assembly, and erection. These costs are also known as 'capitalized expenses', and are to be included as a part of the gross fixed asset and the amount of depreciation. Even in the case of assets brought on hire purchase, the carrying value shall be historic cash price less depreciation. Thus, a fixed assets 'cost' would include: purchase consideration; cost of accessories; stamp duty and registrations; transport costs in case of movable assets; transit insurance; borrowing cost, and all the expenditure directly incurred to acquire the asset such as travel, inspection, duties and taxes (to the extent that they are not recoverable). Further, fixed assets cost also includes a reasonable apportionment of the overheads attributable to the asset based on realistic estimation, and any expenditure incurred to improve the value of the asset to put it to a better usable condition.

Fixed tangible assets are also usually referred to as property, plant and equipment and they normally include assets, such as land, buildings, plant, machinery, motor vehicles, and furniture and fixtures. All these items, with the exception of land, are depreciated. Land is not subject to depreciation as a convention, unless the land is a mine, quarry or any similar extractive property involving depletion on usage. Since land is not depreciated, it is shown separately from other fixed assets. ${ }^{4}$ The nature of ownership, such as leasehold, or freehold, is also required to be disclosed. In case of jointly owned assets, the carrying value will be so much of the proportion of the ownership as it bears to the total cost, less depreciation applicable to that proportion of the assets.

### 2.7.2 Fixed Intangible Assets

Intangible assets are those assets or things of value that do not have any physical dimensions - yet, like all other assets, represents rights, privileges and future economic benefits that result from its ownership. ${ }^{5}$ They cannot be touched, that is, they are incorporeal, although they represent value. They represent value either without material being or intrinsic value, such as, a brand, computer software, franchise, mining rights, copyright, trademark, or patent. These items feature in the balance sheet only if the company has changed hands (with the purchaser having paid for the intangible asset, say goodwill or the brand). Accounting norms often do not permit intangibles to be capitalized unless they have been paid for. This is partly because intangibles valuation itself, is too complicated and ambiguous an exercise.

One of the most common of these assets is 'goodwill'. Goodwill reflects the ability of a firm to earn profits in excess of normal returns. One of the common ways in which goodwill helps a firm earn abnormal returns is by way of 'brand loyalty'. Our paying a higher price to procure a cocoa chocolate from a reputed firm, is an example of goodwill. Almost all firms have some sort of goodwill. However, their goodwill appears in the books and balance sheets only when it has been purchased. Usually, when a going concern is purchased, the purchase price paid in excess of the fair value of the assets,

[^6]is considered to be that concern's goodwill, and classified as fixed intangible asset on the balance sheet. In Illustration 2.3, we observe Ramsons having a goodwill worth ₹ 1.5 million.

Many intangible assets have a limited life too. Examples are patent rights, licenses, franchise rights, and so on. Since they have a limited useful life, the cost of acquiring such assets has to be transformed into expired costs over such useful life. This process of expiration of the cost of an intangible asset is called 'amortization'. In reality, the material effect of amortization and depreciation is almost the same.

### 2.7.3 Capital Work in Progress

Imagine a firm going for constructing a big refinery or such giant heavy engineering venture. Can the construction of such assets be completed within one accounting period? The answer has to be NO! If a fixed intangible asset is not completed at that time when balance sheet is prepared, all costs incurred on that asset up to the balance sheet date are transferred to an account called Capital Work in Progress. Thus, Capital work in progress account contains all expenses incurred on the asset until it is converted into working condition. This account is shown separately in the financial position statement within the fixed asset. Once the fixed tangible assets are completed, then the cost is transferred from Capital work in progress account to the tangible assets account.

Annexure 2.4 on the OLC provides two illustrations using fixed asset schedules of real-life companies, Colgate Palmolive India Limited and ITC Limited along with a short interpretational summary for one of them.

### 2.7.4 Deferred Expenditure

Deferred expenditure or Deferred revenue expenditure is a special case of intangible assets. These are considered as expenses in the normal course of business that lead to a reduction in the owners' equity. However, since the purpose of incurring these expenses are not that of earning revenue in any identifiable accounting period, and since the benefit of these expenses are expected over several future periods, these expenses are deferred over a period of time. Expenses such as restructuring expenses, incorporation costs, advertising and promotion costs for a new product launch, expenses for the issue of capital, and expenses for a software package implementation are some examples of deferred revenue expenditures. The management has discretion as to deferring these expenses. These deferred expenses are amortized over a specified period of time. Many firms mention these deferred expenses as 'Miscellaneous expenses to the extent not written off' and it is written


To know more on "Where to Show Land identified for Sale?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/524 under other non-current assets.

### 2.8 INVESTMENTS

A 'financial security' is a piece of paper that proves ownership of equity, loan, and other similar investments. A savings certificate or fixed deposits are simple examples of financial securities. Like most individuals, most business entities also invest in these pieces of paper, that is, in financial securities. These investments are made and held for the purpose of earning income by way of dividend, interest, rent, and capital appreciation, or for other types of benefits.

Investments can be classified on the basis of the intention of the investor, and not the duration of the investment. Based on the intention, investments can be classified into two types, viz., current investments and non-current investments (see, Figure 2.5).

### 2.8.1 Current Investments

Current investments, including marketable securities are readily realizable and the intention is not to hold them for a period exceeding one year from the date of making the investment. So an investment kept for more than one year, can still be treated as a current investment if the intention, at the time of investing, was to hold it for a short period of time. All other investments are known as non-current investments, or traditionally long-term investments.


Figure 2.5 Investments classified

### 2.8.2 Non-Current Investments

Non-current investments are usually carried at cost price, unless there is a stable (non-temporary) increase or decrease in the investment value. The term 'cost' represents the total cost paid to acquire the investment which includes: amount paid for purchase; additional brokerages (if any); any other charges levied by the stock broker including stamp duties and such. In the case of a permanent decline in the value, the charges can be carried in the balance sheet at the reduced prices. The loss on account of reduction in the value is written off as an expense, resulting in a decrease in the owners' equity. In the case of a nontemporary increase in the value of investments, non-current investments would be carried in the balance sheet at their increased prices.

Five type of investments often constitute non-current investments: (i) investments in subsidiaries and joint ventures, often reflected as equity investments; (ii) investments in securities of business affiliates (say, Tata Steel owning shares of Tata Motors); (iii) investments in government securities and such; (iv) investments in fixed assets not currently used in operations, such as land held for speculation; and (v) investments set aside with specific objectives resulting in specially created funds such as a pension fund, sinking fund and factory expansion fund.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) All assets in the balance sheet are valued at their realizable value.
(h) "Loans and advances", a part of Current Assets, will not include advance to suppliers and vendors.

### 2.9 DEFERRED TAX ASSET

Like individuals, all business entities have to pay taxes when they earn income. The exact amount of tax to be paid and the time of payment would be typically decided on the basis of the local government regulations. Some states accept lower taxes and even give future tax benefits for business entities setting up industries and creating employment in backward areas. Due to such reasons, primarily arising out of local income tax laws and other regulatory issues, business entities do not pay tax exactly during the period when the profits and income are earned. There can be scenarios where they prepay their tax and adjust it in later years (very similar to 'prepaid expenses'). In such a case, we will have another asset item in the balance sheet known as deferred tax asset.

### 2.10 LONG-TERM LOANS AND ADVANCES

Capital advances, security deposits, loans and advances to related parties, and such items are often a part of the balance sheet. Given their non-investment oriented purpose, these items are clubbed together and shown separately as part of 'long-term loans and advances'. To give a clearer picture of the business entity, they are also separately sub-classified: secured, considered good; unsecured, considered good; and doubtful. Similar to trade receivables, allowance for bad and doubtful loans and advances are to be made and disclosed under the relevant heads separately.

Other non-current assets classification includes items such as long-term trade receivables including trade receivables on deferred credit terms. The treatment and sub-categorization is similar to the longterm loans and advances account.

## SPOTLGM 2.2

## A Take on Interviewing an Accountant

Once two fat ladies were interviewing applicants for the position of their club's purchase manager. They devised a simple test to select the most suitable person for the job. They asked each applicant the question, "What is eight and eight?"

The first interviewee was a clubber. His answer was "Two fat ladies". And you know what happened?
The second applicant was an engineer. He pulled out a slide rule and showed the answer to be between 15.9 and 16.1. The last applicant was an accountant. The ladies asked him,"How much is eight and eight?"

The accountant got up from his chair, went over to the door, closed it and then came back and sat down. He leaned across the desk and said in a low voice, "How much do you want it to be?"

Thus, to understand numbers generated by accounting community thoroughly, one needs to be clear with the financial concepts first and the ensuing financial statements. We are reasonably confident that you are enjoying this journey.

### 2.11 CURRENT LIABILITIES

We have studied that liabilities are claims of outsiders against the business. In other words, they are the amounts owed by the business to people who have lent money or provided goods or services on credit. If these liabilities are due within an accounting period or the operating cycle of the business, they are classified as current liabilities. Most of such liabilities are incurred in the acquisition of materials or services, forming a part of the current assets, i.e., for working capital needs (see Annexure 2.9 on the OLC). As was the case with current assets, current liabilities are also listed in the order of their relative liquidity.

### 2.11.1 Trade Payables

Trade Payables arises in the normal course of business as a result of acquisition of goods or services on credit. They are also known as Accounts Payable, Acceptance and Promissory Notes Payable. The term 'trade payables' refers to liabilities contracted for the purchase of raw material, components or services necessary for the production or provision of the goods or services. Since these credits are received usually from several parties, they are also referred to as sundry creditors or trade creditors. Accounts payable are usually unsecured liabilities owed by the firm. Illustration 2.3 shows the same as ₹ 1 million for Ramsons on balance sheet date. These are also referred to as payable on open accounts, and are not evidenced by any formal written acceptance or promise to pay. They represent credit purchase of goods or services for which payment has not been done as of the date of the statement.

Acceptances are bills of exchange accepted by the firm, usually for goods purchased. They are accounts payable converted into credit securities. Similar to acceptances, promissory notes are written promises to pay the debt at a specified future date. Both these liabilities specify the due date for the amount payable and any other conditions of payment. Illustration 2.3 indicates that Ramsons had notes payable worth ₹ 0.6 million. Laws of negotiable instruments govern acceptances and notes payable. Sometimes, notes or bills payable are also used for a longer duration, mostly in cases fixed assets transactions covering more than one year. In such cases, the portion that is due for payment during the current period alone, is treated as a current liability.

### 2.11.2 Short-Term Borrowings

Most businesses depend on banks for short-term borrowings (also known as Bank Overdraft). Business operations can always face situations where the cash payment requirements are in excess of cash receipts. We have seen in the case of current assets that the excess cash available at times can be invested in temporary investments. Similarly, temporary cash requirements are met by short-term borrowings from banks. These borrowings can be made in the form of short-term loans. In such cases, the borrowed amounts are repaid on the basis of an agreed schedule. Each borrowing will require a separate contract. A convenient variant of the short-term borrowing is the overdraft account. Typically, overdraft accounts are 'current accounts' with the bank, with a contract to permit overdrawing these accounts up to a specified limit. In other words, under certain borrowing limits, current accounts are permitted to have a negative balance. The advantage is that the borrowing becomes very flexible. Whenever there is cash available, it is deposited in the account and that brings down the borrowing. When cash is required, it is drawn against the account, which will increase the borrowing. Where there is some uncertainty with respect to the receipt and payments of cash, this arrangement helps the business carry out its operations smoothly.

Generally overdrafts are allowed on security of assets or on the personal guarantee of the borrower. From Illustration 2.3, we find that Ramsons had bank overdraft worth ₹ 0.2 million in its current liabilities.

Businesses may also borrow from the sister concerns or other companies under the same management or from the owners or from friends and relatives of the owners to meet short-term financial crisis. These borrowings are to be repaid and are given with or without security. Some business entities make use of deposits from customers or channel partners (say, distributor) to fund their short-term working capital needs.

### 2.11.3 Accrued Liabilities

Accrued liabilities represent expenses or obligations incurred in the previous accounting period, but the payment for which will be made in the next period. For example, salaries and rents, which are due but not yet paid, are examples of accrued liabilities. In many cases where payments are made periodically, such as wages, rents, interest, and similar items, the last month's payment may appear as accrued liabilities (especially, if the practice is to pay the same on the first working day of the next month). This obligation shown on the balance sheet indicates that the firm owes the said amount as on the balance sheet date.

Accrued liabilities also arise in cases such as interest or lease rentals, where the payments are made at definite intervals (say, semi-annual interest payments) and are expenses. Hence, the liability accrues till the time payment is made. So, even though these liabilities accrue over time, they become payable only on the designated dates.

Schedule III of the Companies Act states the above items as part of 'Other Current Liabilities'. The category also includes items such as current maturities of long-term debt; interest accrued on borrowings; income received in advance; and unpaid dividends. Illustrations 2.3 and 2.4 show that on the given date, Ramsons owed an amount of ₹ 0.8 million.

### 2.11.4 Short-Term Provisions

Where the liabilities are known, but the amounts cannot be precisely determined, we estimate the liability and provide for it as a liability. The principle of conservatism supports the making of provisions for probable liabilities. Some of the usual situations where provisions are made for expected future liabilities are, product service warranty costs, bad debts, and changes in foreign exchange rates in case international transactions are involved, and so on. The common practice is to estimate these liabilities on the basis of past experience.
'Provision for employee benefits' and 'provision for income taxes' are two most common instances of estimated liabilities being provided for. Unless the authorities determine the tax liability, the amount payable cannot be accurately determined. The liability in the case of income taxes is certain, but the exact amount is to be determined by the authority.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(i) If Ms. Malini Parmar was going to buy the assets of a company, the price that he would pay for the assets is their net book value, as shown on the balance sheet.
(j) Some companies, instead of having cash on their balance sheet, have a line of credit or bank indebtedness (i.e., negative balance in their bank current accounts).

### 2.12 CONTINGENT LIABILITIES

Contingent liabilities should be distinguished from estimated liabilities. Estimated liabilities are known liabilities, where the amount is uncertain. Whereas for now, contingent liabilities are no liabilities since neither the amount nor the liability is certain. They become liabilities only on the happening (or sometimes non-happening) of a certain event. In other words, both the amount and the liability or obligation is uncertain, unless the specified event occurs in the future. These may include items like a claim against the company that is being contested in a law court. Only if the court gives an unfavorable verdict, it would become a liability. Such items are not listed as liabilities in the body of the balance sheet. However, in order to give a fair view of all known facts about the affairs of the firm, contingent liabilities are disclosed as footnotes to the balance sheet. ${ }^{6}$ They are not mentioned in the balance sheet and the firm is not liable as on that date. They are mentioned as notes because all those who are concerned may know that there is a possibility that such a liability may occur.

In sum, we can conclude that a contingent liability is not a liability (at present), but it may become a liability on the happening of a certain event. The contingent liabilities are stated so as to give a true and fair view of the financial position.

### 2.13 NON-CURRENT LIABILITIES

Non-current liabilities are liabilities that will be paid after a year. They cover almost all the liabilities not included in the current liabilities and provisions. As discussed below, they are further segregated into a few types.

### 2.13.1 Long-Term Borrowings

These liabilities may be unsecured or secured. Unsecured loans are loans wherein in, case of a default in the repayment of the loan, the lender cannot fall upon any security or take possession of any asset. Acceptance of fixed deposits by reputed firms from retail investors, and loans taken by sole proprietorships from their friends or relatives are good examples of unsecured loans.

On the other hand, secured loans are loans taken on a hypothecation of an asset by the entity. Usually, the fixed assets owned by the firm, assigned to the lender by a pledge or mortgage, act as the security (or collateral). All details, such as the interest rate, repayment commitment and nature of security are disclosed in the balance sheet. Usually, such noncurrent liabilities include debentures and bonds, borrowings from large financial institutions and


Figure 2.6 Long-term Borrowing banks, and deferred payment liabilities.

Debentures and bonds are special instruments of borrowing used by incorporated entities, under the corporate legislation. These borrowings by the companies are designated into standard units and one or more of these units are issued to lenders. The lenders can vary from large institutional bodies (say, State Bank of India) to small retail investors. The advantages of these instruments are that they have a standard

[^7]form and a legal backing, enabling them to be traded on stock exchanges as debt instruments. They enhance the liquidity for the lenders and therefore, it is easier for the companies to borrow using these instruments. Technically, there is no difference between debentures or bonds. Debentures and bonds may have an explicit coupon rate, that is, the rate of interest, and they will also specify the payment schedule. It is also possible to issue bonds or debentures without a periodic interest. Usually known as zero coupon bonds, they are issued at a lower price, and are to be redeemed at an amount including the interest.

### 2.13.2 Deferred Tax Liabilities

Deferred tax liabilities are reciprocals of the 'deferred tax asset', and would be a part of the liabilities. It represents taxes that a company would have had to pay under its regular financial accounting but that it has deferred to the future by way of income tax terms. This is feasible, as states (and even countries) compete with each other - and thus to attract investment (and create employment and development in local level), many states (and even countries) often permit the tax due to be paid at a later point in time. Chapter 6, on 'Accounts of Joint Stock Companies' and Chapter nine, on 'Accounting Standards', would clarify deferred tax assets and deferred tax liabilities further.

### 2.13.3 Other Long-term Liabilities

Trade payables are the biggest category among the other long-term liabilities. Such cases happen where the operating cycle of the company is very long (say, building ships or defence equipment). Specific nature of contract under special conditions (say, difficult industry situation) might permit a few other items to be classified in this category. Long-term provisions are to be not included in the above; and are to be classified separately as per the Schedule III of the Companies Act, 2013. As


To know more on "Balance Sheet: Merchandising Firm vis-à-vis Service Firm" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/525 can be guessed, frequently companies do include the non-current portion of the provision for employee benefits in this category.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(k) We cannot have long-term borrowings above the 'historical price' of the entities fixed assets.
(I) The material effect of amortization and depreciation is almost the same.

### 2.14 OWNERS' EQUITY

Categorize the owners' equity

We have seen in the first part of this chapter that the fundamental accounting equality could be stated as 'assets $=$ liabilities + owners' equity'. From the balance sheet shown in Illustration 2.3 of Ramsons Ltd., we can now easily establish the owners' equity.

| Total assets | $10,000,000$ |
| :--- | ---: |
| Liabilities | $6,000,000$ |
| Owners' equity | $\mathbf{4 , 0 0 0 , 0 0 0}$ |

In this section, we study the items within owners' equity.

### 2.14.1 Capital

Owners invest in their business entity through money invested in a business; through giving assets available for use in the production of further assets; by giving wealth in the form of property owned and human resources of economic value.

We know that the owners' equity consists of the contributed capital and the retained earnings of the firm. The shareholders often pay in the capital reserves of the firm (say, by way of paying a premium for acquiring a share of ownership in the firm). The reserves and surpluses also represent the profit retained (or reinvested) by the entity, known as revenue reserves. In our example above, the owners' equity of 4 million has been contributed by equity shareholders paying in 2 million, while 1.5 million is the profit retained, and 0.5 million is the capital reserve representing either paid in surplus by the shareholders or unearned surplus arising from transactions involving non-current assets. As stated earlier, one of the best examples of capital reserves is the share premium paid by some or all stockholders, to be a part of an entity.

| Shareholders' Equity | All figures in ₹'000 |
| :--- | ---: |
| Equity share capital | 2,000 |
| Capital reserves | 500 |
| Revenue reserves | 1,500 |
| Total Shareholders' equity | $\mathbf{4 , 0 0 0}$ |

If Ramsons were an individual proprietorship business, the owners' equity will be reflected directly as: Capital and retained earnings $=₹ 4,000,000$.

It could also be restated as:

| Shareholder's Equity | All figures in ₹'000 |
| :--- | ---: |
| Paid in capital | 2,500 |
| Retained earnings | 1,500 |

In this case, the capital reserve item share premium that has been paid by individual proprietor has been merged with equity share capital of the firm, i.e., it has been treated as additional paid in capital. If Ramsons were a partnership firm with four partners $\mathrm{W}, \mathrm{X}, \mathrm{Y}$, and Z , and all sharing equally, the capital would be represented as:

| Partner's Capital | All figures in ₹’000 |
| :--- | ---: |
| Capital - Partner W | 1,000 |
| Capital - Partner X | 1,000 |
| Capital - Partner Y | 1,000 |
| Capital - Partner Z | 1,000 |
| Total capital and retained earnings | 4,000 |

So, the owners' equity has been equally divided among the four partners. Alternately, the same thing could be shown as:

| Partner's Capital Details |  | All figures in ₹'000 |
| :--- | :--- | :--- |
| Capital - Partner W | 625 |  |
| Retained earnings | 375 | 1,000 |
| Capital - Partner X | 625 |  |
| Retained earnings | 375 | 1,000 |
| Capital - Partner Y | 625 | 1,000 |
| Retained earnings | 375 | $\mathbf{1 , 0 0 0}$ |
| Capital - Partner Z | 625 | $\mathbf{4 , 0 0 0}$ |
| Retained earnings | 375 |  |
| Total capital and retained earnings |  |  |

In our example, the balance sheet was titled 'Ramsons Ltd.', implying that the firm is an incorporated Limited Company. We did not provide the detailed position statement, incorporating all the legal requirements, in order to avoid confusion. According to the Company Law, the capital has to be disclosed in a greater detail, by analyzing it. This restriction can be easily related to the corporate legislation's need for ensuring maintenance of capital or keeping the firm's assets intact. Insisting that the distributions by way of dividends to shareholders be made only out of accumulated earnings (revenue reserves), ensures this.

Consequently, according to the legal requirements, the owners' equity section of the company's balance sheet is largely divided into two parts: (i) the share capital, representing the contributed capital; and (ii) reserves and surplus, largely representing retained earnings. The contributed capital is the amount paid in by the shareholders.

A company predetermines its share capital at the time of registration, which is called the authorized share capital of the company. It may consist of either Equity share capital or Preference share capital. Preference shares have a preferential right to a fixed dividend and to the repayment of capital at the time of liquidation. This share capital is divided into a number of units known as equity shares. Thus, a company's share capital could consist of either equity shares alone or a combination of equity and preference shares.

## Illustration 2.5

A Company has an authorized share capital of ₹ 200,000 ; divided into 15,000 equity shares of $₹ 10$ each and 500, 10-percent preference shares of ₹ 100 each.

| Authorized capital: | Amount (₹) |
| :--- | ---: |
| 15000 equity shares of ₹ 10 each | 150,000 |
| $500,10 \%$ preference shares of $₹_{100}$ each | 50,000 |
| Total | 200,000 |

The company need not raise the entire amount of the predetermined or authorized capital. That portion of the authorized capital which is raised, is referred to as issued capital. In the above example, suppose the company
offered to the public, 7,500 equity shares and 500 preference shares, for cash. It was fully subscribed and paid up. The capital of the company in summary, will be as follows:

Authorized Share Capital

| Authorized capital: | ₹ |
| :--- | ---: |
| 15,000 equity shares of $₹_{10}$ each | 150,000 |
| $500,10 \%$ cumulative preference shares of $₹_{100}$ each | 50,000 |
| Total | $\mathbf{2 0 0 , 0 0 0}$ |

Issued Capital

| Issued capital: | ₹ |
| :--- | ---: |
| 7500 equity shares of ₹ 10 each | 75,000 |
| $500,10 \%$ cumulative preference shares of ₹ 100 each | 50,000 |
| Total | $\mathbf{1 2 5 , 0 0 0}$ |

Subscribed, Called up and Paid up Capital
Subscribed, Called up and Paid up Capital

| 7500 equity shares of $₹_{10}$ each | 75,000 |
| :--- | ---: |
| $500,10 \%$ cumulative preference shares of ₹ 100 each | 50,000 |
| Total | $\mathbf{1 2 5 , 0 0 0}$ |

In Illustration 2.5 , even though the company was authorized to issue 15,000 Equity shares, it needed only a part of the capital and hence, chose to issue only one half of the total authorized Equity shares. The implication of authorized capital is that it is the maximum amount of capital a company may raise, without altering the deed of registration.

Annexure 2.5 on the OLC provides a real-life illustration focusing on breakup of sources of funds patterns of five retail companies.

### 2.14.2 Equity and Preference Shares

Preference shares are so-called because they have some preference over the equity shares. These preferences are: in case of liquidation, the assets remaining after the payments to the creditors, are distributed to the preference shareholders first. Similarly, whenever the company earns profits and decides to distribute dividends, the preference shareholders are first paid their 'prefixed' dividend, in preference to the equity shareholders.

Like long-term loans and debentures, preference shares are usually redeemable after a specified period. In India, a preference share can be issued for a maximum period of 20 years. Besides, the preference shares could also be granted the right to cumulate unpaid dividends. It is also possible to provide for preference shareholders to share in excess profits, over and above their fixed dividends. It is not necessary that a company should have preference shares. In fact, most of the Indian companies do not have any preference shares in their share capital.

Equity shares have no preferential or fixed rights with respect to either repayment of capital in case of liquidation, or distribution of profits. They have the residual claims against all the assets, after the claims of the creditors and the preference shareholders are satisfied. Similarly, all the residual profits, after the claim of the preference shareholders, are due to them.

We have hinted earlier that even if the company earns profits, unless the company decides to distribute it, shareholders, including preference shareholders, have no right to dividends. However, in case of cumulative preference shareholders, such unpaid dividends will accumulate and have to be paid before any dividends can be paid to equity shareholders.

### 2.14.3 Reserve and Surplus

Reserves and surplus or retained earnings normally arise out of profitable operations. These are surpluses earned by the firm not distributed as dividends. In other words, they are the profits that the company has decided to retain within the business. When a firm starts its operation, it has no retained earnings. If, in the first year, it earns ₹ 10,000 as profits and decides to distribute $₹ 5,000$ as dividends, then the reserves and surplus at the end of the year would be ₹5,000. During its second year of operation, if the firm makes a loss of ₹ 3,000 , then the retained earnings at the end of the year will be reduced to ₹ 2,000 . Hence, 'retained earnings' are 'earned capital' for the firm. While, the above is an example of revenue reserves, as stated earlier (see Section 2.14.1), another item that is part of reserves and surpluses is the capital reserves. Figure 2.7 distinguishes the differences between these two reserves in some more detail.



To know more on "Is There Anything Different in the Balance Sheet of a Bank?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/526

Figure 2.7 Basic Differentiations between Revenue and Capital Reserves
We have seen earlier that the limit of dividend is the retained earnings. This implies that at no point in time, the original capital of the firm is depleted. In other words, the original contributed capital is maintained intact.

It is possible to allocate the profits earned and accumulated as reserves, to be earmarked for specific purposes. Thus, such earmarked reserves will not be distributed. Only non-earmarked reserves or 'free reserves' will be available for distribution as dividends.

## 22 Activity 2

Classify the following either as - (i) Current assets; (ii) Fixed tangible assets; (iii) Current liabilities; (iv) Non-Current liabilities; or (v) Fixed intangible assets:

1. Building
2. Patent rights
3. Office furniture
4. Accrued interest
5. Mortgage loan
6. Supplier
7. Bank balance
8. Accrued wages and salaries payable
9. Prepaid advertising
10. Trade mark

## Case $2.1>$ India's Bizgest Company's Position Statement

Founded in 1968, Tata Consultancy Services Limited (TCS) is today a multinational information technology service company operating in 46 countries with 67 subsidiaries and a market value of over ₹ 4.7 trillion. TCS's financial position is given below and it looks to be in report format (see Section 2.14 for details). The year-on-year figures indicate a stable balance sheet with no major changes.

Its position statement for FY2015 conveys that during the year, balance sheet size of TCS increased from ₹ 689 bn. to ₹751 bn. Further, its biggest book assets are not its fixed assets but its accounts receivable and its marketable securities (primarily, bank deposits). Perhaps, fixed tangible assets are not relatively important in this business compared to human capital. The other large asset items are deferred tax assets and fixed intangible assets.

Tata Consultancy Services Balance Sheet as per IFRS (all figures in INR Bn.)

| Balance Sheet Items | FY14 | FY15 |
| :--- | ---: | ---: |
| Period Ending | 31 Mar | 31 Mar |
| ASSETS |  |  |
| Current assets | 15 | 19 |
| Cash and cash equivalents | 130 | 164 |
| Marketable securities | 222 | 242 |
| Accounts receivable (net of allowances ) | 12 | 15 |
| Current investments | 34 | 27 |
| Short-term loans and advances | 17 | 22 |
| Other current assets | 430 | 489 |
| Total Current Assets |  | $($ contd. $)$ |


| Non-current assets |  |  |
| :---: | :---: | :---: |
| Non-current investments | 55 | 31 |
| Deferred tax assets | 54 | 67 |
| Property, plant and equipment, net | 104 | 116 |
| Goodwill \& intangibles, net | 42 | 39 |
| Other non-current assets | 5 | 9 |
| Total Non-current Assets | 260 | 262 |
| Total Assets | 689 | 751 |
| LIABILITIES AND SHAREHOLDER'S EQUITY |  |  |
| Current liabilities |  |  |
| Trade and other payables | 55 | 88 |
| Short-term borrowings | 25 | 25 |
| Short-term provisions | 17 | 20 |
| Other current liabilities | 13 | 13 |
| Total Current Liabilities | 111 | 147 |
| Non-current liabilities |  |  |
| Long-term debt / borrowings | 1 | 1 |
| Long-term provisions | 4 | 3 |
| Deferred tax liabilities | 6 | 5 |
| Other non-current liabilities | 7 | 11 |
| Total Non-current Liabilities | 18 | 20 |
| Total Liabilities | 129 | 167 |
| Shareholders' equity |  |  |
| Equity share capital / common stock - par value | 2 | 2 |
| Share premium / additional paid-in capital | 19 | 19 |
| Retained earnings | 532 | 554 |
| Total Shareholders' Equity | 553 | 575 |
| Total Liabilities and Shareholders' Equity | 689 | 751 |

Source: TATA Consultancy Services Investors Relations, TCS, Web, 15 Dec. 2015.

The other side of the TCS's balance sheet seems more interesting! It does not owe much to outsiders; and its biggest liabilities are with its suppliers (trade payables). Further, its non-current liabilities indicate an averseness to using long-term borrowings to fund its assets. Prime reason for this comes from TCS shareholders funds details. It conveys a retained surplus of $\mathrm{F}_{575}$ bn.; by far this figure is biggest on this side of the balance sheet.

### 2.15 OTHER FORMATS OF A BALANCE SHEET

## Compare the formats of balance sheet

The balance sheet in Illustration 2.3 was presented in a two-column format, usually referred to as the 'T form' or 'Standard Format' or 'Horizontal Format'. That is, the 'assets' are listed on one side and on the other side, the 'liabilities and owners' equity' are listed. Indian Companies Act, 2013, prescribes a slightly different format, known as Vertical Format and displayed in Illustration 2.4. While going through balance sheets of earlier years including 2013 - you would observe that companies used a slightly different form of presenting their reports wherein 'current liabilities' would be deducted from the 'current assets' - known as 'net current assets' linking it to the concept of 'working capital' of the organization. This format was preferred for presentation by the earlier Indian Companies Act, 1956; and we call it as 'earlier Vertical Format'. Globally, another common used way of presentation is the 'statement form' or 'report form', where assets are listed first, followed by liabilities and capital (see, Case 2.1). Readers may go through Annexure 2.6 (on the OLC) for looking at Ramsons balance sheet in all four formats. Exhibit 2.1 shows the basic ways in which all these formats try to present a company's position statement.

Exhibit 2.1 Presentation Formats of Balance Sheet

1. Standard Format OR Horizontal Format

| Assets | Liabilities and Equity |
| :--- | :--- |
| Current Assets | Current Liabilities |
| Non-current Assets | Non-current Liabilities |
|  | Total Shareholders' Funds |
| Total | Total |

2. Vertical Format (Prescribed by Indian Companies Act, 2013)

| Equity and Liabilities |
| :--- |
| Total Shareholders' Funds |
| Non-current Liabilities |
| Current Liabilities |
| Total |
| Assets |
| Non-current Assets |
| Current Assets |
| Total |

## 3. Earlier Vertical Format (Prescribed by erstwhile Companies Act, 1956)

| Sources of Funds |
| :--- | :--- |
| Total Shareholders' Funds |
| Non-current Liabilities |
| Total Sources of Funds |
| Application of Funds |
| Non-current Assets |
| Net Current Assets <br> (Current Assets less Current Liabilities) |
| Total Application of Funds |

## 4. Report Format

| Assets |
| :--- |
| Current Assets |
| Non-current Assets |
| Total |
| Liabilities and Equity |
| Current Liabilities |
| Non-current Liabilities |
| Total Shareholders' Funds |
| Total |

Of course, the presentation matters very little since the balance sheet represents the equality between the assets and the liabilities, capital and retained earnings. Also the listing of items within is done according to similar classifications and groupings of the items. It should be noted that these classifications and grouping of items, though not essential in accounting theory, are very important from the point of view of the information users. These classifications enhance the understandability and utility of the financial statements. Those of you who are more keen on knowing about analysis at this stage may like to go through the OLC to check Annexure 2.7 titled (What to see in a Balance Sheet?), and Annexure 2.9 which lists the key limitations of a balance sheet.


To know more on "Linking Balance Sheets of Two Entities?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/527

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(m) Patents and copyrights in a balance sheet are typically examples of acquired fixed assets.
( $n$ ) Current assets are liquid assets and will be converted to cash within one year or one operating cycle.

## Case $2.2>$ "Money from Black" OR "Black Money"!!

Coal India Limited (CIL) is a state owned coal mining corporate. It is the single largest coal producer in the world. We provide the summarized financial position statement as on 30 September 2015. The figures presented in vertical format convey the need to do trade on credit in this type of business i.e., CIL ends up having large accounts receivable. It also conveys a cash rich organization.

Coal India Limited Balance Sheet (all figures in INR Bn.)

| Major Balance Sheet Items | Feriod Ending |
| :--- | ---: |
|  | FY15 |
| ASSETS | 30 Sept. |
| Cash and Cash Equivalents |  |
| Accounts Receivable (net of allowances ) | 576 |
| Other Current Assets | 77 |
| Fixed Assets, net | 241 |
| Other Non-current Assets | 222 |
| Total Assets | 58 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | 1173 |
| Trade and Other Payables | 10 |
| Short-term Provisions | 80 |
| Other Liabilities | 619 |
| Total Liabilities | $\mathbf{7 0 9}$ |
| Share Capital | 63 |
| Reserves and Surplus | 401 |
| Total Shareholders' Equity | 464 |
| Total Liabilities and Shareholders' Equity | $\mathbf{1 1 7 3}$ |

Source: Coal India Investors Center, Coal India, Web, 15 Dec. 2015.
On the sources side of the CIL's balance sheet, the past surpluses have not been distributed to the shareholders (primarily, Government of India) and thus, it enables it to have a high reserves and surplus position. Thus while its large liabilities remain a worry; it conveys a public sector unit in good times.

## SOLVED PROBLEMS

## Solved Problem 2.1

Rohan passed his MBA and started a software firm, titled Rohan Software Limited (RSL). The following are the list of Transactions for RSL:

PERIOD I

- On March 1, Rohan invests ₹5 million in cash in Rohan Software Limited (RSL).
- On March 2, RSL took a loan of ₹2 million from Venugopal.
- On March 3, RSL purchased using cash: computers \& furniture, costing ₹5.8 million.
- On March 4, RSL purchased stationary worth ₹ $6,00,000$ on credit from M/s Hardeep.
- On March 19, RSL completes its maiden sale of software to a retail store and receives a price of ₹ 1.2 million.
- On March 21 , RSL pays $₹ 2,00,000$ to its creditors for supplies.
- On March 29, RSL pays salaries to its employees, amounting to $₹ 4,00,000$ and as office rent ₹ $1,00,000$.
- On March 30, RSL delivers a software package for a shoe shop, Bata India. The customer agrees to pay the price of ₹ $8,00,000$ after two months.
- On March 31, RSL gives ₹ $3,00,000$ to owners (as a reward for its good performance)
- At the end of the period the company had following adjustments to make: Closing Stock ₹5,00,000; Depreciation ₹ $2,00,000$; Interest Charge $2 \%$ per month.


## PERIOD II

- April Month Transactions, Summary List: Credit Sales to Bata India ₹1 million; Cash Sales ₹5,00,000; Salaries, Rent, are same as last month \& paid; Adjustments - Closing Stock ₹ $4,00,000$; Depreciation ₹ $2,00,000$; Interest Charge $2 \%$ per month; Interest Paid ₹ 80,000 ; Loan Repaid ₹ $2,00,000$.
You are required to prepare its position statement after each transaction.


## Solution:

This problem is very similar to the illustration we had done to explain the position statement. The first transaction, wherein the owners invest ₹ 5 million in cash would result in the cash going up on the assets side for the new business entity along with the owner(s)-equity going up in the liabilities side of the position statement.

Rohan Software Limited
Position statement as on March 1
(All amounts in ₹ '000)

| Assets | Liabilities and Owners Equity |  |  |
| :--- | :--- | :--- | :--- |
| Current Assets | Owners' Equity |  |  |
| Cash | 50,00 | Capital | 50,00 |
| Current Assets Total | 50,00 | Owners' Equity Total | 50,00 |
| Total Assets | $\mathbf{5 0 , 0 0}$ | Total Liabilities and Owners' Equity | $\mathbf{5 0 , 0 0}$ |

On March 2, Rohan took a loan of ₹2 million from Venugopal would result in the cash balance going further up and on the liability side a new loan item would come as the business entity now owes money to outsiders also. The result would be:

Rohan Software Limited
Position statement as on March 2
(All amounts in ₹ '000)

| Assets |  | Liabilities and Owners' Equity |  |
| :--- | :--- | :--- | :--- |
| Current Assets | Current Liabilities |  |  |
| Cash | $\underline{70,00}$ | Loan from Venu | $\underline{20,00}$ |
| Current Assets Total | 70,00 | Current Liabilities Total | 20,00 |
|  |  | Owners' Equity |  |
|  |  | Capital | 50,00 |
|  |  | Owners' Equity Total | 50,00 |
| Total Assets | $\mathbf{7 0 , 0 0}$ | Total Liabilities and Owners' Equity | $\mathbf{7 0 , 0 0}$ |

On March 3, RSL purchased using cash: computers \& furniture, costing ₹5.8 million. This will create a new fixed asset and reduce the cash balance in the firm. There will be no change in the liability side.

## Rohan Software Limited

Position statement as on March 3 (All amounts in ₹ '000)

| Assets | Liabilities and Owners' Equity |  |  |
| :--- | :---: | :--- | :--- |
| Current Assets |  | Current Liabilities |  |
| Cash | 12,00 | Loan from Venu | $\underline{20,00}$ |
| Current Assets Total | 12,00 | Current Liabilities Total | 20,00 |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer | 58,00 | Capital | 50,00 |
| Fixed Assets Total | 58,00 | Owners' Equity Total | 50,00 |
| Total Assets | $\mathbf{7 0 , 0 0}$ | Total Liabilities and Owners' Equity | $\mathbf{7 0 , 0 0}$ |

On March 4, RSL purchased stationary worth ₹ $6,00,000$ on credit from M/s Hardeep. The result of this transaction would be a simultaneous increase in a current asset and a current liability ( $\mathrm{M} / \mathrm{s}$ Hardeep):

Rohan Software Limited
Position statement as on March 4 (All amounts in ₹ '000)

| Assets | Liabilities and Owners' Equity |  |  |
| :---: | :---: | :---: | :---: |
| Current Assets | Current Liabilities |  |  |
| Cash | 12,00 | (M/s Hardeep) Sundry Creditors | 6,00 |
| Supplies | 6,00 | Loan from Venu | 20,00 |
| Current Assets Total | 18,00 | Current Liabilities Total | 26,00 |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer | 58,00 | Capital | 50,00 |
| Fixed Assets Total | 58,00 | Owners' Equity Total | 50,00 |
| Total Assets | 76,00 | Total Liabilities and Owners' Equity | 76,00 |

On March 19, RSL completes its maiden sale of software to a retail store and receives a price of 1.2 million. Assuming no further deliverables and promises as part of the software, this would result in the cash balance going up by 1.2 Million and the owners' equity also going up. The resulting position statement would be:

Rohan Software Limited
Position statement as on March 19 (All amounts in ₹ '000)

| Assets | Liabilities and Owners' Equity |  |  |
| :--- | ---: | :--- | ---: |
| Current Assets |  | Current Liabilities |  |
| Cash | 24,00 | (M/s Hardeep) Sundry Creditors | 6,00 |
| Supplies | 6,00 | Loan from Venu | $\underline{20,00}$ |
| Current Assets Total | 30,00 | Current Liabilities Total | 26,00 |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer | $\underline{58,00}$ | Capital | 50,00 |
|  |  | Profit Retained | $\underline{12,00}$ |
| Fixed Assets Total | 58,00 | Owners' Equity Total | 62,00 |
| Total Assets | $\mathbf{8 8 , 0 0}$ | Total Liabilities and Owners' Equity | $\mathbf{8 8 , 0 0}$ |

In the above transaction, we observe that, the increase in owners equity has been separately stated as a line item, 'profit retained'. It signifies the fundamental pillar of accounting 'productive capital'. On March 21, RSL pays $₹ 2,00,000$ to its creditors for supplies. This would reduce the cash balance of the organization and also the amount owed to the supplier.

|  | Position statement as on March 21 <br> (All amounts in ₹ '000) |  |  |
| :---: | :---: | :---: | :---: |
| Assets |  | Liabilities and Owners' |  |
| Current Assets |  | Current Liabilities |  |
| Cash | 22,00 | (M/s Hardeep) Sundry Creditors | 4,00 |
| Supplies | 6,00 | Loan from Venu | 20,00 |
| Current Assets Total | 28,00 | Current Liabilities Total | 24,00 |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer | 58,00 | Capital | 50,00 |
|  |  | Profit Retained | 12,00 |
| Fixed Assets Total | 58,00 | Owners' Equity Total | 62,00 |
| Total Assets | 86,00 | Total Liabilities and Owners' Equity | 86,00 |

On March 29, RSL pays salaries to its employees, amounting to ₹ $4,00,000$ and as office rent $₹ 1,00,000$. This would result in the cash balance going down by ₹ $5,00,000$ and the reduction in the owners' equity to ensure that the balance sheet equation tallies. Readers can clearly make out that the owners' equity is being treated as a residual or balancing figure, wherein all gains result in increasing the owners' equity and all losses result in decreasing the owners' equity.

Rohan Software Limited
Position statement as on March 29
(All amounts in ₹ '000)

| Assets |  | Liabilities and Owners' Equity |  |
| :--- | ---: | :--- | ---: |
| Current Assets |  | Current Liabilities |  |
| Cash | 17,00 | Sundry Creditors | 4,00 |
| Supplies | $\underline{6,00}$ | Loan from Venu | 20,00 |
| Current Assets Total | 23,00 | Current Liabilities Total | 24,00 |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer | $\underline{58,00}$ | Capital | 50,00 |
|  |  | Profit Retained | $\underline{7,00}$ |
| Fixed Assets Total | 58,00 | Owners' Equity Total | 57,00 |
| Total Assets | $\mathbf{8 1 , 0 0}$ | Total Liabilities and Owners' Equity | $\mathbf{8 1 , 0 0}$ |

On March 30, RSL delivers a software package for a shoe shop, Bata India. The customer agrees to pay the price of ₹ $8,00,000$ after two months. Given the fact, almost all business transactions happen on credit with a belief that the front party would pay the amount owed on the due date. This transaction would result in a new item on the asset side as shown next.


On March 31, RSL gives ₹ $3,00,000$ to owners (as a reward for its good performance). An owner drawing some cash from his own business entity would lead to reduction in both cash and in the owners equity. The resulting position statement would be:

Rohan Software Limited
Position statement as on March 31 (All amounts in ₹ '000)

| Assets |  | Liabilities and Owners' Equity |  |
| :---: | :---: | :---: | :---: |
| Current Assets |  | Current Liabilities |  |
| Cash | 14,00 | Sundry Creditors | 4,00 |
| Receivable | 8,00 | Loan from Venu | 20,00 |
| Supplies | 6,00 | Current Liabilities Total | 24,00 |
| Current Assets Total | 28,00 |  |  |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer | 58,00 | Capital Invested | 50,00 |
|  |  | Profit Retained | 12,00 |
| Fixed Assets Total | 58,00 | Owners' Equity Total | 62,00 |
| Total Assets | 86,00 | Total Liabilities and Owners' Equity | 86,00 |

Please observe that for paying this reward (dividend), we have reduced profit retained instead of capital invested due to the primary foundational pillar of accounting 'capital maintenance'. One can clearly observe that the future economic utility of a computer after 25 days of usage would not remain the same, and hence would provide for depreciation (in the fixed assets) reflecting the same. Similarly, we need to also take a stock of the remaining supplies to see if the position statement reflects the actual position of the company.

For example, if we were to decide on depreciation of the computers by $₹ 2,00,000$ (assume) and also found that supplies worth $₹ 1,00,000$ to be consumed by RSL and interest charges $2 \%$ per month is to be paid, this would have resulted in the position statement being adjusted for the same. The resulting position statement would be:

## Rohan Software Limited

Position statement as on March 31
(All amounts in ₹ '000)

| Assets |  | Liabilities and Owners' Equity |  |
| :--- | ---: | :--- | ---: |
| Current Assets |  | Current Liabilities |  |
| Cash | 14,00 | Sundry Creditors | 4,00 |
| Receivable | 8,00 | Loan from Venu | 20,00 |
| Supplies | $\underline{5,00}$ | Interest Payable | $\underline{40}$ |
| Current Assets Total | 27,00 | Current Liabilities Total | 24,40 |
| Tangible Fixed Assets |  | Owners' Equity |  |
| Computer, Gross | 58,00 | Capital | 50,00 |
| Less: Depreciation | $\underline{2,00}$ | Profit Retained | $\mathbf{8 , 6 0}$ |
| Computer, Net | 56,00 |  | 58,60 |
| Tangible Fixed Assets Total | 56,00 | Owners' Equity Total | $\mathbf{8 1 , 0 0}$ |
| Total Assets | $\mathbf{8 3 , 0 0}$ | Total Liabilities and Owners' Equity |  |

We have adjusted the owners' equity to reflect the decrease in the value of RSL's supplies, computers and the interest payment due.

After converting the period one transaction into period one report of financial position, let us see the manner in which the period two transactions shall have an impact on the accounting equation ( $\mathrm{A}=\mathrm{L}+\mathrm{OE}$ ).

| Transactions | Equation (Asset = Liability + Owners Equity) |  |  |
| :--- | :---: | :---: | :---: |
|  | Asset | Liability | Owners' Equity |
| Credit Sales to Bata India | $\uparrow$ |  | $\uparrow$ |
| Cash Sales | $\uparrow$ | $\uparrow$ |  |
| Salaries | $\downarrow$ |  | $\downarrow$ |
| Rent | $\downarrow$ | $\downarrow$ |  |
| Closing Stock | $\uparrow$ | $\uparrow$ |  |
| Depreciation | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| Interest Payable |  | $\downarrow$ | $\downarrow$ |
| Interest Paid | $\downarrow$ | $\downarrow$ |  |
| Loan Repaid | $\downarrow$ |  |  |

## Solved Problem 2.2

Baba Finance Limited is engaged in the business of leasing and hire purchase. The issued, subscribed and paid up capital of the company consists of 100,000 equity shares of ₹ 10 each, fully paid up. The following additional information is provided:
Balances in the books as on 1-04-20X6 were:

| Profit and Loss Account | $₹ 35,000$ | General Reserves | $₹ 10,000$ |
| :--- | :--- | :--- | :--- |
| Capital Reserves | $₹ 5,000$ | Land \& Building | $₹ 3,60,000$ |
| Vehicles | $₹ 100,000$ | Furniture | $₹ 60,000$ |
| Other Current Assets | $₹ 5,30,000$ |  |  |
| $\quad$ (including cash and bank balance) |  |  |  |

During the Year 20X6-20X7, transactions entered into by the company were:

- On 15-04-20X6-Accepted loan from the banks, secured by hypothecation of stocks of ₹2,00,000
- On 1-05-20X6-Public deposits accepted, aggregating to ₹50,000.
- Some of the Vehicles and other Assets were on hire.
- Installments received on vehicles and assets on hire were of $₹ 55,000$.
- Salary to the accountant was ₹ 40,000 .
- Purchased shares of State Bank of India on 5-06-20X6 for ₹ $2,00,000$. Current market value is ₹ $2,50,000$.
Other Information:
Salary contained $₹ 36,000$ as advance (prepaid) salary to accountant. The useful life of the vehicles is 5 years, with zero salvage value. It is also known that the useful life of the furniture is 10 years, with zero salvage value. Depreciation would be provided on a straight-line basis. Transfers to General reserves for the year were ₹20,000. Interest accrued but not due on deposits was ₹20,000. Cash in hand as on 31-03-20X7 was ₹27,000.

Prepare a balance sheet as at 31-03-20X7.

## Solution

There are at least two ways of solving this problem. In the first way, the balance sheet can be prepared after every transaction, so as to understand the impact of each transaction and arrive at the final balance sheet. In the second method, we can compute the balances of each balance sheet item (based on the impact of all the transactions) and construct the balance sheet straight away. We would suggest the use of the first method as shown below:

## Baba Finance Limited

Balance Sheet
As at $1^{\text {st }}$ April 20X6 (all figures in ₹ '000)

| Assets | Amount | Liabilities | Amount |
| :--- | :---: | :--- | :---: |
| Current assets | 530 |  |  |
| Land \& Building | 360 | Shareholder' Funds | 1,050 |
| Furniture | 60 |  |  |
| Vehicles | 100 |  | $\mathbf{1 , 0 5 0}$ |
| Total | $\mathbf{1 , 0 5 0}$ | Total |  |

The Balance sheet as on 1-04-20X6 depicts the closing balances in the various accounts as on 31-0320X6, which would become the opening balance for the following year, that is, 20X6-20X7.

In the year 20X6-20X7, every transaction will have an effect on the balance sheet. For example, loan is taken from bank on 15-04-20X6, secured by hypothecation of stock.

In this way, both the assets and liabilities see the respective change. Other current assets under Assets side of the balance sheet is increased by $₹ 2,00,000$, and on the one hand Loan Funds are increased under the Liabilities side of the balance sheet. Therefore, both the assets and the liabilities are increased by ₹ $2,00,000$. The balance sheet, now, appears as:

| Baba Finance Limited <br> Balance Sheet |  |
| :---: | :---: |
| As at 15th April 20X6 | (all figures in ₹ '000) |
| ount | Liabilities |
| 730 |  |
| 360 | Loan funds |
| 60 |  |
| 100 | Shareholder funds |

In the same way, accepting of public deposits will increase the Other Assets (including cash and bank balance) and the Loan funds by ₹ 50,000 , on $05-06-20 \mathrm{X} 6$.

Some of the vehicles and other assets were on hire is just an activity information. Hence, we do not treat it as a transaction to influence the financial position.

Prepaid salary to the accountant is an advance which do not belong to this period. Therefore, we would treat it as an advance which shall get adjusted in subsequent period (matching concept). Hence, we should deduct the owners' equity only by the differential amount that pertains to the period i.e., $₹ 40,000-36,000=4,000$.

The final balance sheet, after considering the closing balances of vehicles, installments received from vehicles given for hire salary to accountant, adjustment of advance (prepaid) salary and after deducting the depreciation from the respective assets, reflects the following position:

## Baba Finance Limited <br> Balance Sheet

As at $31^{\text {st }}$ March 2X07
(all figures in ₹ '000)

| Assets | Refer working \# | Amount | Liabilities | Refer working \# Amount |  |
| :--- | :---: | ---: | :--- | :---: | :---: |
| Current assets, loans and advances |  |  | Current liabilities | 7 | 20 |
| (a) Current assets | 3 | 595 | Loan funds | 6 | 250 |
| (b) Loans and advances | 4 | 36 |  |  |  |
| Fixed assets | 1 | 494 |  | 5 | 1,055 |
| Investments | 2 | 200 | Shareholder funds |  |  |
| Total |  | $\mathbf{1 , 3 2 5}$ | Total | $\mathbf{1 , 3 2 5}$ |  |

## Workings

1. Fixed assets are valued at book values less depreciation, after considering the depreciation applicable. The total amount of fixed assets comes to:
(a) Land and building
360,000
(b) Vehicles

Opening balance 100,000
Less: Depreciation at $20 \%$ *
20,000
Closing value as on 31-3-2X07
80,000
(c) Furniture

Opening balance 60,000
Less: Depn. at $10 \%$ ** $\quad \underline{6,000}$
TOTAL VALUE OF FIXED ASSETS $\quad \underline{494,000}$

* The useful life of the vehicles is 5 years and there is no salvage value. It means that the vehicles should be written off within a period of 5 years, equally (Straight Line Method). Therefore, the applicable rate of depreciation is $20 \%$.
** The useful life of furniture is 10 years, with a residual value of zero. Therefore, the applicable rate of depreciation is $10 \%$.

2. Investments in the shares of State Bank of India are valued at cost.
3. Current Assets include cash and other current assets. All the cash adjustments are made to the balance available with us for the current assets. The adjustments include:
Add:
$\checkmark$ Loan
$\checkmark$ Public deposit
$\checkmark$ Installment received for vehicles on hire 200,000
50,000

Less:
$\checkmark$ Salary to accountant
$\checkmark$ Investment 200,000
Total Adjustments

40,000
36,000 341,000

200,000 240,000
101,000

Opening balance plus the positive inflow gives the total balance to be ₹ $530,000+101,000$.
Here, it includes the advance of salary provided excluding which we shall get ₹ 595,000 .
4. Prepaid salary to the accountant, to the tune of $₹ 36,000$, is treated as prepaid expenses under the heading Loans and Advances.
5. Shareholders fund consists of the amount attributable to the shareholders of the company and hence, includes the amount of share capital and reserves and surplus.

## Equity Share Capital

(1,00,000 equity shares of ₹ 10 each ) $10,00,000$

## Reserves and Surplus

Profit and Loss account $\quad(15,000+55,000-40,000+36,000-20,000-6,000$

$$
-20,000-20,000)
$$

Capital Reserves 5,000
General Reserves $10,000+20,000$
(Including transfer for the year)
6. Loan Funds include the loan from the banks, secured by hypothecation of stocks of ₹ $2,00,000$ (as secured loans), and public deposits accepted during the year, aggregating to ₹ 50,000 (as unsecured loans).
7. Current Liability is the amount of interest accrued but not due on deposits ( $₹ 20,000$ ). Interested readers can go through a few more worked out problems in Annexure 2.8 (on the OLC).

## SUMMARY

A balance sheet, as we have seen, is one of the most important financial statements. It is a periodic summary of the position of the business. It is the statement of the assets, liabilities and owners' capital
as of a particular point in time. This statement in itself, does not reveal anything about the details of operations of the business. However, a comparison of two balance sheets could reveal the change in the business position. A realistic understanding of the operations of the business would require the other two financial statements - profit and loss account and the fund flow statement. We shall take them up in the subsequent lessons.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Balance Sheet
- Asset
- Liability
- Current Assets
- Current Liabilities
- Intangible Assets
- Revenue
- Expenses
- Marketable Securities
- Account Receivable
- Promissory Note
- Prepaid Expenses
- Accrued Liabilities
- Provisions
- Reserves and Surplus
- Contingent Liabilities
- Fixed Asset
- Owners' Equity


## EXERCISES

## Multiple Choice Questions

1. Gutthi Sharma provided the following information about her firms balance sheet: LO 5 EASY

| Cash | $₹ 1,000$ |
| :--- | :--- |
| Accounts receivable | $₹ 5,000$ |
| Shareholders' equity | $₹ 7,000$ |
| Accounts payable | $₹ 2,000$ |
| Project loans | $₹ 10,000$ |

From the information provided above, what are the firm's external liabilities?
(a) ₹ 2,000
(b) ₹ 9,000
(c) ₹ 12,000
(d) $₹ 17,000$
2. In a travel company, painting a car would be treated as a $\qquad$ expenditure; and music player bought to fit in a car would be a $\qquad$ expenditure.

LO 3 MEDIUM
(a) Capital; Capital
(b) Capital; Revenue
(c) Revenue; Revenue
(d) Revenue; Capital
3. Can a balance sheet have an item titled "goods-in-transit"? If yes, it would be of which part?

LO 5 MEDIUM
(a) Yes. It will come under Receivables
(b) No. It will always come under Contingent Liabilities
(c) Yes. It will come under Inventories
(d) No. It will always be part of Profit \& Loss Statement
4. If Prayag International Ltd. is an all equity company it will definitely mean that:

LO 6 MEDIUM
(a) The current liabilities are greater than the current assets
(b) Fixed assets + Working Capital $=$ Owners' Equity
(c) Net Worth = Working Capital
(d) Net Worth < Working Capital
5. If it was known that capital expenditures are for fixed assets (either tangible or intangible) that are by default expected to be productive assets in the long run such as leasehold land improvements. Similarly, if it was also known that revenue expenditures are for costs that are related to specific operating periods and/or revenue transactions, such as the cost of goods sold or repairs and maintenance expense. In such case, pre-commissioning expenses of a plant $\&$ equipment for a footwear producer, Lawreshwar Polymers Limited would be part of its:

LO 5 DIFFICULT
(a) Non-Current liabilities
(b) Current assets
(c) Current liabilities
(d) Non-current assets

## Fill in the Blanks

1. Contingent liabilities are disclosed as $\qquad$ to the balance sheet.

LO 5 EASY
2. Asset losses expected due to non-collection of receivables are called $\qquad$ . LO 5 MEDIUM
3. The expired cost with respect to a fixed asset is referred to as $\qquad$ expense. LO 5 MEDIUM
4. The expiration of the cost of intangible assets is referred to as $\qquad$ .

## LO 5 DIFFICULT

5. As part of his regular business, Jheel went in for the transactions mentioned below (during the day). Fill in the blanks by indicating the direction of the change in the empty columns below (i.e., positive, negative, and no change):

LO 2 DIFFICULT
Transactions Assets $=$ Liabilities + Capital
(a) Took a loan from a bank
(b) Received advance from a customer
(c) Purchased merchandise on credit from a wholesaler
(d) Sold on credit to a well-known customer
(e) Sold on cash to a new customer
(f) Paid taxes to the municipal authorities
(g) Made market enquiries from a new product
(h) Gifted some of the merchandise to her boy friend
(i) Rejected proposal from a competitor to buy her business

## Discussion Questions

1. What is the main purpose of a balance sheet? What basic information does it communicate?

LO 1 EASY
2. Discuss the various ways of presenting a balance sheet. Which form of presentation is prescribed by the latest Companies Act in India?

LO 7 MEDIUM
3. Refer to the Chapter Opening Case on the BCCI's Balance Sheet. Briefly comment on the stated facts therein. How would that augur for the future of the game and for the future of Indian cricket?

LO 1 MEDIUM
4. Rearrange the following current assets in order of liquidity:

LO 5 MEDIUM
(a) Bank balance
(b) Bills receivable
(c) Cash in hand
(d) Insurance prepaid
(e) Loans \& advances
(f) Marketable securities
(g) Stock-in-trade
(h) Trade receivables
5. Start your own business with 20 different transactions. Prepare a position statement after every transaction. Did your firm earn profits or made a loss at the end of all the transactions. Make a small comment on your firm's position at the end.

LO 2 DIFFICULT

## Numerical Problems

## 1. Dilli Durbar Company

LO 5, 6, 7 EASY
(a) Classify the following items into current assets, fixed assets, proprietary funds and current liabilities and prepare a balance sheet for Dilli Durbar Company as at March 31, 20X7:

| Item | Amount ₹ | Item | Amount ₹ |
| :--- | ---: | :--- | ---: |
| Land | $2,50,000$ | Electricity payable | 2,000 |
| Building | $1,00,000$ | Sundry debtors | 40,000 |
| Plant \& machinery | 50,000 | Bills payable | 60,000 |
| Closing stock: |  | Insurance charges | $1,00,000$ |
| Raw material | 15,000 | Marketable securities | 60,000 |
| Work in progress | 10,000 | Cash in hand | 25,000 |
| Finished goods | 25,000 | Cash at bank | 35,000 |
| Salary payable | 15,000 | Profit for the year | 30,000 |
| Wages payable | 13,000 | Sundry creditors | $1,10,000$ |

Additional Information:
(b) Provide for depreciation on plant and machinery at the rate of $10 \%$ per annum.
(c) Sundry debtors include ₹ 500 for goods supplied to a customer, who has become insolvent.
(d) Insurance charges for stock insurance are paid on September 30, 20X6.
2. Abrak Dabra

LO 1 MEDIUM
Shiraz Daneshyar was working for the TV Today Network, one of India's leading news television networks along with Network 18 and NDTV. Its news channels included Aaj Tak (Hindi), Headlines Today (English), Tez (Hindi), and Business Today (English). Please help Shiraz in completing the balance sheet of TV Today Network by filling the following items with figures at the appropriate blanks below: Capital work-in-progress 31; Cash and bank balances 944; Intangible assets 377; Long-term loans and advances 63; Long-term provisions 109; Non-current investments 455; Other current liabilities 340; Other long-term liabilities 17; Reserves and surplus 4,202; Share capital 298; Short-term borrowings 67; Short-term loans and advances 399; Short-term provisions 114; Tangible assets 1,976; Trade payables 676; and Trade receivables 1,406.

## TV Today Network Limited

## Balance Sheet as on March 31, 2015

| Particulars | Amount in ₹ million |
| :---: | :---: |
| EQUITY AND LIABILITIES |  |
| Shareholders' fund |  |
| ? | ? |
| ? | ? |
| Sub-total | 4,500 |
| Non-current liabilities |  |
| ? | ? |
| ? | ? |
| Sub-total | 126 |
| Current liabilities |  |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| Sub-total | 1,197 |
| Total | 5,823 |
| Assets |  |
| Non-current assets |  |
| Fixed assets |  |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| Deferred tax assets (Net) | 157 |
| ? | ? |
| Sub-total | 3,059 |
| Current assets |  |
| ? | ? |
| ? | ? |
| ? | ? |
| Other current assets | 15 |
| Sub-Total | 2764 |
| Total | 5,823 |

Source: BSE India: TV Today Network Ltd Annual Reports, BSE India, Web, 18 Dec, 2015.
3. Chinku's Mismash

LO 5, 6, 7 MEDIUM
Chinku was looking into the microfinance companies based in India. He came across, India's biggest firm, SKS Microfinance Limited. The firm was registered as a non-banking finance company (NBFC) and listed in the stock exchanges. He started jotting down a few figures of the company's balance sheet. However, in his rush - he missed many. Please help Chinku in filling them up and also answering the queries below:

SKS Microfinance Limited
Balance Sheet as on March 31, 2015

| Particulars | Amount in ₹ million |
| :---: | :---: |
| EQUITY AND LIABILITIES |  |
| Shareholders' Fund |  |
| Share Capital | ? |
| Reserves and Surplus | 9,202 |
|  | 10,465 |
| Non-current liabilities |  |
| Long-term Borrowings | ? |
| Long-term Provisions | 127 |
|  | 10,699 |
| Current Liabilities |  |
| Short-term Borrowings | 6,096 |
| Other Current Liabilities | 19,272 |
| Short-term Provisions | 455 |
|  | ? |
| TOTAL | 46,987 |
| Assets |  |
| Non-Current Assets |  |
| Fixed Assets |  |
| Tangible Assets | 52 |
| Intangible Assets | 38 |
| Intangible Assets under development | 13 |
| Non-current Investments | 2 |
| Long-term Loans and Advances | 2,448 |
| Other Non-current Assets | ? |
|  | 3,805 |
| Current Assets |  |
| Trade Receivables | ? |
| Cash and Bank Balances | 15,368 |
| Short-term Loans and Advances | 27,136 |
| Other Current Assets | 645 |
|  | ? |
| Total | ? |

Source: BSE India: SKS Microfinance Limited Annual Reports, BSE India, Web, 18 Dec, 2015.

## Questions

(a) Fill the blank figures (marked '?' in the table above).
(b) What is the biggest asset for this organization? What is the biggest liability for this organization? Does it indicate anything specific about the business model?
(c) Give an example of the item titled "Intangible Assets under Development" mentioned above?
(d) It was known that in FY2014, the share capital of SKS Microfinance was 1,082 million. How can Chinku know if the firm increased its share capital during FY 2015 ?

## 4. New Ideas on IBM

## LO 4 DIFFICULT

I own a business entity, named I am a Business Man i.e., IBM. At the end of accounting year, IBM has a cash balance equal to ${ }^{\text {X }} \mathrm{XXXXXXXX} .{ }^{7}$ Half of the cash has been kept aside for buying brands. The firm does not own any trade receivables nor owns any marketable securities. The firm had a promissory note equivalent to the total cash balance (the amount being receivable after 6 months). Soham Pradhan drew the promissory note. Two days back, Tanmoy Chatterjee, an employee of IBM had taken a travel advance equivalent to one-tenth of the total cash balance. At the end of the accounting period, IBM does not have any other current assets. The entities fixed assets are twice its current assets. IBM's long-term investments are equal to the rest of the assets on its balance sheet. Recently, the firm had incurred restructuring expenses equal to its fixed assets. The benefit of this restructuring expense is expected to flow over the next five years. Long-term liabilities are equal to its non-current assets. IBM's current liabilities \& provisions are equal to half of its current assets. The firm has no other liabilities. The firm had issued equity shares worth ₹XXXXXXXX.
(a) Refer to the problem above. Fill in the blanks below.
I. Other Assets is equal to ₹
II. Total Assets is equal to ₹
III. Net worth of the firm is equal to ₹
IV. Reserves \& Surplus of the firm is equal to ₹
V. Long-term Liabilities is equal to ₹ $\qquad$
(b) Tick all the ones that you agree to (i.e., there may be multiple correct answers). Leave all the ones that you disagree to (i.e., keep them unmarked). Use your own judgment to decide on the answers:
I. The firm had sales higher than its long-term investments
II. The firm had a good current ratio
III. Secured liabilities were more than unsecured liabilities
IV. The firm has zero contingent liabilities
V. During the financial year, the firm had earned a profit
5. Big Toys

LO 8 DIFFICULT
Big Toys Ltd. provides you with the following information relating to the financial year ending on March 31, 20X7. Prepare its balance sheet in the vertical form as at March 31, 20 X 7.

Balances on 01-04-20X6 (all figures in ₹)

| Capital | $3,80,000$ |
| :--- | ---: |
| Profit | 30,000 |
| Plant \& Machinery | $3,75,000$ |
| Furniture \& Fixture | 35,000 |
| Preliminary Expenses | 60,000 |

[^8]Depreciation for the year on plant \& machinery and furniture \& fixtures was ₹ 20,000 and ₹5,000 respectively. Preliminary expenses amounting to ₹ 10,000 were written off during the year.

For all other accounts, the balances in the books of accounts, as on 31-03-20X7, were as follows (all figures in ₹):

| Unexpired insurance | 15,000 |  |
| :--- | ---: | :--- |
| Sundry Debtors | $4,25,000$ | (provide for doubtful debtors ₹25,000) |
| Loan given to Director | 40,000 | (accrued interest not accounted for ₹10,000) |
| Raw material stock | 75,000 |  |
| Finished goods stock | 25,000 |  |
| Prepaid expenses | 50,000 |  |
| Cash in hand | $1,50,000$ |  |
| Cash at bank | 50,000 |  |
| Declared Dividend for the year | 30,000 |  |
| Profit for the year | 20,000 |  |
| Advance received | $2,00,000$ |  |
| Bank Loan | $4,00,000$ |  |
| Sundry Creditors | 50,000 |  |
| Bills Payable | $1,00,000$ |  |
| Provision for Taxes | 10,000 |  |
| Other Current Liabilities | 90,000 |  |

## MINI CASES

## Case 2.1 A Conglomerate's Fixed Assets

ITC is one of India's foremost multi-business enterprise with businesses encompassing Fast Moving Consumer Goods (FMCG), Hotels, Paperboards \& Specialty Papers, Packaging, Agri-Business, and Information Technology - and having a market capitalization of over US $\$ 40$ billion. ITC is rated among the World's Most Reputable Companies by Forbes magazine. It is among India's 10 Most Valuable (Company) Brands, according to a study published by the Economic Times. We present in Annexure 2.4 the company's fixed assets details (on the OLC). You are required to answer the following questions based on the same.

## Case Questions

(a) Give a summarized picture of ITC's fixed assets and the visible changes therein (within 250 words).
(b) What are acquired intangible assets? And, why are they part of ITC's balance sheet? On the other hand, why are ITC's non-acquired intangible assets not included in its fixed assets? Give a few examples of the same.
(c) Give a non-technical summary of the notes to the ITC's fixed assets (within 100 words).
(d) Based on the figures available, can we confidently state that the biggest asset of ITC is its "plant and equipment"? Comment (within 100 words).

## Case 2.2 'Rajat Jain and IIM Premier League'

The modern day Jhola-wala laptop carrying and tobacco-chewing Wharton-returned Professor Rajat Jain was teaching financial accounting course in one of the IIMs. The class was hazaar (means, thousand
times) impressed with his smart looks and pony tail-especially the Dance India Dance members including Gita and Shruti. The Bigg Boss Gang smelt competition and did not like him one bit, especially Salman Khan. Unlike the aggressive actresses in bollywood, the sambar brigade decided to adopt a wait and watch approach; it included Shruti and Kajal.

In a recent session, Professor Rajat surprised the class with a quiz. The class was of course not surprised. The Bigg Boss Gang tigers took it as an opportunity to prove themselves while the Dance India Dance folks worked vigorously to impress the charismatic Rajat by repeated visits to beauty parlor-varlor, gym-vym, and doing some yoga-shoga. The sambar brigade was also not left behind and had Ayurvedic preparation. Finally, the day came when the quiz paper was there on the table. It included ten companies listed on the Bombay Stock Exchange from different sectors and varying ownership and having different sizes and being at different stages of growth:

- Aditya Birla Nuvo: Large business group affiliate and a conglomerate with presence across Financial Services, Telecom, Fashion and Lifestyle and Manufacturing Businesses.
- Chowgule Steamships: Small business group affiliate is principally engaged in the carriage of goods by sea.
- Educomp Solutions: Private owned entity with main products as Books, CD ROMs, Toys, Software Education, Computers and other components.
- Hindustan Unilever: A multinational subsidiary with focused presence in fast moving consumer consumables space.
- MMTC: State owned entity with main activities as Wholesale Trade of Commodities such as Iron Ore, Gold, and Coal.
- Noida Toll Bridge Co.: Private owned entity with main activities as Infrastructure based Construction and managing of a Toll Bridge.
- NTPC: State owned entity with main activities as Utilities especially generating thermal power.
- SKS Microfinance: Private owned entity and operating in microfinance domain as a non-banking finance company.
- Tech Mahindra: Large business group affiliate providing IT solutions and Business Process Outsourcing to telecommunications industry.
- Zee Entertainment Enterprises: A large business group affiliate in media and entertainment space.

The quiz involved identifying the two biggest items in both sides of the balance sheet for the latest financial year (i.e., 'assets' side and 'equities \& liabilities' side) from the list of items prescribed in the Schedule III of the Companies Act, 2013 (for example, the categories would include items in the Current Assets as "Cash \& Cash Equivalents', 'Trade Receivables', and 'Short-term Loans and Advances'; and items in the Non-current Assets as 'Long-term Loans and Advances', 'Non-current Investments', and 'Intangible assets under development').

Source: Various company websites.

## Case Questions

(a) What are the possible reasons behind differing choices in the (two biggest) balance sheet items (on either side) of these 10 companies? Discuss.
(b) Are there any similarities emerging in the list above? Discuss.

## Case 2.3 A Bank And A Manufacturer

## LO 7 MEDIUM

You are being given the balance sheets of two well-known companies, namely, Bank of India Limited (BOI) and Reliance Industries Limited (RIL). The first one is a large state-owned bank, the other is a large manufacturing company. Both the balance sheets seem to be very different. Prepare both of them in the Standard format and analyze the differences in the nature of the assets, liabilities, and owner(s).

## Bank of India <br> Consolidated ${ }^{8}$ Balance Sheet As On 31St March, 2015

| PARTICULARS | Amount |
| :--- | ---: |
|  | (all figures in ₹ crores) |
| CAPITAL AND LIABILITIES |  |
| Capital | 666 |
| Reserves \& Surplus ${ }^{9}$ | 32,025 |
| Deposits | 534,482 |
| Borrowings | 40,099 |
| Other Liabilities \& Provisions | 18,013 |
| Total | $\mathbf{6 2 5 , 2 8 5}$ |
|  |  |
| ASSETS | 27,498 |
| Cash and balances with Reserve Bank of India | 49,441 |
| Balances with Banks and Money at Call and Short Notice | 123,196 |
| Investments ${ }^{10}$ | 404,390 |
| Advances ${ }^{11}$ | 5,915 |
| Fixed Assets | 14,845 |
| Other Assets | $\mathbf{6 2 5 , 2 8 5}$ |
| Total | 201,312 |
| Contingent Liabilities ${ }^{12}$ |  |

[^9]
## Reliance Industries Limited Consolidated Balance Sheet as on 31st March, 2015

| PARTICULARS |  | (all figures in ₹ crore) |
| :---: | :---: | :---: |
| SOURCES OF FUNDS |  |  |
| Shareholders' Funds |  |  |
| Capital | 2,943 |  |
| Reserves and Surplus | 218,594 | 221,537 |
| Non-current Liabilities |  |  |
| Long-term Borrowings, Unsecured | 113,302 |  |
| Long-term Borrowings, Secured | 7,475 |  |
| Deferred Tax Liability (Net) | 12,974 |  |
| Other Long-term Liabilities \& Provisions | 10,645 | 144,396 |
| Current Liabilities |  |  |
| Short-term Borrowings | 27,965 |  |
| Trade Payables | 59,407 |  |
| Other Current Liabilities | 45,789 |  |
| Short-term Provisions | 5,392 | 138,553 |
|  |  | 504,486 |
| APPLICATION OF FUNDS |  |  |
| Non-current Assets |  |  |
| Fixed Assets |  |  |
| Gross Block | 284,469 |  |
| Less : Accumulated Depreciation | 132,408 |  |
| Net Block | 152,061 |  |
| Capital Work-in-Progress | 106,256 |  |
| Intangibles Under Development, Others | 60,206 |  |
| Non-Current Investments | 25,437 |  |
| Long-Term Loans \& Advances, Others | 23,949 | 367,909 |
| Current Assets |  |  |
| Current Investments | 51,014 |  |
| Inventories | 53,248 |  |
| Trade Receivables | 5,315 |  |
| Cash and Cash Equivalents | 12,545 |  |
| Short-Term Loans \& Advances, Other CA | 14,455 | 136,577 |
|  |  | 504,486 |

## Case 2.4 Balance Sheets of Four Different Companies <br> LO 5, 6 DIFFICULT

In the following pages, you are being given the balance sheets of four different companies for the last two years. Please note that all the figures are in ₹ crore. Further, figures mentioned in brackets are deductions. Compare the summarized balance sheets of these four companies and explain the nature of assets, liabilities and owner(s)-equity, with their similarities and dissimilarities. Also comment on the significant changes in the individual items in the last one year.

## Balance sheet-1

| INFOSYS TECHNOLOGIES LTD. Consolidated Balance Sheet |  |  | (₹ in crore) |  |
| :---: | :---: | :---: | :---: | :---: |
| Particulars | 31 March 2015 |  | 31 March 2014 |  |
| SOURCES OF FUNDS <br> Shareholders' Funds |  |  |  |  |
|  |  |  |  |  |
| Capital | 572 |  | 286 |  |
| Reserves and Surplus | 50,164 | 50,736 | 44,244 | 44,530 |
| Non-Current Liabilities |  |  |  |  |
| Long-term Borrowings | - |  | - |  |
| Other Long-term Liabilities | 50 | 50 | 405 | 405 |
| Current Liabilities |  |  |  |  |
| Trade Payables | 140 |  | 173 |  |
| Other Current Liabilities | 6,920 |  | 5,449 |  |
| Short-term Provisions | 8,443 | 15,503 | 6,409 | 12,031 |
| Total Equity and Liabilities |  | 66,289 |  | 56,966 |
| APPLICATION OF FUNDS |  |  |  |  |
| Non-Current Assets |  |  |  |  |
| Tangible assets, Gross | 14,108 |  | 11,580 |  |
| Accumulated Depreciation | $(6,423)$ |  | (5524) |  |
| Tangible assets, Net | 7,685 |  | 6,056 |  |
| Intangible assets, Gross | 3,708 |  | 2,370 |  |
| Accumulated Amortization | (47) |  | (48) |  |
| Intangible assets, Net | 3,661 |  | 2,322 |  |
| Capital Work-in-Progress | 776 |  | 961 |  |
| Non-current Investments | 1,398 |  | 1,307 |  |
| Deferred tax assets (net) | 536 |  | 629 |  |
| Long-term Loans and Advances \& Others | 4,991 | 19,047 | 2,613 | 13,888 |
| Current Assets |  |  |  |  |
| Current Investments | 872 |  | 3,024 |  |
| Trade Receivables | 9,713 |  | 8,351 |  |
| Cash and Cash Equivalents | 30,367 |  | 25,950 |  |
| Short-term Loans and Advances \& Others | 6,290 | 47,242 | 5,753 | 43,078 |
| Total Assets |  | 66,289 |  | 56,966 |

## Balance sheet-2



## Balance sheet-3

| BLUE DART EXPRESS LTD. Consolidated Balance Sheet |  |  | (₹ in crore) |  |
| :---: | :---: | :---: | :---: | :---: |
| Particulars | 31 March 2015 |  | 31 March 2014 |  |
| SOURCES OF FUNDS <br> Shareholders' Funds <br> Capital <br> Reserves and Surplus | $\begin{array}{r} 24 \\ 283 \end{array}$ | 307 | $\begin{array}{r} 24 \\ 619 \end{array}$ | 643 |
| Non-Current Liabilities Deferred Tax Liabilities Long-term Borrowings Other Long-term Liabilities | $\begin{array}{r} 10 \\ 332 \\ 15 \end{array}$ | 357 | 17 <br>  <br> 9 | 27 |
| Current Liabilities <br> Trade Payables Other Current Liabilities Short-term Provisions Total Equity and Liabilities | $\begin{array}{r} 128 \\ 128 \\ 68 \end{array}$ | $\begin{aligned} & 324 \\ & 988 \end{aligned}$ | 107 117 46 | $\begin{aligned} & 270 \\ & 940 \end{aligned}$ |
| APPLICATION OF FUNDS <br> Non-current Assets <br> Tangible assets, Gross <br> Accumulated Depreciation <br> Tangible assets, Net Intangible assets, Gross <br> Accumulated Amortization <br> Intangible assets, Net Intangible assets under development <br> Capital Work-in-Progress <br> Non-current Investments <br> Long-term Loans and Advances \& Others | 302 $(131)$ 171 85 $(40)$ 45 21 5 26 183 | 451 | $\begin{array}{r} 352 \\ (164) \\ 188 \\ 72 \\ (32) \\ 40 \\ 7 \\ 1 \\ 24 \\ 236 \end{array}$ | 497 |
| Current Assets <br> Inventories <br> Trade Receivables <br> Cash and Bank Balances <br> Short-term Loans and Advances \& Others <br> Total Assets | $\begin{array}{r} 4 \\ 291 \\ 166 \\ 76 \end{array}$ | $\begin{aligned} & 537 \\ & 988 \end{aligned}$ | 3 267 106 67 | $\begin{aligned} & 443 \\ & 940 \end{aligned}$ |

Balance sheet-4

## COLGATE-PALMOLIVE (INDIA) LTD.

Balance Sheet
(₹ in crore)

| Particulars | 31 March 2015 |  | 31 March 2014 |  |
| :---: | :---: | :---: | :---: | :---: |
| SOURCES OF FUNDS <br> Shareholders' Funds |  |  |  |  |
|  |  |  |  |  |
| Capital | 14 |  | 14 |  |
| Reserves and Surplus | 757 | 771 | 586 | 600 |
| Non-Current Liabilities |  |  |  |  |
| Deferred Tax Liabilities | 3 | 65 | - | 52 |
| Other Long-term Liabilities | 2 |  | 1 |  |
| Long-term Provisions | 60 |  | 51 |  |
| Current Liabilities |  |  |  |  |
| Trade Payables |  |  |  |  |
| Other Current Liabilities | 514 |  | 498 |  |
| Short-term Provisions | 286 | 866 | 273 | 842 |
| Total Equity and Liabilities | 66 | 1,702 | 70 | 1,493 |
| APPLICATION OF FUNDS |  |  |  |  |
| Non-Current Assets |  |  |  |  |
| Tangible assets, Gross | 1,192 |  | 902 |  |
| Accumulated Depreciation | (411) |  | (346) |  |
| Tangible assets, Net | 781 |  | 556 |  |
| Capital Work-in-Progress | 141 |  | 142 |  |
| Non-current Investments | 30 |  | 37 |  |
| Deferred tax assets (net) | - |  | 18 |  |
| Long-term Loans and Advances \& Others | 59 | 1,011 | 71 | 823 |
| Current Assets |  |  |  |  |
| Current Investments | 7 |  | - |  |
| Inventories | 252 |  | 226 |  |
| Trade Receivables | 70 |  | 55 |  |
| Cash and Bank Balances | 254 |  | 285 |  |
| Short-term Loans and Advances \& Others | 108 | 691 | 104 | 670 |
| Total Assets |  | 1,702 |  | 1,493 |

## Case 2.5 Financial Health of CNBC India - Part I

Raghav Bahl was the founding/Controlling Shareholder \& Managing Director of the Network18 group until it was taken over by the Reliance group in 2014. Thus, his baby, Television Eighteen India Limited (TV18) used to run the popular private television channel 'CNBC India' during early days. The channel had its focus on business news and related events. We reproduce its balance sheet during Bahl's time for two consecutive financial years (below) with specific learning agenda.


## Case Questions

(a) Please note that the format of reporting uses the earlier Schedule VI of the Companies Act, 1956. It has significant differences from the presentation prescribed by the new Companies Act 2013 -
and followed by all the recent financial statements. What are the significantly visible differences? Please list them down. Discuss the possible reasons behind the same.
(b) In the next balance sheet, losses are recorded as assets i.e., as part of application of funds. What could be the reasoning behind the same?
(c) Was TV18 in good financial health? What are the other factors we need to take into account while commenting on the financial health of the company?
(d) Discuss the significant changes that had happened in the companies' financial position during the recent year.

## Television Eighteen India Limited Consolidated Balance Sheet (all figures in ₹ million)

31 March 201031 March 2009
SOURCES OF FUNDS

1. SHAREHOLDERS' FUNDS

| Share capital | 901 | 600 |
| :--- | ---: | ---: |
| Reserves and surplus | 10,544 | 5,282 |

2. LOAN FUNDS

| Secured loans | 3,019 | 3,138 |
| :--- | :--- | :--- |

$\begin{array}{lll}\text { Unsecured loans } & \text { 7,849 } & \text { 6,644 }\end{array}$
3. DEFERRED TAX LIABILITY

APPLICATION OF FUNDS
4. FIXED ASSETS

| Gross block | 4,011 | 4,038 |
| :--- | ---: | ---: |
| Less: Accumulated Depreciation/ Amortization | 2,636 | 2,236 |
|  | 1,374 | 1,801 |
| Capital Work in Progress | 14 | 7 |
| GOODWILL ON CONSOLIDATION | 4,871 | 4,097 |
| INVESTMENTS | 8,103 | 5,880 |
| DEFERRED TAX ASSETS | 89 | 142 |

8. CURRENT ASSETS, LOANS \& ADVANCES

| Inventories | 70 | 86 |
| :--- | :--- | :--- |


| Sundry debtors | 1,832 | 1,660 |
| :--- | :--- | :--- |

Unbilled revenue $\quad 76$
$\begin{array}{lll}\text { Cash \& bank balances } & \text { 1,636 }\end{array}$
Loans \& advances
9. LESS: CURRENT LIABILITIES AND PROVISIONS
10. NET CURRENT ASSETS
11. MISCELLANEOUS EXPENDITURE

| 4,099 | 1,945 |
| :---: | :---: |
| 8,730 | 5,365 |

12. PROFIT AND LOSS ACCOUNT (Debit balance)

1,782
,

22,323
15,701

## Case 2.6 Ram Traders: Balance Sheet

Ram decides to start a business in the local vegetable market of Jamshedpur. The case below is completely based on your roll number ( $\mathbf{Z}$ being the last three digits of your roll number) and day of birth ( $\mathbf{Y}$ ) as per your records.

- Example 1: If your roll number is FB15008 and Date of Birth is 22 -Jun- 1748 then Z will be ' 008 ' and Y will be ' 22 '.
- Example 2: If your roll number is O15023 and Date of Birth is $29-\mathrm{Feb} .-2008$ then Z will be ' 023 ' and Y will be ' 29 '.
- Example 3: If your roll number is BM15209 and Date of Birth is $01-$ Dec-1899 then Z will be ' 209 ' and Y will be ' 01 '.
We provide the transactions and events against each date for Ram Traders below. You are required to prepare the position statement of the organization.
- Date 1-June Ram starts a trading entity (Ram Traders) with capital ₹ " $2 \mathrm{Z}+1$ " thousand.
- Date 1-June Ram Traders borrows ₹ "Y" thousand from Ms. Champa (interest will be at Simple Interest @ $12 \%$ p.a. payable at end of the month).
- Date 2-June Ram takes on hire a "small shop" (i.e., shed or gmooty) in Sakchi Sabji Bazaar (i.e., local vegetable market) on a daily rent of ₹ " $Z+1$ " per day (pays an adjustable deposit of ₹ " $\mathrm{Z}+1$ " hundred).
- Date 2-June Ram purchases "Y + 1" Bags of Red Chillies (i.e., Lal Mirchi) from Pappu at the rate of ₹ " $Z+1$ " per Kilogram (remember 1 red Chilli bag $=20 \mathrm{Kg}$ ).
- Date 5-June Ram purchases " $Z+1$ " Bags of Green Chillies (i.e., Hari Mirchi) on Credit from Laddu at the rate of ₹ "Y + 1" per Kilogram (remember 1 green Chilli bag = 40 Kg ).
- Date 6-June Ram spends ₹ 1,000 on sales promotion (such as pamphlets, advertisement on local cable network).
- Date 7-June My Childhood Classmate Akella Veera Venkata Vijayawada Sitaramanjaneyula Rajasekhara Yarlagadda Venkata Samba Siva Rao, Tennis Superstar Ms. Sania Mirza, IPL Dada Shri Lalit Modi, Badminton Champion Ms. Saina Nehwal, Prime Minister Shri Narendra Modi, Bollywood King Shri Shah Rukh Khan, Chennai-based Indian Super Star Shri Rajinikanth, Bollywood Beauty Ms Anushka Sharma, Delhi Tiger Shri Virat Kohli, Indian National Congress President Ms Sonia Gandhi, XL General Secretary Shri Abhijit Roy and Puratchi Thalaivi Amma Jayalalitha Jayaram jointly launch a massive campaign to promote the health benefits of eating chilli along with International YOGA DAY (as part of Healthy India Campaign using funds from the Government Budget Allocation).
Every day Ram Traders sells large amounts of green chillies and red chillies. Due to the high demand, Ram starts rationing of chilli and selling only 1 kg per customer.
- Date 13-June Ram Traders CEO Ram while watching "F" TV channel, comes to know of a new combo flavor (some kind of mixture prepared by using both red \& green chilly) being more popular seasoning these days. Hence, the trading entity lends 1 kilo each of red \& green chilly to his mother-in-law for doing research to identify the exact mix in this new combo flavor.
- Date 19-June Ram completes reading a book titled "Thought Leaders for the Future Generation" by Harvard Guru Pankaj Ghemawat. He decides to re-write the book in Maithili, Hindi and the local tribal language, i.e., Santhali.
- Date 23-June A customer hits Ram with a stone (on some petty argument). Ram is injured. Ram Trader's employee Raju puts 1-gram chilli on the customer's eyes. Finally, both settle the matter and become good friends by hiring each other.
- Date 24-June Ram sells $80 \%$ of the purchased red chilli at an average price of ₹ 150 per kg. He sells $90 \%$ of the purchased green chilli at an average price of ₹ 100 per kg
- Date 25-June Ram's wife turns sweet sixteen. He celebrates his wife's birthday. He gifts her 1 kg of green chilli and 1 kg of red chilli. His wife goes ecstatic.
- Date 26-June Due to high volatility in chilli prices, Ram gets heart attack. Based on medical advice from Dr. T K Banerjee, Ram decides to close the shop for the next one week.
- Date 30-June Ram Traders pays up the interest to Ms Champa (if any). In return, Ms Champa gives Ram a Get Well Soon greeting card.
- Date 30-June Ram knows that his employee Raju has to collect this month's salary of ₹ 1,000 . He finds Raju to be absent that day. Ram decides to pay him on the next working day.
- Date 30-June Ram Traders purchases shop furniture worth ₹"Y + 1" hundred on credit from $\mathrm{M} / \mathrm{s}$ Arunachal Green Plywood. Delivery of furniture is done on the same day. Ram promises to make payment in 21 days.
- Date 30-June Ram decides to compute the three financial statements. Ram Traders provides for $40 \%$ income tax (proportionate-basis) based on the prevalent taxation norms.
Based on the details above, please prepare the financial position as on 30th June. Please fill the table below.

Ram Traders Balance Sheet as on $30^{\text {th }}$ June
(all figures in ₹)

| Assets |  | Liabilities and Owners' Equity |  |
| :--- | :--- | :--- | :--- |
| Cash | $?$ | Payables | $?$ |
| Inventory | $?$ | Loan | $?$ |
| Prepaid Rent | $?$ | Provisions | $?$ |
| Total Current Assets | $?$ |  | Total Liabilities |
|  |  | Capital | $?$ |
| Fixed Assets | $?$ | Profit | $?$ |
| Total Fixed Assets | $?$ |  | Total Owner's Equity |
| Total Assets | $?$ | Total Liabilities and Owners' Equity | $?$ |

## INTERNET ASSIGNMENTS

## Assignment 2.1 Balance Sheet in Annual Reports

In the Online learning the annual reports of the following seven companies, listed on the Bombay Stock Exchange, has been provided:

- IVRCL Limited (Size: Medium; Key Sector: Infrastructure Constructions \& Contracting)
- ITC Limited (Size: Large; Key Sector: Fast Moving Consumer Goods)
- Linc Pen and Plastics Limited (Size: Small; Key Sector: Printing \& Stationary)
- PTC India Limited (Size: Medium; Key Sector: Trading)
- Raymond Limited (Size: Medium; Key Sector: Textiles Woolen \& Worsted)
- Tanla Solutions Limited (Size: Small; Key Sector: IT Software)
- Torrent Power Limited (Size: Large; Key Sector: Power Generation \& Distribution)

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor, sample worked out assignments have been provided on the OLC.

Your second assignment would to be answer the following two questions:

1. Please state the summarized balance sheet equation for the last two years from the latest company annual report. Please comment (within 50 words) LO 2
2. Mention five biggest items as part of the assets, liabilities and shareholders funds for the last two years from the latest company annual report along with their amounts and their relative proportions. Please comment (within 50 words)

## Answers

## Answers to "Let's Check Our Concepts!"

(a) True
(b) False
(c) False
(d) True
(e) False
(f) True
(g) False
(h) False
(i) False
(j) True
(k) False
(l) True
(m) False
(n) False

## Answers to Activity 2

1. (ii)
2. (v)
3. (ii)
4. (iii)
5. (iv)
6. (iii)
7. (i)
8. (iii)
9. (i)
10. (v)

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 2.1: Understanding Balance Sheet: Another Illustration
- Annexure 2.2: Balance Sheet and its Need for Comparison
- Annexure 2.3: What are 'Bad and Doubtful Debts'?
- Annexure 2.4: Fixed Asset Schedules of Two FMCG Giants
- Annexure 2.5: Illustration on Sources of Funds
- Annexure 2.6: Illustration on Various Formats of Balance Sheet
- Annexure 2.7: What to See in a Balance Sheet?
- Annexure 2.8: Solved Illustration
- Annexure 2.9: Additional Reading Material
- Annexure 2.10: Auxiliary Test Material
- Annexure 2.11: Internet Assignment

Profit and Loss Statements

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Identify the importance of Profit and Loss Statements
LO 2 Paraphrase the Statement of Profit and Loss as an Accounting Equation
LO 3 Relate the Realization and Accrual Principles for matching Revenue and Expenses
LO 4 Discuss Periodical Income Summaries and their link with interconnecting Balance Sheets
LO 5 Characterize Revenue and Expenses
LO 6 Prepare a Statement of Profit and Loss
LO 7 Explain the processes of Inventories' Expiration
LO 8 Review the four parts of a Manufacturing Concern's Income Statement

In Q2FY2015, Nestle India registered its First Loss
Found in 1866, Nestle has operations in almost every country in the world. In Q2FY2015, for the first time in two decades, the Nestle India Limited, the Indian arm of the Swiss multinational reported a loss. Its primary businesses are food products including milk products, beverages, prepared dishes, cooking aids, chocolates and confectionery. The Table ahead presents its quarterly financials for 2015.

The first line of the notes of the company had "Results for the quarter have been impacted by the MAGGI Noodles Issue". News reports in June 2015 i.e., near end of the quarter suggested that the Food Safety and Standards Authority of India (FSSAI) banned the sale of Maggi noodles saying it was 'unsafe and hazardous' for human consumption.

| Items of Nestle India <br> (from its Profit and Loss State- <br> ment) | Q2FY2015 |  | Q1FY2015 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Amount in ₹ <br> Crores | (Sales Weight \%) | Amount in ₹ <br> Crores | (Asset Weight \%) |
| Total Income from Operations, etc. | 1,987 | $100 \%$ | 2,541 | $100 \%$ |
| Expense: Cost of Goods | 855 | $43 \%$ | 1,062 | $42 \%$ |
| Expense: Employee Benefits | 188 | $9 \%$ | 201 | $8 \%$ |
| Other Expenses | 556 | $28 \%$ | 958 | $38 \%$ |
| Exceptional Items - Charge | 452 | $23 \%$ | - | $0 \%$ |
| Net Profit / (Loss) for the Period | $\mathbf{( 6 4 )}$ | $\mathbf{( 3 \% )}$ | $\mathbf{3 2 0}$ | $\mathbf{1 3 \%}$ |

Nestle's hallowed past, the Table above provides the quarterly financials of Nestle India, and the FSSAI concerns on Maggi raised a number of questions, such as:

- Why should the total income from operations go down by about $20 \%$ during the quarter? In terms of physical movement - how would that have happened?
- What could be the reasons behind the minimal change in the employee benefits expense item vis-à-vis a drastic fall in other expenses? What might be the bigger items within the other expenses?
- Why should the results show an 'exceptional items - charge' for one quarter and none for another?
In sum, we conclude that the discussion above on Nestle India makes us appreciate about the need to understand the statement of profit and loss better. Our discussion in this chapter provides a few pointers to the above questions.

Source: Nestle Investors, Nestle, Web, 16 Jan. 2016.

While reading the news section of a popular newspaper, you often come across statements such as 'Airline Industry to Lift Annual Profit $80 \%$ on Indian Surge'. What Does that Mean? It means that the industry is having a good time due to increased demand from the Indian contingent. And no wonder among financial statements, people talk most about Statement of Profit and Loss.

The primary motive of running a business enterprise; say, Google Inc. is its income/profit. Yes, owners of Google Inc. would be happier with a high-profit firm than a non-profit making firm. Hence, the profits are the compensation derived by an entrepreneur for the capital invested and risks incurred in running a firm (think of the reasons for the existence of Google and its benefits to its owners).

The balance sheet, as we have studied in the previous chapter, is intended at reporting the value of the assets, liabilities and owners equity, at a particular point in time. It does not disclose anything about the details of the operations of the business. All that it tells about the operations of the business during the period between the previous balance sheet and the present balance sheet, is the net change in the owner(s) equity brought about by the operations. Both the owners and the management alike, are interested in knowing more about the changes in the owner(s) equity, in detail. The need for information in this regard is addressed by preparing a detailed statement summarizing the increases and decreases in the owner(s) equity, caused by revenues earned and expenses incurred during the accounting period. Due to
the primacy of profits and the role played by it in shaping the decisions of a firm, a detailed statement of the same is required to understand the components that influence profits and hence, the need for the income statement.

### 3.1 WHY PROFIT AND LOSS ACCOUNT



Identify the importance of profit and loss statements

The primary motive of running a business enterprise is profits. The profits are the compensation derived by an entrepreneur for the capital invested and risks incurred in running a firm. Therefore, management and owners, while looking at their business during a period, are interested in getting answers to at least some mundane questions such as: Was it a good year or a bad year for the business? What was the volume of operations? What was the margin available on sales realization? How was each sales rupee distributed among the different expense items and profit? Why are salary and other cost structures different within the same industry? All these questions cannot be answered without the help of an additional financial statement addressed exclusively to summarizing the revenue and expenses of the particular period. This statement is what is referred to variously as the Profit and Loss Account, Statement of Profit and Loss, Income Statement, or Income Summary. This statement is so named since it summarizes all the revenues or incomes and all the expenses of earning that revenue, showing the net difference, i.e., the profit or loss of the period.

Profit and Loss Account is a major financial statement showing a company's earnings and expenses over a given period of time. The profit and loss account is a part of the final accounts drawn up at the end of the accounting period. It establishes the net earnings of the business.

Profits earned are also one of the chief indicators of the efficiency of a business concern. Hence, it is also of utmost importance that each and every employee of a company understands the role that profits plays in shaping up the decisions of a concern (refer to Annexure 3.8 on the Online Learning Center i.e., OLC for more information).

### 3.2 MEASUREMENT OF INCOME



> Paraphrase the statement of profit and loss as an accounting equation

When you sell an item costing ₹ 70,000 for $₹ 100,000$, assuming no other costs, you earn a profit of $₹ 30,000$. What we have done in arriving at this conclusion is nothing but a measurement of the net income. This is achieved by comparing the revenue from sales against the cost of materials parted with for earning that revenue. The net difference in this comparison represents the net income or profit.

Figure 3.1 demonstrates the basic process of profit measurement. This process involves three steps. First, identify the realized revenues. Second, identify the costs expiring in relation to those identified


Figure 3.1 Measuring Income
revenues. Finally, match the identified revenue and the expired costs. The difference arising from this matching is the profit or loss.

### 3.2.1 Profit and Loss Account and Balance Sheet

The importance of 'profit' and its 'measurement' in accounting accords an important position to the Statement of Profit and Loss. However, it will be interesting to see how this document is related to the balance sheet. In the previous chapter, we have seen that the earning of revenue increases the owners' equity. Please recall the basic balance sheet equation we have learnt in the previous lesson.

$$
\begin{equation*}
\text { Assets }=\text { Liabilities }+ \text { Owners' Equity } \tag{1}
\end{equation*}
$$

We also saw that the owner(s) equity at any point in time is represented by the following relationship:

$$
\begin{equation*}
\text { Owners' equity }=\text { Assets }- \text { Liabilities } \tag{2}
\end{equation*}
$$

And thus, it is residual in nature (see Section 2.1). This implies that, except in the case of the first balance sheet, the owner(s) equity need not be equal to the contributed capital. We have seen that the owner(s) equity changed with the sale transactions. How did this happen? It happened as follows:

- The amount of sales revenue realized increased the owner(s) equity.
- The amount of goods parted with decreased the owner(s) equity.

Therefore, the resultant increase in the owner(s) equity was equal to the net increase in the assets. That is, equal to the profit. We explained owner(s) equity in the previous chapter (see Section 2.14) as:

$$
\begin{equation*}
\text { Owner(s) Equity = Contributed Capital }+ \text { Retained Earnings } \tag{3}
\end{equation*}
$$

Assuming no withdrawals of capital from the business by the owner, 'retained earnings' are nothing but all the revenue, minus the expenses. Therefore, we could write this relationship as follows:

$$
\begin{equation*}
\text { Retained earnings }=\text { Revenue }- \text { Expenses } \tag{4}
\end{equation*}
$$

Now, substituting the right hand side of equality for retained earnings to our earlier balance sheet equation (1), we have:

$$
\begin{equation*}
\text { Assets }=\text { Liabilities }+\{\text { Contributed Capital }+(\text { Revenue }- \text { Expenses })\} \tag{5}
\end{equation*}
$$

It is these last two terms in equality (5) above, which are together, referred to as the 'profit and loss account' or 'income summary'. Thus, we find that the profit and loss account is an integral part of any balance sheet, in that it is an expansion of one of the terms of the balance sheet. In order to appreciate and understand the profit and loss account, we should clearly understand the conceptual basis for the same.

Therefore, the profit and loss account measures the income generated by the entity. The income is generated from or with the use of its assets. Thus, the concern of the profit and loss account is the income arising out of the assets, rather than the assets themselves. In order to make this segregation and the process of measurement practical, we should have a precise idea of what constitutes revenue and expenses.

In the case of a balance sheet, assets and liabilities are measured as at a point in time. Normally, most of the transactions affect the balance sheet. This is so because most transactions affect the assets and/or liabilities. A change in the owners' equity, in the absence of any further investment by the owners, or withdrawal of the owners' equity by the owners, is effected by sale transactions. Usually, the transaction of sale of goods and services has a two-way impact on the position of the entity. First, an asset increases, leading to an increase in the owners' equity. Second, an asset decreases, leading to the decrease in owners' equity. Therefore, subject to the caveats expressed earlier, the comparison of the owner(s) equity between two periods, will show the change in the owner(s) equity effected by the retained earnings. This does not
provide much knowledge about the operations of the business. ${ }^{1}$ Hence, we summarize these transactions relating to revenue and expenses separately, in order to meet the information requirement.

We should also note that revenue and expenses relate to a period and not to a point in time, like the assets and liabilities. Recognition and measurement of the revenue and expense are based on the ideas of realization, accrual and matching. However, if we were not confronted with the problem of a going concern, these ideas may have had different meanings altogether. Therefore, the accounting period becomes the reference point for judging the revenue and expenses.

Just think of having financial statements, i.e., equation (5) made after every one minute for a large entity! While theoretically feasible, this is highly impractical. Thus, we must also recognize the fact that revenues and expenses can be measured only over a time period. If this time period does not cover the completion of the venture, it is quite possible that we will be confronted with incomplete transactions. The incomplete transactions would necessitate dealing with situations of future changes in assets and equities. Broadly, they will involve costs that are not expired at the time of recognition of revenue as well as costs that may expire in future, but relate to revenues already recognized.


To know more on "Which Revenue Concept Makes More Sense for e-commerce Players" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/528

## Let's Check Our Concepts!

State whether the following statements are True or False:
(a) An increase in the owner(s) equity, in the absence of any further investment by the owners is typically effected by sale transactions.
(b) Principle of prudence is the prime reason behind periodical measurement of accounting performance.

### 3.3 REALIZATION PRINCIPLE



Relate the realization and accrual principles for matching revenue and expenses

Realization is technically understood as the process of converting non-cash resources and rights into money (see Section 1.7.6). It is more precisely understood in accounting to mean recognition of revenue from sale of assets for cash or claims to cash. As an accounting principle, it is used to precisely identify the amount of revenue to be recognized and the amount of expense to be matched to such revenue, for the purpose of income measurement. Readers may like to think of these issues by relating to Illustration 3.1.

[^10]
## Illustration 3.1

## You and Your Café Shop

Imagine yourself entering a Café Shop (say, at Brigade Road, Bengaluru) - and ordering a Cappuccino. Large number of accounting issues can arise for Cafe Shop:

- When should Cafe Shop recognize this as revenue?
- When the order is placed
- When the coffee is processed and ready for takeaway
- When the coffee is delivered/picked
- When the customer mixes sugar to his taste
- When the coffee is tasted by the customer
- When the coffee is fully consumed by the customer
- When the invoice is made
- When the payment is made by credit card
- When the credit card confirmation comes
- When the credit card folks transfer the amount to Cafe Shop account
- When you walk out of the Cafe Shop
- When Cafe Shop is sure that there is no harm done to customer after consumption of Cappuccino (say, till next day morning)
- What items would go into Cafe Shop's expired costs for the above?
- How should Cafe Shop go about identifying the same?
- When should Cafe Shop identify the expired costs?
- What if issues such as what should we do if there are genuine dilemmas in tackling any of the above issues Accountants deal with all such accounting issues using two principles: (i) realization and (ii) accrual. We unravel the same in the following section.

Realization, thus, usually, pertains to the recognition of revenue from a sale or provision of goods or services to customers. When should we recognize revenue? This is the question that the realization principle tries to answer. There can be several arguments for and against recognizing revenue at a particular time, which time could be the time when the inventory is acquired, when the goods are made ready for sale, when the order is received, when the goods are delivered, or when the sale proceeds are collected. In order to avoid such confusion, generally, it is taken in accounting that, revenue is recognized when goods are delivered or services are rendered. This is done despite the fact that delivery is only one of a series of events related to the sale. The rationale is that delivery validates a claim against the customer.

The principle of realization being the point of recognition of revenue also enables us to have a reference for recognizing the expiration of costs incurred in making available such goods or services. Thus, the realization principle facilitates the process of income measurement by identifying revenues and the expiration of costs with respect to such revenues. By implication, if costs (say, raw material inventory) are incurred in producing the goods, unless sales are made, such costs are not considered as expenses.

So, realization would imply two major factors, simultaneously:
(i) All completed sales transactions of the period and the amounts contracted and received or to be received, are recognised as revenue of the period. Theoretically and practically, it is possible that during a whole accounting period, no revenue could be realized, or more precisely, revenue earned during the period is zero. Think of a Cafe Shop restaurant in Illustration 3.1 with no sales during a particular accounting period.
(ii) All costs involved in the goods or services transferred to the customer are recognized as expired costs and hence, expenses of the period. All costs that are incurred during the period and do not remain as unexpired costs or assets (such as rents and clerical salaries) at the end of the period, are also costs incurred and relating to the revenues of the period. During a period, is here no revenue is earned, that is, the revenue earned during the period is zero, expired costs could be positive and would represent the loss of the period. Think of a Cafe Shop restaurant in Illustration 3.1 with zero sales but with few costs during a particular accounting period.
There are two major exceptions to the notion that an exchange is needed to justify the realization of revenue. First, in the case of long run construction contracts, often, revenue is recognized on the basis of a proportionate or partial completion of the construction. In this case, revenue is recognized without satisfying the test of completion and delivery. Second, in the case of long-run installment sales contracts (say, in case of a turnkey power plant), depending on the uncertainties involved, revenue is regarded as realized only in proportion of the actual cash collections. In this case, even though delivery is complete at the time of entering into the contract, recognition of revenue is deferred and related to the actual cash collections.

### 3.4 ACCRUAL PRINCIPLE

The accrual principle tries to evaluate every transaction in terms of its impact on the owners' equity. In simple terms, it implies that recognized revenue results in an increase in the owner(s) equity; and expired costs or a recognized expense results in a decrease in the owners' equity. These could be understood by thinking of many variations of Illustration 3.1 that did happen simultaneously across the Cafe Shop owned outlets and restaurants located across the globe - wherein many transactions would happen on credit by Cafe Shop and/or its suppliers. The essence of the accrual concept is that net income arises from events that change the owner(s) equity in a specified period and that these are not necessarily the same as the change in the cash position of the business. Thus, realization and accrual together, lay down the ground rule for the measurement of income.

It is generally accepted in accounting that the basis for reporting income is accrual. Resources and obligations change in time periods other than those in which money is received or paid. Enterprise economic activity in a short period is complete if a complete cycle of money to productive resources to money is completed. In reality, continuous production, and the use of credit and long-lived assets, produce several overlapping cycles. This makes the process of evaluation of income very complex. In Illustration 3.1, think of Cafe Shop having factories with continuous production, vendors supplying coffee beans on varied trade terms with some on long credits and others on cash, and Cafe Shop coffee espresso machines having a life of five years, being long-lived assets.

## Ali Mehdi and his Mehendi Cone Filling \& Mixing Machine

Q1. Mehndi (or henna) is a paste that is bought in a cone-shaped tube and is made into designs for men and women. Ali Mehdi Khan starts his business on $1^{\text {st }}$ July. He took a loan of ₹ $1,00,000$ from bank @ $12 \%$ per annum, for purchasing plant \& machinery, on $1^{\text {st }} J u l y$. The machine has a life of 10 years, with no scrap value. He also paid ₹ 60,000 , as three months' rent, in advance.

## Explanation

Readers will agree that the bank borrowing does not represent the revenue. The increase in the cash is offset by an increase in the liabilities, whereas an interest of $₹ 1,000$ (computed as $₹ 1,00,000 \times 12 \% \times 1 / 12$ ) and a depreciation of $₹_{333}$ (computed as $₹_{1,00,000 / 10 \times 1 / 12 \text { ) is an accrued expense in the month of July. Rent }}$ expense for the month of July will be ₹ 20,000 only, as the rent has been paid in advance for the months of August and September also.
Q2. Khan had received written orders worth ₹2,00,000 in the month of June itself (even before starting his business).
He started the production accordingly. The total production cost was $₹ 1,20,000$. The sales of merchandise or services to its customers, from $2^{\text {nd }}$ July to $31^{\text {st }} J u l y$ are as follows:
Total Sales = ₹ 95,000 (Cash Sales $=₹ 25,000$ and Credit Sales to Rajesh $=₹ 70,000$ )

## Explanation

The revenue is recognized only when the goods are sold to the customers and not on receiving the order or on incurring the production cost. So, the total sales during the month of July are nothing but the revenue earned for that month, that is, ₹ 95,000 . It is an amount equal to the cash received and to be received in the later month. Thus the accounting equation would be:

> Assets = Liabilities + Owner's Equity
> Cash + Debtors = Liabilities + Owner's Equity
> $25,000+70,000=0+95,000$

When Rajesh pays $₹_{70,000}$ in the next month, that amount must not be counted for the second time while measuring the revenue in the month of August. During that period (when cash is received from Rajesh), the cash would increase by ₹ 70,000 and the debtors would decrease by the same amount. The amount of total assets, liabilities and owner's equity would remain the same.
Here, the accrual concept plays an important role. Credit sales to Rajesh are considered as revenue earned in July, whereas the cash is received in the next month. Thus, the revenue is of July, when the sale took place, and not when the cash is received.

## SPOTLTGH『 3.1

## Accrual Basis Vs Cash Basis

Cash-basis and Accrual-basis are two bases differing in the manner in which they deal with the issue of when to recognize revenues and expenses. Unlike in the accrual basis, the focus in the cash basis is, as its name implies, on the actual flow of cash. That is to say, whenever cash is collected, revenue is recognized as having been earned. A similar basis for the recognition of expenses is used, namely, whenever cash is disbursed (or paid), the related expense is recognized as having been incurred.

The cash basis seems to be straight and simple, yet it has many defects that interfere with the real measurement of an entity's economic activities. It looks at activities as measured in terms of the short run, as though they will not be in existence in the future.

On the other hand, the accrual basis does take into account the fact that a business entity's life will extend into the future, beyond the current period. This line of thought is embedded in the Going Concern Concept of GAAP. The accrual-basis accounting records financial events based on events that change one's net worth (the amount owed to you, less the amount you owe others, frequently known as owner's equity). The standard practice is to record expenses with the incomes they are associated with. The following table summarizes the broad differences between the two methods:

| Basis of Accounting | Accrual Basis | Cash Basis |
| :---: | :---: | :---: |
| Revenue | When earned | When cash is collected |
| Expense | When incurred | When cash is paid |
| GAAP Compliance | Yes | No |
| Example | If you were a student staying in a hostel, then your hostel owner would record an income event on the day your hostel rent comes due (you owe it to him). He records an expense event when the monthly wages are owed to the servant for maintenance of your apartment that month (he owes it to the agent). | When you pay your hostel rent your hostel owner would record an income event. Similarly, the hostel owner records an expense event when he pays the wages for maintenance of the apartment. |

We end our discussion on the realization and accrual principles by jotting some of their objectives. Firstly, it brings transparency and truthfulness in reporting transactions ensuring highly business excellence and governance. Secondly, it helps in determining the correct profit (or loss) for the accounting period. Thirdly, it helps in generating clarityfor stakeholders of accounting information regarding the profit earning capacity of the entity. Last but not least, it helps to design proper internal control system which can prevent financial manipulations by key management personnel such as CFO.

## Let's Check Our Concepts!

State whether the following statements are True or False:
(c) A popcorn seller can recognize revenue when there is proof of no harm done to customer after consumption.
(d) For a popcorn seller expenses recognition will be different in Cash-basis and Accrual-basis.

### 3.5 ACCOUNTING PERIOD



Discuss periodical income summaries and their link with interconnecting balance sheets

Once we accept the concept of a Going Concern, it is inconceivable to approach the problem of profit measurement without a clear perception of the idea of an accounting period. The most accurate way to measure the results of an entity's operations will be to measure them at the time of liquidation. Let us elaborate further on this one.

If we consider the whole life of the business, net income would be nothing but the excess of amount the owners would get over what they have put into it (investment). But it is inconceivable and impractical
to imagine that one should have to wait till the winding up of the business for ascertaining the profit or loss. Therefore, accountants choose some convenient segment of time, such as a calendar year, to collect, summarize and report all information on the material changes in the owner's equity during that period. There is no particular reason for an accounting period to be necessarily of a year's duration. It has evolved, as a convention out of convenience, over the years. There is enough historical evidence to suggest that in the past, accounting periods used to be a couple of years or the time required for the completion of a venture, and so on. Even now, there are firms which follow the system of a certain number of weeks as an accounting period. However, generally, as a convention, most enterprises try to have a uniform length of accounting period to permit a period-to-period comparison of the results.

The crux of the matter is that the realization and accrual principles, which we have discussed earlier, will have to be applied in the context of the accounting period. ${ }^{2}$ It is the principal of considering only the revenue that has been 'realized' during a particular accounting period, which enables us to have a practical system of valuation and measurement. Accounting periods are bounded by balance sheets at the beginning and the end. Income statements summarize the operations during the period. This process can be illustrated in the following form:
If $t$ stands for 'time':

| $t_{0}$ | Accounting period - 1 | $t_{1}$ | Accounting period - 2 | $t_{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| Balance <br> Sheet $_{0}$ | Profit and Loss Account (or <br> income summary) for the first <br> accounting period | Balance <br> Sheet $_{1}$ | Profit and Loss Account (or <br> income summary) for the <br> second accounting period | Balance <br> Sheet $_{2}$ |

Here, accounting periods can be perceived as links in the information chain, which make up the life of the enterprise. Accounting periods are variously referred to as fiscal years or financial years also. In most western countries, the accounting period of firms usually starts on January 1 of a year and ends on December 31 of the year. In India and in many other Asian countries, the accounting period usually starts on April 1 of a year and ends on March 31 of the next year. It is an inheritance from the erstwhile British rule of most of these countries (see Annexure 3.1 on the OLC for more).

### 3.6 MATCHING REVENUE AND EXPENSES

In reality, we match revenues and expenses during these accounting periods. Matching is the entire process of periodic earnings measurement, often described as a process of matching expenses with revenues (see Section 1.7.5). In a narrow sense, this means deducting from the revenues of a period, the cost of goods sold or other expenses that can be identified with such revenues, of that period, on the basis of a cause and effect relationship.

Matching involves the subtraction of expenses of a period, from the realized revenues of the period, to determine the profit or loss earned or suffered during the accounting period. It is this profit or loss that will get added or subtracted from the owner's equity.

The expenses to be matched against the revenues of the period will be all those costs expiring during the accounting period. These expenses will fall into two categories (see Figure 3.2). The first category

[^11]would be the cost of inventory that was parted with for earning the revenue. The second category would be the costs of the accounting period, other than inventory costs, that expire during the period (say, rents and wages for the period). We will discuss the association basis of expenses in Section 3.6.2. The accounting basis of expenses would be discussed in Chapter 5.


Figure 3.2 Two Ways of Categorizing Expenses

### 3.6.1 Particularizing Revenue

Revenue has to be understood in its proper perspective. Sale transactions (of goods or services) always lead to asset increases and hence, an increase in the owners' equity. The change in the owners' equity as a result of such transaction is the revenue. In a broad sense, revenue is the total amount realized from the sale of goods (or provision of services), together with the earnings from interest, dividend, rents and other items of income. Revenue is recognized when the enterprise gains a right to the income. In practice, we make a segregation of an enterprise's income as obtained from its main operation, and that from activities incidental to the main operations. The former is usually referred to as 'operating income' and the latter, as 'other income' or 'non-operating income'.

Realized revenue, as we have seen earlier, need not be realized in cash. If the right to receive that income is created or the time for which the income relates has expired, we treat the income as accrued.

For example, a credit sale, to be collected during the next accounting period, is an income of this period. Similarly, interest to be received on a specified date is treated as accrued, and hence earned for the period covered by the current accounting period.

## Characteristics of Revenue

- Normally, revenue is generated out of business activities, viz., sale of goods or rendering of services.
- Revenue results in an inflow of assets (cash or receivable) and an outflow of goods or services.
- Revenue is usually related to a specific period, that is, revenue of one year cannot be included in the revenue of the other year.
- Revenue leads to increases in the owners' equity.

It is important to note that revenue should not be confused with 'profit' or 'net income'. Revenue arises throughout the accounting period by way of sale of goods or rendering of services, but profit is to be calculated at the end of the accounting period. Profit is calculated by matching the revenues with the costs that have been expired during the relevant accounting period.

### 3.6.2 Particularizing Expense

The expiration of the assets and the resultant decrease in the assets, leading to a decrease in the owners' equity, constitute expenses. Expenses are costs incurred and expired in connection with the earning of revenue. As such, the point of reference for the recognition of expenses becomes the recognition of revenues. Costs incurred do not become expenses until the goods (or service) in question are exchanged or the accounting period in question is over. An expense is a sacrifice made or resource consumed in relation to the revenues earned during an accounting period. Thus, cost is not synonymous with expense. Only costs that have expired during an accounting period are treated as expense. (see Annexure 3.8 on the OLC for more)

We must also understand that the costs incurred by a business can be grouped into two broad categories: inventoriable costs and non-inventoriable costs (see Figure 3.2). Inventoriable costs are all those costs that can be directly or indirectly, traced or tracked to the goods or services in question and can be regarded as expiring with the passing of title to the buyer. Non-inventoriable costs are all other costs incurred during a period, which would not leave behind any value with the passage of time. Examples of such costs could be rentals paid for offices, interest paid on borrowings, and so on. One thumb rule, which could be used to identify a non-inventoriable cost, is that all those costs that have a tendency to grow over time, without making any change in the value of the goods or services, could be considered to be non-inventoriable, generally. Non-inventoriable costs are usually period costs, and hence to be matched against the revenues of the period.

## Characteristics of Expense

- Expenses are incurred for the purpose of generating revenue or benefit.
- Benefit is usually derived during the same accounting period.
- It is related to a particular period. However, the payment can be made before the recognition of the expense or afterwards.
- An expense leads to decreases in the owner's equity.


## Illustration 3.3

We purchase merchandize worth ₹ 100,000 during the period; sell one half of this during the period for ₹ 75,000 . Rental for the facilities during the period was ₹ 20,000 .

In this example we have:

| Item |  | Remarks |
| :--- | ---: | :--- |
| Cost of inventory | $₹_{100,000}$ | The purchase prices of the merchandize. |
| Increase in owners' equity i.e., Revenue | $₹_{75,000}$ | The sale proceeds realized in exchange of one half <br> of the merchandize. |
| Expenses i.e., expiration of inventoriable costs | $₹_{50,000}$ | The cost of the merchandize parted with or given <br> over to the customer in exchange for the revenue. <br> The reduction in owners' equity as a result of <br> reduction of inventory. The cost with respect to <br> the revenue earned, and hence expired cost. |
| Expenses i.e. expiration of non-inventoriable costs | $₹_{20,000}$ | The cost of rent for the facility is a cost incurred <br> during the period and expiring during the period, <br> i.e., a period cost. |
| Ending Inventory | $₹_{50,000}$ | The unexpired cost. An asset merchandize <br> inventory, as a convention valued at cost. |
| Profit | $₹_{50,000}$ | Resulting surplus from the transaction. |

Generally, unexpired costs represent assets. Costs can be incurred by either exchanging another asset (usually cash) or by contracting a liability. All assets, which have a limited life, expire as expenses with respect to the revenue earned during their useful life. In Illustration 3.3, please note that we did not apportion the cost of rental between the portion of inventory sold and the portion of inventory remaining. Expenses mean a decrease in the owners' equity that arises from the operation of a business during a specified accounting period. Thus, cost means any sacrifice, whether or not the sacrifice affects the owners' equity during a given accounting period. In Illustration 3.3, merchandize inventory is an example. The American Accounting Association provides the following description for expense. Expense is the expired cost, directly or indirectly related to a given fiscal period, of the flow of goods or services to the market and of related operations. Recognition of cost expiration is based on a complete or partial decline in the usefulness of assets, or on the appearance of a liability without a corresponding increase in the assets.

Expenses of a given period are:

1. Costs and expenses of the current accounting period.

These are costs incurred during the accounting period, which also expire during the same period. Example: cost of materials bought and sold during the same accounting period.
2. Costs incurred in a previous accounting period that become expenses or expired costs during this year. Example: inventory purchased during the previous period, but unsold during that period and sold during this period. The amount of inventory, which represented unexpired costs and hence, an asset at the close of the previous accounting period, becomes expired costs, and hence an expense during the period in which it is sold.
3. Expenses of this year, the monetary outlay for which will be made during a subsequent period.

These are also expired costs of the current period, but the costs are incurred by contracting a liability. Example: Rent due for the current accounting period, but is to be paid in the next accounting period.

Expenses are recognized under the following circumstances:

- Expenses are given recognition in the period in which there is a direct identification or association with the revenue of the period. This implies that recognition of expense is directly related to the realization of revenue.
- When the expenses has an indirect association with the revenue of the period. Example: rent, salaries, insurance, depreciation and such other costs, which are not usually inventoried.
- Measurable expiration of assets (unexpired costs) though not associated with the production of revenue for the current period, is recognized in that period. Example: loss from flood, fire and similar events.


### 3.6.3 Assets that Become Expenses

On examining some of the specific cases wherein the assets become expenses, will help us to understand the idea of asset expiration very clearly.

## Inventories

Inventories of merchandize become expenses when they are sold. In case of manufacturing organizations, all the costs incurred on the transformation of raw materials add value to the inventory. These costs are treated as expenses only when the inventory in question is sold. A trader selling off his complete inventory is a simple example of inventories becoming expenses.

## Prepaid Expenses

Prepaid expenses represent services or assets paid for, prior to their actual use. Thus, they represent unexpired costs. They become expenses when the services are used or assets are consumed. Railway reservation tickets purchased a couple of weeks before the actual travel, by a firm, is a good example of a prepaid expense. When the travel dates on the ticket lapses, the prepaid expense gets converted to an expense.

## Long-lived Assets

Fixed assets have a limited useful life. The costs of such assets expire during the life of the assets in question. Such expiration of the costs of the assets is referred to as 'depreciation'.

What we have examined so far, are some of the conceptual tools necessary for the preparation and understanding of a profit and loss account. In the subsequent part of this chapter, we shall examine the mechanics of how to prepare a profit and loss account.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(e) The point of reference for the recognition of expenses also becomes the recognition of revenues.
(f) All assets, irrespective of their life, compulsorily expire as expenses sooner or later.

### 3.7 PREPARATION OF PROFIT AND LOSS ACCOUNT

A 'Profit and Loss Account', as we have seen so far, is a summary of all 'accounts' dealing with transactions relating to revenue and expenses. An account is a statement, wherein information relating to an item or a group of similar items is accumulated. This accumulation is done in such a framework that it is fairly easy to summarize, by combining several such accounts. In the case of a profit and loss account, the process of preparation is nothing but such a summarization of all such individual accounts, accumulating information on different items, relating to the elements of 'expense' and 'revenue'.
We have seen the expanded balance sheet equation at the beginning of this chapter, as follows:

$$
\begin{equation*}
\mathrm{A}=\mathrm{L}+\mathrm{C}+(\mathrm{R}-\mathrm{E}) \tag{6}
\end{equation*}
$$

Where:

$$
\begin{aligned}
& \mathrm{A}=\text { assets } \\
& \mathrm{L}=\text { liabilities } \\
& \mathrm{C}=\text { contributed capital } \\
& \mathrm{R}=\text { revenues } \\
& \mathrm{E}=\text { expenses }
\end{aligned}
$$

We also note that for simplicity, we ignore withdrawals or profit distributions. However, if we consider withdrawals, it will imply a reduction in the assets to that extent and the equality would be provided with one more negative term, that is, withdrawals or drawings or dividends. Thus, the equality can be rewritten as:

$$
\begin{equation*}
A=L+C+R-(E+D) \tag{7}
\end{equation*}
$$

Where:

$$
\mathrm{D}=\text { total dividends or drawings }
$$

The expression 'Revenue - (Expenses + Dividends or Drawings)' is equal to the 'Retained Earnings'. We also know that the capital plus retained earnings is the owners' equity. We have seen that the purpose of a profit and loss account or an income summary is to determine the profit or loss of an accounting period.

Let us illustrate this with the help of an example:

## Illustration 3.4

During an accounting period, Ramsons buys twelve units of inventory for $₹_{1,200}$. Another 10 units are purchased on credit, for $₹_{1,000}$. Now 15 units of inventory were sold during the period, on credit, for $₹ 2,250$. Five units of inventory were sold for cash, for ${ }_{7} 750$, during the same period.
To prepare the income summary or the Profit and Loss Account for the period, we would have to identify the realized revenues for the period and the corresponding expired costs or expenses to be matched against such revenue.

| Revenue of the period: | Amount (in ₹) |
| :--- | :---: |
| 15 units sold on credit | 2,250 |
| 5 units sold for cash | 750 |
| Total | 3,000 |

We have recognized $₹_{3,000}$ as realized revenue, irrespective of whether cash is collected or not. In other words, for the purposes of revenue recognition, both credit sales and cash sales are recognized as realized revenue. Now, the expenses of the period or expired costs will have to be reckoned in relation to the realized revenues.

The total cost incurred during the period is $₹ 2,200$, for 22 units of inventory. The costs incurred during the period are also reckoned without having reference to whether the costs are actually paid for in cash or not. The costs being incurred resulted in the acquisition of an asset, namely, inventory.

In order to determine the expense of the period, we have to take recourse to the realization of the revenue. What portion of the unexpired cost expires in the process of earning the revenue? That expired portion of the asset is the expense of the period.

In our example, 20 units of inventory were parted with for earning the revenue. Thus, ₹ 2,000 , the cost of 20 units of inventory, is the expired cost or expense for the period. Remember, that part of this inventory was purchased on credit. Therefore, it follows that the expense in accounting need not imply a decrease in cash, just as revenue need not imply an increase in the cash.

The 2 units of inventory remaining unsold are assets or the 'unexpired cost' and have no relevance to the idea of measurement of profit.

Now to summarize:

| Revenue of the period: | Amount(in ₹) |
| :--- | :---: |
| 15 units sold on credit | 2,250 |
| 5 units sold for cash | 750 |
| Total revenue of the period | 3,000 |
| Less: Cost of goods sold or expired cost of inventory | 2,000 |
| Profit of the period | 1,000 |

'Revenue minus expense' or profit of the period is $₹_{1,000 \text {. We could present the same formally, as follows: }}^{1,}$

| Rrofit and Loss Account for an accounting period |  |  |  |
| :--- | :---: | :---: | :---: |
| Expenses ₹ Revenues $₹$ <br> Cost of goods sold $2,000 \quad$ Sales 3,000  <br> Profit for the period 1,000 3,000  <br>  3,000   |  |  |  |

In the example discussed above, we dealt with only direct revenue and direct expense. Revenue arose from two sale transactions - one on credit and the other on cash. The expense was one simple direct item of expense the cost of sale or the recognition of expiration of inventory cost. Before we proceed to examine a more complex example and a detailed profit and loss account, we must discuss some of the expenses or cost expirations, which cannot be traced so directly as in the case of cost of goods sold and are mostly of the nature of indirect expenses.

For the purpose of matching, we observe that there are expenses that are to be incurred by a business, such as rent, interest, and advertising, which are fairly difficult to be traced to particular units of revenue. At the same time, it is obvious that the cost incurred on these items does not create any discernible benefits in a future period or create a value that can be exchanged. These costs are generally attributable to the revenue earning power of
an accounting period and can be safely considered as the expired costs in relation to the realized revenues of a period. These costs are sometimes, referred to as period costs and matched against the revenue of the period without tracing a direct nexus to the revenues. Based on the discussion above, we write two important equations:

```
Profit and Loss Account Equation
    Retained Earnings during a period = Revenue - (Expenses + Dividends)
Balance Sheet Equation
```

    Assets \(=\) Liabilities + (Contributed Capital + Accumulated Retained Earnings)
    Readers could try to look into Illustration 3.2 using the above two equations, to see if the balance sheet and income summary created, go with each other.

### 3.8 POSSIBLE FUTURE EXPENSES

Another situation encountered by us, which poses some measurement difficulty, is where costs are to be incurred, which are directly in relation to the revenue of a given accounting period, in subsequent periods. These expenses pose an important problem since the expense is more or less certain, but the amount is not certain. We normally estimate the amount of expense in question, relating to an accounting period, in order to make a reasonably accurate measurement of the profit or loss of the period. Examples of such expenses could be, collection losses with respect to credit sales, which, may be known only in a future period; warranty costs to be incurred with respect to sales of the period, which are to be incurred in future; and similar other cases.

### 3.8.1 Bad Debt Expense

In most business situations, sale 'on credit' is common. We also treat such a sale as 'realized' since they produce a certain asset - 'accounts receivable'. Thus, a credit sale is recognized at the point of sale, during the accounting period in which the transaction takes place. The uncollected balance at the close of accounting period is reflected as an asset on the balance sheet, regularly mentioned as gross 'trade receivable' or 'sundry debtors' or 'accounts receivable'.

Now, if the customer is not able to make the payment or will not make the payment, both these records (record as revenue of the period and record as asset at the close of the period) will amount to an overstatement in the records. However, we have no basis of estimating the exact amount of such collection losses at the time of sale. This is so, since the collectability or otherwise can be known only in a subsequent accounting period. It is exactly such situations that warrant us to estimate the amount of expense with respect to collection losses. Let us consider the following example.

## Illustration 3.5

A business is started in the name and style of 'Roshini Traders' with owners' equity of $₹ 25,000$. The business makes four credit sales of ₹ 2,500 each during a period. The cost of Goods sold for the same is known to be ₹ 5,000 .

The profit and loss account would be shown as follows:

Roshini Traders
Profit and Loss Account for an accounting period

| Expenses | $₹$ | Revenues | $₹$ |
| :--- | :---: | :--- | :---: |
| Cost of goods sold | 5,000 | Sales | 10,000 |
| Profit for the period | 5,000 |  |  |
|  | 10,000 |  | 10,000 |

The balance sheet records arising from this will be:
Roshini Traders
Balance Sheet (As at the close of an accounting period)

| Assets | $₹$ | Liabilities \& Capital | $₹$ |
| :--- | :---: | :--- | :---: |
| Accounts receivable | 10,000 | Retained earnings | 5,000 |
| Other assets (balancing figure) | 20,000 | Owner(s) equities | 25,000 |
|  | 30,000 |  | 30,000 |

The word 'bad' implies that an account receivable is no more recoverable. Thus, an amount that was supposed to be received in the future, but is not received and there is no chance of its recovery, then it can be called 'bad'. There could be varied reasons for the occurrence of bad debts, for example, closure of the buying party or a court order on the buyer, etc.

Now, assuming that in the above problem, one of the accounts goes bad, then, the collection loss will amount to $₹ 2,500$. The implication of this is, if we do not take this into account, we have overstated the receivables (asset in the balance sheet), sales (revenue in the profit and loss account) and profit (retained earnings in the balance sheet). It is possible for us to estimate these losses on account of bad debts beforehand, and reduce the revenues and thereby, profits to that extent. This is achieved by recognizing this amount as an increase in the expense - bad debts expense - thereby, reducing profit. Thus, we will have a profit and loss account and a balance sheet as follows:

Roshini Traders
Profit and Loss Account for an accounting period

| Expenses | $₹$ | Revenues | $₹$ |
| :--- | :---: | :--- | :---: |
| Cost of goods sold | 5,000 | Sales | 10,000 |
| Bad Debt expense | 2,500 |  |  |
| Profit for the period | 2,500 |  |  |
|  | 10,000 | 10,000 |  |


| Roshini Traders <br> Balance Sheet (As at the close of an accounting period) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  | ₹ | Liabilities \& Capital | ₹ |
| Gross Accounts receivable Less: Estimated Collection loss Net Accounts receivable | $\begin{array}{r} 10,000 \\ 2,500 \end{array}$ | $7,500$ | Retained earnings | 2,500 |
| Other assets |  | 20,000 | Other Owner equities | 25,000 |
|  |  | 27,500 |  | 27,500 |

Generally, the probable collection losses are estimated and provided for by charging them as an expense of the period. Such estimated expense is reduced from the value for the asset - accounts receivable - to show the realizable value of the asset.
In other words, there are two ways of accounting for bad or doubtful debts/receivables:
(a) Writing them off; and
(b) Creating a provision for bad and doubtful debts.

We will discuss these methods further in Chapter 8.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) For the purpose of matching, there are revenues that are going to occur for a business and can be traced to each particular unit of expenses.
(h) Sale on credit can result in a future possible expense.

### 3.9 EXPIRATION OF NON-CURRENT ASSETS

In our discussion earlier, we have seen that non-current tangible assets are long-lived and provide benefits beyond one operating cycle. While discussing the idea of expense, we saw that expenses are expired costs. All costs incurred on any asset with a limited life, thus, expire during its lifetime. Using this understanding, it is not difficult to perceive what depreciation is. Depreciation expense is the expired cost of a tangible fixed asset during an accounting period. Let us illustrate this idea with a simple example.

## Illustration 3.6

A machine purchased for ₹5 million having a five-year life and no salvage value, is used in a business. During the life of the asset, it will be able to earn a revenue of ₹ 10 million.

Assuming no other expenses, it is simple arithmetic to say that by using the machine, we make a profit of $\mathrm{F}_{5}$ million over its lifetime - ₹ 10 million revenues, less $₹_{5}$ million (cost of the machine). The problem of depreciation arises when we have to measure the profits annually. What should be the amount of profit to be recognized each year?

We can approach this problem by using an illustrative table below. Assume that the following scale shows the amount of revenue earned. We take it that the revenue is earned in equal amounts during the five years of the life of the asset.

Revenue over the period of use of the assets
(in Millions)

| Total Revenue |  |  |  |  | $=₹_{10}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :--- |
| Period $\rightarrow$ | 1 | 2 | 3 | 4 | 5 |  |
| Amount | $₹_{2}$ | $₹_{2}$ | $₹_{2}$ | $₹_{2}$ | $₹_{2}$ | $=₹_{10}$ |

Cost expiration over the period of use of the assets

| Total Machine Cost |  |
| :--- | :--- | :--- |
| Period $\rightarrow$ (in Millions) |  |
| Amount | Unexpired at the end of the period |
| Assuming no other costs, we can say that the only cost is the cost of the asset, which becomes an expense |  |
| over the five-year period, since there is no salvage value. Now, the question is, how should we apportion this cost |  |
| over the life of the asset? If we make the simple assumption that the cost expires in an equal proportion, we have |  |
| this simplest solution (as above). |  |
| Now, having made the assumption of spreading the cost equally, we have come to the conclusion that one-fifth |  |
| of the cost of the asset expires annually. That portion of the cost of the asset, which is reckoned to expire during |  |
| an accounting period, is what is termed as depreciation expense. This also clarifies that, normally, the total amount |  |
| of depreciation on the asset shall not be more than the depreciable cost of the asset. It is this 'expense' which is |  |
| matched against the revenues of a period, for determining the profit. |  |
| From our example above, based on the assumptions, we can easily determine that the profit per annum is ₹ 1 |  |

Million, that is, ₹5 million over the useful life of the asset. To recapitulate, depreciation expense is the cost of a fixed
asset, written off or matched as expense against the revenues of the different periods during which the asset is used.
An intelligent query often asked by curious students is: should depreciation be provided on fixed assets lying idle?
Typically, the response to this is: The value of an asset depreciates not only by putting it to use, but also due to
efflux of time or technology obsolescence. Thus, even an idle fixed asset should have depreciation.

### 3.9.1 Methods of Depreciation

In Illustration 3.6, we assumed that the cost of fixed tangible asset expires uniformly over its useful life. However, this assumption is not based on any theoretical construct. Therefore, it is possible for us to assume any other basis of expiration. The only theoretical basis for these assumptions could be that the entire cost less any salvage value, must expire over its useful life.

There are different methods for depreciation, which differ from one another only on the basis of how the cost should be treated as expiring over the life of the asset. Essentially, depreciation methods follow either of two broad approaches, the accelerated approach and the uniform approach. Methods in which larger amounts are expired during the initial years of the life of the assets are known as the accelerated methods of depreciation. This method has the backing of the principle of prudence. The level of uncertainty is higher into the future and hence, expiration of the cost at the earliest is welcome. The other method tries to expire the cost uniformly over the useful life of the assets, and hence is considered as the most easy to follow method. This is also the most popular method of depreciation. We shall discuss two of the most commonly used methods. A third method is illustrated in Annexure 3.2 along with brief description of rest on the OLC.

## SPOTLTGM『 3.2

## Terms Used in Depreciation Methods

Original cost of the asset: This is the cost incurred in making the asset available for use at the first instance. This amount is specific and known at the time of acquisition of the asset.
Salvage value: This is the expected recovery or sales value of the asset at the end of its useful life. This value, in most cases, is not known, and hence it is to be estimated. When there is no certainty about the recoverable value at the end of an asset's useful life, it is prudent to assume a zero salvage value.
Useful life: This is the expected time period for which the asset is to provide economic service. It is the period for which the asset can be used for production. This period also is not known with any certainty at the time when the asset is acquired. This is usually estimated on the basis of experience or technical factors.
Depreciable cost: This is the original cost of the asset, less its salvage value. This is the amount of expense the enterprise will be incurring on account of the expired costs of the fixed asset, over its useful or economic life.
Book value: The written down value of the asset at any point of time, is its original cost, less depreciation to date (commonly known as, 'accumulated depreciation'). This is also referred to as the 'written down value' or 'remaining book value'. This is the value at which assets are recorded in the balance sheet.


Figure 3.3 Depreciation Methods

## (A) Straight Line Method of Depreciation

Under the straight-line method (also known as Equal Installment Method), the depreciable cost of the asset is proportionately allocated as expense against the revenues during each year of the useful life of the asset.

## Illustration 3.7

Assume that a company acquires a machine at the beginning of operations, at ₹ 10,000 . It is expected that the machine will last 10 years and will have no salvage value at the end of its useful life.

The assumption under the straight-line method is that the cost of the equipment expires uniformly over time. The depreciation every year for the machine under the straight-line method, will be $1 / 10$ or 10 per cent of the cost
of the asset. Annual depreciation, therefore, will be $₹_{1,000\left(₹_{10,000 / 10)}\right) \text {. The written down value at the end of the }}$ first year will be $10,000-1,000=9,000$. At the end of the second year, it will be $10,000-(1,000+1,000)$ or ( 9,000 $-1,000)=8,000$, and so on. The book value will become zero at the end of 10 years. Table 3.1 below shows the annual depreciation, accumulated depreciation and remaining book value of the asset during its useful life.

Table 3.1 Depreciation @ 10\% per annum: Straight-line Method

| Year | Original Cost | Annual Depreciation | Accumulated Depreciation | Remaining Book Value |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 10,000 |  |  |  |
| 1 | 10,000 | 1,000 | 1,000 | 9,000 |
| 2 | 10,000 | 1,000 | 2,000 | 7,000 |
| 3 | 10,000 | 1,000 | 3,000 | 6,000 |
| 4 | 10,000 | 1,000 | 4,000 | 5,000 |
| 5 | 10,000 | 1,000 | 5,000 | 4,000 |
| 6 | 10,000 | 1,000 | 6,000 | 3,000 |
| 7 | 10,000 | 1,000 | 7,000 | 2,000 |
| 8 | 10,000 | 1,000 | 8,000 | 1,000 |
| 9 | 10,000 | 1,000 | 9,000 | 0 |
| 10 | 10,000 | 1,000 | 10,000 |  |

Figure 3.4 below, graphically represents the outcome of straight-line depreciation over the useful life of the asset. The graph illustrates the annual depreciation as a straight line, parallel to its base line, hence, the name straight-line method of depreciation.


Figure 3.4 Annual Depreciation Charge @ 10\% per annum: Straight-line Method

The accumulated depreciation will be increasing annually, at a uniform rate, becoming equal to the depreciable cost of the asset at the end of its useful life. As shown Figure 3.4, it is a straight line sloping upward, to the right from origin. On the other hand, the written down value steadily declines to become zero (or reduces to the salvage value) at the end of the useful life of the asset, hence, a downward sloping straight line, reaching origin at the end of its useful life.

## (B) Written Down Value Method of Depreciation

Under written down value method of depreciation (also known as Reducing Balance Method), the assumption is that the amount of expiration of the cost of the non-current asset is higher during the initial years. This is due to the fact that the expiration reduces the value of the asset, and the same rate of expiration is applied to the net value of the asset at the beginning of each year. This results in lower amounts of depreciation during successive years. Depreciation is taken as a certain rate, and it is applied to the written down value of the asset as at the beginning of each year. The effect of this method is that the amount of depreciation charge every year, is an amount less than that in the previous year. In effect, larger amounts are depreciated during the initial years.

We need to decide on a depreciation rate in advance. Usually, the rate is based as per the Companies Act 2013. This method does not depreciate the entire cost of the asset during the period. The remainder, at the end of the period, is considered as the terminal depreciation during the last year of the life of the asset, when no salvage value is expected. Otherwise the residual is considered as the salvage value. There will always be a residual value because each year's depreciation is calculated as a rate (percentage) of the previous written down value and hence, it will resemble an unending function. Following Illustration 3.7, Table 3.2 shows the annual depreciation, accumulated depreciation, and written down value of the asset during its useful life.

Since there is no salvage value for the asset at the end of its useful life, the terminal year depreciation will be taken as ₹ 1,342 i.e., ₹ $268+₹ 1,074$. This being addition of the depreciation for the period plus the terminal value of the asset.

Table 3.2 Depreciation @ 20\% per annum: Written Down Value Method

| Year | Original Cost | Annual Depreciation | Accumulated Depreciation | Remaining Book Value |
| :---: | :---: | :---: | :---: | :---: |
| 0 | 10,000 |  |  | 10,000 |
| 1 | 10,000 | 2,000 | 2,000 | 8,000 |
| 2 | 10,000 | 1,600 | 3,600 | 6,400 |
| 3 | 10,000 | 1,280 | 4,880 | 5,120 |
| 4 | 10,000 | 1,024 | 5,904 | 4,096 |
| 5 | 10,000 | 819 | 6,723 | 3,277 |
| 6 | 10,000 | 655 | 7,378 | 2,622 |
| 7 | 10,000 | 524 | 7,902 | 2,098 |
| 8 | 10,000 | 420 | 8,322 | 1,678 |
| 9 | 10,000 | 336 | 8,658 | 1,342 |
| 10 | 10,000 | 268 | 8,926 | 1,074 |

Annual depreciation under the written down value method is the highest during the first year and goes on reducing over the subsequent years. This is shown by a rapidly declining curve in Figure 3.5. However, the rate of decline reduces as the number of years approaches the end of the life of the asset. The accumulated depreciation, similarly, increases at a rapid rate during the initial years and the rate of


Figure 3.5 Annual Depreciation Charge @ 20\% per annum: Written Down Value Method
increase declines in later years. The remaining book value of the asset is a declining curve. The nonallocated portion of the cost is usually charged as depreciation in the last year of the life of the asset.

### 3.9.2 Intangible Assets and Amortization

Many times, business enterprises acquire intangible assets, such as patent rights, distribution rights or copyrights, by paying large sums of money. So, intangible assets also represent unexpired costs. Intangible assets are a lot more difficult to be identified or verified. Prudent accounting policy demands that we recognize the expiration of these assets as well. The expiration of these assets, though similar to depreciation, is distinguished by referring to it as amortization. Amortization, like depreciation, is also another past cost, which has to be matched against the revenues. It is usual practice to amortize intangible assets on a straight-line basis. Since it is difficult to determine the useful life of intangible assets in many cases, they are amortized over a reasonably short period. This decision is irrespective of the fact that some of these intangible assets may have a much longer legal life.

### 3.9.3 Non-Current Asset Expiration and Profit Measurement

What we have learnt from the discussion of the depreciation methods is that, depending on the method used for charging depreciation or recognition of expiration of the cost of the fixed assets, we have a different amount of charge for annual depreciation. It could also be noticed that over the entire life of the asset, the total amount of depreciation charge cannot be different from the depreciable cost of the asset. Thus,
the difference is only in terms of the annual apportionment. The net effect of the methods is therefore, in terms of showing less or more profit in any particular year. This can be demonstrated by continuing with our earlier illustration. We also note that the effect of amortization of intangible assets on profit measurement is the same as that of depreciation. (see Annexure 3.8 on the OLC for more information).

## Illustration 3.8

Assume that the company using the machine in our earlier illustration, earns ₹ 5,000 per annum in earnings before depreciation. The difference in the annual measurement of profit under the straight line, written down value and sum-of- the-years' digit methods is illustrated in Table 3.3.

Table 3.3 Profit Measurement under Different Depreciation Methods
(in Rupees)

| Year | Earnings Before Depreciation | Straight line depreciation | Written down value depreciation | Profit under Straight line | Profit under written down value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  |  |  |  |  |
| 1 | 5,000 | 1,000 | 2,000 | 4,000 | 3,000 |
| 2 | 5,000 | 1,000 | 1,600 | 4,000 | 3,400 |
| 3 | 5,000 | 1,000 | 1,280 | 4,000 | 3,720 |
| 4 | 5,000 | 1,000 | 1,024 | 4,000 | 3,976 |
| 5 | 5,000 | 1,000 | 819 | 4,000 | 4,181 |
| 6 | 5,000 | 1,000 | 655 | 4,000 | 4,345 |
| 7 | 5,000 | 1,000 | 524 | 4,000 | 4,476 |
| 8 | 5,000 | 1,000 | 420 | 4,000 | 4,580 |
| 9 | 5,000 | 1,000 | 336 | 4,000 | 4,664 |
| 10 | 5,000 | 1,000 | 268+1,074* | 4,000 | 3,658 |
|  | 50,000 | 10,000 | 10,000 | 40,000 | 40,000 |

* Including the non-allocated depreciation charge of $₹_{1,074,}$ since there is no salvage value for the asset. Under this method, there will always be a terminal unabsorbed depreciation. All figures are rounded off.

We observe from the above illustration and table that the choice of depreciation method has an important bearing on the year-to-year profit measurement. However, theoretically, if the income is measured over the entire life of the asset, the total income and depreciation would be the same amounts and hence, the choice of method does not influence the income measurement over the life of the asset.

The only accounting consideration for a preference of one depreciation method over the others could be the ease of application. However, environmental considerations, such as taxation policies, also influence the choice of method of depreciation. Where accelerated depreciation methods are accepted by the tax authorities, the amount of tax to be paid in the initial years will be less under that method and hence, it would be beneficial to the business from the point of view of the time value of money. Please note that assuming a uniform rate of taxation on income, the total tax paid during the life of the asset would be same. The choice of the depreciation method can only change the timing of the payment, and not the total amount.


Figure 3.6 Profit Measurement under Different Depreciation Methods

## SPOTLGHT 3.3

## Depreciation, Amortization, and Depletion

Frequently, we come across the question of the differences between depreciation, amortization, and depletion. We provide a summary below:

Depreciation is a measure of wearing out, consumption or other loss of value of a depreciable asset, arising from use, effluxion of time or obsolescence through technology and market changes. It is allocated so as to charge a fair proportion in each accounting period, during the useful life of the asset. Depreciation expense is applicable on all tangible long-term assets, whose useful life is predetermined. Example: the Depreciation expense on movable and immovable machineries in a service industry, such as air cargo services.

Depletion charge is a measure of exhaustion of a wasting asset, represented by a periodic write off of the cost or other substituted value. Example: depletion charge of using a mine of iron ore and coal, by a steel manufacturer owning those mines.

Amortization is the gradual and systematic writing off of an intangible long-term asset or an account over an appropriate period. Example: amortization of business restructuring expenses and software implementation expenses, by a large banking firm.

## Depreciation Vs Amortization Vs Depletion

Frequently, we come across the question of the differences between depreciation, amortization and depletion. We provide a summary in the next Table.

## Depreciation

Depreciation is a measure of wearing out, consumption or other loss of value of a depreciable asset, arising from use, efflux ion of time or obsolescence through technology and market changes. It is allocated so as to charge a fair proportion in each accounting period, during the useful life of the asset. Depreciation expense is applicable on all tangible long-term assets, whose useful life is pre-determined. For example, the depreciation expense on movable and immovable machineries in a service industry, such as air cargo services.

Depletion

## Amortization

 and a large banking organization, respectively.Depletion charge is a measure of Amortization is the gradual and exhaustion of a wasting asset, systematic writing-off of an intangible long-term asset over an appropriate period. For example, amortization of business restructuring expenses and software implementation expenses by a large conglomerate engineering firm represented by a periodic write-off of the cost or other substituted value. For example, depletion charge of using a mine of iron ore and coal, by a steel manufacturer owning those mines.

## Activity 3

Relate items in column $A$ to all items in Column B

| A |  |
| :--- | :--- |
| (a) Depreciation expense | 1. An appropriation of profits |
| (b) Gross sales | 2. Unexpired cost of the period |
| (c) Sales allowances | 3. Invoice notation, " $2 / 15, \mathrm{n} / 30^{\prime \prime}$ |
| (d) Prepaid expense | 4. Adjustments to recorded sales |
| (e) Discounts | 5. Invoice value of goods sold during the period |
| (f) Given effect on return of goods by customers | 6. Reduction from invoice price |
| (g) Dividends | 7. Expiration of cost of fixed assets |

### 3.10 FORM AND CONTENTS OF PROFIT AND LOSS ACCOUNT



Prepare a statement of profit and loss

So far, we had been discussing the profit and loss account in the 'accounts' format. That is, listing all the revenues earned on the right hand side and all the expenses incurred on the left hand side, showing profit in case the sum on the right hand side is larger than the sum of all the entries on the left hand side.

Incidentally, in accounting, the left hand side of an account format in the T form is referred to as the debit (Dr.) side and amounts recorded on the left side of an account are referred to as debit amounts.

The right hand side of a T account format is referred to as the credit ( Cr .) side and amounts recorded on this side are referred to as credit amounts. To avoid confusion in understanding, please do not attach any further meaning to debit and credit than that they are on left and right side of the account respectively.

It is also a common practice to present the revenue and expense information in a summarized statement form and to provide the details in attached schedules. The method of presentation does not alter the results in any case, since the relationship is always:

$$
\text { Revenue }- \text { Expense }=\text { Profit (or Loss) }
$$

We first provide, a summarized profit and loss account in both these formats, namely, horizontal format (Illustration 3.9) and vertical format (Illustration 3.10). We discuss the items presented subsequently. Most of the subsequent discussion would be based on this income statement illustration of Tools India Limited.

|  |  | Profit e year en | dia Ltd. <br> oss Account <br> December 31, 2015 | All figures in ₹ crores |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Debit |  |  | Credit |  |  |
|  | Schedule | Amount |  | Schedule | Amount |
| Cost of goods sold | 3 | 130 | Sales net | 1 | 255 |
| Gross profit |  | 130 | Other income | 2 | 5 |
| 260 |  |  |  | 260 |  |
| Personnel expenses | 4 | 49 | Gross profit | 130 |  |
| Depreciation | 511 |  |  |  |  |
| Other expenses | 6 28 |  |  |  |  |
| Operating profit | 42 |  |  |  |  |
|  | 130 |  |  | 130 |  |
| Interest | 7 | 12 | Operating income | 42 |  |
| Profit before taxes | 30 |  |  |  |  |
|  | 42 |  |  | 42 |  |
| Income tax provision | 12 |  | Profit before taxes | 30 |  |
| Net profit after tax | 18 |  |  |  |  |
|  | 30 |  |  | 30 |  |


|  | Illustration 3.10 |  |
| :---: | :---: | :---: |
| Tools India Ltd. <br> Profit and Loss Account <br> For the year ended December 31, 2015 | All figures in ₹ crores |  |
|  | Schedule | Amount |
| Sales net | 1 | 255 |
| Other income | 2 | 5 |
| Total Revenue |  | 260 |
| Cost of goods sold | 3 | 130 |
| Gross profit |  | 130 |
| Operating expenses: |  |  |
| Personnel | 4 | 49 |
| Depreciation | 5 | 11 |
| Other expenses | 6 | 28 |
| Operating profit |  | 42 |
| Interest | 7 | 12 |
| Profit before taxes |  | 30 |
| Income tax provision |  | 12 |
| Net profit after tax |  | 18 |

The summarized profit and loss account will be accompanied by schedules, providing details for various items forming the total.

### 3.10.1 Sales

The net sales amount shown in the profit and loss account is after deductions (worth ₹ 5 crore) from the gross sales. Schedule 1 provides the detailed breakup of the sales, by different divisions of the company, as also by domestic market and export sales. Annexure 3.3 on the OLC has additional content on revenue.

Schedule 1: Sales

|  | (₹ in crores) |  |
| :--- | ---: | ---: |
| Gross sales |  | 260.00 |
| Less: Sales returns and allowances | 1.75 |  |
| $\quad$ Sales discount | 3.25 | 5.00 |
| Net sales |  | $\mathbf{2 5 5 . 0 0}$ |
| Net sales - Domestic |  |  |


| Machine tools group | 83 |  |
| :--- | :--- | :--- |
| Watch group | 87 |  |
| Tractor group | 60 |  |
| Lamp group | 13 |  |
| Dairy machinery group | 2 |  |
| Total domestic sales |  | $\mathbf{2 4 5 . 0 0}$ |
| Export: | 6 |  |
| Machine tools group | 2 |  |
| Watch group | 2 |  |
| Others |  | $\mathbf{1 0 . 0 0}$ |
| Total Export Sales |  |  |

### 3.10.2 Sales Returns and Allowance

Sales records are prepared as and when goods are shipped to customers. The customers may return goods that are not according to specifications, are damaged or defective and in such cases, a refund of the purchase price is made. If the transaction was a credit sale, the account receivable in question will be cancelled. It is also a usual practice for the customer to retain the goods and an allowance may be made to compensate the customer for the damage, change in specification or any other deviation from the order.

Such refunds or allowances are separately accumulated and accounted for, for the purpose of control by the management. At the time of preparation of the profit and loss account, such allowances are set off against the gross sales and the net sales are taken as the operating revenue earned. Many companies may not disclose this information in published accounts as competitors may use it to their advantage.

### 3.10.3 Sales or Cash Discount

Sales discounts are reductions from the invoice price, granted for prompt payment of the invoice, within a specified time limit. These reductions are sometimes called cash discounts. In our illustration, Tools India allowed ₹3.25 crore as discounts to customers.

It is a usual practice to state the discount offered to a customer on the invoice. Discounts or terms of payments are usually presented in short forms or symbols. Examples of such short forms are: 'Net amount' or 'No cash discount' - (N); 'Net Amount due at end of the Month' - (N/EOM); Net amount due in 30 days of invoice, no cash discounts - (N/30); a 3 percent discount, if payment is made in 10 days, otherwise net amount to be paid in 30 days - $(3 / 10, n / 30)$.

An invoice of $3 / 10, \mathrm{n} / 30$ sales that a 3 percent discount is offered, if payment is made within 10 days. It also implies, however, that if payment is not made within 10 days, the normal credit of 30 days can be availed. Suppose you have a $₹ 1,000$ invoice with ' $3 / 10, \mathrm{n} / 30$ ', you are losing 3 percent for 20 days credit. In other words, it would cost you $360 / 20 \times 3 \%=60 \%$ per annum in equivalent interest! This knowledge will definitely help you in planning your short-term finances more effectively.

### 3.10.4 Trade Discounts

Trade discounts are absorbed as adjustments in the price and are used when a manufacturer makes bulk sales to a wholesaler, or a wholesaler to a retailer. These are never brought into accounts. Rather, the
sales and hence, the sales invoices are valued at net of the trade discount. (Refer to Annexure 3.3 on the OLC for further discussion on trade discounts and combinations.)

### 3.10.5 Other Income

The revenue earned by an enterprise is usually divided into two parts, operating income and non-operating income. Operating income usually refers to the income derived from the main-line operations of the business. Other income usually arises from activities incidental to the business. Schedule 2 lists the details of income from non-operating receipts by Tools India Ltd.

## Schedule 2: Other Income

| (₹ in crores) <br> Interest - banks | 0.50 |
| :--- | :---: |
| Interest - staff and offices | 1.20 |
| Export incentives | 1.80 |
| Sales agency commission | 0.50 |
| Profit on sales of assets | 0.30 |
| Dividend on trade investments | 0.20 |
| Other miscellaneous income | 0.50 |
| Total | $\mathbf{5 . 0 0}$ |

### 3.10.6 Cost of Goods Sold

The computation on the cost of goods sold is very complex in the case of a multi-product, multi-division company, where you have large amounts of semi-finished goods. But in cases where it is a trader who deals in commodities and where each unit bought can be identified with each unit sold, it is very simple. We confront two major problems in this regard. The first problem is with respect to changes in the price per unit of purchase. At what price should we identify the cost of goods sold? The second one is, how do we evaluate the cost of the semi-finished goods?

The cost of goods sold in summary, presented in our illustration, can be understood more clearly from Schedule 3.

Schedule 3: Cost of Goods Sold

| Inventory on January 1, 2015 <br> F in crores) <br> Add: Purchase | 81.00 |
| :--- | ---: |
| Freight-in | 110.00 |
| Other direct material costs | 10.00 |
| Total goods available | 15.00 |
| Less: Raw material and semi-finished inventory on December 31, 2015 | $\mathbf{2 1 6 . 0 0}$ |
| Goods available for sale | 71.00 |
| Less: Finished goods inventory on December 31, 2015 | $\mathbf{1 4 5 . 0 0}$ |
| Cost of goods sold | 15.00 |

### 3.10.7 Gross Profit

The gross profit or gross margin obtained by subtracting the cost of goods sold from the sales revenue, has great managerial significance. The cost of goods sold usually reflects the direct input costs and to a great extent, is variable with the volume of operations. In other words, cost of goods sold per unit of sales, is a fixed ratio. The gross profit should be sufficient to cover other operating expenses of the business if the business is to be viable. You would realize that since the cost of goods sold is being determined by mostly factors external to the company, the only other factor which could affect the gross profit margin is the pricing policy. Management and control of the gross margin will depend on improving the efficiency of operations and procurement, given the sales price.

### 3.10.8 Operating Expenses

The cost of goods sold normally includes all those costs of making the inventory available for sale, and are directly traceable to the inventory to be sold. All those expenses, which are necessary to run the business enterprise or the organization, which are not directly associated with the company's output on a cause and effect relationship, are usually termed as operating expenses. Usually, these expenses include all items of expenses with respect to administration and provision of supports for the operation of business. It is a usual practice to segregate these expenses as falling under two broad groups, 'selling expenses' and 'general administrative expenses'. It is also possible to accumulate the expenses on the basis of material, personnel and other expenses, as in the case of the financial statement of Tools India Limited.


To know more on "What are Operating Expenses?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/529

### 3.10.9 Personnel Expenses

Personnel expenses include remuneration and other benefits to the staff and workmen. In case of Tools India Ltd., details of the expenses on account of personnel are detailed in Schedule 4.

Schedule 4: Personnel Expense

| Salaries, wages and bonus | 37.81 |
| :--- | ---: |
| House rent allowance | 2.19 |
| Gratuity | 0.75 |
| Contribution to provident fund | 2.75 |
| Contribution to Employees State Insurance (ESI) | 0.50 |
| Workmen and staff welfare expense | 5.00 |
| Total | $\mathbf{4 9 . 0 0}$ |

### 3.10.10 Depreciation Expense

Depreciation is the expiration of costs of fixed assets. It is a usual practice to classify the depreciation expense according to the different groups of assets. In case of Tools India Ltd, Schedule 5 gives the break-up of depreciation for the different groups of assets.

Schedule 5: Depreciation

|  | (₹ in crores) |
| :--- | ---: |
| Fixed assets | 9.84 |
| Tools and instruments | 0.02 |
| Patterns, jigs and fixtures | 1.14 |
| Total | $\mathbf{1 1 . 0 0}$ |

### 3.10.11 Other Expenses

All the expenses, other than those disclosed separately, are usually grouped together as other expenses. These expenses are relatively very small when considered as individual items. It is still customary to gives, a detailed break-up of the major items of operating expenses other than personnel, depreciation and financing costs. In case of Tools India Ltd, the details are provided in Schedule 6.

Schedule 6: Other Expenses

| (₹in crores) <br> Rewer and fuel | 3.10 |
| :--- | :---: |
| Rates and taxes | 0.50 |
| Insurance | 0.40 |
| Water and electricity | 0.50 |
| Repairs to buildings | 0.60 |
| Repairs to machinery | 0.20 |
| Printing and stationery | 0.80 |
| Advertisement and publicity | 0.90 |
| Training | 2.40 |
| Audit fees | 0.10 |
| Royalties | 0.05 |
| Sole selling and other agents commission | 0.85 |
| Directors' fees | 4.70 |
| Provision for bad debts and advances | 2.00 |
| Loss on assets sold or discarded | 0.20 |
| Provision for warranty repairs | 1.30 |
| Miscellaneous expenses | 1.00 |
| Total | 8.40 |

### 3.10.12 Operating Profit

Operating profit is the figure obtained after subtracting personnel, depreciation and other expenses, from the gross profit. Operating profit is the surplus generated by the operations. The company, irrespective of the method of financing, earns this amount. The only other expense to be met at this stage, is the
interest expense. This is a measure of the operational efficiency of the company. This is usually referred to as Operating Profit before Interest and Taxes (OPBIT) or Earnings before Interest and Taxes (EBIT).

## Operating Profit $=$ Revenue - Cost of goods sold $\boldsymbol{-}$ Operating expenses

### 3.10.13 Interest Expense

Interest expense arises out of the management's decision to finance a part of the assets from borrowed funds. The management has the option to finance the assets from exclusively owners' equity or with a combination of owner(s) equity and borrowed funds. More than 90 percent of the business entities use some amount of borrowed funds to finance themselves. The level of interest expense presents the amount of risk the company is carrying in terms of fixed commitments, irrespective of the volume of operations and profit. Schedule 7 shows the different items of interest commitments of Tools India Ltd.

Schedule 7: Interest

|  | (₹ in crores) |
| :--- | ---: |
| Debentures | 0.58 |
| Fixed public deposits | 1.50 |
| Loans from government | 5.00 |
| Term loans from banks/financial institutions | 0.42 |
| Cash (packaging) credit from banks | 3.50 |
| Others | 1.00 |
| Total | $\mathbf{1 2 . 0 0}$ |

### 3.10.14 Profit Before Tax

Net profit before tax is the surplus after meeting all expenses, including interest. This is the profit available to the company as a result of both its operating and financing performance.

$$
\text { Net profit = Operating profit }- \text { Interest }
$$

### 3.10.15 Income Taxes

The profit before tax determines the level of taxation. As per the tax laws, the amount of tax payable is not determined on the basis of the reported net profit. In most cases, the accounting profit so arrived at will have to be reclassified and adjusted for allowances for determining the tax liability. Recall that revenue minus expense is profit. From this point of view, income taxes or corporate tax is not an expense. It is reckoned to be a share of the profit earned by the firm.

Tax laws in most countries, provide for tax concessions for investment in fixed assets, research and development, and so on. These allowances will reduce the amount of tax payable by the company during the year in which such benefit is availed. It is also an accounting requirement in many countries, to spread these tax benefits over the life of the concerned assets. Such deferral of the tax benefit received on specific conditions, is necessary to enhance the comparability of the net profit figures. In most countries, tax concessions are also applicable to companies which earn income by way of exports in select sectors and for setting up investments/infrastructure in backward and underdeveloped regions. Further, though
the tax liability is certain, the amount is determined only after the tax assessment is completed. This is the reason why tax liability is always provided for as a provision, implying that it is a liability where the amount is based on an estimate. The provision is set off when the amount is actually determined later on. This profit, prior to the making of a provision for taxes, is usually referred to as profit before tax (PBT) or Earnings before tax (EBT).

### 3.10.16 Profit After Tax

Profit after tax is the net amount of surplus earned by the company during the accounting period. This is the amount ultimately available to the company for appropriation. That is, this amount can be either distributed as dividends to shareholders (owners) or retained in the business as retained earnings. Not distributing the profit to the owners increases the owner(s) investment or equity in the business. The Net Income or Profit After Tax (PAT) or Earnings After Tax (EAT) is an important performance indicator of the company.

$$
\text { Profit after tax }=\text { Profit before tax }- \text { Tax }
$$

Please see Annexure 3.4 on the OLC for checking out profit and loss account and its interpretation reports.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(i) Depletion charge is an apt method of expiring natural resources.
(j) Cost of goods sold normally includes all those costs of making the inventory available for sale, and are directly traceable to the inventory to be sold.

## Case 3.1 India's Biggest Company's Income Statement

This case is an extension of Case 2.1 on the Tata Consultancy Services Limited (TCS). TCS's income statements are given below for two consecutive accounting years as per the vertical format (see Section 3.10 for details). The year-on-year figures indicate a stable income statement with slow and steady growth.

Its income summary for FY2015 conveys that during the year, net profit figures improved by about 5\% from ₹ 19 bn. to ₹ 20 bn. Further, its biggest cost was the employee benefit expense. Looks like, TCS faced lot of pressure in FY2015 due to increase in its personnel costs. It also conveys that, perhaps, TCS is focusing more on building its human capital (and retaining) compared to fixed tangible assets (see the low depreciation and amortization expenses). The other low item was the finance costs - conveying the near zero leverage of the entity.

Tata Consultancy Services Balance Sheet as per IFRS (all figures in INR Bn.)

| Statement of Profit and Loss Items | FY15 | FY14 |
| :---: | :---: | :---: |
| Period Ending | 31 Mar. | 31 Mar. |
| Revenue from operations | 95 | 82 |
| Other income (net) | 3 | 2 |
| Total Revenue | 98 | 84 |
| Expenses: |  |  |
| Employee benefit expense | 39 | 30 |
| Operation and other expenses | 31 | 27 |
| Finance costs | - | - |
| Depreciation and amortization expense | 2 | 1 |
| Total Expenses | 72 | 58 |
| Exceptional item | - | - |
| Profit Before Tax | 26 | 26 |
| Income Tax expense | 6 | 6 |
| Profit for the Year | 20 | 20 |

Source: TATA Consultancy Services Investors Relations, TCS, Web, 15 Dec. 2015.
In terms of year on year change - we see the sales of TCS having a steady state growth of about $15 \%$. For a large giant-sized organization and an industry leader - that is significant jump. Finally, one can see that the steady improvement in profit surplus of TCS is adding to its reserves and surplus as part of the total shareholders' funds.

### 3.11 METHODS OF INVENTORY VALUATION

## Explain the processes of inventories' expiration

The only thing certain with respect to prices, is that they are not certain. This makes it necessary to evolve a strategy for charging the cost of materials sold. The recording of inventory, as well as its expiration as cost of goods sold, will have to be made on the basis of its historical cost. If one could make identification of the goods sold with their historical details (such as, purchase price and time) then the ideal way to compute cost of goods sold would be the 'specific identification method'. This method in real life is practically visible by most retail giants using RFID technology.

However, not all businesses can track and relate their historical input costs with their final processed output specifics so easily. Thus, the historical cost of the inventory leaves us with the options of the historical cost of any of the units to be reckoned as cost of goods sold. Two of the most commonly used systems using historical costs are the 'first in, first out' (FIFO), which assumes that the sales are made in the order in which they are purchased, and 'last in, first out' (LIFO), which assumes that goods which are bought last, are sold first. Often, we observe that the fresh fruits and vegetable stores make use of

FIFO method of inventory valuation. Giant chemical storage houses (such as, raw sulfur) make use of LIFO. Another possibility, which is also used in many cases, is to recalculate the cost of the materials on a weighted average basis, after each purchase and sale (for example, most processing industries). In this case, the inventory and issues are recorded on the 'weighted average cost' (WAC).

We will illustrate these different methods of inventory valuation with a simple example.

## Illustration 3.11

Table 3.4 shows the purchase and sale transactions of General Traders, traders of a particular commodity, during January.

Table 3.4 Purchase and Sale Transactions of General Traders

| Purchases |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Date |  | No. of units | Price per unit (in ₹) | Amount (in ₹) |
| 1 Jan. | Inventory | 500 | 3 | 1,500 |
| 5 Jan. | Purchase | 1,000 | 4 | 4,000 |
| 10 Jan. | Purchase | 2,000 | 5 | 10,000 |
| 15 Jan. | Purchase | 1,000 | 6 | 6,000 |
| 20 Jan. | Purchase | 3,000 | 4 | 12,000 |
| 25 Jan. | Purchase | 2,000 | 74,000 |  |
|  | Total | 9,500 |  | 47,500 |
| Sales |  |  |  |  |
| 11 Jan. | Sales | 1,000 |  |  |
| 14 Jan. | Sales | 500 |  |  |
| 16 Jan. | Sales | 1,000 |  |  |
| 21 Jan. | Sales | 2,000 |  |  |
| 30 Jan. | Sales | 1,500 |  |  |
|  | Total | 6,000 |  |  |
| 31 Jan. | Inventory | 3,500 |  |  |

Recognition of the cost of goods sold and inventory valuation on the basis of FIFO is shown in Table 3.5 .

Table 3.5 Inventory and cost of goods sold under FIFO

|  | Purchases |  |  | Sales |  |  | Inventory |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per <br> unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) |
| 1 Jan 11 | 500 | 3 | 1,500 |  |  |  |  |  |  |
| 5 Jan 11 | 1,000 | 4 | 4,000 |  |  |  |  |  |  |

(contd.)

| 10 Jan 11 <br> 11 Jan 11 | 2,000 | 5 | 10,000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 500 | 3 | 1,500 |  |  |  |
|  |  |  |  | 500 | 4 | 2,000 | 500 | 4 | 2,000 |
|  |  |  |  |  |  |  | 2,000 | 5 | 10,000 |
| 14 Jan 11 |  |  |  | 500 | 4 | 2,000 | 2,000 | 5 | 10,000 |
| 15 Jan 11 | 1,000 | 6 | 6,000 |  |  |  | 2,000 | 5 | 10,000 |
|  |  |  |  |  |  |  | 1,000 | 6 | 6,000 |
| 16 Jan 11 |  |  |  | 1000 | 5 | 5,000 | 1,000 | 5 | 5,000 |
|  |  |  |  |  |  |  | 1,000 | 6 | 6,000 |
| 20 Jan 11 | 3,000 | 4 | 12,000 |  |  |  | 1,000 | 5 | 5,000 |
|  |  |  |  |  |  |  | 1,000 | 6 | 6,000 |
|  |  |  |  |  |  |  | 3,000 | 4 | 12,000 |
| 21 Jan 11 |  |  |  | 1000 | 5 | 5,000 |  |  |  |
|  |  |  |  | 1000 | 6 | 6,000 | 3,000 | 4 | 12,000 |
| 25 Jan 11 | 2,000 | 7 | 14,000 |  |  |  | 3,000 | 4 | 12,000 |
|  |  |  |  |  |  |  | 2,000 | 7 | 14,000 |
| 30 Jan 11 |  |  |  | 1500 | 4 | 6,000 | 1,500 | 4 | 6,000 |
|  |  |  |  |  |  |  | 2,000 | 7 | 14,000 |
|  | 9,500 |  | 47,500 | 6000 |  | 27,500 | 3,500 |  | 20,000 |

The recognition of cost of goods sold and inventory valuation using LIFO method is shown in Table 3.6.

Table 3.6 Inventory and cost of goods sold under LIFO

|  | Purchases |  |  | Sales |  |  | Inventory |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) |
| 1 Jan 11 | 500 | 3 | 1,500 |  |  |  |  |  |  |
| 5 Jan 11 | 1,000 | 4 | 4,000 |  |  |  |  |  |  |
| 10 Jan 11 | 2,000 | 5 | 10,000 |  |  |  |  |  |  |
| 11 Jan 11 |  |  |  | 1,000 | 5 | 5,000 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 1000 | 5 | 5,000 |
| 14 Jan 11 |  |  |  | 500 | 5 | 2,500 | 500 | 3 | 1,500 |

(contd.)

|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 Jan 11 |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  | 1,000 | 6 | 6,000 |  |  |  | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1000 | 6 | 6,000 |
| 16 Jan 11 |  |  |  | 1,000 | 6 | 6,000 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
| 20 Jan 11 | 3,000 | 4 | 12,000 |  |  |  | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 3000 | 4 | 12,000 |
| 21 Jan 11 |  |  |  | 2,000 | 4 | 8.000 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1000 | 4 | 4,000 |
| 25 Jan 11 | 2,000 | 7 | 14,000 |  |  |  | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 2,000 | 7 | 14,000 |
| 30 Jan 11 |  |  |  | 1,500 | 7 | 10,500 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 7 | 3,500 |
|  | 9,500 |  | 47,500 | 6,000 |  | 32,000 | 3,500 |  | 15,500 |

Table 3.7 demonstrates the recognition of cost of goods sold and the inventory valuation using weighted average cost.

Table 3.7 Inventory and cost of goods sold under LIFO

|  | Purchases |  |  | Sales |  |  | Inventory |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) |
| 1 Jan 11 | 500 | 3 | 1,500 |  |  |  |  |  |  |
| 5 Jan 11 | 1,000 | 4 | 4,000 |  |  |  |  |  |  |
| 10 Jan 11 | 2,000 | 5 | 10,000 |  |  |  |  |  |  |
| 11 Jan 11 |  |  |  | 1,000 | 5 | 5,000 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 1000 | 5 | 5,000 |
| 14 Jan 11 |  |  |  | 500 | 5 | 2,500 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
| 15 Jan 11 | 1,000 | 6 | 6,000 |  |  |  | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1000 | 6 | 6,000 |
| 16 Jan 11 |  |  |  | 1,000 | 6 | 6,000 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
| 20 Jan 11 | 3,000 | 4 | 12,000 |  |  |  | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 3000 | 4 | 12,000 |
| 21 Jan 11 |  |  |  | 2,000 | 4 | 8.000 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1000 | 4 | 4,000 |
| 25 Jan 11 | 2,000 | 7 | 14,000 |  |  |  | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  | 1,000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 500 | 5 | 2,500 |
|  |  |  |  |  |  |  | 1000 | 4 | 4,000 |
|  |  |  |  |  |  |  | 2,000 | 7 | 14,000 |
| 30 Jan 11 |  |  |  | 1,500 | 7 | 10,500 | 500 | 3 | 1,500 |
|  |  |  |  |  |  |  |  |  | (contd.) |


|  |  | 1,000 | 4 | 4,000 |
| ---: | ---: | ---: | ---: | ---: |
|  |  | 500 | 5 | 2,500 |
|  |  |  | 1,000 | 4 |
|  |  |  | 500 | 7 |
|  |  |  |  | 3,500 |
|  | 47,500 | 6,000 | 32,000 | 3,500 |

Table 3.8 demonstrates the recognition of cost of goods sold and the inventory valuation using WAC method.

Table 3.8 Inventory and cost of goods sold under WAC

|  | Purchases |  |  | Sales |  |  | Inventory |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) | No. of units | Price per unit (in ₹) | Amount (in ₹) |
| 1 Jan 11 | 500 | 3 | 1,500 |  |  |  | 500 | 3 | 1,500 |
| 5 Jan 11 | 1,000 | 4 | 4,000 |  |  |  | 1,500 | 3.667 | 5,500 |
| 10 Jan 11 | 2,000 | 5 | 10,000 |  |  |  | 3,500 | 4.429 | 15,500 |
| 11 Jan 11 |  |  |  | 1,000 | 4.429 | 4,429 | 2,500 | 4.429 | 11,071 |
| 14 Jan 11 |  |  |  | 500 | 4.429 | 2,215 | 2,000 | 4.429 | 8,857 |
| 15 Jan 11 | 1,000 | 6 | 6,000 |  |  |  | 3,000 | 4.952 | 14857 |
| 16 Jan 11 |  |  |  | 1,000 | 4.952 | 4,952 | 2,000 | 4.952 | 9,905 |
| 20 Jan 11 | 3,000 | 4 | 12,000 |  |  |  | 5,000 | 4.381 | 21,905 |
| 21 Jan 11 |  |  |  | 2,000 | 4.381 | 8,762 | 3,000 | 4.381 | 13,143 |
| 25 Jan 11 | 2,000 | 7 | 14,000 |  |  |  | 5,000 | 5.429 | 27,143 |
| 30 Jan 11 |  |  |  | 1,500 | 5.429 | 8,142 | 3,500 | 5.429 | 19,000 |
|  | 9,500 |  | 47,500 | 6,000 |  | 28,500 | 3,500 |  | 19,000 |

Table 3.9 shows the comparison of the results of first in first out, last in first out and weighted average cost bases of recognition of the cost of goods sold and inventory valuation.

Table 3.9 Inventory and cost of goods sold under FIFO, LIFO and WAC

| Valuation method | Purchase cost <br> (in ₹) | Cost of goods sold <br> (in ₹) | Value of Inventory <br> (in ₹) |
| :---: | :---: | :---: | :---: |
| FIFO | 47,500 | 27,500 | 20,000 |
| LIFO | 47,500 | 32,000 | 15,500 |
| WAC | 47,500 | 28,500 | 19,000 |

From the illustration above, we find that the purchase cost is the same irrespective of the method of inventory valuation. However, the cost of goods sold and the value of inventory at the end of the period are different for the three different methods of inventory valuation. If we use FIFO, the cost of goods sold, which is based on the prices
of inventory procured earliest, prior to sales, would amount to ₹ 27,500 . And the closing inventory of 3,500 units will be valued at ₹ 20,000 , representing the most current purchase prices. In the case of LIFO, we find that the cost of goods sold, which are based on the most recent prices of the inventory purchased, is ₹ 32,000 . The closing inventory is valued at the prices of the earlier purchases at $₹_{15,500 \text {. In the case of WAC, we find that the cost of goods sold, }}$ which are based on the weighted average price of the inventory purchased, is ₹ 28,500 . Closing inventory is also valued at the weighted average price of $₹ 15,500$. In all the cases, inventory plus cost of goods sold would amount to the same, that is, ₹47,500, since they are all based on the actual historical cost only.

Here again, over the entire life of the entity, there will be no difference, irrespective of the method used in the valuation of the cost of goods sold. There will also be no difference if the entire inventory is sold. The differences again reflect one of the effects of accounting periods on income measurement. It is also easy to recognize the fact that, if all the purchases are at the same unit price, the choice of method will have no relevance. Please see Annexure 3.5 on the OLC for more on inventory valuation methods.

### 3.12 MORE ON INCOME FORMATS AND FLOW

Illustrations 3.9 and 3.10 presented the Income Statement in 'horizontal format' and 'vertical format'. On the other hand, Illustration 3.11 presents the same figures of Tools India Limited using order sequence in the Schedule III format specified by the Indian Companies Act 2013. Observe the differences in some items by comparing these illustrations and we can gauge subtle variations. For instance, cost of goods sold in the earlier illustration is classified under two headings cost of goods consumed and changes in inventories. Similarly, interest expenses are labelled as financial costs. We will get to know of a few more things as we comprehend further.


To know more on "EBITDA and its Growing Importance" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/530


|  | Finance costs | 7 |
| :--- | :--- | :---: |
|  | Depreciation and amortization expense | 5 |
|  | Other expenses | 6 |
| 12 |  |  |
|  | Total expenses | 28 |
| V | Profit before exceptional and extraordinary <br> items and tax (III - IV) | 230 |
| VII | Exceptional items | 30 |
| VII | Profit before extraordinary items and tax (V - VI) | - |
| VIII | Extraordinary items | 30 |
| IX | Profit before tax (VII- VIII) | - |
| X | Tax expense: | 30 |
|  | (1) Current tax | 12 |
|  | (2) Deferred tax | - |
| X | Profit (Loss) for the period (X-IX) | 18 |

Table 3.10 elaborates the discussion further by showcasing the flow of income along with numerous types of profit. It also shows the figures in the case of Tools India Limited, our focus of discussion in Illustrations 3.9, 3.10 and 3.11, respectively.

Table 3.10 Flow of Income and Types of Profit

| Item from "Statement of Profit and Loss" | Tools India Ltd. <br> figures in FY2015 | Remarks |
| :---: | :---: | :--- |
| Revenue from Operations (or Sales) | 255 | Generically referred to as Topline |
| Add: Other Income | 5 |  |
| $\downarrow$ | 260 |  |
| Total Revenue | 130 | Often excludes, 'other income' to <br> Less: Cost of Goods Sold <br> $\downarrow$ <br> Gross Profit |
| Less: Sales, General \& Administrative Expenses | 130 |  |
| $\downarrow$ | 77 | 53 |
| EBITDA ~ Earnings Before Interest, Tax, |  |  |
| Depreciation \& Amortization |  |  |


| Adjust: Exceptional items and Extraordinary items | - |  |
| :---: | :---: | :---: |
| $\downarrow$ |  |  |
| PBIT ~ Profit Before Interest \& Tax / EBIT ~ Earnings Before Interest \& Tax | 42 |  |
| Less: Interest Expense / Financial Costs | 12 |  |
| $\downarrow$ |  |  |
| PBT ~ Profit Before Tax / EBT ~ Earnings Before Tax | 30 |  |
| Less: Income Tax Expense | 12 |  |
| $\downarrow$ |  |  |
| PAT ~ Profit After Tax / Net Income | 18 | Generically referred to as Bottomline |
| Less: Dividends | - |  |
| $\downarrow$ |  |  |
| Retained Earnings Carried Forward to Balance Sheet | 18 |  |

## Case $3.2>$ Revisiting "Money from Black" OR "Black Money"!!

We introduced ourselves to Coal India Limited (CIL)'s financial statement in Case 3.1. We provide the summarized half-yearly income statement as on 30 September 2015. We observe that CIL, a natural resource extraction company also has its biggest expense item as employee expenses. CIL's low deprecation figures hint that unlike popular perception - coal mining is not a highly fixed asset intensive business.

Coal India Limited Balance Sheet (all figures in INR Bn.)

| Statement of Profit and Loss Items | FY15 |
| :--- | :---: |
| Half Yearly Period Ending | 31 Sept |
| Revenue from operations | 36 |
| Other operating income | 1 |
| Total Revenue | 37 |
| Expenses: |  |
| Employee benefit expense | 15 |
| Contractual expenses | 5 |
| Cost of materials | 5 |
| Other operating expenses | 4 |
| Finance costs | - |
| Depreciation and amortization expense | $\mathbf{1}$ |
| Total Expenses | 30 |


| Profit/(Loss) from operations before other income, finance costs and exception items | $\mathbf{7}$ |
| :--- | :---: |
| Other income | 3 |
| Profit Before Tax | $\mathbf{1 0}$ |
| Income tax expense | $\mathbf{4}$ |
| Profit for the Year | $\mathbf{6}$ |

Source: Coal India Investors Center, Coal India, Web, 15 Dec. 2015.

Surprisingly, one observes that mining of natural resources (herein, coal) also involves some material costs (possibly, chemicals for detonation, explosion and such) and contractual expenses (perhaps, for outsourcing few technology intensive activities). The figures also convey that CIL is doing well for the stated accounting period.

## Let's Check Our Concepts!

State whether the following statements are True or False:
(k) Operating Profit computations should ideally exclude other income.
(I) Ideally, firms would like to 'special identification method' of inventory valuation.

### 3.13 PROFIT AND LOSS ACCOUNT OF A MANUFACTURING CONCERN



Based on the above discussion, one can deduce that the profit and loss account incorporates all the revenue and expense transactions relating to the business operations. It has been observed that the process of business operations is more complex in manufacturing firms and hence, this demands the preparation of a slightly extended version of the profit and loss account. In a manufacturing concern, the profit and loss account can be divided into four parts, viz., the Manufacturing Account, Trading Account, Profit and Loss Account, and Profit and Loss Appropriation Account. We provide a brief description on these accounts and delve further in Chapter 8.

### 3.13.1 Manufacturing Account

The Manufacturing Account gives the cost of goods manufactured by the manufacturer, during the given accounting period. This is the reason why many organizations that do not perform manufacturing operations, also do not prepare this account.

## Illustration 3.13

M/s Rasiklal \& Co. is a manufacturer of sports goods. For the year ending March 31, 20X6, the following transactions took place:

| Raw material purchased | 60,000 | Productive Wages | 20,000 |
| :--- | ---: | :--- | ---: |
| Power and fuel consumed | 10,000 | Rent of Factory | 5,000 |

It is also known that there was a stock (inventory) of work-in-progress as on the beginning of the year, amounting to $\mathrm{F}_{40,000 \text {, and }}$ the closing stock of work-in-progress is $\mathrm{F}_{10,000 \text {. The opening and closing stocks of }}$ raw material were $₹_{5,000}$ and $₹_{15,000}$ respectively.

In the above case, the Manufacturing Account of $\mathrm{M} / \mathrm{s}$ Rasiklal \& Co. shall be as follows:

> M/s Rasiklal \& Co.
> Manufacturing Account
> For the Year ending 31-03-20X6

| Particulars | Amount (in ₹) | Particulars | Amount (in ₹) |
| :--- | :---: | :--- | :---: |
| Opening Work-in-progress | 40,000 | Closing Work-in-progress | 10,000 |
| Raw Material Consumed: <br> Opening Stock 5,000 <br> Add: Purchases 60,000 <br> Less: Closing Stock 15,000 |  | Cost of Production for the period transferred <br> to the Trading Account |  |
| Productive Wages | 50,000 |  | $1,15,000$ |
| Power and Fuel | 20,000 | 10,000 |  |
| Factory Rent | 5,000 | $1,25,000$ |  |
|  |  |  |  |

In the above manufacturing account, all the manufacturing expenses that were incurred on raw materials, were ascertained and transferred into the next account, called the Trading Account.

### 3.13.2 Trading Account

The Trading Account indicates the amount of gross profit earned by the business, by matching the cost of the sales with the revenues generated by the business during the period. In the case of a manufacturer who is also a trader, the trading account discloses not only the profit made by the business by selling the manufactured goods, but also profits generated by the sale of goods purchased directly from others. Continuing with the same example, if we are given the following additional information:

| Opening stock (Finished Goods) | 25,000 | Sale | $1,60,000$ |
| :--- | :--- | :--- | ---: |
| Closing stock (Finished goods) | 35,000 | Cartage | 15,000 |
| Purchase (Finished Goods) | 15,000 |  |  |

The Trading Account appears as follows:

M/s Rasiklal \& Co.
Trading Account
For the Year ending 31-03-20X6

| Particulars | Amount (in ₹) | Particulars | Amount (in ₹) |
| :--- | ---: | :--- | ---: |
| Opening Finished Goods | 25,000 | Sales | $1,60,000$ |
| Cost of production for the period transferred <br> from Manufacturing Account | $1,15,000$ | Closing Stock of <br> finished goods | 35,000 |
| Purchase of Finished goods | 15,000 |  |  |
| Cartage Expenses | 15,000 |  |  |
| Gross Profit | 25,000 |  | $1,95,000$ |
|  | $1,95,000$ |  |  |

In this way, one can calculate the amount of gross profit earned by matching the cost of sales with the revenues generated by the business. In other words, 'Gross Profit' in the above table would become the figure to be computed.

### 3.13.3 Profit and Loss Account

The Profit and Loss Account is used to measure the profit and loss of the firm by way of deducting the administrative expenses, selling and distribution expenses, finance charges and other non-trading losses, from the amount of gross profit and the non-trading income of the business.

### 3.13.4 Profit and Loss Appropriation Account

The Profit and Loss Appropriation Account reflects how the net profit earned by the firm is utilized by way of distribution of dividends, payment of dividend taxes (if any) or retained in the business. Hence, this statement is an income distribution statement, rather than the income statement itself.


To know more on "Is there anything different in the
Profit \& Loss Statement of a Bank?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/531

### 3.14 DIVIDENDS AND RETAINED EARNINGS

Dividends are technically withdrawals by the owners of the business (Figure 3.7). Once the profit is determined after the provision for taxes has been made, the remaining amount can be appropriated among the owners as dividends. In case of individual proprietorship and partnership, this process is subject to the decision by the owner or partners. In case of joint stock companies, it is to be subject to the law relating to the declaration and payment of dividends as contained in the Company Law. In several schemes of Company Law, the directors of the company alone can recommend the payment of dividends, which are to be necessarily approved by the members. However, in these companies, the members cannot force the directors to pay dividends even if the company has distributable profits. But some Company Laws empower the members to take a decision to distribute profits, irrespective of the recommendation by the directors.


Figure 3.7 Period to Period Flow of Retained Earnings
After subtracting the dividends declared, from the net profit, any surplus remaining is added to the retained earnings of the previous year. Retained earnings are also referred to as reserves and surplus. It is also a practice to designate the retained earnings to signify the retention of the earnings for specific, different future purposes, such as redemption of debt (also known as redemption reserve), replacement of assets, and so on. Any such designation does not imply that there will be sufficient cash to meet those purposes when required. In most cases, it is the company laws which require the creating of retained earnings as designated reserves. The intention of such a legal requirement is only that of restricting the distribution of profits. Dividends are only an appropriation of the profits among the owners, and are not an expense. The accounting significance of dividends or drawings is exactly the opposite of the investment by owners. Annexure 3.6 (on the OLC) gives two real-life illustrations, namely, Hindustan Unilever and Tata Steel


To know more on "Announcement of Dividends' have anything to do with 'Retained Earnings'?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/532 Limited, based on Figure 3.7.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(m) The Manufacturing Account indicates the amount of gross profit earned by the business, by matching the cost of the sales with the revenues generated by the business during the period.
( n ) Withdrawals of retained surplus by the owners of the business can be called Dividends.

## SOLVED PROBLEMS

## Solved Problem 3.1

From the following information provided by Prakash Textiles, prepare a profit and loss account for the year 20X6-20X7:

| Capital Employed | $20,00,000$ | Opening Stock | $6,00,000$ |
| :--- | ---: | :--- | ---: |
| Machinery Purchased | $10,00,000$ | Furniture | $5,00,000$ |
| Cash Purchases for the Year | $17,50,000$ | Cash Sales | $30,50,000$ |
| Payable to suppliers of material | $2,50,000$ | Advertisement Expenses | 50,000 |
| Credit Sales for the Year | $1,50,000$ | Discount allowed | 50,000 |
| Cash Discount on Purchases | $1,50,000$ | Closing Stock | $1,50,000$ |
| Salary Paid | $2,50,000$ |  |  |

## Solution

This is a problem which will be solved by identifying the individual items and allocating them to the appropriate side of one of either the balance sheet or the income summary.

One can solve the problem by allocating each of the above items in the following manner:

- Capital employed is not considered in the preparation of the profit and loss account, as we have seen in the previous chapter that it is a balance sheet item. Similar is the case of machinery purchased and furniture.
- As explained in this chapter, purchases include all purchases, whether on cash or on credit. The amount payable to the supplier of raw materials is shown in the balance sheet as sundry creditors (or trade payables). Hence, purchases for the year amount to ₹ $20,00,000$ (cash purchases ₹ $17,50,000$ + payable to suppliers of material ₹ $2,50,000$ ).
- Similarly, sales include the total amount of sales for cash as well as credit. The amount receivable from customers is shown in the balance sheet as sundry debtors, as a part of the current assets. Thus, the sales for the year is ₹ $32,00,000$ (cash sales ₹ $30,50,000$ and credit sales ₹ $1,50,000$ ).
- Discount allowed is an expense for the business, and so it is charged against the revenue for the period. Alternatively, it can be shown as a reduction from the sales. In that case, the net sales amount would be ₹ $31,50,000$ (i.e., $32,00,000-50,000$ ).
- Similarly, discount received is a benefit enjoyed by the business and it can be treated as a revenue for the period. Alternatively, it can be shown as a reduction from the total purchases for the period, making the amount of net purchases to be ₹ $18,50,000$ (i.e., ₹ $20,00,000-₹ 1,50,000$ ).
The students can calculate and verify that in both the above alternative treatments, the net profit of the business will remain the same.

Now, we are in a position to prepare the profit and loss account for the accounting period, for Prakash Textiles.

> Prakash Textiles
> Profit and Loss Account
> For the year ending 31-03-20X7

| Particulars | Amount (in ₹) | Particulars | Amount (in ₹) |
| :--- | ---: | :--- | ---: |
| To Opening Stock | $6,00,000$ | By Sales during the Year | $32,00,000$ |
| To Purchases for the Year | $20,00,000$ | By Discount received | $1,50,000$ |
| To Discount allowed | 50,000 | By, Closing Stock | $1,50,000$ |
| To Salary | $2,50,000$ |  |  |
| To Advertisement Expenses | 50,000 |  | $35,00,000$ |
| To profit for the Year | $5,50,000$ |  |  |
|  | $35,00,000$ |  |  |

## Solved Problem 3.2

This illustration is a repeat of the Solved Problem 2.1 in Chapter 2. However, we will evidence the financial statements being extended to the periodic income statement. We are not repeating the transactions and the numbers of Rohan Software (to save on space) - thus, readers may like to go through Solved Problem 2.1. Question: At the end of the months of March and April, you are required to prepare its income statements.

## Solution

The first transaction, wherein the owners invest ₹ 5 million in cash would result in the cash going up on the assets side for the new business entity along with the owner(s) equity going up in the liabilities side of the position statement. However, the same shall have no influence over the income statement.

On March 2, Rohan took a loan of ₹2 million from Venugopal would result in the cash balance going further up and on the liability side a new loan item would come as the business entity now owes money to outsiders also. Since, an income statement is prepared to record the changes to an organization's owners equity (due to its business operations), there would be no effect on the income statement.

On March 3, RSL purchased using cash: computers and furniture, costing ₹ 5.8 million. This will create a new fixed asset and reduce the cash balance in the firm. There will be no change in the liability side and shall also not change the income statement.

On March 4, RSL purchased stationary worth ₹ $6,00,000$ on credit from M/s Hardeep. The result of this transaction would be a simultaneous increase in a current asset and a current liability (M/s Hardeep). However, this shall also have no expense recording effect for the period in our Profit and Loss account.

On March 19, RSL completes its maiden sale of software to a retail store and receives a price of ₹ 1.2 million. Assuming no further deliverables and promises as part of the software, this would result in the cash balance going up by $₹ 1.2$ million and the owners' equity also going up. The rationale behind the increase in owners' equity is the result of rise in the credit of the income statement due to this revenue item. This transaction also signals the use of realization principle apart from the fundamental pillar of accounting 'productive capital'.

On March 21, RSL pays ₹ $2,00,000$ to its creditors for supplies. This would reduce the cash balance of the organization and also the amount owed to the supplier but would not lead to a change in RSL's income statement.

On March 29, RSL pays salaries to its employees, amounting to ₹ $4,00,000$ and as office rent ₹ $1,00,000$. This would result in the cash balance going down by ₹ $5,00,000$ and the reduction in the owners' equity. Assuming these payments are for the whole month, would result in the expense side of the income statement consisting of these two items, i.e., 'salaries expense' and 'office rent expense'. Both would reduce the owners' equity - and are also illustrations of application of matching principle.

On March 30, RSL delivers a software package for a shoe shop, M/s Bata India. The customer agrees to pay the price of ₹ $8,00,000$ after two months. A result of this transaction would be an increase in the owners' equity due to this additional revenue item for RSL. A similar amount would be shown on the asset side as a accounts receivable item (being money due from this trade debtor).

On March 31, RSL pays ₹ $3,00,000$ to owners as a reward for its good performance - reducing the cash balance on RSL's asset side. A business entity reducing its cash balance to reward its shareholders, is an instance of dividend. Thus, this reduction in owners' equity would be adjusted (or balanced by a reduction) by reducing the 'surplus profits' of the company instead of touching its 'contributed capital'. A key reason behind this is the foundational accounting pillar of 'capital maintenance'.

Please observe that for paying this reward (dividend), we have reduced retained profit fully in the equation-based solution as follows:
'Statement of Profit and Loss' and 'Balance Sheet' of Rohan Software Limited at the end of Period I using the Equation Method

|  |  | Assets |  |  |  |  | Liabilities |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Cash | Receivables | Supplies | Computer | $=$ | Trade Payables | Interest Payable | Loan, <br> Venu |
| 1-Mar; Raising Capital | 5,000,000 |  |  |  | $=$ |  |  |  |
| 2-Mar; Taking a Loan | 2,000,000 |  |  |  | $=$ |  |  | 2,000,000 |
| 3-Mar; Purchasing Machinery | $(5,800,000)$ |  |  | 5,800,000 | $=$ |  |  |  |
| 4-Mar; Supplies on Credit |  |  | 600,000 |  | $=$ | 600,000 |  |  |
| 19-Mar; Maiden Cash Sale | 1,200,000 |  |  |  | $=$ |  |  |  |
| 21-Mar; Repaying Creditors | $(200,000)$ |  |  |  | $=$ | $(200,000)$ |  |  |
| 29-Mar; Monthly salaries paid | $(400,000)$ |  |  |  | = |  |  |  |
| 29-Mar; Monthly rent paid | $(100,000)$ |  |  |  |  |  |  |  |
| 30-Mar; Maiden Credit Sale |  | 800,000 |  |  | = |  |  |  |
| 31-Mar; Rewarding Shareholders | $(300,000)$ |  |  |  | $=$ |  |  |  |
| Cumulative Effect of above | 1,400,000 | 800,000 | 600,000 | 5,800,000 | $=$ | 400,000 | 0 | 2,000,000 |
| Adjustments for Period 1 |  |  |  |  | $=$ |  |  |  |
| Supplies, closing stock adjustment |  |  | $(100,000)$ |  | $=$ |  |  |  |
| Depreciation, computers |  |  |  | $(200,000)$ | $=$ |  |  |  |
| Accured Interest |  |  |  |  | = |  | 40,000 |  |
| Accounting Equation at the end of Period 1 | 1,400,000 | 800,000 | 500,000 | 5,600,000 | $=$ | 400,000 | 40,000 | 2,000,000 |
| Profit and Loss Statement for Period 1 |  |  |  |  |  |  |  |  |
| Balance Sheet at the end of Period 1 |  |  |  |  |  |  |  |  |
|  |  | Assets |  |  | $=$ |  | Liabilities |  |
|  | $\begin{gathered} \text { Cash } \\ 1,400,000 \end{gathered}$ | $\begin{gathered} \text { Receivables } \\ 800,000 \end{gathered}$ | Supplies $500,000$ | Computer 5,600,000 | $\begin{aligned} & = \\ & = \end{aligned}$ | Trade <br> Payable <br> 400,000 | Interest <br> Payable <br> 400,000 | Loan, <br> Venu 2,000,000 |

You can clearly observe that the future economic utility of a computer after one month usage would not remain the same as a new one. Hence, as per matching principle, we should provide for depreciation (in the fixed assets) reflecting the same. In the accounting equation, we have reduced the owners, equity along with the value of the fixed asset by $₹ 2,00,000$. Depreciation represents the periodically utilized proportionate value of a fixed asset into an expense, as the asset is used during normal business operations. Capitalization of the asset has a sole motive, i.e. an effective business operations. Therefore depreciation is considered as an operating expense for the relative expired proportion.


Similarly, we also need to take a stock of the remaining supplies to see if the income statement reflects the actual in and out of the company. Closing Stock of ₹ 500,000 represents the consumption of ₹ 100,000 as ₹ 600,000 denotes the purchase portion and unexpired portion of same is represented as closing stock, and hence, the differential amount being the effective consumption for the related period. A result of this has been reduction a simultaneous reduction in owners' equity by having a supplies expense of ₹ $1,00,000$. Likewise, accrual principle calls for providing for the unpaid interest charges at the rate of $2 \%$ per month on the loans taken. We reduce the owners, equity of RSL by having an interest expense of ₹ 40,000 and concurrently increase its accrued liabilities by having an interest payable of the same amount.

Now, we present RSL's income statement at the end of first period as:
Rohan Software Limited
Profit and Loss Account for the Period $1^{\text {st }}$ to $31^{\text {st }}$ March (all figures in ₹'000)

| Stationery | 600 | Sales Net | 2,000 |
| :--- | ---: | :--- | ---: |
| Rent Expense | 100 | Closing Stock | 500 |
| Salaries Expense | 400 |  |  |
| Depreciation | 200 |  |  |
| Operating Profit | $\mathbf{1 , 2 0 0}$ |  | $\mathbf{2 , 5 0 0}$ |
| TOTAL | $\mathbf{2 , 5 0 0}$ | TOTAL | $\mathbf{1 , 2 0 0}$ |
| Interest Expense | 40 | Operating Profit |  |
| Net Profit | $\mathbf{1 , 1 6 0}$ |  | $\mathbf{1 , 2 0 0}$ |
| TOTAL | $\mathbf{1 , 2 0 0}$ | TOTAL | $\mathbf{1 , 1 6 0}$ |
| Withdrawals (OR Dividends) | $\mathbf{3 0 0}$ | Net Profit |  |
| Retained Earnings to Balance Sheet | $\mathbf{8 6 0}$ |  |  |

After converting the period one transactions into period one report of income statement, (using arrows, $\uparrow$ and $\downarrow$ ) let us see the manner in which the period two transactions shall have an impact on the accounting equation $[\mathrm{A}=\mathrm{L}+\mathrm{OE}$ wherein $\mathrm{OE}=\mathrm{CC}+(\mathrm{R}-\mathrm{E})]$.

| Transactions | Equation (Asset $=$ Liability + Owner's Equity) <br> (OE = Contributed Capital + Revenue - Expenses |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets | Liability | Contributed Capital | Revenue | Expenses |
| Credit Sales to Bata India | $\uparrow$ |  |  | $\uparrow$ |  |
| Credit Sales to Bata India | $\uparrow$ |  |  | $\uparrow$ |  |
| Cash Sales | $\uparrow$ |  |  | $\uparrow$ |  |
| Salaries | $\downarrow$ |  |  |  | $\uparrow$ |
| Rent | $\downarrow$ |  |  |  | $\uparrow$ |
| Closing Stock | $\uparrow$ |  |  | $\uparrow$ |  |
| Depreciation | $\downarrow$ |  |  |  | $\uparrow$ |
| Interest Payable |  | $\uparrow$ |  |  | $\uparrow$ |
| Interest Paid | $\downarrow$ | $\downarrow$ |  |  |  |
| Loan Repaid | $\downarrow$ | $\downarrow$ |  |  |  |

You may find it interesting to compare the solution of period 2 with that given in Chapter 2 which is expressed based on simple balance sheet equation Asset = Liability + Owner's Equity. While comparing, you will be able to identify and explain the logical movements in owner's equity. You shall also be able to determine how the elements function within the equation and yet discriminate between the contributed capital and other changes (including changes due to productive capital). Annexure 3.7 (on the OLC) provides the solution for both the periods at one go using the equation method - and also pictorially interconnects them.

## SUMMARY

In this chapter, we have developed and examined the Profit and Loss Account. This account shows the net profit or earnings generated by the company during an accounting period. This statement, in summary, measures the management's contribution. It shows the income generated from the assets.

The profit and loss account summarizes the revenues and expenses of an accounting period. As a result of this summary, it shows the net profit or net loss earned or suffered by the company during the period. The reader of this account is provided with the cost structure and profitability during the accounting period.

The net profit, after payment of dividends, shows the amount retained and hence, links the balance sheet with the profit and loss account.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this
chapter:

- Accounting period
- Accrual basis
- Amortization
- Bad debt expense
- Cash basis
- Cost
- Cost of goods sold
- Depletion
- Depreciation
- Diminishing balance method
- Expense
- First in first out (FIFO)
- Inventories
- Last in first out (LIFO)
- Matching
- Prepaid Expenses
- Profit
- Profit and loss account
- Profit after tax (PAT)
- Realization
- Revenue
- Straight-line method
- Sum of the year's digit method
- Weighted average cost (WAC)
- Written down value method


## EXERCISES

## Multiple Choice Questions

1. An expense leads to the following effect on the owner's equity.

LO 1 EASY
(a) Increase
(b) Decrease
(c) Constant
(d) None of the above.
2. Discount allowed ₹ 6,000 was wrongly recorded as discount received by Das Brothers. What is the effect on net profit of Das Brothers?

LO 5 MEDIUM
(a) Net profit is understated by ₹ 12,000 .
(b) Net profit is understated by ₹ 6,000 .
(c) Net profit is overstated by ₹ 6,000 .
(d) Net profit is overstated by ₹ 12,000 .
3. The energy internally consumed by NTPC (for powering its own colonies, establishments, etc.) will be reflected in the income statement as
(a) Dividend
(b) Cost of Goods Sold
(c) Income
(d) None of the above
4. If BHEL (erstwhile name, Bharat Heavy Electricals Limited) makes a fixed asset (say, a generator) for using it internally then it can show the cost of making this fixed asset as a: LO 5 MEDIUM
(a) Income statement item - income
(b) Income statement item - expense
(c) Balance sheet item - non-current asset
(d) None of the above
5. Imagine a firm wherein, all costs were incurred in the first half of the year and all revenue earned in the second half? You would see a semi-annual income statement for the first half of the year reflecting a loss. The second half of the year would reflect a profit. In such a case one can say that:

LO 3 DIFFICULT
(a) The income statements are prepared on accrual-basis.
(b) The income statements are prepared on realization-basis.
(c) The income statements are prepared on matching-basis.
(d) The income statements are prepared on cash-basis.

## Fill in the Blanks

1. The Profit and Loss Account is a summary of $\qquad$ and $\qquad$ for an accounting period.

LO 1 EASY
2. Retained Earnings during a period $=$ Revenue $-($ Expenses + $\qquad$ ).

LO 2 EASY
3. The $\qquad$ principle tries to evaluate every transaction in terms of its impact on the owner's equity.

LO 3 EASY
4. Advance received from customers (also known as, Unearned Revenue) would be reflected as ___ part of the Balance Sheet.

LO 4 MEDIUM
5. All costs involved in the goods or services transferred to the customer are recognized as
$\qquad$ .

## Discussion Questions

1. Classify each item listed in column A into (a) Operating Revenue (b) Non-Operating Revenue (c) Cost of goods sold (d) Selling and distribution expense (e) General Administrative expense (f) Appropriation of profit and (g) Financial expense (h) not related to Profit and Loss Account, by appropriately marking them in column B. Assume that the information relates to a small manufacturing firm.

LO 5 MEDIUM

| A B |
| :--- | :---: |
| Raw material consumed |
| Interest received |
| Dividends received |
| Wages paid to manufacturing workers |
| Carriage on goods sold |


| A B |
| :--- |
| Carriage on goods purchased |
| Salary of clerical staff |
| Rent for office |
| Power and fuel |
| Selling agents commission |
| Advertising |
| Auditors fees |
| Sales tax paid |
| Municipal rates on office premises |
| Profit on sale of fixed assets |
| Power used in administrative office |
| Sales discount |
| Purchase returns and allowances |
| Dividends paid |
| Interest expense on loans |

2. Refer to the Chapter Opener on the Nestle India's Profit and Loss Statement. Briefly comment on the stated facts therein. How would that augur for the future of the organization? And for the future of Industry?

LO 1 DIFFICULT
3. Shantanu Real Estate Brokers

The summary financial data for each transaction of the Shantanu Real Estate Brokers are presented below in the equation form. Describe the possible transactions for each entry. LO 2 DIFFICULT
(all figures are in ₹’000)

|  | Cash | + | Accounts Receivable | + | Office Furniture | $=$ | Accounts <br> Payable | + | Shantanu, Capital |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) | 100 |  |  |  |  |  |  |  | 100 |
| (ii) |  |  |  |  | 200 |  |  |  | 200 |
| (iii) | - 50 |  |  |  | + 250 |  | 200 |  |  |
| (iv) | + 600 |  |  |  |  |  |  |  | + 600 |
| (v) | - 100 |  |  |  |  |  | - 100 |  |  |
| (vi) | -200 |  |  |  |  |  |  |  | -200 |
| (vii) |  |  | +200 |  |  |  |  |  | +200 |
| (viii) | +100 |  | +100 |  |  |  |  |  | +200 |
| (ix) | +150 |  | -150 |  |  |  |  |  |  |
| (x) | -200 |  |  |  |  |  |  |  | -200 |
| (xi) | -100 |  |  |  |  |  | -100 |  |  |

4. How is the income summary of the last accounting period connected with the balance sheet of the future accounting periods? Explain, preferably using the balance sheet and income summary equations.

LO 4 DIFFICULT
5. What would be the major differences in the profit and loss account of a manufacturing firm and a trading firm?

LO 8 DIFFICULT

## Numerical Problems

## 1. Abrak Dabra Revisited

This problem is a continuation of Chapter 2, Numerical Problem 2. Please help Shiraz Dhaneshyar in completing the profit and loss statement of T.V. Today Network by filling the following items with figures at the appropriate blanks below: Current tax 416; Deferred tax 2; Depreciation and amortization expense 300; Employee benefits expense 1168; Finance costs 15; Other expenses 1736; Other income 227; Production cost 545; Profit before tax 1229; Profit for the year 811; and Revenue from operations 4766.
T.V. Today Network Limited

Statement of Profit and Loss for the year ended March 31, 2015

| Particulars | Amount in ₹ million |
| :---: | :---: |
| $?$ | $?$ |
| $?$ | $?$ |
| Total revenue | 4993 |
| Expenses: |  |
| $?$ | $?$ |
| $?$ | $?$ |
| $?$ | $?$ |
| $?$ | $?$ |
| Total expenses | $?$ |
| $?$ | $?$ |
| ?ax expenses | $?$ |
| $?$ | $?$ |
|  | $?$ |

Source: BSE India: TV Today Network Ltd Annual Reports, BSE India, Web, 18 Dec, 2015.

## 2. Kochi Oil Mills

Mr. Tanumoorthy was contemplating the acquisition of Kochi Oil Mills. The balance sheet of Kochi Oil Mills as of December 31, 20X0, as supplied to Mr. Tanumoorthy by the current owners, is provided here:

| ASSETS | ₹ ${ }^{\prime} 000$ | ₹ ${ }^{\text {'000 }}$ |
| :---: | :---: | :---: |
| Current Assets: |  |  |
| Cash | 750 |  |
| Accounts receivable | 1,650 |  |
| Inventory | 2,200 |  |
| Prepaid rent and insurance | 160 |  |
| Current assets |  | 4,760 |
| Property, Plant and Machinery |  |  |
| Freehold land |  | 2,100 |
| Plant and equipment | 4,850 |  |
| Less: Accumulated depreciation | 3,200 | 1,650 |
| Goodwill |  | 3,700 |
| Total assets |  | 12,210 |
| Liabilities and Owners' Equity |  |  |
| Current Liabilities: |  |  |
| Accounts payable | 1,350 |  |
| Wages payable | 650 |  |
| Taxes payable | 850 |  |
| Long term loans due within the year | 600 |  |
| Current Liabilities |  | 3,450 |
| Long term loans |  | 5,200 |
| Owner(s) equity |  |  |
| Owner(s) Capital | 1,000 |  |
| Retained earnings | 2,560 | 3,560 |
| Total Liabilities and Owners' Equity |  | 12,210 |

Mr. Tanumoorthy had no training in accounting and, therefore, decided to consult a management consultant. He approached KMG, well-known management consultants in Kochi.
Mr. Gopinath of KMG, who was dealing with this account, had detailed discussions with the accountant of Kochi Oil Mills. He collected the following information with respect to the balance sheet on the basis of the available working notes on the balance sheet and the discussions he had with the accountant.
The information gathered by Mr. Gopinath showed the following:
(a) Included in the computation of the cash balance is an amount of ₹ 14,500 , received against cash sales and payments of $₹ 32,800$, made on account of accounts payable during January 20X1.
(b) Invoices were raised against customers for an amount of ₹28,400 against orders received during December, even though deliveries will be made only during January and February.
(c) Inventory was valued and recorded on the basis of the expected selling price. The cost of the inventory was computed at $₹ 1,985,000$.
(d) Rentals amounting to ₹ 65,000 and insurance premium for 20 X 1 in the amount of ₹ 35,000 , have been paid in advance as of December 31.
(e) Plant and equipment was revalued during December, raising the cost by $₹ 9,24,000$. The accumulated depreciation represents the actual amount accumulated to date.
(f) It was found that goodwill was recorded on the basis of a suggestion made by a public accountant, using a formula. The calculation was made by taking the average rate of return of the coconut oil industry, multiplied by the net assets of the company at the beginning of 20X0 and multiplying this product, by five.
After the above information was collected, Mr. Gopinath had a meeting with his principal and they decided that the first step should be to revise the balance sheet on the basis of the generally accepted accounting principles.
Questions
Prepare a revised balance sheet as Mr. Gopinath would have prepared. Also taken note of the accounting principles involved in every change you make.

## 3. Prime Rubber Industries

(a) The company plans to earn a profit after tax of $₹ 3,850,000$. Income taxes are expected to be $30 \%$ of the earnings.
(b) During the year, shares of the face value of $₹ 2,800,000$ will be issued, at a premium of $100 \%$.
(c) An office block will be purchased at a down payment of ₹ $3,500,000$ by taking on a mortgage, at the rate of 10 percent interest per annum, for the like amount.
(d) Plant and equipment costing $₹ 2,300,000$ will be added to the factory on the basis of deferred payments to be made in 5 equal annual instalments, beginning with the date of acquisition.
(e) Accounts receivable are to be maintained at the level of one month's sales. Inventory stock was expected to be $₹ 50,00,000$ of which $60 \%$ will be raw material. Average credit available will be about 30 days purchases.
(f) It is expected that during the plan period, actual operations may be for 300 days.
(g) Operating expenses projections for the period are as follows: Raw material cost will be $30 \%$ of sales revenue; Wages will be $10 \%$ of sales revenue; other direct manufacturing expenses will be $10 \%$ of sales revenue.
(h) Administrative expenses are projected to be $₹ 25,00,000$. Selling and distribution expenses are projected to ₹ $18,00,000$.
(i) Depreciation of plant and machinery is calculated on the basis of $10 \%$ straight line and buildings, of $2.5 \%$ straight line.

| Prime Rubber Industries <br> Balance Sheet as on December 31, 2X10 |  |  |  | (all figures in ${ }^{\prime}$ '000) |
| :---: | :---: | :---: | :---: | :---: |
|  | Amount |  |  | Amount |
| Assets |  |  | Liabilities and Owners Equity |  |
| Cash |  | 500 | Accounts payable | 1,500 |
| Accounts receivable |  | 3,000 | Bank overdraft | 3,500 |
| RM inventory |  | 3,880 | Current Liabilities | 5,000 |
| FG inventory |  | 1,000 |  |  |
| Prepaid rent and insurance |  | 120 |  |  |
| Current Assets |  | 8,500 |  |  |
| Land |  | 300 | Owner(s) Equity |  |
| Plant and equipment | 1,400 |  | Share capital | 1,000 |
| Less: Accumulated depreciation | 700 | 700 | Share premium | 1,000 |
| Goodwill |  | 1,000 | Retained earnings | 3,500 |
| Total Assets |  | 10,500 | Total Liabilities \& Owners' Equity | 10,500 |

## Question

Based on the above information, prepare a projected income summary for the plan period and a balance sheet as at the end of the plan period.
4. Bong, Harry and Mallu

LO 4, 5, 6 MEDIUM
Bong, Harry and Mallu formed a partnership to carry on the business of an ethnic store in Bangkok. They are to receive equal shares of the profits and can make drawings during a year, not exceeding Baht (B) 20,000 each. They invested an amount of B 3,600,000.
Transactions of the first financial year are as follows:
(a) Delivery vans purchased during the year, B $1,284,000$. These vans are to be depreciated over 5 years, assuming a salvage value of $5 \%$.
(b) Sales are made on 30 days credit and collection losses during the year amounted to $1 \%$ of the sales. Total sales during the year amounted to B 4,800,000 and receivables outstanding, B 600,000 .
(c) Purchases are on 45 days credit and total purchases during the year amounted to B 3,320,800. Payables outstanding at close of the year were B 368,000 .
(d) Inventory of merchandise available at the end of the year was B 256,500. Wages and other operating expenses were B 785,000 . The firm owed B12,890 in wages at the end of the year.
(e) They have signed promissory notes amounting to B 85,000 .
(f) It is expected that $1.5 \%$ of the accounts receivable outstanding may be bad. Drawings by the partners amounted to: B 18,000 by Mallu, B 20,000 by Bong and B 12,800 by Harry.
(g) All cash transactions were carried through the bank with which the firm had entered into an overdraft agreement, having a limit of B $1,200,000$.

## Question

Prepare a profit and loss account for the year and a balance sheet as at the end of the year.
5. Chinku's Mismash Part II

LO 4, 5, 6 MEDIUM
This problem is a continuation of Chapter 2, Numerical Problem 3. Please help Chinku in filling the 'profit and loss statement' and also answering the queries below:

SKS Microfinance Limited Statement of Profit and Loss for the year ended March 31, 2015

| Particulars | Amount in ₹ Million |
| :--- | ---: |
| Income | $?$ |
| Revenue from operations | $\mathbf{? 9 1}$ |
| Other income | $\mathbf{8 , 0 3 1}$ |
| Total revenue (I) |  |
|  |  |
| Expenses: | $\mathbf{2 , 3 1 9}$ |
| Employee benefit expenses | $\mathbf{2 , 7 9 0}$ |
| Finance costs | $\mathbf{8 4 0}$ |
| Other expenses | $\mathbf{?}$ |
| Depreciation and amortization expenses | $\mathbf{?}$ |
| Provisions and write-offs | $\mathbf{1 , 9 3 4}$ |
| Total expenses (II) | $\mathbf{?}$ |
|  | $\mathbf{?}$ |
| Profit before tax (III) = (I) - (II) | $\mathbf{1 , 8 7 7}$ |
| Tax expenses | ? |
| Currrent tax (MAT) |  |
| Excess provision for tax relating to earlier years (net) |  |
| Total tax expense (IV) | (IV) |
| Profit after tax (III) - |  |
| Sore\| |  |

Source: BSE India: SKS Microfinance Limited Annual Reports, BSE India, Web, 18 Dec, 2015.

## Questions

(a) Fill the blank figures (marked '?' in the table above).
(b) What is the biggest expense for this organization? Does it connect with the biggest liability for this organization (mentioned in Chapter 2)? Does it indicate anything specific about the business model?
(c) Give examples of items in "Other expenses" and "Other income" for SKS Microfinance?
(d) It was known that in FY2015, the earnings per equity share of SKS Microfinance was ₹15.22. Chinku wanted to know the approximate unit of equity shares for SKS Microfinance (in its share capital) during FY 2015?

## MINI CASES

## Case 3.1 Koya's Kabs - Part II

LO 4, 5, 6 EASY

This case is in continuation of the Mini Case 1.5 of Chapter 1. Using the figures presented there in, please make relevant assumptions and prepare the profit and loss account of Koya's new business.

## Case 3.2 Income Statements of Four Different Companies

LO 1, 5 EASY
This case is in continuation of Mini Case 2.4 of Chapter 2. You are given profit and loss accounts of same four companies for two consecutive years. Compare the summarized profit and loss accounts of the four companies available to you and explain the nature of income, and expenses, with their similarities and dissimilarities. Also, comment on the significant changes in the individual items in the recent year.

## Profit and Loss -1

| INFOSYS TECHNOLOGIES LTD. <br> Consolidated Statement of Profit and Loss |  |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { Year Ended } \\ \text { March 31, } 2015 \end{gathered}$ | $\begin{gathered} \text { Year Ended } \\ \text { March 31, } 2014 \end{gathered}$ |
| Income |  |  |
| Income from software services | 51,666 | 48,305 |
| Income from software products | 1,653 | 1,828 |
| Income from software services and products | 53,319 | 50,133 |
| Income received on deposits with banks and others | 2,734 | 2,226 |
| Other items of 'other income' | 696 | 438 |
| Other Income | 3,430 | 2,664 |
| Total Revenue | 56,749 | 52,797 |
| Expenses |  |  |
| Employee benefit expenses | 29,802 | 28,831 |
| Cost of technical subcontractors | 2,171 | 1,951 |
| Travel expenses | 1,818 | 1,697 |
| Cost of software packages and others | 1,044 | 982 |
| Communication expenses | 495 | 440 |
| Professional charges | 421 | 504 |
| Depreciation and amortization expenses | 1,017 | 1,317 |
| Other expenses | 2,697 | 2,347 |
| Total Expenses | 39,465 | 38,069 |
| Profit before tax | 17,284 | 14,728 |
| Tax expense |  |  |
| Current tax | 4,835 | 4,308 |
| Deferred tax | 76 | (236) |
| Profit for the Year | 12,373 | 10,656 |

## Profit and Loss-2

## RAYMOND LIMITED

Consolidated Statement of Profit and Loss
(all figures are in ₹ crore)

|  | Year Ended March 31, 2015 | Year Ended <br> March 31, 2014 |
| :---: | :---: | :---: |
| Income |  |  |
| Revenue from operations (gross) | 5,374 | 4,593 |
| Sale of products | 4,739 | 3,903 |
| Sale of services | 53 | 58 |
| Other operating revenues | 87 | 86 |
| Share in joint ventures | 495 | 546 |
| Less: Excise duty | (41) | (46) |
| Revenue from operations (net) (1) | 5,333 | 4,547 |
| Interest income | 28 | 11 |
| Net gain on sale of investments | 17 | 29 |
| Provision no longer required | 12 | 7 |
| Share in joint ventures | 6 | 6 |
| Other items of 'Other Income' | 32 | 19 |
| Other income (II) | 95 | 72 |
| Total revenue (III) = ( $\mathrm{I}+\mathrm{II}$ ) | 5,428 | 4,620 |
| Expenses |  |  |
| Cost of materials consumed | 1,264 | 1,231 |
| Purchases of stock in trade | 1,071 | 566 |
| Consumption of store and spare parts | 238 | 216 |
| Power and fuel | 216 | 210 |
| Other manufacturing and operating expenses | 392 | 404 |
| Employee benefit expenses | 663 | 554 |
| Finance costs | 200 | 197 |
| Depreciation and amortization expenses | 162 | 195 |
| Other expenses | 1,062 | 887 |
| Total Expenses (IV) | 5,268 | 4,460 |
| Profit before exception items and tax (V) = (III) - (IV) | 160 | 160 |
| Exceptional items (VI) |  |  |
| VRS/Termination payments | (3) | (11) |
| Impairment of gas based captive power plant for previous years | - | (21) |
| Other Exceptional Items | 3 | (3) |
| Profit before tax (VII) $=(\mathrm{V})-(\mathrm{VI})$ | 159 | 125 |
| Tax expense (VIII) |  |  |
| Current tax | 45 | 36 |
| Deferred tax | (2) | (7) |
| Profit for the Year (IX) = (VII) - (VIII) | 116 | 95 |

[^12]
## Profit and Loss-3



Note: There could be minor rounding off errors.

## Profit and Loss-4

COLGATE-PALMOLIVE (INDIA) LIMITED
Consolidated Statement of Profit and Loss
(all figures are in ₹ crore)

|  | Year Ended <br> March 31, 2015 | Year Ended <br> March 31, 2014 |
| :--- | ---: | ---: |
| Income |  |  |
| Revenue from operations (gross) | 4,238 | 3,791 |
| Less: Excise duty | 256 | 212 |
| Revenue from operations (net) (I) | $\mathbf{3 , 9 8 2}$ | $\mathbf{3 , 5 7 9}$ |
| Other income (II) | $\mathbf{3 3}$ | $\mathbf{5 0}$ |
| Total revenue (III) = (I + II) | $\mathbf{4 , 0 1 5}$ | $\mathbf{3 , 6 2 9}$ |
| Expenses |  |  |
| Cost of materials consumed | 1,170 | 1,103 |
| Purchases of stock in trade | 298 | 299 |
| Freight and forwarding charges | 137 | 119 |
| Advertising | 418 | 441 |
| Sales promotion | 295 | 246 |


| Royalty | 221 | 194 |
| :---: | :---: | :---: |
| Employee benefit expenses | 259 | 212 |
| Finance costs | - | - |
| Depreciation and amortization expenses | 75 | 51 |
| Other expenses | 362 | 300 |
| Total Expenses (IV) | 3,235 | 2,965 |
| Profit before Exceptional items tax (V) = (III) - (IV) | 780 | 664 |
| Exceptional items (VI) | - | 64 |
| Profit before tax (VII) $=(\mathrm{V})+(\mathrm{VI})$ | 780 | 728 |
| Tax expense (VIII) |  |  |
| Current tax | 201 | 183 |
| Deferred tax | 20 | 5 |
| Profit for the Year (IX) = (VII) - (VIIII) | 559 | 540 |

Note: There could be minor rounding off errors

## Case 3.3 'Rajat Jain and IIM Premier League' - Part II

LO 5 EASY
This case is in continuation of the Mini Case 2.2 of Chapter 2. It included 10 companies listed on the Bombay Stock Exchange from different sectors - Aditya Birla Nuvo; Chowgule Steamships; Educomp Solutions; Hindustan Unilever; MMTC; Noida Toll Bridge Co.; NTPC; SKS Microfinance; Tech Mahindra; and Zee Entertainment Enterprises. These firms had different sizes and came from different stages of growth.

This part of the quiz involves identifying two main items in the income statement from their latest financial year other than 'revenue from operations/sales' from the list of items prescribed in the Schedule III of the Companies Act 2013 (for example, the categories would include items as "Cost of materials consumed', 'Deferred tax expense', 'Employee benefits expense', and 'Finance costs').

## Case 3.4 Kanchan Polymers

LO 1, 4, 5 EASY
This case is based on your Birth Day (say, PQ) and Birth Month (say, RS). You are starting a firm with a capital equal to PQRS $+\mathbf{1}$ crore. Suppose, you are having a date of birth as per official records as 01-01-1979 then in your case the capital of your firm would be 101 plus 1 crore $=₹ 102$ crore (as PQRS would be 0101). Similarly, suppose your date of birth is 20-10-2015 then in your case the capital would be $₹ 2,011$ crore (being $2010+1$ ).

## Transactions:

(i) Day 1: You start a firm named 'Kanchan Polymers Limited' with a capital of ₹ $(\mathrm{PQRS}+1)$ crores.
(ii) Day 1: You buy machinery worth ₹ PQRS crore from Raj Machineries Limited. Half of the amount is paid on the same day. Rest half of the payment would be done by the end of the month.
(iii) You take an interest free loan from a friend of a size equal to twice the capital of the firm.
(iv) The firm makes credit sales of ₹ 1,000 crore during the year. The end of the year trade receivables balance is $₹ 100$ crores. It is expected that $10 \%$ of the same would turn out to be bad debt.
(v) Marketing and distribution expenses for the year are ₹ 10 crore. Salaries for the year stand at ₹ 5 crore. Electricity and other charges for the year are at ₹ 10 crore. All these expenses are paid and no dues remain at the end of the year.
(vi) The firm makes cash purchases of raw materials worth ₹ 100 crore. The firm makes credit purchases of ₹ 100 crore. The yearend payables balance remained at ₹ 28 crore.
(vii) End of the year survey reveals a raw material inventory of ₹ 1 crore. No other inventory exists for the firm.
(viii) The machinery is to be depreciated on a written down value basis @ $20 \%$ per annum. Corporate income tax rate is applicable at the rate of $35 \%$. Fringe benefit tax is estimated to be ₹ 1 crore. Taxes are not yet paid by the firm and provision for the same has to be made.
You are required to prepare Kanchan Polymer balance sheet and income statement at the end of first year and answer the following questions:
(a) The Cash and Bank Balances are equal to: ₹ $\qquad$
(b) The Retained Earnings are equal to: ₹
(c) The Total Assets would be equal to: ₹ $\qquad$
(d) The Gross Profit would be equal to: ₹ $\qquad$
(e) The Current Liabilities and provisions would be equal to: ₹

## Case 3.5 Financial Health of CNBC India - Part II

This case is in continuation of Mini Case 2.5 of Chapter 2, on Television Eighteen India Limited, which runs the popular private television channel 'CNBC India'. We reproduce the profit and loss account of Television Eighteen India Limited for two consecutive years (financial years 2009 and 2010) with specific learning agenda. Based on the same comment, please answer the following:
I. Please note that the income statement format of reporting uses the earlier Schedule VI of the Companies Act 1956. It has significant differences from the presentation prescribed by the new Companies Act 2013, and followed by all the recent financial statements. What are the significantly visible differences? Please list them down. Discuss the possible reasons behind the same.
II. If the investments have increased significantly compared to previous years (as seen in the balance sheet), how can the "other income" be less than half of the previous year's amount?
III. What is Prior Period Adjustment? Give examples of the same.
IV. What is the important reason for the company seeing a decrease in its financial profits in the year 2010, as compared to the year 2009? Discuss the other big changes that had happened in the companies' income statement during the financial year 2010?
V. Would you change your previous opinion on the financial health of the company (based on Chapter 2, Mini Case 2.5)? Discuss.

Television Eighteen India Limited
Consolidated Profit and Loss Account for the Year ended 31 March, 2010

|  | Year ended 31.3.2010 <br> $(₹$ million $)$ | Year ended 31.3.2009 <br> (₹ million) |
| :--- | ---: | :---: |
| INCOME |  |  |
| Income from operations | 5198.09 | 4848.96 |
| Other income | 767.36 | 1112.46 |
|  | 5965.45 | 5961.42 |
| EXPENDITURE |  | 305.68 |
| Materials consumed | 263.64 | 3904.47 |
| Production, administrative and other costs | 3396.53 |  |

(contd.)

| Personnel expenses | 1695.88 | 1927.72 |
| :--- | ---: | ---: |
| Interest and financial charges | 1231.98 | 1091.05 |
| Interest for acquisition of long-term investments | - | 98.66 |
| Depreciation | 486.26 | 481.35 |
| Prior period adjustments | 5.50 | 16.98 |
|  | $\mathbf{7 0 7 9 . 7 9}$ | $\mathbf{7 8 2 5 . 9 1}$ |
| Profit before tax | $\mathbf{( 1 1 1 4 . 3 4 )}$ | $\mathbf{( 1 8 6 4 . 4 9 )}$ |
| Provision for taxes after adjusting write back | $\mathbf{( 6 8 . 3 9 )}$ | 86.27 |
| Profit after tax | $\mathbf{( 1 1 8 2 . 7 3 )}$ | $\mathbf{( 1 7 7 8 . 2 2 )}$ |

## Case 3.6 Ram Traders: Income Statement

Lo 5, 6 MEDIUM

This case is in continuation of Mini Case 2.6 of Chapter 2, on Ram Traders Limited and his chilli business. The problem has a few transactions mentioned for a complete month. Assume a corporate income tax rate of $35 \%$ and prepare an income statement of the organization.

Please fill the below table:
Ram Traders Profit and Loss Account for the Period $1^{\text {st }}$ to $30^{\text {th }}$ June
(all figures in ₹)

| Horizontal Format |  |  |  |
| :--- | :--- | :--- | :--- |
| Cost of Goods Sold | $\boldsymbol{?}$ | Sales Net | $\boldsymbol{?}$ |
| Gross Profit | $\boldsymbol{?}$ | Other Income | $\boldsymbol{?}$ |
| Depreciation Expense | $\boldsymbol{?}$ | Gross Profit | $\boldsymbol{?}$ |
| Other Operating Expense | $\boldsymbol{?}$ |  |  |
| Operating Profit | $\boldsymbol{?}$ |  | $?$ |
| Interest Expense | $\boldsymbol{?}$ | Operating Profit |  |
| Profit Before Tax | $\boldsymbol{?}$ |  | $?$ |
| Income Tax Provision | $\boldsymbol{?}$ | Profit Before Tax |  |
| Net Profit After Tax | $\boldsymbol{?}$ |  | $?$ |
| Withdrawals (or Dividends) | $\boldsymbol{?}$ | Profit After Tax |  |
| Retained Earnings | $\boldsymbol{?}$ |  |  |

## Case 3.7 Financial Technologies: Building the Empire to Lose

LO 1, 4, 5 DIFFICULT
Financial Technologies Limited was promoted in 1988 by a first generation entrepreneur named Jignesh Shah. The firm and its arms (commonly known as FT group) went on to become a global leader in offering technology and domain expertise to create and trade on next-generation financial markets, across all asset classes including equities, commodities and currencies among others. FT had a market value of over ₹ 15,000 crore in FY2012.

Given below are the two standalone financial statements, i.e., profit and loss account and balance sheet of Financial Technologies (India) Ltd, for the period FY2002-09. Please go through them and answer the questions.

Financial Technologies Limited
Profit and Loss Statement
(all amounts in ₹ million)

(contd.)

| Shared business support service | 211 |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :--- | :--- |
| IT Infrastructure sharing income | 9 |  |  |  |  |  |  |  |
| Gain on extinguishment of debt | 115 |  |  |  |  |  |  |  |
| Profit on sale of investments: |  |  |  |  |  |  |  |  |
| Long-term investments |  | 3468 | 7 | 0 | 6 |  |  |  |
| Current investments | 2203 | 7742 | 21 | 8 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Exchange rate fluctuations | 513 | 280 | 60 |  |  |  |  |  |
| Miscellaneous income | 5 | 12 | 1 | 10 | 20 | 20 | 1 | 1 |
| Total | $\mathbf{3 7 1 8}$ | $\mathbf{1 2 0 9 9}$ | $\mathbf{7 5 3}$ | $\mathbf{6 4}$ | $\mathbf{3 3}$ | $\mathbf{2 3}$ | $\mathbf{7}$ | $\mathbf{4 2}$ |

Financial Technologies Limited Balance Sheet
(all amounts in ₹ million)

| Financial Year $\rightarrow$ Balance Sheet Item $\downarrow$ | 31/03/2009 | 2008 | 2007 | 2006 | 2005 | 2004 | 2003 | 2002 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sources of Funds |  |  |  |  |  |  |  |  |
| Shareholders' Fund |  |  |  |  |  |  |  |  |
| Share Capital | 92 | 92 | 88 | 88 | 88 | 82 | 75 | 255 |
| Reserves \& Surplus | 17405 | 14602 | 1899 | 1422 | 1299 | 479 | 149 | 150 |
| Loan Funds |  |  |  |  |  |  |  |  |
| Zero Coupon Convertible Bonds | 4611 | 3994 | 4344 | - | - | - | - | - |
| Secured Loan |  |  |  |  |  |  | 17 | 2 |
| Deferred Tax Liability (Net) | 167 | - | - | - | 1 | - | - | 22 |
|  | 22275 | 18688 | 6331 | 1510 | 1388 | 561 | 241 | 429 |
| Application of Funds |  |  |  |  |  |  |  |  |
| Fixed Assets |  |  |  |  |  |  |  |  |
| Gross Block | 678 | 458 | 232 | 129 | 99 | 89 | 90 | 264 |
| Less: Depreciation/Amortisation | 146 | 77 | 59 | 45 | 35 | 35 | 27 | 55 |
| Net Block | 532 | 381 | 173 | 84 | 64 | 54 | 63 | 209 |
| Capital Work in progress | 2309 | 1692 | 517 | 8 | - | - | - | 1 |
| Investments | 14445 | 13743 | 4144 | 1603 | 1232 | 466 | 111 | 132 |
| Deferred Tax Assets (Net) | - | 11 | 9 | 13 | - | - | - | - |
| Foreign Currency Monetary Item Translation Difference | 353 | - | - | - | - | - | - | - |
| Current Assets, Loans \& Advances |  |  |  |  |  |  |  |  |

(contd.)

| Sundry Debtors | 840 | 190 | 264 | 68 | 49 | 27 | 49 | 16 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Cash \& Bank Balances | 4407 | 3502 | 1815 | 97 | 100 | 12 | 6 | 14 |
| Other Current Assets | 105 | 20 | - | - |  |  |  |  |
| Loans \& Advances | 1086 | 416 | 155 | 131 | 80 | 50 | 40 | 35 |
|  | 6438 | 4128 | 2234 | 296 | 229 | 89 | 95 | 65 |
| Less: Current Liabilities \& |  |  |  |  |  |  |  |  |
| Provisions |  |  |  |  |  |  |  |  |
| Current Liabilities | 734 | 601 | 492 | 192 | 61 | 23 | 26 | 40 |
| Provisions | 1068 | 666 | 254 | 302 | 76 | 25 | 11 | 11 |
| Net Current assets | 4636 | 2861 | 1488 | -198 | 92 | 41 | 58 | 14 |
| Miscellaneous Expenditure | - | - | - | - | - | - | - | 2 |
| Profit and Loss A/c | - | - | - | - | - | - | 9 | 72 |
| Total | 22275 | 18688 | 6331 | 1510 | 1388 | 561 | 241 | 429 |

Financial Technologies Limited Some Details of Sales and Reserves \& Surplus
(all amounts in ₹ million)

| Sales (Break up) | $\mathbf{3 1 / 0 3 / 2 0 0 9}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 2}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Products (IPR Based-License) | 825 | 940 | 712 | 542 | 276 | 121 | 99 | 49 |
| Services (Project Based) | 2457 | 433 | 282 | 357 | 26 | 133 | 40 | 14 |
| Sale of Goods (Trading) | 113 | 59 | 29 | - | - | - | - | - |
| Less: Excise Duty | 52 | 56 | 35 | - | - | - | - | - |
|  | 3343 | 1376 | 988 | 899 | 302 | 254 | 139 | 63 |
| Reserves \& Surplus (Break up) |  | $\mathbf{3 1 / 0 3 / 0 8}$ | $\mathbf{3 1 / 0 3 / 0 7}$ | $\mathbf{3 1 / 0 3 / 0 6}$ |  |  |  |  |
| Capital Reserve | 15 | 15 | 15 |  |  |  |  |  |
| Securities Premium Account | 5148 | 986 | 1102 |  |  |  |  |  |
| General Reserve | 1125 | 156 | 57 |  |  |  |  |  |
| Foreign Currency Translation Reserve | -1 | -1 | 0 |  |  |  |  |  |
| Profit and Loss Account | 8315 | 743 | 248 |  |  |  |  |  |
| Total | 14602 | 1899 | 1422 |  |  |  |  |  |

## Case Questions

1. What are the major changes in the financial statements between FY2002 and FY2009? (say, the major portions of assets in FY2002 and after) Discuss.
2. Do the financial statements clearly cover the main business of the company? Discuss
3. Can FT use its Reserves \& Surpluses to distribute dividends to the shareholders? If yes, to what extent?
4. Comment on the item "other income" and its changes during the period?
5. In 2013, India's commodity markets regulator, the Forward Markets Commission (FMC), declared that FT was "not fit and proper" to run few of its arms such as regulated exchange like MCX, after one of its arms, the National Spot Exchange Limited (NSEL) defaulted in trade settlements in August 2013. In fact, this scam is one of the largest in India's financial market history with over 13,000 investors being duped of a whopping ₹ 5,690 crore. ${ }^{3}$ The move resulted in FT's market value falling to less than ₹ 1,000 crore. What could be the reason for such a fall? What items in the FT's income statement get negatively influenced by such regulatory restrictions? Give reasons for your response.
6. How can the 'accounting regulators' including ICAI take steps to ensure that investors of FT do not get hurt?

## Case 3.8 Fashion Clothing Company

LO 1, 4, 6 DIFFICULT

Mr. Silkwallah established the Fashion Clothing Company (FCC) to market designer clothes. The business was to get designer clothes produced by tailors, exclusively for FCC.

FCC provides the following information for the year ended as at March 31, 2015:

| Sales | (all figures in ₹’000) |
| :--- | ---: |
| Cash in hand | 7,900 |
| Sales discount allowed | 800 |
| Marketable securities at cost (market value 1200) | 300 |
| Purchases | 1,000 |
| Accounts receivable | 4,850 |
| Wages | 1,950 |
| Land at cost | 1,700 |
| Advertising expense | 3,000 |
| Building and fixtures at cost | 100 |
| Supplies consumed | 4,000 |
| Insurance expense | 55 |
| Accumulated depreciation | 60,550 |
| Rent expense | 130 |
| Interest expense | 30 |
| Interest income | 15 |
| Other general expense | 35 |
| Income tax expense (payable) | 1,810 |
| Accounts payable | 6,440 |
| Notes payable (payable in equal annual installments over next five years) | 605 |
| Capital as of 01 April 2014 | 685 |
| Merchandise inventory as of 01 April 2014 |  |
| Merchandise inventory as of 31 March 2015 |  |

[^13]On 1 April 2015, FCC engaged Ms Kaptawallah as a new design manager, at a monthly salary of $₹ 45,000$, and at her instance, introduced several new designs. FCC purchased ₹ $1,20,000$ worth of new designs, during the quarter beginning April 2015, from a design agency. After Ms Kaptawallah joined FCC, they decided to go in for the manufacture of designer apparel.

FCC obtained a long-term loan of $₹ 30,00,000$ from Small Industries Finance Corporation and a working capital accommodation from the State Bank, in the form of an overdraft limit of $70 \%$ of the current assets, against their hypothecation.

During the quarter ending 30 June 2015, the following transactions were carried out by FCC:

- Purchased modern machinery and equipment, including cutting, stitching and finishing machines, at a cost of $₹ 1,20,00,000$, paying $₹ 20,00,000$ down and balance in notes payable to be paid in equal annual installments over the next five years.

| Transactions during the quarter ended June 30, 2015 | (in ₹'000) |
| :--- | ---: |
| Purchase of materials for cash | 2,200 |
| Accounts payable paid | 3,400 |
| Cash sales | $\mathbf{1 2 , 2 0 0}$ |
| Credit sales | 7,000 |
| Wages | 2,400 |
| Supplies purchased | 6,800 |
| Electricity and fuel | 85 |
| Advertising | 250 |
| Five-year insurance cover purchased | 600 |
| Additions to buildings | 5,000 |
| General expenses | 65 |
| General expenses payable | 13 |
| Tax paid in advance | 960 |

On 31 May 2015, Mr. Silkwallah, owner of FCC, married Ms Kaptawallah and she was admitted as a partner in FCC with a $50 \%$ share of profits. She brought in ₹ $50,00,000$ towards the capital of FCC.

Dresses worth $₹ 250,000$ at list price, were given to Ms Kaptawallah as gifts at the time of marriage, from the business inventory. However, this was not included as sales during the year. All the marketable securities were sold during the quarter for ₹ $1,200,000$.

As on 30 June 2015: accounts receivable stood at ₹ $13,50,000$; accounts payable stood at ₹ $8,50,000$; finished goods inventory at ₹ $8,35,000$; Inventory of materials at ₹ 40,000 ; supplies at ₹ $18,00,000$; work in progress at ₹ $9,85,000$.

Wages paid during the first quarter, ending 30 June 2015, included ₹ $1,00,000$ paid as advance to the workers. The advance will be repaid during the next quarter.

Buildings and fixtures are depreciated at the rate of $2.5 \%$ per annum on a straight-line basis; while machinery and equipment is depreciated at the rate of $25 \%$ per annum on a written down value basis. Cost of designs is expired during the year of acquisition.

The tax rate applicable to the business is $40 \%$ of net profit.
A long-term loan was obtained on 1 April 2015, and it carries an interest of $12 \%$ per annum, to be paid during the first quarter of the next fiscal year. Overdraft carries an interest of $15 \%$ per annum, charged on the average of high and low balances during the quarter, for the whole year.

## Case Questions

1. Prepare a profit and loss account for the periods ending 31 March 2015, and 30 June 2015 and the balance sheets as of those dates.
2. Comment on the performance of the business.
3. Comment on Ms Kaptawallah's decision to invest in the business.

## INTERNET ASSIGNMENTS

## Assignment 3.1 Statement of Profit and Loss in Annual Reports

On the OLC of this book we have provided annual reports on the following seven companies, listed on the Bombay Stock Exchange:

1. IVRCL Limited (Size: Medium; Key Sector: Infrastructure Constructions \& Contracting)
2. ITC Limited (Size: Large; Key Sector: Fast Moving Consumer Goods)
3. Linc Pen and Plastics Limited (Size: Small; Key Sector: Printing \& Stationary)
4. PTC India Limited (Size: Medium; Key Sector: Trading)
5. Raymond Limited (Size: Medium; Key Sector: Textiles-Woolen \& Worsted)
6. Tanla Solutions Limited (Size: Small; Key Sector: IT Software)
7. Torrent Power Limited (Size: Large; Key Sector: Power Generation \& Distribution)

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor, we have uploaded sample worked out assignments on the Online Learning Centre.

Your third assignment would be to answer the following two questions:

1. Please state the summarized income statement equation for the last two years from the latest given company annual report. Please comment (within 50 words).
2. Mention five biggest items as part of the income and expenses/ dividends (along with their proportions) as mentioned in the annual report. Please comment (within 50 words).

## Answers

## Answers to the "Let's Check Our Concepts!"

(a) True
(b) False
(c) False
(d) True
(e) True
(f) False
(g) False
(h) True
(i) True
(j) True
(k) True
(l) True
(m) False
(n) True

## Answers to Activity 3

Note: While there can be multiple answers in the 'match the following', we are providing the most appropriate matches herein:
(a) 7
(b) 5
(c) 4
(d) 2
(e) 3
(f) 6
(g) 1

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 3.1: Accounting Periods in India
- Annexure 3.2: Other Methods of Depreciation
- Annexure 3.3: More on Sales and Its Discounts
- Annexure 3.4: Another Real Case: Profit \& Loss Account of Reliance Industries Limited
- Annexure 3.5: More on Inventory Valuation Methods
- Annexure 3.6: Linking Income Statement with Balance Sheets: Case of Hindustan Unilever and Tata Steel Limited
- Annexure 3.7: 'Statement of Profit and Loss' and 'Balance Sheet' of Rohan Software Limited at the end of Period I \& II using the Equation Method
- Annexure 3.8: Additional Reading Material
- Annexure 3.9: Auxiliary Test Material
- Annexure 3.10: Sample Assignment Reports

Cash Flow Statement

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Know what a cash flow statement is
LO 2 Identify the importance of cash flow statements
LO 3 Prepare a cash flow statement using direct method
LO 4 Determine the role of working capital in the operations of a business
LO 5 Prepare a cash flow statement using indirect method
LO 6 Understand accounting standards on cash flow statement
LO 7 Use the cash flow statement as an analytical tool

In FY2015, HDFC Bank had to Borrow to Maintain Cash
Incorporated in 1994, HDFC Bank Limited is the largest bank in India with market capitalization approximately $₹ 2.7$ trillion. In fact, in January 2016, it created a huge news. The stock market value of HDFC Bank was more than that of all the 20 nationalized banks put together. The bank's Managing Director has held his position since 1994, giving a signal on prime constituent behind the banks amazing growth and success. We present some financials from its 2015 annual report:

| Financial Items of HDFC Bank | Amount in ₹ Billion |
| :--- | :--- |
| Total income from operations, etc. | 602 |
| Net profit / (loss) for the Period | 107 |
| Net cash flow from operating activities | (212) |


| Net cash used in investing activities | (8) |
| :--- | :--- |
| Proceeds from issue of shares | 97 |
| Increase in borrowings | 98 |
| Net increase (decrease) in cash and cash equivalents | $(34)$ |

While, HDFC Bank might be the largest bank in India - but the above numbers do not seem to be in sync with the write up there. In fact the numbers show a scary picture. They create chaos and raise a lot of questions for a first time reader of financial information, such as:

- How can a company make profit but still need to dip its hands into its cash balance?
- How can a company having a huge negative net cash flow from operating activities still make a profit?
- Where was the need for such a giant organization to raise equity and borrowings to fund its negative cash flow from operating activities?
■ Why is the net cash used in investing activities so low?
- What could be the reason behind investors still willing to value this company so highly?
- Is this not contradictory to the popular adage that 'cash is not king but also strategic'?

In sum, we conclude that the discussion above on HDFC Bank makes us fathom about the need to understand the statement of cash flow better. Our discussion in this chapter provides a few pointers to the above questions.

Source: HDFC Bank Financial Information, HDFC Bank, Web, 8 Jan. 2016.

In business Cash is referred to as the trump card for any business entity. Employees, suppliers, investors all need to be paid lest a business operation will come to a halt. Cash is just like the oil in the machine of a business, and a Cash Flow Statement is the just like the cash summary of the machine, wherein all the cash inflows and outflows in a business over a period of time are stated, registering how much cash is available in a business to keep the business running.

Before we move on to have a discussion on the Cash Flow Statement, let us have a look at the following interesting news.

On a fine day, all European pink papers and dailies had a screaming headline "Online retailer Boo.com bites the dust". This was one of the biggest e-tailing failures to hit Europe. Cash flow problems were the stated reasons for the mishap. Losses kept on mounting in spite of rising sales. The company filed for bankruptcy, when it failed to raise another round of funding. A classic liquidity trap!

Most dotcom start-ups in gung-ho days (1999-2000) assumed that venture capitalists, angels, banks and others, would continue to bankroll losses in the name of building the business. The problems came, when the cash tap dried. A parallel pattern is visible in the mobile-application space with startups during period 2014-15 assuming that some angel investor or venture capitalist would fund them for some more time.

The question is, why did the taps dry? What had happened in the financial system that made investors wary? The answer is - any finance student will tell you that Cash Flow is the way to value. And unfortunately this never happened for Boo.com.

## What do we see above?

In the above case, we observe that a cash crunch has led to business failure. Another interesting thing to observe is the fact that there appeared to be no real issues regarding the sales or the future prospects of the company. The crux of the problem lies in the handling of the cash flow by the management of these types of companies. Thus, if you believe that cash flow management cannot significantly alter the financial position of a firm, then you're grossly mistaken. Nonetheless do not worry as you are in elite company. Many of the top managers too tend to make the same mistake (initially!) - to quickly learn, unlike the above case.
"Cash" is the lifeblood of any company. Hence, the efficient management of cash flow becomes imperative for all concerns. Apart from ensuring liquidity, adept cash flow management can also play a role in the profitability of a company. In order to better manage the funds and cash, as stated at the start of the chapter, companies rely on their "Cash Flow Statement". As the name says, it gives us the position and flow of the cash inside a company. ${ }^{1}$

### 4.1 CONCEPT OF ‘STATEMENT OF CASH FLOW’

## Know what a cash flow statement is

Originally (from 1971 onwards), businesses were required to file their funds flow statements (see Annexure 4.1 on the Online Learning Center i.e., OLC for more information). In 1987, in an effort to help investors better understand the financial position of a business entity, the accounting boards across the globe progressively moved towards a common statement format, known as "Statement of Cash Flow". In India, the Indian Accounting Standard 7 "Statement of cash flows", issued by the ICAI, guides the preparation of cash flow statements. We learn more about it in the following paragraph.

A statement that presents the flow of cash to and from an organization, due to various transactions, in a given accounting period, is known as the cash flow statement. This information summary on the varied type of cash flow transactions is segregated under three activities: operating, investing and financing. The sum of these activities reflects in the net change in the cash position of the entity. Table 4.1 captures the above discussion figuratively.

Table 4.1 Three Activities of a Cash Flow Statement

|  | Amount |
| :--- | :--- |
| (A) Cash flows from operating activities | XXXX |
| (B) Cash flows from investing activities | XXXX |
| (C) Cash flows from financing activities | XXXX |
| Net increase (decrease) in cash and cash equivalents (A + B + C) | XXXX |
| Add: Cash and cash equivalents at the beginning | XXXX |
| $=$ Cash and cash equivalents at the end | XXXXX |

Operating activities are the prime sources of revenue and expenditure in an enterprise. Thus, the simplest examples would be: cash received from customers (a cash inflow) and cash payments to

[^14]suppliers and vendors (a cash outflow). Instances of operating activities involving a cash inflow would also include receiving cash payments by disposing inventories; receiving tax refund from the government, receipt of trading commission, and receiving advance from customers. Instances of cash outflow would include making cash payments for prepaid expenses, making cash payments to tax authorities, making cash payments for office administrative purposes, making cash payments of sales commission, and cash payments of employee benefits. Please note that all these actions are due to the operations of the entity. Given the ascertainment of cash flows from operating activities needs special attention - we shall revisit and discuss on this in Section 4.6 further.

Investing activities include all activities that have to do with non-operations and done with a purpose of investment, i.e., having a future perspective. Thus, illustrations of this would include cash outflows involving purchases of non-current assets such as plant \& machinery and long-term investments; and cash inflows would involve instances as proceeds on the sale of non-current assets such as disposal of real estate and sale of non-current investments.

Financing activities include all activities that have to do with financing the organization such as proceeds on the issue of equity/preference shares and loans/debentures; and the redemption of redeemable preference shares and loan/debentures. Accordingly, examples of financing activities would include issues of new debentures (cash inflow) and payment of dividend (cash outflow).

Please note that, in a cash flow statement, by cash we mean both cash and its equivalents (see Table 4.1) such as highly liquid investments that are readily convertible into known amount of cash (such as bank demand deposits). The objective is to provide information on the changes during an accounting period, in cash and cash equivalents' and to classify the cash flows under three standard headings, namely, operating activities, investing activities, and financing activities. A corollary of the above would be: a cash flow statement would capture the perspective gains from a cash-based accounting hybridized further by the segregation into the three essential business activities.

## Let's Check Our Concepts!

## Match the following columns:

| Cash Flow Type |  | Examples of Activities |
| :--- | :--- | :--- |
| (a) Cash out from investing activities | 1. | Payments of income taxes and accrued expenses |
| (b) Cash outflow from financing activities | 2. Issuance of equity securities |  |
| (c) Cash inflow from financing activities | 3. | Redemption of debentures and loan repayments |
| (d) Cash outflow from operating activities | 4. | Sale of equity instruments and collection on loans |
| (e) Cash inflow from investing activities | 5. | Purchase of equity/debt instruments and making loans |
| (f) Cash inflow from operation activities | 6. | Income from interest on receivables and sale of by products |

### 4.2 UTILITY OF A CASH FLOW STATEMENT

Identify the importance of cash flow statements

The cash flow statement is one of the most useful financial statements that companies prepare. When analyzed in a rational and logical
manner, it can illuminate like a jewel of pearls and gems as to how a company is pursuing its growth agenda, receiving revenue from debtors, paying its vendors, and otherwise managing its flow of cash. The important utilities of a cash flow statement are:

- It provides the user with a mechanism for having additional information on its business activities and make a better assessment of the current liquidity of a business. Thus, it answers questions as, how much money has been borrowed during the year? What is the company using extra cash for?
- Combined with external environment of the organization, it helps assesses the ability of an enterprise to generate and utilize the cash. So, it also helps to assess the long-term solvency of the entity. Hence, it answers the queries such as: how was the expansion in the plant and machinery financed by? How were recent proceeds for the large foreign commercial borrowings used?
- If combined well, it can explain the difference between profits and cash, and thus, provides the users with a mechanism for providing additional inputs on the organizations' trade conditions and managements take on the same. For example, it would answer points such as: how did the cash position change, compared to the accounting profits reported based on the income statements? From where did the company bring in cash and spend it out? Why are the company's working capital items moving in the direction different from rest of the industry peers?
Unfortunately, some readers bypass the cash flow statement after spending time with the popular financial statements, i.e., income statement and balance sheet. This is despite the fact that the cash flow statement often provides important information about a business entity that is beyond that contained in these two tradition statements. A prime reason for this is - even though cash flow statement is present in India from the 1990s, it is still considered a "jazzy new statement" as many executives and non-finance managers were not exposed to it during their graduation days, and are especially unaware of its detailed analytical insights.


### 4.3 CASH AND CASH EQUIVALENTS

In a cash flow statement, the objective is to provide information on the changes during an accounting period, in cash and cash equivalents. So, when we prepare a cash flow statement, we seek to track the movement of cash and its equivalents. Cash equivalents means all the short-term investments which can be readily converted into cash, without any reduction in their value, i.e., with an insignificant risk in decrease of value. Cash equivalents are often held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

The list of items that fit the description of cash and cash equivalents are as follows:

- Cash, as we understand in general terms, i.e. the amount of currency available with us.
- Demand deposits with the bank, i.e. any amount deposited with the bank that is free to withdraw whenever we so desire. For instance, the savings account and current account with the entities bankers.
- Short term, highly liquid investments that can be readily converted to cash. A thirty-day bank deposit is a case in point. On the other hand, a hundred-day bank deposit would not quality as part of cash equivalents.
It would be obvious to readers that investment in equity shares (irrespective of their holding perspective) would get excluded from the above - given their risk profile. Further, an enterprise should also disclose if any portion of the cash and cash equivalent is not available for immediate use (say, due to a legal restriction). For example, if a branch of the enterprise operates in a foreign country with large foreign exchange controls (say, Nigeria) then its cash and cash equivalents in that part of the world should be mentioned as a note.


## Case 4.1 A Footfall at Pantaloons Fashion \& Retail!

Pantaloons Fashion \& Retail Limited, an Aditya Birla group affiliate, is one of the top clothing brands in the world; and targets itself as a premium lifestyle company. We produce its cash and cash equivalents detail below:

| Pantaloons Fashion \& Retail Limited <br> Cash and Cash Equivalents as on 31 <br> (all figures in INR Mn.) |  |
| :--- | :---: |
| March 2015 |  |

Source: Aditya Birla Fashion and Retail Ltd. Investors, Abfrl, Web, 11 Jan. 2016.
Readers would observe that the company has no bank time deposits or short-time period government securities as part of the above. The only item that readers may be surprised is the 'balance with Credit Card Company.' These would be, customer transactions that have happened around the financial year-end date (say, customer purchases on $30^{\text {th }}$ and $31^{\text {st }}$ March) with highly secure banks through agents such as, MastarCard and Visa. And, Pantaloons is due to receive them on the next working day.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) Cash payments relating to forward contracts are held for dealing/trading purpose will be classified as investing activity.
(h) Cash payments to acquire shares or debt instrument of other enterprises and interests in joint ventures will be classified as investing activity.
(i) Cash repayments of amount borrowed will be classified as operating activity.

### 4.4 PREPARATION OF CASH FLOW STATEMENT USING DIRECT METHOD

Prepare a cash flow
103
statement using direct method

In this section, we'll give you an introduction to the process of preparing a cash flow statement. All of the cash flow activities are supposed to be segregated into three heads; viz., operating activities, investing activities and financing activities. The sum of
these activities reflects the net increase or decrease in the cash and cash equivalents. Let us now understand each of the activities that form a part of the cash flow statement.

The principle revenue generating activities of an entity, other than its financing and investing activities, are known as the operating activities. There are two ways of calculating the cash flow from operating activities, viz., the direct method and the indirect method. The amount of cash provided by or used by operating activities is the same, no matter whichever method is used. We focus on the direct method here.

Under the direct method, gross receipts and gross payments of cash are disclosed, i.e., the amount of cash received from customers, and the amount of cash paid to suppliers, employees and such parties are disclosed. In other words, all transaction due to the operating activities resulting in cash inflows and outflows are tabulated in a systematic fashion. Similarly, we identify the investing and financing activities in cash inflows and outflows and table them in a systematic fashion. Thus, to sum it up, we present simple formats of direct method of presenting 'Statement of Cash Flow'.

Table 4.2 Presentation format for Cash Flow Statement using Direct Method

| Receipts from debtors and customers | XXXX |  |
| :---: | :---: | :---: |
| Payments to creditors and suppliers | (XXXX) |  |
| Payments towards expenses | (XXXX) |  |
| Taxes paid | (XXXX) | XXXX |
| Cash Flow from Operating Activities (A) |  | XXXX |
| Proceeds from sale of fixed assets | XXXX |  |
| Purchase of fixed assets and investments | (XXXX) |  |
| Dividend received | XXXX |  |
| Interest received | XXXX | XXXX |
| Cash Flow from Investing Activities (B) |  | XXXX |
| Proceeds from borrowings | XXXX |  |
| Proceeds from issue of shares | XXXX |  |
| Payment of long-term borrowings | (XXXX) |  |
| Payment of dividends | (XXXX) | $\underline{X X X X}$ |
| Cash Flow from Financing Activities (C) |  | XXXX |
| Net Cash Flow during the year $=(\mathrm{A}+\mathrm{B}+\mathrm{C})$ |  | XXXX |
| Add: Opening Balance of Cash and Cash Equivalents |  | $\underline{X X X X}$ |
| Closing Balance of Cash |  | XXXX |

Note: The negative figures are presented in brackets.
We appreciate the direct method by solving two illustrations (Illustration 4.1 and 4.2).

## Illustration 4.1

This illustration is a repeat of the Solved Problem 2.1 in Chapter 2. In this illustration, we will evidence the financial statements being extended to the periodic cash flow statement. To save on space, we do not repeat the transactions and the numbers of Rohan Software - thus, readers may like to go through Solved Problem 2.1 again.

Question: At the end of the months of March and April, you are required to prepare the 'statement of cash flow'.

## Suggested Solution

The first and second transactions of raising owner's equity and taking a loan would be part of its financing activities as cash inflows.

The third transaction involving RSL purchasing two computers would be part of its investing activities as cash outflow.

The fourth transaction is a transaction on credit. It would not lead to any change in its cash position and hence, would not be part of its cash flow statement.

The next transaction on March 19, wherein RSL completes its maiden sale of software to a retail store and receives a price of $₹ 1.2$ million would be part of its operating cash inflow. On March 21, RSL pays ₹ 2 lakh cash (part of its payables) to its supplier resulting in an operating cash outflow.

RSL pays salaries to its employees resulting in operating cash outflow.
RSL delivers a software package for a shoe shop worth ₹8 lakh and the customer agrees to pay the price a week later. This transaction would result in neither a cash inflow nor a cash outflow and hence, there would be no change in our statement of cash flow. On the other hand, accrual principle would have taken this transaction as an increase in the revenue of the company by a similar amount as part of its profit and loss account.

On March 31, the owner withdraws ₹ 3 lakh from the profits of the company. We consider the same to be dividend resulting in a cash outflow due to the firms financing activities.

For ease of understanding, we present each of the above transactions and their specific implication on the cash flow statement below:

Table 4.3 Rohan Software Limited, Period I, Transaction-wise Implication on Cash Flow Statement

| S. No. | Transaction | Is there a cash transaction involved? If yes, then is that an inflow or outflow? | Type of Activity (Operating / Investing / Financing) | Remarks (if any) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | On March 1, Rohan invests $₹_{5}$ Million in cash in Rohan Software Limited (RSL). | Yes; Cash Inflow | Financing | Equity invested |
| 2 | On March 2, RSL took a loan of ₹ 2 million from Venugopal. | Yes; Cash Inflow | Financing | Loan taken |
| 3 | On March 3, RSL purchased using cash: computers \& furniture, costing ₹ 5.8 million. | Yes; Cash Outflow | Investing | Investment for future perspective |
| 4 | On March 4, RSL purchased stationary worth ₹ $6,00,000$ on credit from M/s Hardeep. | No | - | No cash transaction involved |
| 5 | On March 19, RSL completes its maiden sale of software to a retail store and receives a price of $\mathrm{F}_{1.2}$ million. | Yes; Cash Inflow | Operating | Revenue from Operations |
| 6 | On March 21, RSL pays ₹ $2,00,000$ to its creditors for supplies. | Yes; Cash Outflow | Operating | Cash paid for expenditure on operations |
| 7 | On March 29, RSL pays salaries to its employees, amounting to $₹_{4,00,000}$ and as office rent $₹_{1,00,000 \text {. }}$ | Yes; Cash Outflow | Operating | Expenditure on operations |


| 8 | On March 30, RSL delivers a software package for a shoe shop, Bata India. The customer agrees to pay the price of ₹8,00,000 after two months. | No | - | There is no cash transaction |
| :---: | :---: | :---: | :---: | :---: |
| 9 | On March 31, RSL gives ₹ $3,00,000$ to owners (as a reward for its good performance) | Yes; Cash Outflow | Financing | Profit share given to owners |
| 10 | At the end of the period the company had following adjustments to make: Closing Stock ₹5,00,000; Depreciation ₹ $2,00,000$; Interest charge 2\% per month | No | - | No cash is involved in adjustments |

Note: The adjustment entries done are based on the Matching principle (such as depreciation of fixed assets and expiry of inventory) would result in no change in the statement of cash flow.

A summary of all the above transactions can be formally presented in the format shared in Table 4.2. We do the same in Table 4.4:

Table 4.4 Rohan Software Limited Statement of Cash Flow for the Period: 1st to 31st March
(All figures in ₹)
Using Direct Method:

| Cash flows from operating activities |  |  |
| :--- | :--- | :--- |
| Cash received from customers | $12,00,000$ |  |
| Cash paid to suppliers, rent, and employees | $(7,00,000)$ | $\mathbf{5 , 0 0 , 0 0 0}$ |
| Net cash provided by operating activities (A) |  |  |
| Cash flows from investing activities | $(58,00,000)$ | $(58,00,000)$ |
| Purchase of office equipment |  |  |
| Net cash provided by investing activities (B) | $50,00,000$ |  |
| Cash flows from financing activities | $(3,00,000)$ | $\mathbf{6 7 , 0 0 , 0 0 0}$ |
| Capital invested by owner, Equity | $20,00,000$ | $\mathbf{1 4 , 0 0 , 0 0 0}$ |
| Withdrawal by owner |  |  |
| Loan |  |  |
| Net cash provided by financing activities (C) |  |  |
| Net increase (decrease) in cash position (A+B+C) |  |  |
| Beginning cash balance |  |  |
| Cash balance at the end |  |  |

Note: The negative figures are presented in brackets.

Now that we have a comfortable understanding of the direct method, we move to the second period by sharing the list of transactions and its summarized table of implications below:

Table 4.5 Rohan Software Limited, Period II, Transaction-wise Implication on Cash Flow Statement

| S. No. Transaction | Is there a cash <br> transaction in- <br> volved? If yes, <br> then is an inflow <br> or outflow? | Type of Activity <br> (Operating / <br> Investing / <br> Financing) | Remarks (if any) |
| :---: | :--- | :--- | :--- | :--- |

Rohan Software's above transactions for second period are converted to a cash flow statement below:
Table 4.6 Rohan Software Limited Statement of Cash Flow for the Period 1st to 31st March
(All figures in ₹)
(Using Direct Method)

| Cash flows from operating activities |  |  |
| :--- | ---: | :--- |
| Cash received from customers | $5,00,000$ |  |
| Cash paid to suppliers, rent, and employees | $(5,00,000)$ |  |
| Net cash provided by operating activities (A) |  |  |
| Cash flows from investing activities |  |  |
| Purchase of office equipment | $(2,00,000)$ |  |
| Net cash provided by investing activities (B) | $(80,000)$ |  |
| Cash flows from financing activities |  | $(2,80,000)$ |
| Loan repaid |  | $(2,80,000)$ |
| Interest paid |  | $14,00,000$ |
| Net cash provided by financing activities (C) | $11,20,000$ |  |
| Net increase (decrease) in cash position (A+B+C) |  |  |
| Beginning cash balance |  |  |
| Cash balance at the end |  |  |

Note: The negative figures are presented in brackets.

By now, you would have understood that a direct method of evaluating each and every transaction for a firm with large number of transactions in mighty difficult. There are shorter ways in direct method as well - wherein using the profit and loss statement figures and balance sheet figures of RSL can help us generate the cash flow from operating activities using the direct method. The suggested way is:

- Computing Cash Collections from Customers: Sales minus increase (or, plus decrease) in receivables plus increase (or, minus decrease) in deferred revenue.
- Computing Payment to Suppliers: Cost of goods sold plus increase (or, minus decrease) in inventory minus increase (or, plus decrease) in account payable.
- Computing Cash Payments for Salaries: Salary expense minus increase (or, plus decrease) in accrued salaries payable.
- Computing Cash Payment for other Operating Expenses: Other operating expenses minus depreciation and amortization expense for period plus increase (or, minus decrease) in prepaid expense minus increase (or, plus decrease) in accrued operating expense
- Computing Cash Revenue from Interest: Interest revenue minus increase (or, plus decrease) in interest receivable.
- Computing Cash Paid for Interest: Interest expense minus increase (or, plus decrease) in accrued interest payable.
- Computing Cash Revenue from Dividends: Investment income minus increase (or, plus decrease) in investment account.
- Computing Cash Paid for Taxes: Tax expense minus increase (or, plus decrease) in accrued tax payable minus decrease (or, plus increase) in prepaid tax.

We gain more insights into the direct method using Illustrations 4.2 and 4.3.

Illustration 4.2

## Shikari Shambu Security

Shikari Shambu was running an investigating agency, Shikari Shambu Security Services Limited. From the summary cash account of the firm, prepare the cash flow statement for the year ended $31^{\text {st }}$ March $20 X_{7}$.

Table 4.7 Shikari Shambu Security Services Ltd.
Summary Cash Account For the Year Ended 31st March 20x7
(all figures in ₹ million)

| Receipts | Amount | Payments | Amount |
| :--- | :---: | :--- | ---: |
| Cash balance as on 20X6 | 100 | Cash purchases during the year | 2,000 |
| Issue of equity shares | 150 | Factory expenses incurred | 250 |
| Issue of preference shares | 150 | Wages \& salary paid | 150 |
| Cash sales for the period | 2,300 | Income tax paid | 50 |
| Sale of fixed assets | 600 | Dividend paid | 150 |
|  |  | Repayment of loan | 400 |
|  |  | Balance on $20 X_{7}$ | 300 |
| Total | $\mathbf{3 , 3 0 0}$ | Total | $\mathbf{3 , 3 0 0}$ |

## Suggested Solution

The direct method requires the gross receipts and payments to be disclosed. Accordingly, our cash flow statement would be:

Table 4.8 Shikari Shambu Security Services Ltd.
Statement of Cash Flow
For the accounting year ended 31.3.20 $\mathrm{X}_{7}$
(all figures in ₹ million)

## Shikari Shambu Security Services Ltd.

Particulars Amount

| (A) Cash Flow From Operating Activities |  |
| :---: | :---: |
| Receipt from customers (cash sales) | 2,300 |
| Payment to suppliers (cash purchases) | $(2,000)$ |
| Payment for factory expenses | (250) |
| Payment for salary \& wages | (150) |
| Income tax paid | (50) |
| Total (A) | (150) |
| (B) Cash Flow from Investing Activities |  |
| Sale of fixed asset | 600 |
| Total (B) | 600 |
| (C) Cash Flow from Financing Activities |  |
| Issue of equity shares | 150 |
| Issue of preference shares | 150 |
| Repayment of loan | (400) |
| Dividend paid | (150) |
| Total (C) | (250) |
| Total Cash Flow for the Period (A) + (B) + (C) | 200 |
| Add: Opening cash balance | 100 |
| Closing cash balance | 300 |

Note: The negative figures are presented in brackets.
We can even summarize the key analytical point for this company. Shikari Shambhu has shown a weak performance wherein, the cash has been generated through the sale of fixed assets and through issue of shares rather than through operations. The cash was basically utilized for repayment of loan and for paying the dividends.

## Illustration 4.3

Jamuna Tudu Enterprises is a manufacturer and trader of edible oil. Jamuna has no idea about how to calculate the amount of cash generated by his business activities every year. She seeks your help to determine the amount of net cash inflows from the various activities of her business for the year $20 \times 6-20 X_{7}$. For this purpose, the following information is provided to you.

> Jamuna Tudu Enterprises
> Profit and Loss Account For the Year ending 31st March $20 X_{7}$
(all figures in ₹ million)

| Purchase for the year | 800 | Sales | $\mathbf{1 , 6 5 0}$ |
| :--- | ---: | :--- | ---: |
| Direct expenses | 200 |  |  |
| Gross profit | 650 |  | $\mathbf{1 , 6 5 0}$ |
|  | $\mathbf{1 , 6 5 0}$ |  | 650 |
| Rent | 80 | Gross profit b/d | 130 |
| Salary | 200 | Profit on sale of old machinery |  |
| Depreciation | 150 |  |  |
| Provision for bad debts | 50 |  |  |
| Proposed dividends (withdrawals) | 100 |  | $\mathbf{7 8 0}$ |
| Provision for taxes | 25 |  |  |
| Preliminary expenses written off | 15 |  |  |
| Net profit | 160 |  |  |
|  | $\mathbf{7 8 0}$ |  |  |

## Solution (as per Direct Method)

## Using Direct Method:

Operating Activities: We have seen that cash flows from operating activities can be calculated in two ways that is, using the direct method and using the indirect method. We know that under the direct method, the amount of cash received from customers and the amount of cash paid to suppliers and employees are disclosed. In this way, we can calculate the cash flow statement directly, based upon the cash receipts and cash payments during the period, in the following way.

Jamuna Tudu Enterprises<br>Cash Flow Statement for the Year ending 31st March 20X7

(all figures in ₹ million)

| Cash flow from Operating Activities: |  |
| :--- | :--- | :--- |
| Cash received on account of sale of goods | 1,650 |
| Less: Payment made on account of purchase of <br> goods | $(800)$ |

(Contd.)

| Direct expenses | $(200)$ |  |
| :--- | ---: | ---: |
| Salary paid | $(200)$ |  |
| Rent paid | $(80)$ |  |
|  |  | $(1,280)$ |
| Cash inflow |  | 370 |

As sale of old machinery is not a part of the operating activity, hence, in the above cash flow statement on operating activities, we have consciously avoided the inclusion of cash from the sale of old machinery. So, the question that arises is that under which activity do we include the sale of old machinery? Following the discussion in Section 4.1, we can clearly agree that it will be a part of the investment activity.

Investing Activities: Activities related to the acquisition and disposal of long-term assets and other investments (which are not taken into consideration under the cash equivalents head) are investing activities. Investment activities also include investments made by business entities, in other company's shares and debentures. The various examples of investment activities include cash payments or receipts to acquire or dispose fixed assets, shares, warrants, debt instruments, etc. Interest and dividends received from investments will form part of investing activities. Continuing with the same Illustration 4.3, suppose we are given the following information that during the period, Jamuna Tuduhas incurred the following transactions:
(all figures in ₹ million)

| Item |  |
| :--- | :---: |
| Purchased a machinery for | 1,500 |
| Sold investment in shares worth | 2,000 |
| Received interest on debentures purchased earlier | 100 |
| Received dividend on shares held | 200 |
| Sold old machinery | 500 |

We can calculate the cash flow from investing activities in the following way:

## Jamuna Tudu Enterprises

Cash Flow Statement
for the Year ending 31st March 20X7
(all figures in ₹ million)

| Cash Flow from Investing Activities: |  |
| :--- | ---: |
| Sale of shares | 2,000 |
| Interest received | 100 |
| Sale proceeds of old machinery | 500 |
| Dividend received | 200 |
|  | 2,800 |
| Less: Outflow on account of machine purchase | $\mathbf{( 1 , 5 0 0 )}$ |
| Cash Flow from Investing Activities | $\mathbf{1 , 3 0 0}$ |

## Financing Activities

The activities that result in a change in the size and composition of the long-term capital employed in the firm, are known as financing activities. The 'capital employed' includes both owners' capital and the borrowings of the entity. The various examples of this type of activities include cash received from issue of share capital (both equity and preference), issue of loans/debentures and cash payment on account of redemption of preference shares, debentures, repayment of loans, payment of interest on loans and dividends, etc.

Proceeding with the same illustration, if we are informed that during the year, Jamuna Tudu had taken a loan of $₹ 1,500$ million and paid an interest of $₹ 150$ million thereon, the cash flow from financing activities for the year comes to an inflow of ₹ 1,350 million (i.e., ₹ $1,500-₹ 150$ ).

Given the above additional information and discussion details, makes us present the complete Cash Flow Statement of Jamuna Tudu Enterprises as follows:

## Jamuna Tudu Enterprises

Cash Flow Statement
for the Year ending 31st March 20X7
(all figures in ₹ millions)

| Cash flows from operating activities |  |
| :--- | :---: |
| Cash receipts from customers | 1,650 |
| Cash paid to suppliers | $(800)$ |
| Direct expenses | $(200)$ |
| Cash paid to employees | $(200)$ |
| Indirect expenses (Rent) | $(80)$ |
| Cash generated from operations | $\mathbf{3 7 0}$ |
| Income taxes paid | - |
| Net cash from operating activities (A) | $\mathbf{3 7 0}$ |
|  | 2,000 |
| Cash flows from investing activities | 100 |
| Proceeds from sale of shares | 500 |
| Interest received | 200 |
| Proceeds from sale of machinery | $(1,500)$ |
| Dividend received | $\mathbf{1 , 3 0 0}$ |
| Outflow on account of machine purchase | $(C o n t d)$. |
| Net cash from investing activities (B) |  |
|  |  |
|  |  |


| Cash flows from financing activities |  |
| :--- | ---: |
| Proceeds from long-term borrowings | 1,500 |
| Interest Paid | $(150)$ |
| Net cash from financing activities (C) | $\mathbf{1 , 3 5 0}$ |
|  |  |
| Net increase in cash and cash equivalents (A + B + C) | $\mathbf{3 , 0 2 0}$ |
| Cash and cash equivalents at beginning of period | - |
| Cash and cash equivalents at end of period | $\mathbf{3 , 0 2 0}$ |

Annexure 4.4 on the OLC shares the workings for this illustration using the indirect method.

## SPOTLTGHT 4.1

## "Interesting Inquiries"

Two interesting queries can come to an inquisitive mind. And we answer both of them here:
Query 1: Can a single transaction include cash flows that are classified differently, i.e., in two different activities.
Answer: Yes. Take for example, when installment paid in respect of a purchase of a machinery (or, any other noncurrent asset) acquired on deferred payment basis includes both interest and loan, the interest element is classified under financing/operating activities and the loan element is classified under investing activities.
Query 1: Where do you classify cash flows arising from the purchase and sale of dealing/trading securities?
Answer: An enterprise may hold securities and loans for dealing or trading purposes, in which case they are similar to merchandise inventory acquired specifically for resale (say, by a local Kirana store). Therefore, cash flows arising from the purchase and sale of dealing or trading securities are classified as operating activities. Similarly, cash advances and loans made by financial enterprises are usually classified as operating activities since they relate to the main revenue-producing activity of that enterprise.

### 4.5 OPERATING CASH FLOWS VS NET INCOME

## Case $4.2>$ Is there a Gap between Net Income and Operating Cash Flows?

The title gave us an opportunity to probe a little further. Thus, we collected above data on these two items for a range of Indian corporates from their latest annual reports. We tabulate it as follows:

| Company Name | Net Profit | Net Cash Flow from Operating Activities | \% Difference |
| :---: | :---: | :---: | :---: |
| 1. Bank of India Limited | 20,129 | 146,382 | 627\% |
| 2. Blue Dart Express Limited | 1,293 | 1,535 | 19\% |
| 3. Colgate Palmolive (India) Limited | 5,590 | 6,381 | 14\% |
| 4. SKS Microfinance Limited | 1,876 | $(11,463)$ | -711\% |
| 5. T.V. Today Network Limited | 810 | 779 | -4\% |
| 6. Tata Consultancy Services Limited | 198,522 | 193,688 | -2\% |

Source: Collated by author(s) from respective annual reports of FY2015-16
The table above throws a range of differences from extreme positive to extreme negative. No company has its net profit nearing its cash flow from operations. This section will identify the areas due to which these differences will arise.

A leading reason behind the difference above is due to the fact that 'net profit' figure captures the cash flows from 'non-operating activities' as well. And these can be in either direction as well. For example, disposal of fixed asset at a price that is astronomically higher (or lower) than the book price will be captured as a investing activity cash inflow (or cash outflow). Likewise, any write offs (or sale) of any non-current assets will be reflected in the net profit figure, but not in operating activity cash flows. Correspondingly, cash flows related to financing activity may also have a similar differentiation influences on net profit vis-à-vis cash flow from operating activities. We will try to understand more about this issue using the following example.

## Illustration 4.4

John Bhengra provides the following information of his business for the year ending March 31, 20X7:
John Bhengra Enterprises
Profit and Loss Account
For the period ending 31-03-20X7
(all figures in ₹ millions)

| Purchases (all cash purchases) | 750 | Sales (includes $50 \%$ credit sales) | 1,000 |
| :--- | ---: | :--- | :--- |
| Salaries | 50 |  |  |
| Wages | 30 |  |  |
| Office expenses | 10 |  |  |
| Selling \& distribution expenses | 12 |  |  |
| Depreciation | 8 |  | $\mathbf{1 , 0 0 0}$ |
| Net profit. | $\mathbf{1 4 0}$ |  |  |
| Total | $\mathbf{1 , 0 0 0}$ | Total |  |

In the above profit and loss account, we see that there is a profit of $\mathrm{F}_{140}$ million, but as the sales consists of $50 \%$ credit sales and assuming all purchases, to be cash purchases there is a net cash outgo of ${ }^{2} 352$ million during the period. Thus, the total cash inflow for the period is ₹ 500 million i.e., $50 \%$ of the total sales; and the total cash outflow is ₹852 million i.e., all the expenses other than depreciation that were paid in cash. In other words, even though doing a profitable business, the organization was having a net cash outflow due to funds getting stuck in receivables (worth, ₹ 500 million). In the same way, there can be a business loss for the period, but the business entity may still have a positive cash flow due to the non-cash expenses like depreciation, amortization and other expenses written off in the profit and loss account.

From Illustration 4.4, we can arrive at the conclusion that the cash flow from operations are not necessarily equal to the net profit for the period. In some organizations with large number of transactions based on accrual concept such as wages payable and provision for warranties, even an abridged cash flow statement (widely known as, funds flow statement; see Annexure 4.1 on the OLC for more) may not be able to provide detailed information and hence, would not be helpful to the investors. For example, in the Illustration 4.4 on John Bhengra, it would only mention that there has been an increase in the working capital, but it would not provide the information of where has the increase in the current asset been utilized (herein, receivables). A statement of cash flow using indirect method (see Section 4.7) would solve the problem.

To give an example, writing off of depreciation and amortization does not result in an outflow of cash for the period concerned. All these expenses are required to be added back to the profit and loss account for the period, in order to arrive at the cash from operation. We will explain that in the next few pages, using examples.

## Illustration 4.5

## DEVDAS ANNA Ltd. <br> Summarized Profit and Loss Account <br> for the year ended December $3120 X_{7}$ (all figures in ₹ millions)

| Sales net | 3,500 |
| :--- | ---: |
| Other income* | 100 |
| Total revenue | $\mathbf{3 , 6 0 0}$ |
| Less: Cost of goods sold | $\mathbf{1 , 5 0 0}$ |
| Gross profit | $\mathbf{2 , 1 0 0}$ |
| Less: operating expenses | 600 |
| Personnel | 119 |
| Depreciation and amortization | 131 |
| Other expenses | 850 |
| Operating profit | $\mathbf{1 , 2 5 0}$ |
| Less: Interest | 150 |
| Profit before taxes | $\mathbf{1 , 1 0 0}$ |
| Less: Income tax provision | 550 |
| Net profit after tax | $\mathbf{5 5 0}$ |
| Less: Dividends | $\mathbf{2 0 0}$ |
| Net profit retained | $\mathbf{3 5 0}$ |

* Other income includes ₹ 10 million profits on sale of furniture.

The profit and loss account of Devdas Anna Limited shows that operations have provided gross additions to working capital during the period, to the tune of $₹ 3,600$ million - either by way of increasing cash or receivables. This increased in working capital represent the sale proceeds of goods and services of the company. We also know that a great part of this increased working capital is utilized for meeting the cost of inputs, such as material, personnel and other operating costs. Apart from these, we also have to meet the interest commitments and cost expirations of the machinery and equipment. However, expiration of costs of the machinery and equipment (depreciation) is an item which does not require a use of 'working capital' in the current period. Assuming no change in the working capital items, the cash flow statement would show cash from operations of Devdas Anna Limited as follows:

$\quad$| Devdas Anna Ltd. |
| :--- |
| Cash Flow from Operations |

for the year ended December 31, 20X7 (all figures in ₹ millions)

| Operations: |  |  |
| :--- | :--- | ---: |
| Net income | 550 |  |
| Add: Depreciation and amortization | 119 | $\mathbf{6 6 9}$ |
| Less: Profit on sale of furniture |  | $\mathbf{1 0}$ |
| Net cash provided from operations | 659 |  |

Hence, we observe that the cash from operations in a scenario of no change in working capital are equal to the net profit for the period increased by the non-cash and non-business expenses that were taken in the profit and loss account (for example depreciation, expenses written off, loss on sale of fixed assets and investments) and reduced by non-cash non-business income taken in the profit and loss account (for example, profit on sale of fixed assets, investments, profit from revaluation of fixed assets and other non-operating incomes). We learn the same using one more illustration (Illustration 4.6).

## Illustration 4.6

Given no change in working capital items, calculate the funds from operation from the following limited data:

Hardeep Singh Traders Limited
Profit and loss account for the year ending on 31-03-20X7

| Particulars | (all figures in <br> ₹ millions) | Particulars | (all figures in <br> $₹$ |
| :--- | :---: | :--- | :---: |
| To, Depreciation | 5 | By, Gross profit | 80 |
| To, Goodwill written off | 10 | By, Profit on sale of plant | 20 |
| To, Discount on issue of debentures | 5 | By, Rent received | 10 |
| To, Loss on sale of machinery | 30 |  |  |
| To, Net profit | 60 |  | 110 |
|  | 110 |  |  |

## Solution

As in Illustration 4.5, we will identify the non-operating income and expenses from the above income statement. The issue gets simplified - given no change in individual working capital items. The items will then be adjusted to compute the cash from operations in the following way:

Hardeep Singh Traders Limited Statement of Cash Flow from Operations for the financial year 20X7

| Particulars |  | (all figures in ₹ millions) |
| :--- | ---: | ---: |
| Net profit as per profit and loss account | 60 |  |
| Add: | Non-cash or non-operating expenses |  |
|  | Depreciation | 5 |
|  |  |  |
| Goodwill written off | 10 |  |
| Discount on issue of debentures | 5 | 50 |
|  | Loss on sale of machinery | 30 |

### 4.6 WORKING CAPITAL AND FLOW OF FUNDS

## Determine the role

 of working capital in the operations of a businessIn this section, starting from basics, we gradually learn about the key reason linking the gap between net profit and cash flow from operations.

### 4.6.1 Flow of Funds

We have studied in Chapter 2 dealing with balance sheets, that every material transaction changes the position statement. This, in other words, implied a dynamic situation involving a continuous movement of resources into the business, within the business, and out of the business. The complexity of these flows increases with the increase in the size and volume of the business. Directly or indirectly, all these flows take place in the business through the medium of funds. Let us learn how.

Depending on the user's purpose, the term 'funds' may be used differently; literally, it means a supply that can be drawn upon. In this sense, it is used to mean cash, total current assets or working capital. We use it here in the sense of working capital, meaning, total current assets less current liabilities. The meaning of working capital in this sense is that it represents amounts invested by the business in current assets, financed from long-term sources of funds. Investment in all the current assets is needed to operate the business and hence, it should be financed from some source. Current liabilities finance a part of the current assets and, therefore, it is the remainder which is to be financed by the business from other sources.

The funds flow takes place only when there is a movement in the current assets or the current liabilities during the accounting period. For example, if land is purchased out of a long-term loan, there is no flow of funds. This is because land is a non-current asset and the loan again, is a non-current liability. These types of transactions neither affect the current liability nor the current assets, hence, there is no movement
in the working capital position due to the given transaction. In the same example, if the purchase is made of a short-term loan, it would result in an increase of current liability and hence, it would decrease the working capital, or in other words there would be an outflow of funds.

Funds flow is used to refer to changes in or movement of current assets and current liabilities. We shall see that this movement is of vital importance in understanding and managing the operations of a business.

### 4.6.2 Working Capital

We have defined earlier that working capital is total current assets less current liabilities. This, in other words, means all the assets held by the business with the objective of conversion to cash (including cash) during an operating cycle of the business (see, Figure 4.1).


Figure 4.1 Operating Cycle
Of these assets, a part is financed by short-term credits or borrowing, which are to be met or repaid during the operating cycle. These short-term obligations represent current liabilities. Thus, current assets less current liabilities, or the working capital, imply the amount of resources invested in current assets from sources of finance other than current liabilities. This net amount is also the amount available for use in the business in the form of funds.

Working Capital $=$ Total Currents Assets - Current Liabilities

## SPOTLTGHT 4.2

## Funds Flow Statement Clarified

The funds flow statement is a statement that depicts the ways and reasons for the movement in the funds of an entity for a given accounting period. Funds here, mean the mode of acquiring assets.

The Funds flow statement is based on an important equation, that is

## Sources of Funds - Application of Funds = Change in Working Capital

A clear understanding of all the three items in the equation is important for the preparation of a cash flow statement - which is our final target. 'Sources of funds' are all those changes in the equity, non-current assets and liabilities that increase the working capital, while 'application of funds' is the reduction in the working capital due to changes in equity, non-current assets and non-current liabilities.

### 4.6.3 Need for Working Capital

Let us approach this problem with the help of a small example.

## Illustration 4.7

Ramsons is a small retail outlet dealing in domestic appliances and entertainment electronics equipment, owned by Ram. The investment in the showroom, display counters, cash register, furniture fixtures and so on, was ₹ 600,000 . Ram also decided to follow the straight-line method of depreciation for the fixed assets, at the rate of 10 per cent per annum.

Ramsons 'estimated sales were ₹ 150,000 per month: Out of which ₹ 50,000 would be cash sales and ₹ 100,000 , on credit, to be collected in four equal monthly installments, with the first installment collected at the time of sale. All sales would be made on a 25 per cent margin on the selling price. In other words, if selling price of a merchandise item is $₹_{100}$ then its cost of sales would be ${ }^{7} 75$.

Supply and sales constraints would warrant carrying three months sales requirement in the form of inventory. Similarly, a month's cash expense requirements had to be held in cash balance.

The initial inventory was to be bought for cash and replenishment purchases would receive a month's credit from suppliers.

The average monthly cash requirement for meeting operating expenses other than payment for purchases, amounted to ₹ 26,000 . Ram needed to withdraw ₹ ${ }_{4,000}$ per month for his personal needs.

In Illustration 4.7, it is clear that Ramsons is coming out with some broad norms for managing the new business, leading to issues such as:

1. How much working capital would Ramsons require to start operations?
2. Will it need any addition to the working capital during the first four months? Or will it have surplus working capital during the first four months?
We can instinctively answer these questions by saying that Ramsons needs working capital to pay for inventory and to pay for expenses and for keeping a safe cash balance. You can also say that Ramsons will receive funds from operations to meet most of these requirements. But to say exactly how much, you need to approach the problem a little more critically. This could be done by working out a schedule of cash receipts and cash payments on a monthly basis. It is also possible for us to prepare a pro forma monthly profit and loss account and balance sheet for the business. It can also be noticed that we have chosen the first four months consciously, since four months would cover a complete operating cycle of the business.

RAMSONS
Schedule of Cash Payments

| Month | Explanation | Amount (in ₹) | Total (in ₹) |  |
| :--- | :--- | :--- | :---: | :---: |
| January | Operating expenses | 26,000 |  |  |
|  | Withdrawals |  | 4,000 |  |
|  |  |  |  | 30,000 |
| February | January purchases | $\left[1,50,000^{\star 7} 75 / 100\right]$ | 112,500 |  |

(Contd.)

|  | Operating expenses | 26,000 |  |
| :--- | :--- | ---: | ---: |
|  | Withdrawals | 4,000 |  |
|  |  |  | 142,500 |
| March | February purchases | $\left[1,50,000^{*} 75 / 100\right]$ | 112,500 |
|  | Operating expenses | 26,000 |  |
|  | Withdrawals | 4,000 |  |
|  |  |  | 142,500 |
| April | March purchases | $\left[1,50,000^{\star} 75 / 100\right]$ | 26,000 |
|  | Operating expenses | 4,000 |  |
|  | Withdrawals |  | 142,500 |

## RAMSONS

Schedule of Cash Receipts

| Month | Explanation | Amount (in ₹) | Total (in ₹) |
| :--- | :--- | :--- | :--- |
| January | Cash sales | 50,000 |  |
|  | Credit sales of the month first installment | 25,000 |  |
|  |  |  | 75,000 |
| February | Cash sales | 50,000 |  |
|  | Credit sales of the month first installment | 25,000 |  |
|  | January sales second installment | 25,000 |  |
| March | Cash sales |  | 100,000 |
|  | Credit sales of the month first installment | 20,000 |  |
|  | January sales-third installment | 25,000 |  |
|  | February sales-second installment | 25,000 |  |
| Cash sales | 20,000 |  |  |
|  | Credit sales of the month first installment | 25,000 |  |
|  | January sales-fourth installment | 25,000 |  |
|  | February sales-third installment | 25,000 |  |
|  | March sales second installment |  | 150,000 |

## RAMSONS

Balance Sheet as of 1st January

| Assets | $₹$ | Liabilities and Capital | $₹$ |
| :--- | :---: | :--- | :---: |
| Fixed Assets | 600,000 | Capital | 967,500 |
| Inventory $\left[112500^{*} 3\right]$ | 337,500 |  |  |
| Cash | 30,000 |  | 967,500 |
|  | 967,500 |  |  |

We have assumed that the entire asset requirements at the first instance are financed by Ram's own capital. Working capital of Ramsons at the beginning of January was as follows:

| Current assets | ₹ |
| :--- | ---: |
| Inventory | 337,500 |
| Cash | 30,000 |
| Total Current assets | 367,500 |
| Less: Current liabilities | 0 |
| Working Capital | 367,500 |

Based on the above information, we could also compute a schedule of cash receipts and payments of Ramsons for the four months, which will show the deficit or surplus of cash available to the business.

RAMSONS
Schedule of Cash Balances
(all figures in ₹)

|  | January | February | March | April |
| :--- | ---: | ---: | ---: | ---: |
| Opening balance | 30,000 | 75,000 | 32,500 | 15,000 |
| Cash receipts | 75,000 | 100,000 | 125,000 | 150.000 |
| Total cash available | 105,000 | 175,000 | 157,500 | 165,000 |
| Less: Cash payments | 30,000 | 142,500 | 142,500 | 142,500 |
| Cash balance | 75,000 | 32,500 | 15,000 | 22,500 |

Using the information available, we can also prepare the profit and loss account of the business for the four-month period as follows:

RAMSONS
Profit \& Loss Account for the Month ending
(all figures in ₹)

|  | 31 January | 28 February | $\mathbf{3 1}$ March | 30 April |
| :--- | :---: | ---: | :---: | :---: |
| Total Sales | $\mathbf{1 5 0 , 0 0 0}$ | $\mathbf{1 5 0 , 0 0 0}$ | $\mathbf{1 5 0 , 0 0 0}$ | $\mathbf{1 5 0 , 0 0 0}$ |
| Less: Cost of sales | 112,500 | 112,500 | 112,500 | 112,500 |
| Other expenses | 26,000 | 26,000 | 26,000 | 26,000 |
| Depreciation $\left[6,00,000 * 0.10^{* 1 / 12]}\right.$ | 5,000 | 5,000 | 5,000 | 5,000 |

(Contd.)

| Total expenses | $\mathbf{1 4 3 , 5 0 0}$ | $\mathbf{1 4 3 , 5 0 0}$ | $\mathbf{1 4 3 , 5 0 0}$ | $\mathbf{1 4 3 , 5 0 0}$ |
| :--- | ---: | ---: | ---: | ---: |
| Net Profit | $\mathbf{6 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ | $\mathbf{6 , 5 0 0}$ |
| Less: Drawings | 4,000 | 4,000 | 4,000 | 4,000 |
| Profit retained | 2,500 | 2,500 | 2,500 | 2,500 |

Incorporating the changes in the assets, liabilities and owners' equity as a result of the transactions during the four months, we can also prepare the balance sheet of the business as at the end of each month.

RAMSONS
Balance Sheet as at the end of
(all figures in ₹)

| Assets | 1 Jan | 31 Jan | $\mathbf{2 8 ~ F e b}$ | $\mathbf{3 1 ~ M a r}$ | 30 Apr |
| :--- | :---: | ---: | ---: | ---: | ---: |
| Gross fixed assets | 600,000 | 600,000 | 600,000 | 600,000 | 600,000 |
| Less: Accumulated depreciation |  | 5,000 | 10,000 | 15,000 | 20,000 |
| Net Fixed Assets | $\mathbf{6 0 0 , 0 0 0}$ | $\mathbf{5 9 5 , 0 0 0}$ | $\mathbf{5 9 0 , 0 0 0}$ | $\mathbf{5 8 5 , 0 0 0}$ | $\mathbf{5 8 0 , 0 0 0}$ |
| Inventory | 337,500 | 337,500 | 337,500 | 337,500 | 337,500 |
| Receivable |  | 75,000 | 125,000 | 150,000 | 150,000 |
| Cash | 30,000 | 75,000 | 32,500 | 15,000 | 22,500 |
| Current Assets | $\mathbf{3 6 7 , 5 0 0}$ | $\mathbf{4 8 7 , 5 0 0}$ | $\mathbf{4 9 5 , 0 0 0}$ | $\mathbf{5 0 2 , 5 0 0}$ | $\mathbf{5 1 0 , 0 0 0}$ |
| Total | $\mathbf{9 6 7 , 5 0 0}$ | $\mathbf{1 , 0 8 2 , 5 0 0}$ | $\mathbf{1 , 0 8 5 , 0 0 0}$ | $\mathbf{1 , 0 8 7 , 5 0 0}$ | $\mathbf{1 , 0 9 0 , 0 0 0}$ |
| Liabilities \& Capital |  |  |  |  |  |
| Capital | 967,500 | 967,500 | 967,500 | 967,500 | 967,500 |
| Add: Retained earnings |  | 2,500 | 5,000 | 7,500 | 10,000 |
| Owners' Equity | 967,500 | 970,000 | 972,500 | 975,000 | 977,500 |
| Accounts payable |  | 112,500 | 112,500 | 112,500 | $\mathbf{1 1 2 , 5 0 0}$ |
| Liabilities \& Capital | 967,500 | 1082,500 | $1,085,000$ | $1,087,500$ | $\mathbf{1 , 0 9 0 , 0 0 0}$ |

Now we can easily create a table containing the changes in the working capital of Ramsons and the possible sources of their funding.

## RAMSONS

Schedule of Working Capital
(all figures in ₹)

| Assets | 31 January | 28 February | $\mathbf{3 1}$ March | 30 April |
| :--- | :---: | ---: | :---: | :---: |
| Current assets | 487,500 | 495,000 | 502,500 | 510,000 |
| Less: Current liabilities | 112,500 | 112,500 | 112,500 | 112,500 |
| Working Capital | $\mathbf{3 7 5 , 0 0 0}$ | $\mathbf{3 8 2 , 5 0 0}$ | $\mathbf{3 9 0 , 0 0 0}$ | $\mathbf{3 9 7 , 5 0 0}$ |
| Funds From Operation |  |  |  |  |
| Net profit | 6,500 | 6,500 | 6,500 | 6,500 |
| Add: Depreciation | 5,000 | 5,000 | 5,000 | 5,000 |
| Total funds generated from operations | 11,500 | 11,500 | 11,500 | 11,500 |
| Less withdrawals | 4,000 | 4,000 | 4,000 | 4,000 |
| Net additions to Working Capital | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ |

### 4.6.4 Reconciling Increase in Working Capital

In the example (Illustration 4.7), we were following the changes in the working capital and we noticed that they were due to only funds generated by operations. It is easy for us to track the changes in the working capital over the periods, starting with the beginning of the business and ending with the close of accounting period.

|  | Amount (in ₹) |
| :--- | ---: |
| Working capital as on January 1 | 367,500 |
| Add: additions during the January | 7,500 |
| Working capital as on February 1 | 375,000 |
| Add: additions during the February | 7,500 |
| Working capital as on March 1 | 382,500 |
| Add: additions during the March | 7,500 |
| Working capital as on April 1 | 390,000 |
| Add: additions during the April | 7,500 |
| Working capital as on May 1 | 397,500 |

## Capital Invested in Business

Now, with the example of Ramsons at hand, it is not difficult for us to understand that Ramsons had invested his 'money to make money'. Often, this investment of profits is known as 'retained earnings'. Where has Ramsons invested the money? It is easy to answer this question too, because the balance sheet of the business shows us what all things Ramsons has done with the money to start with. Refer to the first balance sheet. You will find that Ramsons had fixed assets, shop room and facilities, inventory, goods or merchandise purchased for resale, and some cash for meeting expenses and personal needs. In all, this is how Ramsons had invested the capital to start with. Let us first review these three items and accounts receivable.

## Cash

It is difficult to perceive cash kept in a vault, as an investment, a use of resources. Rather, you would be thinking that we invest cash, then how can cash itself be an investment? But you will realize that a certain minimum amount of cash is necessary for any business. Take a simple case: if you are a retailer, will you send away a customer who does not have exact change? You can entertain him only if you keep change. The change you keep is your investment in cash! Similarly, you will have to pay your employees and suppliers on a specific time. In order to do that, you need cash! Therefore, investment in cash is that amount which is required to be kept in hand to meet the day-to-day requirements of cash. This amount is determined after taking into account the regularity and amounts of inflows of cash, the amount and frequency of outflows, as also the uncertainties related to these. Obviously, as your business grows, the need for cash will also grow. The need for cash will also be influenced by your need for investment in other assets. Thus, both, excess cash (which could have been used for any other purpose like earning interest on deposit) and shortage of cash (because of this the day-to-day business might get affected like loss of cash discount) are harmful for the business. The schedule of cash balance (prepared above) enables one to overcome this problem because using this one can estimate the amount of cash that the business needs to maintain.

## Receivable

In most situations, it will be necessary to grant credit to customers. This may be necessary either because of competition or because of the custom of trade. However, when we grant credit to customers, it implies that we have to finance the cost of materials for the duration of such credit. In other words, you are financing your customers business or consumption to the extent and period of the credit granted. Whenever the business is expanding, the volume of receivables will also expand. Please note that the need for finance on your part, to finance the receivables, is not to the full extent of the accounts receivable. You are actually financing only to the extent of the cost of goods sold of the receivables in question. However, the opportunity aspect of the credit granted is that you are deferring the receipt of cash to the extent of the receivables amount.

## Inventory

Inventory is held whenever there is a time lag between procurement and use of inventory of materials and supplies. You can well appreciate the need for carrying inventory. In order to carry on operations unhindered, we need to have a sufficient amount of merchandise on hand. The availability and regularity of supply, the lead-time for delivery and so on, will determine the quantum we have to keep in store. All the same, we should carry some inventory in most cases.

## Supplies and Prepaid Expenses

Similar is the case with non-merchandise inventory, such as office and factory supplies. We have to carry a minimum stock of these items to ensure smooth operations. We also know that there are several expenses that are to be paid before we actually use the services, such as rent, insurance, and so on. In other words, we invest our money in these items of assets in order to ensure smooth operations.

## Fixed or Non-current Assets

We have seen the importance of current assets. Now, it should not be difficult to appreciate the necessity for having adequate fixed facilities with which to conduct the business. The amount we have invested in our example of Ramsons, for the shop, furniture and fixtures, are for creating the facilities required for carrying on the business. It also limits the capacity of the business. We cannot expand our business beyond a certain capacity, which is limited by the facilities created by the fixed assets. In the case of a manufacturing firm, it will be the plant capacity; in case of a transport undertaking, it may be tonnage of trucks, ships or wagons; in case of show business, it may be seat capacity, in the case of airlines, it may be seat-kilometers, and so on. Any increase in such capacity would require a further additional investment in non-current assets.

It is also necessary for us to understand that the need for fixed asset investments and current asset investments will vary from business to business. A trading company may require very little investment in fixed assets and a very large investment in current assets. A complex manufacturing unit may need large investments in factory and equipment. Capital requirements will also be determined by specific firms, at given levels or volumes of their activity.

### 4.6.5 Determining the Existing Capital Requirement

Understanding the existing capital needs and how it is financed, will help us in understanding the process of financing of the business and the flows of funds within the business. The first question we have to answer is how much working capital is needed to start the operations. We could determine the amount of capital required and compare the same with the existing capital to see whether it is sufficient and
whether there is any excess available. Please note that we are not applying precise techniques of cash management or liquidity planning, since that is beyond the scope of this book.

We know from Ramsons, operating requirements that the business requires one month's cash expenses, other than payment to creditors, to be kept in cash. That is, a minimum of ₹ 30,000 of average cash on hand is required by Ramsons. Ramsons has to keep three months' sales requirement in inventory. This means that during the first month, they start with three months, sales worth of inventory. We know that the sale per month is $₹ 1,50,000$, sold at a gross margin of 25 per cent on sales. Therefore, inventory required to be maintained is three times 75 per cent of the monthly sales that is, $150,000 \times 0.75 \times 3=₹ 337,500$.

Similarly, we know from the information available that every month, one-third of the sales are made on cash, and two-third of the sales are on credit. The credit sales are to be collected in four installments. This means, cash collection during the month will be cash sales plus one-fourth of the credit sales of the period and one-fourth of three previous months, credit sales. During the first month, we will collect from sales for cash, ₹ 50,000 ; and from the first installment of 25 per cent of the credit sales:

RAMSONS
First Month Sales and Cash Collections

|  | $₹$ | $₹$ |
| :--- | ---: | ---: |
| Cash sales | 50,000 |  |
| Credit sales | 100,000 |  |
| Total Sales |  | $\mathbf{1 5 0 , 0 0 0}$ |
| Cash sales | 50,000 |  |
| First installment in cash | 25,000 |  |
| Total Cash Collection |  | $\mathbf{7 5 , 0 0 0}$ |

Credit period allowed on the sales will be as follows:
Total amount of credit granted on one month's sales is total sales of the month, less the first installment to be paid by the buyer. This means, Ramsons effectively, makes credit sales of ₹ 75,000 per month. This ₹ 75,000 will be collected in three equal monthly installments.

This will mean:

- From the date of sale, till the payment of the second installment, ₹ 75,000 is due for one month. A credit of ₹ 75,000 is granted for one month.
- From the date of the Second installment, till the payment of the third installment, ₹ 50,000 is due for one month. A credit of $₹ 50,000$ is granted for one month.
- From the date of the third installment, till the payment of the fourth installment, ₹ 25,000 is due for one month. A credit of ₹ 25,000 is granted for one month.
This, in effect, is equivalent to $₹ 75,000$ sales made for two months credit. In terms of working capital requirements, we require one month financing of the cost of sales with respect to ₹ $1,50,000$ sales. That is, $₹ 1,12,500$ is needed for one month in order to finance the credit sales of a month.

Therefore, we could summarize Ramsons' need for funds for current asset financing to start operations at the beginning of the period, as follows:

| 3 months inventory | $₹ 337,500$ |
| :--- | ---: |
| One month expenses as cash | 30,000 |
|  | $₹ 367,500$ |

During the first month, Ramsons will make one-third of the total sales generating ₹ 50,000 , in cash. The remaining two-third of the sales will be on installment credit where ₹ 25,000 will be colleted in cash and $₹ 75,000$ will be collected in three further installments. Thus, we need some additional funds to finance our granting credit to the customers.

Similarly, we would need to replenish the inventory and make payments for the expenses. We shall examine these with the help of the balance sheet and profit and loss account of Ramsons, for the first four months.

### 4.6.6 Future Capital Requirements

A business would require additional capital for two purposes:

1. Financing additional fixed assets; and
2. Financing additional working capital.

Investment in fixed assets is required to expand the capacity or to improve the current facilities for operation. Usually, additions to investments are judged on the basis of their ability to reduce the present costs or to increase the present output.

Additional working capital is required to finance an increased holding of inventory, increased credit to customers and increased cash holding requirement. Obviously, on a continuously revolving basis, current creditors (suppliers) would finance a part of this requirement for working capital.

If Ramsons invests in another shop or in an expansion of the existing shop, it will require funds for an investment in the fixed assets as also for increasing the current assets. We can also notice that whenever an additional investment is to be made in non-current assets, we have to use the funds (working capital) available. Similarly, when our non-current assets are sold, the sale provides funds or results in a source of funds.

Let us try to review the five balance sheets of Ramsons to see the changes and evaluate the working capital situation. We can achieve this by, first, finding out the changes in each item, over the previous period.

RAMSONS
(all figures in ₹)
Change in Balance Sheet over the previous period as at the end of

| Assets | $\mathbf{3 1}$ Jan | $\mathbf{2 8}$ Feb | $\mathbf{3 1}$ Mar | $\mathbf{3 0}$ Apr |
| :--- | ---: | ---: | ---: | ---: |
| Fixed assets | 0 | 0 | 0 | 0 |
| Less: Depreciation | 5,000 | 5,000 | 5,000 | 5,000 |
| Net fixed assets | $\mathbf{- 5 , 0 0 0}$ | $\mathbf{- 5 , 0 0 0}$ | $\mathbf{- 5 , 0 0 0}$ | $\mathbf{- 5 , 0 0 0}$ |
| Inventory | 0 | 0 | 0 | 0 |
| Receivable | 75,000 | 50,000 | 25,000 | 0 |
| Cash | 45,000 | $-42,500$ | $-17,500$ | 7,500 |
| Current assets | $\mathbf{1 2 0 , 0 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ | $\mathbf{7 , 5 0 0}$ |
| Net change in assets | $\mathbf{1 1 5 , 0 0 0}$ | $\mathbf{2 , 5 0 0}$ | $\mathbf{2 , 5 0 0}$ | $\mathbf{2 , 5 0 0}$ |
| Liabilities \& capital |  |  |  |  |
| Capital | 0 | 0 | 0 | 0 |
| Add: Retained earnings | 2,500 | 2,500 | 2,500 | 2,500 |
| Owner's equity | 2,500 | 2,500 | 2,500 | $\mathbf{2 , 5 0 0}$ |
| Accounts payable | 112,500 | 0 | 0 | 0 |
| Liabilities \& capital | $\mathbf{1 1 5 , 0 0 0}$ | $\mathbf{2 , 5 0 0}$ | $\mathbf{2 , 5 0 0}$ | $\mathbf{2 , 5 0 0}$ |

The changes in the fixed assets are represented by the accumulated depreciation only. There were no additions to fixed assets during the period. Reduction in the fixed assets due to depreciation is a noncash transaction.

On the liability side also, there was no transaction involving long-term liabilities or capital. The only change in the long-term items is the increase in the retained earnings.

Thus, all the changes are in the area of working capital. The net change in the working capital, as we have seen earlier, is an increase of $₹ 7,500$ per period. How did this come about? This leads us to the changes in the current assets and current liabilities. There was no change in the inventory during the period. The only items which experienced change, are cash and receivables. The only item of current liability that changed, is the accounts payable during the first period, which is maintained without change, during the period. The increase in the receivables needed funds to finance it and it was provided in part by the increase in payables, thereby having no impact on the working capital to that extent. Whenever an increase in the current assets is offset by an equal increase in the current liabilities, the net impact on the working capital is zero.

This leaves us with the only other item which could have financed the change in, working capital the funds generated by operations.

The operations provided a net profit of ₹ 6,500 during each period. We have made an expiration of fixed assets in the amount of ₹ 5,000 per month. Depreciation is a non-fund transaction, meaning, no cash goes away from the entity, and hence, the fund provided by operations will include that too. Thus, operations generated ₹ 11,500 per period. The owner regularly withdrew cash of ₹ 4,000 per period, leaving in the business, additional resources of ₹ 7,500 per period, which is the change in the working capital.

|  | 1 January | 31 January | 28 February | 31 March | 30 April |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Working Capital | 367,500 | 375,000 | 382,500 | 390,000 | 397,500 |

We can summarize the normal uses of funds (working capital) as follows:

1. Acquisition of new non-current assets (fixed assets or intangible assets)
2. Repayment of non-current debt
3. Profit distribution to owners, and
4. Increase in the balance of working capital (current assets - current liabilities)

If the operations are unsuccessful, operations may use funds rather than provide funds. The items within application of funds that are usually presented in the funds flow statement are given in Figure 4.2.

### 4.6.7 Possible Sources of Working Capital

We have seen that working capital is required to finance that portion of current assets, which are not financed by current liabilities. We also studied that the investments represented by current assets are converted into cash during the operating cycle. This implies that our need for financing is for one such cycle. Under normal circumstances, every unit of investment in working capital is converted to cash at the end of the cycle, at an added value, to the extent of profits.

When we are looking at the possible sources of working capital, the most important source becomes this 'internal generations'. The very idea of internal sources implies that there is something 'external' as well.

## Internal Sources

When we are looking for sources of funds, it is but natural to start searching at home. What do we have? While examining the need for working capital, we could also make an assessment as to whether


Figure 4.2 Uses of Fund
the existing working capital is sufficient or not. Thus, the first internal source is any excess working capital that we have.

If we have any non-current assets, which do not have any use, they could be disposed of, thereby generating additional working capital. Please note that this is not a regular and continuing source of funds.

We have seen earlier that every profitable sale brings with it, funds in excess of what was expended on the goods sold. In other words, a profit generated by the business contributes towards additional working capital. But you may also notice that whenever we measure profits, we match against the realised revenue, all expenses relating to the revenue, irrespective of whether they involved a use of funds in the current period or not. The profit so measured does not reflect the actual amount of funds available.

Therefore, in order to assess the actual fund generated from current operations, we must add back to the profits, all those items of 'expense' not involving use of funds, during the current period. One major example of such an item is depreciation. Another example is amortization.

Now, we can summarize the important internal sources of funds as:

1. Funds generated from operations. In simple terms, this is revenue less expenses involving use of funds during the period.
2. Sale of non-current assets (e.g., sale of plant \& machinery, long-term investments, etc.).
3. Existing surplus working capital.

## External Sources

External sources of funds are resources raised from outside the organization, to augment funds availability for any of the uses discussed earlier. Normally, there are only two ways of doing the same:

1. By the owners contributing additional capital, that is, by raising more capital; or
2. By increasing long-term borrowings

Please note that short-term creditors are not included as a source of funds since we have already defined funds as 'current assets less current liabilities'. Working capital, therefore, represents long-term investments in current assets and hence, short-term borrowings will not increase the working capital. The sources of funds as they are usually presented in the funds flow or working capital statement are summarized in Figures 4.3 and 4.4.


Figure 4.3 Sources of fund


Figure 4.4 Sources of Working Capital

### 4.6.8 Factors affecting Fund Requirements

From the discussions we have had earlier, it is not difficult to come to the conclusion that several factors affect the fund or net working capital requirements.

Fund requirements vary with the nature and type of business. A firm that provides agency services may require less working capital than a firm which carries on a business of merchandising. The merchandising firm would require working capital to carry inventory, give credit and so on. Similarly, a firm which
manufactures a product may require more working capital than a retailer. The manufacturing company will have to carry inventory of raw materials, work-in-process and finished goods.

Working capital requirements are directly influenced by the sales volume. With growth in the sales volume, we need to carry more inventories, increase the volume of customer's receivables, as also the operating expenses. It may be that all the expenses do not move up proportionally, however, we will have to finance some of these increases. It is also possible that granting extended credits could bring about an increase in the sales volume. In other words, by investing more funds, we could increase the volume of sales.

Fund requirements for the business may be seasonal. Say for example, in industries using agricultural raw materials (such as, Tea and Cotton), it may be more advantageous to procure raw materials during the harvest season. The materials that are required for year round production might be procured during a few months. In case of consumer retailing (such as a television manufacturer), it may be necessary to hold large inventories during a festive season. Most of the fund requirements are restricted to a limited period and if we provide for than on a permanent basis, we may have idle funds during most part of the year.

Yet another important aspect, which may condition the fund requirement, is the velocity of circulation of the current assets. In other words, the length of the operating cycle will influence the need for funds. The shorter the duration of the operating cycle, the faster is the conversion of money invested in current assets into cash and hence, the lesser the need for the net working capital.

The net working capital fund requirement is also influenced by the terms of the suppliers. The credit terms extended by the suppliers will determine the amount of additional funds required.

A firm which carries a month's inventory and grants only a month's credit to its customers, will need to fund the inventory cost of two months' sales. If it could avail two months' credit from the suppliers, the need for holding inventory and funding receivables will be nil. Please note that the sales and accounts receivable are designated in the selling price, whereas the funds requirement is only to the extent of the cost of goods sold.

In another situation, suppose the firm carries an average balance of ₹ 10,000 of accounts payable, payable in 30 days; and an average accounts receivable of $₹ 15,000$; receivable in 45 days. The firm will have to keep a net working capital for the differences of the receipts from customers and fund required for meeting the payables, as follows:

| Fund required to meet payable due within 30 days | $₹ 10,000$ |
| :--- | :---: |
| Less: <br> Funds received from customers within 30 days: <br> Received in 45 days, that is, ₹ $15,000 \times 30 / 45$ | $₹ 10,000$ |
| Fund required in the form of additional net working capital | NIL |

Assuming the time taken for the collection of receivables is 90 days, the situation will be:

| Fund required to meet payable due within 30 days | $₹ 10,000$ |
| :--- | :--- |
| Less: <br> Funds received from customers within 30 days: <br> Received in 45 days, that is, ₹15,000 $\times 30 / 90$ | $₹ 5,000$ |
| Fund required in the form of additional net working capital | $₹ 5,000$ |

We could summarize the discussion we had with respect to the need for working capital by saying that the ability of the firm to circulate cash in its operating cycle (see Figure 4.1) is the most vital and important factor in determining the amount of working capital required. However, the exact amount needed
to be invested in all these will be determined by the period and quantum of the holding of each of these elements. This, in turn, is also influenced by the factors we discussed in this section.

Readers may like to look at Annexure 4.2 on the OLC to have a look at a company's financial statements and understand its flow of funds from these statements. Please also note that the funds flow statement is another important financial statement and can be constructed with the help of a balance sheet at the beginning and end of a period and the profit and loss account for the period. This is the core idea behind our preparation of cash flow statement using the indirect method.

## Let's Check Our Concepts!

State whether the following statements are True or False:
(j) A cash flow statement takes items according to the cash basis of accounts.
(k) Working capital requirements are indirectly influenced by the sales volume.

### 4.7 PREPARING A CASH FLOW STATEMENT USING INDIRECT METHOD

Prepare a cash flow statement using indirect method

The discussion in Sections 4.5 and 4.6 would have clearly hinted that an entity's cash flow statement for a particular period could be built - if one has access to that period's profit and loss statement along with balance sheets on the start date and end date of that period. The cash effects of the balance sheet changes between the start period and end period statements would be as follows:

Table 4.9 Effect of Balance Sheet changes in Cash Flow Statement

|  | Cash Inflow |  |  | Cash Outflow |
| :--- | :--- | :--- | :--- | :--- |
| Operating Activities | $\downarrow$ | Current Assets items | $\uparrow$ | Current Assets items |
| Operating Activities | $\uparrow$ | Current Liability items | $\downarrow$ | Current Liability items |
| Investing Activities | $\downarrow$ | Non-current Asset items | $\uparrow$ | Non-current Asset items |
| Financing Activities | $\uparrow$ | Non-current Liability items | $\downarrow$ | Non-current Liability items |

## SPOTLIGHI 4.3

## Balance Sheet Equation Restated

We know that the Balance Sheet Equation states:
Assets $=$ Owner's Equity + Liabilities
Therefore, we can say that $\Delta$ Assets $=\Delta$ Owner's Equity $+\Delta$ Liabilities
or
This can be expanded and restated as:
$\Delta$ Cash \& cash equivalent $+\Delta$ Non-cash Assets $=\Delta$ Owner's Equity $+\Delta$ Liabilities

And the cash effects of income statement for that period would simpler wherein revenue accounts are sources of cash and expense accounts are uses of cash. Need for minor additional information such as any specific non-cash business acquisitions values; profit/loss on sale of non-current assets; and such would also be needed. This way of building the cash flow statement is


To know more on "Direct Method Vs Indirect Method?" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/533 known as indirect method (see Table 4.10 sample format).

Table 4.10 Presentation Format for Cash Flow Statement Using Indirect Method

| Profit before taxation and extraordinary items | XXXX |  |
| :---: | :---: | :---: |
| Add: |  |  |
| Adjustment (non-cash \& non-operating items) |  |  |
| Depreciation | XXXX |  |
| Interest expense | XXXX |  |
| Interest income | (XXXX) |  |
| Dividend income | ( XXXX ) |  |
| Operating profit before working capital changes | XXXX |  |
| Add: Decrease in current assets (sources) | XXXX |  |
| Increase in current liability (sources) | XXXX |  |
| Less: Increase in current assets (application) | (XXXX) |  |
| Decrease in current liability (application) | (XXXX) |  |
| Cash generated from operations | XXXX |  |
| Less: Income taxes paid | (XXXX) |  |
| Cash flow from operating activities | (A) | XXXX |
| Proceeds from sale of fixed assets | XXXX |  |
| Purchase of fixed assets and investments | ( XXXX ) |  |
| Dividend received | XXXX |  |
| Interest received | XXXX |  |
| Cash flow from investing activities | (B) | XXXX |
| Proceeds from borrowings | XXXX |  |
| Proceeds from issue of shares | XXXX |  |
| Payment of long term borrowings | (XXXX) |  |
| Payment of dividends | (XXXX) |  |
| Cash flow from financing activities | (C) | XXXX |
| Net Cash Flow during the year = ( $\mathbf{A}+\mathbf{B}+\mathbf{C}$ ) | XXXX |  |
| Add: Opening balance of cash and cash equivalent | $X X X X$ |  |
| Closing Balance of Cash | XXXX |  |

Table 4.11 The Journey of Ramsons can be expressed in Cash Flow Statements as:

| A Change in Balance Sheet | Impact on Cash Flow Statement |  |
| :--- | :--- | :--- |
| Current Assets excluding Cash | Operating activities |  |
| Current Liabilities | Operating activities |  |
| Non-Current Assets |  | Investing activities |
| Non-Current Liabilities |  | Financing activities |
| Owners' Equity |  | Financing activities |

In operating activities, the idea is to convey to the user of the cash flow, the cash generated solely as a result of the operating activities of the business, and hence, all the non-operating cash flows are adjusted to get purely the operating cash flow of the company. Under the indirect method, the profit and loss account is adjusted for the effects of transactions of non-cash and non-operating nature. We add back all the non-operating expenses to and subtract all the non-operating incomes from the current year's profit and subsequently should give effects toward the changes in the Working Capital. So, the profit adjusted for depreciation, gains and/or losses on sale of non-current assets, tax paid and working capital changes (such as increases or decreases in pre-paid expenses, inventories, receivables and payables), come under operating activities. In the language of cash, this would be stated as cash transactions omitted from income are added (such as, income tax paid). Non-cash transactions included in the income are removed (such as, dividend income). Hence, this method is also called by accountants, as 'reconciliation to Net Income'. Table 4.12 reemphasizes the steps for cash flows from operating activities.

Table 4.12 Cash Flows from Operating Activities (Indirect Method)

| Net Profit/Loss before Tax and Extraordinary Items | xxx |  |
| :--- | :--- | :--- |
| + | Deductions already made in the statement of profit and loss on account of non-cash items <br> such as depreciation, goodwill to be written off. |  |
| + | Deductions already made in statement of profit and loss on account of <br> non-operating items such as interest. |  |
| - | Additions (incomes) made in statement of profit and loss on account of <br> non-operating items such as dividend received, | xxx |
|  | Profit on sale of fixed assets. | xxx |
| Operating Profit before Working capital changes | Increase in current liabilities | Decrease in current assets |
| $+\quad$ Increase in current assets | xxx |  |
| - | Decrease in current liabilities | xxx |
| Cash Flows from Operating Activities before Tax Items | xxx |  |
| - | Income tax paid | xxx |
| Net Cash from Operating Activities | xxx |  |



Figure 4.5 Computing Cash Flow using Indirect Method
Table 4.10 conveys that purchases of non-current assets and proceeds on the sale of non-current assets are called 'investing activities'. Examples of cash inflow by way of investing activities include, purchase of machinery, land and long-term investments. Examples of cash outflow by way of investing activities would be items such as disposal of real estate, old machinery and sale of long-term investments. Similarly, examples of cash inflow due to financing activities in Table 4.10 would include issues of new debentures and issue of new preference shares. Repayment of loans and dividends (to shareholders) would be good examples of cash outflow due to financing activities.

Illustration 4.8

This illustration is a repeat of Illustration 4.1 on Rohan Software Limited (RSL) to prepare the cash flow statement using the indirect method. Readers may like to visit Solved Problems 2.1 and 3.2 to browse through the income statements and balance sheets of RSL for the two periods.

## Solution:

Given the lucid way of explanation in this chapter and the simplicity of the RSL illustration, we directly present the cash flow statement using indirect method for both the periods below:

Interested readers might like to go through the comparison of solution presented in Illustration 4.1 with this one to appreciate the indirect method better.

## Rohan Software Limited Statement of Cash Flow

For the Period 1st to 31st March
(All figures in ₹)
Using Indirect Method

|  | Period 2 | Period 1 |
| :--- | :---: | :---: |
| Cash Flows from Operating Activities |  |  |
| Profit before taxation | $6,60,000$ | $11,60,000$ |
| Adjustments for: |  |  |
| Depreciation | $2,00,000$ | $2,00,000$ |
| Interest expense | 40,000 | 40,000 |
| Working capital changes: | $(10,00,000)$ | $(8,00,000)$ |
| (Increase) / Decrease in trade and other receivables | $1,00,000$ | $(5,00,000)$ |
| (Increase) / (Decrease) in inventories | - | $4,00,000$ |
| Increase / (Decrease) in trade payables |  |  |

(Contd.)

| Cash generated from operations | - | 5,00,000 |
| :---: | :---: | :---: |
| Income taxes paid | - | - |
| Net cash from operating activities | - | 5,00,000 |
| Cash Flows from Investing Activities |  |  |
| Purchase of office equipment | - | (58,00,000) |
| Net cash provided by investing activities (B) | - | (58,00,000) |
| Cash Flows from Financing Activities |  |  |
| Capital invested by the owner, equity | - | 50,00,000 |
| Withdrawal by owner | - | (3,00,000) |
| Loan | (2,00,000) | 20,00,000 |
| Interest Paid | (80,000) | - |
| Net cash provided by financing activities (C) | $(2,80,000)$ | 67,00,000 |
| Net increase (decrease) in cash position ( $A+B+C$ ) | $(2,80,000)$ | 14,00,000 |
| Beginning cash balance | 14,00,000 | - |
| Cash balance at the end | 2,80,000 | 14,00,000 |

Readers may like to also go through the indirect method in Annexure 4.3 on the OLC. Now that you have gone through a basic illustration of indirect method - gives us the confidence to delve through the complex ones.

## Illustration 4.9

## Cash Flow Statement for Telangana Tigers Limited

Telangana Tigers Limited (TTL)'s statement of profit and loss and balance sheet are provided. You are required to show how the statements of cash flow for this non-finance enterprise under the direct method and the indirect method. The following additional information is also relevant for the preparation of the statement of cash flows (figures are in millions).
(a) An amount of 250 was raised from the issue of share capital and a further 250 was raised from long-term borrowings.
(b) Interest expense was 400 of which 170 was paid during the period. 100 relating to interest expense of the prior period was also paid during the period.
(c) Dividends paid were 1,200.
(d) Tax deducted at source on dividends received (included in the tax expense of 300 for the year) amounted to 40.
(e) During the period, the enterprise acquired fixed assets for 350 . The payment was made in cash.
(f) Plant with original cost of 80 and accumulated depreciation of 60 was sold for 20.
(g) Foreign exchange loss of 40 represents the reduction in the carrying amount of a short-term investment in foreign-currency designated bonds arising out of a change in exchange rate between the date of acquisition of the investment and the balance sheet date.
(h) Sundry debtors and sundry creditors include amounts relating to credit sales and credit purchases only.

## Telangana Tigers Limited

Balance Sheet as at 31.12.20X7
(₹ in millions)

|  | 20X7 | 20X6 |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash on hand and balances with banks | 200 | 25 |
| Short-term investments | 670 | 135 |
| Sundry debtors | 1,700 | 1,200 |
| Interest receivable | 100 | - |
| Inventories | 900 | 1,950 |
| Long-term investments | 2,500 | 2,500 |
| Fixed assets at cost | 2,180 |  |
| Accumulated depreciation | $(1,450)$ |  |
| Fixed assets (net) | 730 | 850 |
| Total assets | 6,800 | 6,660 |
| Liabilities |  |  |
| Sundry creditors | 150 | 1,890 |
| Interest payable | 230 | 100 |
| Income taxes payable | 400 | 1,000 |
| Long-term debt | 1,110 | 1,040 |
| Total liabilities | 1,890 | 4,030 |
| Shareholders' Funds |  |  |
| Share capital | 1,500 | 1,250 |
| Reserves | 3,410 | 1,380 |
| Total shareholders' funds | 4,910 | 2,630 |
| Total liabilities and shareholders' funds | 6,800 | 6,660 |

Telangana Tigers Limited
Statement of Profit and Loss for the period ended 31.12.20X7
(in millions)

| Sales | 30,650 |
| :--- | ---: |
| Cost of sales | $(26,000)$ |
| Gross profit | 4,650 |
| Depreciation | $(450)$ |

(Contd.)

| Administrative and selling expenses | (910) |
| :--- | ---: |
| Interest expense | (400) |
| Interest income | 300 |
| Dividend income | 200 |
| Foreign exchange loss | (40) |
| Net profit before taxation and extraordinary item | 3,350 |
| Extraordinary item - Insurance proceeds from <br> earthquake disaster settlement | 180 |
| Net profit after extraordinary item | 3,530 |
| Income-tax | $(300)$ |
| Net profit | 3,230 |

## Solution

The solution for TTL using the direct method.

## Telangana Tigers Limited

 Direct Method Cash Flow Statement(₹ in millions)

|  |  |
| :--- | ---: |
|  |  |
| Cash flows from operating activities | $20 X_{7}$ |
| Cash receipts from customers | 30,150 |
| Cash paid to suppliers and employees | $(27,600)$ |
| Cash generated from operations | 2,550 |
| Income taxes paid | $(860)$ |
| Cash flow before extraordinary item | 1,690 |
| Proceeds from earthquake disaster settlement | 180 |
| Net cash from operating activities | $(350)$ |
| Cash flows from investing activities | 20 |
| Purchase of fixed assets | 200 |
| Proceeds from sale of equipment | 160 |
| Interest received | 30 |
| Dividends received | 250 |
| Net cash from investing activities | 250 |
| Cash flows from financing activities | $(C o n t d)$. |
| Proceeds from issuance of share capital |  |
| Proceeds from long-term borrowings |  |
|  |  |


| Repayment of long-term borrowings | $(180)$ |
| :--- | ---: |
| Interest paid | $(270)$ |
| Dividends paid | $(1,200)$ |
| Net cash used in financing activities | $(1,150)$ |
| Net increase in cash and cash equivalents | 750 |
| Cash and cash equivalents at beginning of period | 160 |
| Cash and cash equivalents at end of period | 910 |

The solution for TTL using the direct method. Cash and cash equivalents consist of cash on hand and balance with banks, and investments in money-market instruments. Cash and cash equivalents included in the cash flow statement comprise the following balance sheet amounts.

|  | $\mathbf{2 0 X}$ | $\mathbf{2 0 X 6}$ |
| :--- | :---: | :---: |
| Cash on hand and balances with banks | $\mathbf{2 0 0}$ | 25 |
| Short-term investments | 670 | $\mathbf{1 3 5}$ |
| Cash and cash equivalents | 870 | 160 |
| Effect of exchange rate changes | 40 | - |
| Cash and cash equivalents as restated | 910 | 160 |

Cash and cash equivalents at the end of the period include deposits with banks of 100 held by a branch which are not freely remissible to the company because of currency exchange restrictions. Further, TTL has undrawn borrowing facilities of 2,000 of which 700 may be used only for future expansion. The total tax paid during the year including tax deducted at source on dividends received amounted to goo.

We now move further to present the solution using the indirect method.

## Telangana Tigers Limited <br> Indirect Method Cash Flow Statement

₹ in millions)

|  | $\mathbf{2 0 X} \mathbf{7}$ |
| :--- | ---: |
| Cash flows from operating activities |  |
| Net profit before taxation, and extraordinary item | 3,350 |
| Adjustments for: | 450 |
| Depreciation | 40 |
| Foreign exchange loss | $(300)$ |
| Interest income | $(200)$ |
| Dividend income | 400 |
| Interest expense | 3,740 |
| Operating profit before working capital changes | $(500)$ |
| Increase in sundry debtors | $\mathbf{1 , 0 5 0}$ |
| Decrease in inventories |  |


| Decrease in sundry creditors | $(1,740)$ |
| :--- | ---: |
| Cash generated from operations | 2,550 |
| Income taxes paid | $(860)$ |
| Cash flow before extraordinary item | 1,690 |
| Proceeds from earthquake disaster settlement | 180 |
| Net cash from operating activities | $\mathbf{1 , 8 7 0}$ |
| Cash flows from investing activities | $(350)$ |
| Purchase of fixed assets | 20 |
| Proceeds from sale of equipment | 200 |
| Interest received | 160 |
| Dividends received | 30 |
| Net cash from investing activities | 250 |
| Cash flows from financing activities | 250 |
| Proceeds from issuance of share capital | $(180)$ |
| Proceeds from long-term borrowings | $(270)$ |
| Repayment of long-term borrowings | $(1,200)$ |
| Interest paid | $\mathbf{( 1 , 1 5 0 )}$ |
| Dividends paid | $\mathbf{7 5 0}$ |
| Net cash used in financing activities | $\mathbf{1 6 0}$ |
| Net increase in cash and cash equivalents | $\mathbf{9 1 0}$ |
| Cash and cash equivalents at the beginning of the period |  |
| Cash and cash equivalents at the end of the period |  |

As an alternative, in an indirect method cash flow statement, operating profit before working capital changes is sometimes presented as follows:

| Revenues excluding investment income | 30,650 |
| :--- | ---: |
| Operating expense excluding depreciation | $\underline{(26,910)}$ |
| Operating profit before working capital changes | $\underline{3,740}$ |

The working notes for TTL's cash flow statement are given below. The purpose of these working notes is merely to assist in understanding the manner in which various figures in the cash flow statement have been derived. (Figures are in millions.)

1. Cash receipts from customers

| Sales | 30,650 |
| :--- | ---: |
| Add: Sundry debtors at the beginning of the year | 1,200 |
|  | 31,850 |
| Less : Sundry debtors at the end of the year | 1,700 |
|  | 30,150 |

2. Cash paid to suppliers and employees

| Cost of sales | 26,000 |  |
| :--- | ---: | ---: |
| Administrative and selling expenses | 910 |  |
|  | 26,910 |  |
| Add: Sundry creditors at the beginning of the year | 1,890 |  |
| Inventories at the end of the year | 900 | 2,790 |
|  |  | 29,700 |
| Less: Sundry creditors at the end of the year | 150 |  |
| Inventories at the beginning of the year | 1,950 | 2,100 |
|  |  | 27,600 |

3. Income taxes paid (including tax deducted at source from dividends received)

| Income tax expense for the year (including tax deducted at source <br> from dividends received) | 300 |
| :--- | ---: |
| Add : Income tax liability at the beginning of the year | 1,000 |
|  | 1,300 |
| Less: Income tax liability at the end of the year | 400 |
|  | 900 |

Out of goo, tax deducted at source on dividends received amounting to 40 is included in cash flows from investing activities and the balance of 860 is included in cash flows from operating activities.
4. Repayment of long-term borrowings

| Long-term debt at the beginning of the year | $\mathbf{1 , 0 4 0}$ |
| :--- | ---: |
| Add : Long-term borrowings made during the year | 250 |
|  | $\mathbf{1 , 2 9 0}$ |
| Less : Long-term borrowings at the end of the year | $\mathbf{1 , 1 1 0}$ |
|  | 180 |

5. Interest paid

| Interest expense for the year | 400 |
| :--- | :--- |
| Add: Interest payable at the beginning of the year | 100 |
|  | 500 |
| Less: Interest payable at the end of the year | 230 |
|  | 270 |

We move towards the next section and look out at the accounting standards related to the cash flow statement.

## Case $4.3>$ Come back to "Money from Black" OR "Black Money"!!

We introduced ourselves to Coal India Limited (CIL)'s financial statements in Cases 2.2 and 3.2. Given below is the summarized cash flow statement as on $31^{\text {st }}$ March 2015. We see that its cash and cash equivalents balance is unchanged as the changes in its three different activities balance themselves out. CIL's biggest outgo is in dividend payments. In fact it matches CIL's cash flow from operating activities. An indication of a firm with comfortable financial situation and minimal borrowing activities.

Coal India Limited, Cash Flow Statement Summary
(all figures in ₹ Bn.)

| Item | Amount |
| :---: | :---: |
| Cash Flow from Operating Activities |  |
| Net profit before tax | 21 |
| Adjustments for: |  |
| Depreciation and amortization expense, and similar | 2 |
| Changes in other accounts affecting operations |  |
| (Increase)/decrease in prepaid expenses and other current assets | (2) |
| Increase/(decrease) in accounts payable and provisions | 3 |
| Income tax paid/refund | (10) |
| Net cash provided by operating activities (A) | 14 |
| Cash Flow from Investing Activities |  |
| Capital expenditures | (5) |
| Proceeds from sales of investments | 1 |
| Interest pertaining to investment activities | 5 |
| Net cash provided by (used in) investing activities (B) | 1 |
| Cash Flow from Financing Activities |  |
| Dividends paid | (15) |
| Net cash provided by (used in) financing activities (C) | (15) |
| Starting Cash and Cash Equivalents Balance | 9 |
| Net increase (decrease) in cash and cash equivalents due to (A) + (B) + (C) | - |
| Ending Cash and Cash Equivalents Balance | 9 |

Note: All figures are rounded off (and thus, there can be rounding off errors)
Source: Coal India Investors Center, Coal India, Web, 15 Dec. 2015.

Within operating activities, we observe that CIL's income tax payments absorb a huge portion of its operating cash flows. This indicates the high tax rate environment in which CIL operates in. Working capital items have changed but their overall influence has been muted. Within investing activities, we observe that CIL has spent a fair amount of money on capital expenditures. This amount is more than twice the amount of depreciation and amortization expense. This signals the intent of the firm to grow further.


To know more on "How to Deal when Profits vary widely under different GAAPs?" scan the QR code, or visit:
http://qrcode.flipick.com/index. php/534

### 4.8 ACCOUNTING STANDARD ON CASH FLOW STATEMENT



Having understood the process of preparing a cash flow statement - readers would also like to be make themselves aware of the accounting standards, and thus this section was made. Another reason behind this was also the fact that the stand aloneness of this topic also made us cover it here. The format suggested by us throughout the discussion and the illustrations do convey most of the broad items with the accounting standards. Yet, finer points remain. Few transactions that create confusion while separating various items into their activities are: interest received, interest paid, dividend received and dividend paid. To avoid mistakes, the following suggestions can be adopted:

1. Interest received on long-term investments made or on a part of non-current assets, should be considered as an investing activity, while interest received on short-term investments taken under the head cash and cash equivalents, should be taken under the head of operating activity. Similarly, interest on trade advances and operating receivables are considered as operating activity. Interest received by financial institutions are treated as operating activity.
2. Interest paid on loans and debts are either operating or financing activities depending on a entities way of looking at borrowings. However, care should be taken to maintain consistency. On the other hand, interest paid on a working capital loan or any other loan for financing the operating activity, is considered under operating activities.
3. As per Indian accounting standards, dividend received in case of financial enterprises is an operating activity, since the main business of a financial enterprise is dealing in securities, while dividends received by any other type of enterprise are to be considered under the investing activity.
4. Dividend paid is always classified as a financing activity.

IFRS have International Accounting Standard 7, i.e., known as IAS 7 to deal with the cash flow statement. Ind AS, the IFRS converged standards in India issued by the Ministry of Corporate Affairs, Government of India in 2015 issued Indian AS 7, i.e., known as Ind AS 7 to deal with the cash flow statement. While, there is no difference in their treatments for most items. In Table 4.13, we show the comparison for both IAS 7 and Ind AS 7 on two complex issues.

Table 4.13 Accounting Standards on Cash Flow Statement: IFRS and Ind AS

| Topic | IFRS | Indian AS |
| :--- | :--- | :--- |
| Item | IAS 7- Statement of Cash Flows | Indian AS 7- Statement of Cash Flows |
| Bank overdrafts | Included as cash and cash equivalents | Similar to IFRS |
| Interest and <br> Dividend | May be classified as operating, investing or <br> financing activities in a manner consistent from <br> period to period. | For Financial enterprises: <br> Interest paid and interest and dividend received <br> are to be classified as operating activities. <br> Dividend paid is to be classified as financing <br> classified. |
|  |  | For other enterprises: <br> Interest and dividends received are required to <br> be classified as investing activities. Interest and <br> dividends paid are required to be classified as <br> financing activities. |

From the comparative Table 4.13, we see that, as far as cash flow statement related accounting standards are concerned, Ind AS differs from IAS on only one aspect. On almost all other aspects, it is in sync with the IFRS. Before we move to our next section, it takes us through questions to be raised for analysis of cash flow statements, and hints at the possible answers as well.

## Let's Check Our Concepts!

## Fill in the Blanks

(I) Working Capital = Total Current Assets - $\qquad$ .
(m) Investment in $\qquad$ is required to expand the capacity or to improve the current facilities for operation.

### 4.9 CASH FLOW STATEMENT ANALYSIS

Use the cash flow
statement as an analytical tool

In the recent times of high company failures, cash flow statement has come to acquire a significance of its own. The key reason is very simple, whereas it is comparatively easier to tinker with the income statement and balance sheet items of a company (with some help of innovative accounting practices), the manipulation of the cash balances has proved to be a much tougher exercise. So, it is nearly impossible to manipulate a statement of cash flow. Further, a cash flow statement helps to answer the following type of questions:

- How did cash position change, compared to the accounting profits reported based on the income statements?
(Hint: Look inside the changes beneath the indirect method of cash flow statement presentation)
- Did the firm issue/redeem any share capital during the period?
(Hint: Look at the items within financing activities)
- How was the expansion in the plant and machinery financed?
(Hint: Look at the cash inflow items within financing activities and match them with the cash outflow items within investing activities)
- How much money was borrowed during the year?
(Hint: Look at the cash inflow items within financing activities)
- From where did the company bring in and spend out the cash?
(Hint: Identify the major cash inflow items; also check on the change in the cash balance)
- What is the company using extra cash for?
(Hint: Look at items within cash equivalents; also look at investment activities of the organization)
- Has the company's operating activities generated enough cash to support the payment of interest, dividends and fund its CAPEX ${ }^{2}$ during the period?

[^15](Hint: Look at the net cash flow from operating activities and match that with the items mentioned above)

- If NO, then how have the payments for interest, dividends and CAPEX been dealt with?
- If YES, then how was the excess cash dealt with?

Analyzing the cash flow statement should not be an intimidating task when reviewed in the manner we do here. After appreciating the cash flow statement, the method we suggest is:

1. Scan the big picture for the company: This would include items such as, what is the external environment for the company? How strong is the organization vis-à-vis its competitors? Where is the company located in the industry life cycle? What is the size of the organization? Is it family based? Are there deep pockets backing the organization?
2. Check the major source items within the cash flow statement: This would include asking questions such as: What were the major sources of funds? What is the proportion of long-term sources vis-à-vis short-term sources? Is the borrowing (if any) secured or unsecured? Are the sources sustainable in the future?
3. Check the major use items within the cash flow statement: The questions would be similar to the previous one, such as, What are the major uses of funds? Are the uses of funds for the long-term benefit of the company? Are the uses going to be perennial (going forward)?
4. Pinpointing the positives and the negatives: This can be done by a systematic observation of the key items in the statement and gaging their trends over the past few years for comparison. Care is to be taken to observe the broad trends in the firms' capital expenditure compared to depreciation. Similarly, the trends in specific working capital items would also give you hints to chew on.
Putting the summary points: This can be done by asking the final questions to ensure that you are aware of the bankruptcy risks the company may face. These could include: (a) What are the most probable sources of funds that were used for capital expenditures and the payment of dividends? and (b) Is the firm approximately following a policy of using long-term sources for long-term purposes and short-term sources for short-term requirements?

While analyzing companies, one should remember that these financial statements, including the balance sheet, profit and loss account and funds flow statement, are like pieces of a puzzle and hence, drawing extreme conclusions based on only one financial statement should be avoided. We look at a sample real-life case below to


To know more on "Are Negative Cash Flows for One Year a Bad Signal?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/535 see and appreciate the discussion.

## Activity 4

Identify each transaction either as:
(a) Operating activity, (b) Investing activity, (c) Financing activity (d) None of the above

1. Cash received from customers
2. Purchased machinery
3. Paid income tax to government
4. Issued equity shares at par
5. Sold investments at a gain
6. Issued debentures in exchange for equipment
7. Converted debentures into equity shares
8. Paid installments for the purchase of inventory
9. Received dividend
10. Paid interest on loans and debts

## Case $4.4>$ India's Biqgest Company's Income Statement

This case is an extension of Cases 2.1 \& 3.1 on the Tata Consultancy Services Limited (TCS). Cash flow statements of TCS are given below for two consecutive accounting years.

Tata Consultancy Limited
Cash Flow Statement for the Year 2014-15

|  | Year Ended March 3/31/2015 | Year Ended March 3/31/2014 |
| :---: | :---: | :---: |
| CASH FLOWS FROM OPERATING ACTIVITIES |  |  |
| Profit before tax | 263 | 254 |
| Adjustments for: |  |  |
| Depreciation and amortization expense | 13 | 13 |
| Provision of doubtful receivables (net) | 2 | 1 |
| Interest expense | 1 | 0 |
| Interest income | (16) | (13) |
| Profit on redemption of mutual funds and sale of other investments (net) | (2) | (2) |
| Operating profit before working capital changes | 261 | 252 |
| Unbilled revenue | 2 | (8) |
| Trade receivables | (22) | (40) |
| Loans and advances and other assets | (7) | (3) |
| Trade payables, other liabilities and provisions | 34 | 17 |
| Cash generated from operations | 269 | 218 |
| Taxes paid | (75) | (70) |
| Net cash provided by operating activities | 194 | 148 |
| CASH FLOWS FROM INVESTING ACTIVITIES |  |  |
| Purchase of fixed assets | (29) | (31) |
| Acquisition of subsidiaries | (3) | (5) |


| Purchase of mutual funds and other investments | (673) | (826) |
| :---: | :---: | :---: |
| Redemption of mutual funds and sale of other investments | 694 | 813 |
| Inter-corporate deposits placed | (18) | (27) |
| Inter-corporate deposits matured | 20 | 35 |
| Fixed deposit placed with banks having original maturity over three months | (155) | (128) |
| Fixed deposit with banks matured having original maturity over three months | 131 | 57 |
| Earmarked deposits placed with banks | (2) | 0 |
| Interest received | 20 | 14 |
| Net cash used in investing activities | (17) | (97) |
| CASH FLOWS FROM FINANCING ACTIVITIES |  |  |
| Redemption of preference shares | 0 | (1) |
| Proceeds from other borrowings | 0 | 1 |
| Repayment of other borrowings | 0 | (1) |
| Dividend paid, including dividend tax | (170) | (55) |
| Interest paid | (1) | (0) |
| Net cash used in financing activities | (172) | (57) |
| Net increase/(decrease) in cash and cash equivalents | 5 | (6) |
| Cash and cash equivalents at the beginning of the year | 15 | 18 |
| Exchange difference on translation of foreign currency cash and cash equivalents | (1) | 2 |
| Cash and cash equivalents at the end of the year | 19 | 15 |
| Earmarked balances with banks | 3 | $\bigcirc$ |
| Short-term bank deposits | 164 | 129 |
| Cash and bank balances at the end of the year | 186 | 144 |

Note: All figures are rounded off (and thus, there can be rounding off errors).

## Tata Consultancy Services Cash Flow Statement as per IFRS (all figures in ₹ billion)

We observe that the year-on-year figures above display a steady growth in cash flow from operations. We also observe a large number of figures in the cash flow statement above. For example, there are multiple investment items within the cash flows from investing activities. To tackle the same, we will focus on the key items which convey us the cash situation of TCS. In the process, we also club similar items into broad themes. The table ahead gives a summary of the analysis.

| Tata Consultancy Services <br> Cash Flow Statement Analysis | (allf figures in ₹ billion) |
| :--- | :--- | :--- | :--- |

Source: Authors own analysis
We observe that TCS is doing well and rewarding its shareholders with dividends. The analysis indicates a firm with near zero borrowing and leverage worries such as interest paid and such. In FY2015, TCS tripled its dividend to shareholders. In fact, it sold some of its investments to do the same. Was that a special year for TCS to dole out such big rewards to its shareholders? Perhaps, yes - as a major portion of this was announced as 'special dividend'.

On the future prospects front, we observe that TCS by spending about two to three times more on capital expenditure compared to their depreciation and amortization expense is giving a signal of confidence. It signals TCS management's confidence in the future growth prospects of its business model.


To know more on "Description on Sun Pharma's Cash Flow Statement" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/536

## SOLVED PROBLEMS

As we have read through the importance, preparation and interpretation of a cash flow statement, it would be better to go through some illustrations to brush up our understanding of the same.

## Solved Problem 4.1

From the following balance sheet, prepare the fund flow statement.
Gogoi Constructions Pvt. Limited
Balance Sheet as at $31^{\text {st }}$ March...
Figure in Millions

| Assets | 20X6 | 20X7 | Liabilities | 20X6 | 20X7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Land | 30 | 50 | Equity Share Capital | 25 | 25 |
| Building | 20 | 20 | Preference Share | 10 | 10 |
| Stock | 10 | 15 | Profit \& Loss Account | 35 | 45 |
| Debtors | 25 | 50 | Long-Term Loans | 15 | 20 |
| Cash | 10 | 20 | Sundry creditors | 10 | 55 |
|  | 95 | 155 |  | 95 | 155 |

## Suggested Solution

In order to prepare the funds flow statement, we have to calculate the change in the working capital first, by way of a statement of changes in the working capital, in the following way:

M/s Gogoi Constructions Pvt. Limited
Statement of Changes in Working Capital

| Particulars | 20X6 | 20X7 | Increase in working capital | Decrease in working capital |
| :---: | :---: | :---: | :---: | :---: |
| Current Assets: |  |  |  |  |
| Closing Stock | 10 | 15 | 5 |  |
| Sundry Debtors | 25 | 50 | 25 |  |
| Cash in Hand | 10 | 20 | 10 |  |
| Total (A) | 45 | 85 |  |  |
| Current Liabilities: |  |  |  |  |
| Sundry Creditors | 10 | 55 |  | 45 |
| Total (B) | 10 | 55 |  |  |
| Net Working Capital (A) - (B) | 35 | 30 |  |  |
| Decrease in W. CAPITAL |  | 5 | 5 |  |
|  | 35 | 35 | 45 | 45 |

Based on the above figures, we can easily prepare the Funds Flow Statement.

## M/s Gogoi Constructions Pvt. Limited <br> Funds Flow Statement

| Particulars |  | Amount |
| :--- | :--- | :---: |
| Sources |  |  |
| Funds from Operation (Increase in the Profit) |  | 10 |
| Increase in Loan |  | 5 |
| Decrease in the Working Capital | Total (A) | 5 |
|  |  | 20 |
| Applications |  | 20 |
| Land Purchased | Total (B) | 20 |

## Solved Problem 4.2

M/s Mirza Ghalib \& Co. provides you with this profit and loss account and balance sheet for the previous two years. The directors are interested in tracking down the activities that generated cash inflows during the year ending March 31, 20X7. Prepare a cash flow statement based upon the following details.

|  | M/s Mirza Ghalib \& Co. Balance Sheet as at $31^{\text {st }}$ March |  |  | (all figures in ₹ million) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Assets | 20X6 | 20X7 | Liabilities | 20X6 | 20X7 |
| Fixed Assets | 400 | 500 | Equity share capital | 250 | 500 |
| Investments | 200 | - | Preference share capital | 50 | 20 |
| Machinery | 150 | 300 | Debentures | 100 | 40 |
| Cash in Hand | 41 | 200 | Long-term Borrowing | - | 30 |
|  |  |  | Net Profit | 100 | 119 |
|  |  |  | Reserves \& Surplus | 291 | 291 |
|  | 791 | 1,000 |  | 791 | 1,000 |

## M/s Mirza Ghalib \& Co.

Profit \& Loss Account
For the year ending $31^{\text {st }}$ March 20X7
(all figures in ₹ million)

| To Purchases (Cash) | 15 | By Sales (cash) | 30 |
| :--- | ---: | :--- | :--- |
| To Salaries \& Wages | 5 | By Interest Received | 10 |
| To Income Tax | 1 | By Dividend Income | 15 |
| To Debenture Interest | 6 |  |  |
| To Dividend (Preference Share) | 3 |  |  |
| To Dividend (Equity Share) | 6 |  | 55 |
| To Net Profit | 19 |  |  |
|  | 55 |  |  |

## Suggested Solution

M/s Mirza Ghalib \& Co.
Statement of Cash Flow as at $31^{\text {st }}$ March 20X7 (all figures in ₹ million)
(A) Cash Flow from Operating Activities
Sale of goods 30
Paid to suppliers
Paid to employees
Income tax paid
Total Cash Flow from Operating activities
(A)
9
(B) Cash Flow from Investing Activities
Dividend received 10
Interest received 15
Sale of investments 200

| Purchase of fixed assets | $(100)$ |  |
| :--- | ---: | :--- |
| Purchase of machinery | $(150)$ |  |
| Total Cash Flow from Investing activities | (B) | (25) |
| (C) Cash Flow from Financing Activities |  |  |
| Issue of equity shares | 250 |  |
| Long term borrowings | 30 |  |
| Debentures redeemed | $(60)$ |  |
| Preference shares redeemed | $(30)$ |  |
| Debenture interest paid | $(6)$ |  |
| Dividend (Preference shares) | $(3)$ |  |
| Dividend (Equity shares) | $(6)$ |  |
| Total Cash Flow from Financing activities | (C) | $\mathbf{1 7 5}$ |


| Cash Flow from Operating, Investing \& Financing Activity $(A)+(B)+(C)$ | 159 |
| :--- | ---: |
| Opening Cash Balance | 41 |
| Cash Balance at the end of the year | $\underline{200}$ |

## Solved Problem 4.3

Oil and Natural Gas Corporation Ltd. (ONGC) is the leader in Exploration \& Production (E\&P) activities in India having $72 \%$ contribution to India's total production of crude oil and $48 \%$ of natural gas. We provide below the Cash Flow Statement of ONGC. You are required to analyze it.

Cash Flow Statement of ONGC
Cash Flow Statement for the Year 2014-15
(all figures in ₹ billion)

|  | Current year | Previous year |
| :---: | :---: | :---: |
| CASH FLOW FROM OPERATING ACTIVITIES |  |  |
| Profit before tax and extraordinary items | 274 | 394 |
| Adjustments for: |  |  |
| Prior Period Items | 3 | (2) |
| Depreciation, Depletion and Amortization \& Impairment | 180 | 166 |
| Exploration Well Costs Written off | 89 | 67 |
| Interest on Borrowings | 29 | 6 |
| Foreign Exchange Loss/Translation Adjustment | 2 | 21 |

(Contd.)
(Contd.)

| Provision for Employee Benefits | 5 | (15) |
| :---: | :---: | :---: |
| Other Provision and Write offs | 11 | 11 |
| Excess Provision/Liability written Back | (7) | (19) |
| Interest Income | (34) | (32) |
| Dividend Received | (5) | (4) |
| Provision for Mark to Market loss on Derivative contracts | (0) | 2 |
| Operating Profit before Working Capital Changes | 545 | 596 |
| Adjustments for:- |  |  |
| Receivables | (60) | 6 |
| Loans and Advances | (30) | (1) |
| Other Current Assets | (30) | (148) |
| Inventories | 45 | (22) |
| Trade Payable and Other Liabilities | (40) | 208 |
| Cash Generated from Operations | 430 | 638 |
| Direct Taxes Paid (Net of tax refund) | (90) | (106) |
| Prior period items | 1 | 1 |
| NET CASH FLOW FROM OPERATING ACTIVITIES 'A' | 340 | 533 |
| B. CASH FLOW FROM INVESTING ACTIVITIES: |  |  |
| Purchase of Fixed Assets | (169) | (149) |
| Acquisition, Exploration and Development Cost | (185) | (466) |
| Advance/Investment in Joint Controlled Entities/Associates | (1) | (5) |
| Loans to Public Sector Undertakings and Other Bodies Corporate | 0 | (27) |
| Gain on Foreign Exchange Forward Exchange Contract | 0 | 1 |
| Deposit in Site Restoration Fund | (16) | (14) |
| Project Development/ Preoperative Expenditure (net of advances) | (15) | (11) |
| Dividend Received | 5 | 4 |
| Interest Received | 31 | 31 |
| Tax paid on Interest Income | (1) | 0 |
| NET CASH FLOW FROM INVESTING ACTIVITIES 'B’ | (351) | (636) |
| CASH FLOW FROM FINANCING ACTIVITIES: |  |  |
| Advance against Equity | 0 | 2 |


| Proceeds from Borrowings | 171 |
| :--- | ---: |
| Repayment of Borrowings | $(151)$ |
| Foreign Exchange Fluctuation Related to Borrowing Cost | $(18)$ |
| Dividend Paid | $(79)$ |
| Tax on Dividend | $(16)$ |
| Interest Paid | $(12)$ |
| Change in Minority Interest | $(1)$ |
| NET CASH FLOW FROM FINANCING ACTIVITIES ‘C' | $(83)$ |
| NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS <br> (A + B + C) | $(106)$ |
| Cash and Cash Equivalents as at 1st April, 2014 (Opening Balance) | $\mathbf{( 1 1 7 )}$ |
| Add: Other Adjustments to Cash and Cash Equivalent | $\mathbf{( 7 )}$ |
| Cash and Cash Equivalents as at 31st March, 2015 (Closing Balance) | $\mathbf{1 5 2}$ |
|  | $\mathbf{3}$ |

Note: All figures are rounded off (and thus, there can be rounding off errors).

## Suggested Solution

After seeing the above Cash Flow Statement, the following few points are understood:

1. The Cash Flow Statement covers two sequential accounting periods.
2. The cash flows (i.e., cash receipts and cash payments) has been categorized under three different activities:

- Operating Activities
- Investing Activities and
- Financing Activities

3. Finally, it also shows opening and closing cash positions of the accounting periods (refer to last rows).
Thus, a Cash Flow Statement helps to answer the following type of questions:

- How did cash position change, compared to the accounting profits reported based on the income statements?
- How were the proceeds of the long-term bond or debt issued used?
- How was the expansion in the plant and machinery financed?
- How much money was borrowed during the year?
- From where did the company bring in and spend out the cash?
- What is the company using extra cash for?
- Has the company's operating activities generated enough cash to support the Capital Expenditures and payment of dividends?
- If not then how has the Capital Expenditures and payments of dividends been dealt out?

The summarized information given ahead from the cash flow statements does give us cues to the issues raised above.

|  | ONGC Limited <br> Analysis of Cash Flow Statement |  |
| :--- | :--- | :--- |
| Current Year |  |  |
| (all figures in ₹ billion) |  |  |

(Contd.)

| Capital Expenditures | Decreased, +386 | +645 |
| :--- | :--- | ---: |
| Dividends Paid | Nearly Equal, +95 | +98 |
| Net Borrowing | Drastically Reduced, +19 | +247 |

Explanation of the table: ONGC is a giant organization with positive operating cash flows for both the years. In that sense - it is not in a bad shape. Working capital items are largely being a use of cash - indicating the growth traits of ONGC. However, the latest year has seen a decreased level of operational activities. The recent decrease in crude oil prices seem to be hurting ONGC's Net Cash Flow from Operations. As far as the cash flow is concerned, we see a decreased level of Operating Activities and changes in working capital. Certainly this does not mean reduced volume of production and such parameters. While, the previous year's cash needs were managed by borrowings. In this year - it has been able to manage the cash requirements using its existing large existing cash balance. Thus, we conclude that ONGC is doing acceptably well, yet, it is facing pressures due to the external down cycle in its business conditions.

The above tabulated information conveys a lot of important information. For example, we can see that ONGC is doing well. It is also expanding vigorously. It is funding the same using external equity (this year) and debt (last year). In the latest year, the company has started repaying its loans (using the cash flow from operations) and increasing dividends.

## SUMMARY

The basic task a Cash Flow Statement is to show all the cash transactions within a business entity in a given period that enables a company to gauge its cash position and manage its daily functions more efficiently. Thus, it is a summary of receipts and payments of cash; by disclosing the cash movement during a specific period.

While cash accounting keeps track of all the cash coming in and going out of a business; on the other hand a cash flow statement is much more than cash accounting. It segregates the cash flows of a firm into three types of activities, namely, operating, investing, and financing activities. Summarizing the activities and adjusting it with the starting period cash \& its equivalents balance of the organization gives the firm's ending period balance of cash \& its equivalents. This helps in understanding the firm and its external environment better (such as the liquidity position); and thus cash flow statement gives better handle in analysis.

Statement of cash flow can be prepared in two ways - direct and indirect method. Direct method is a form of cash-basis accounting and it also segregates cash transactions based on the type of activities. In contrast, indirect method starts from an entity's income statement figures and steadily builds its cash flow statement. Regulators and accounting standards board have preferred the indirect method of presentation be preferred - given its inherent advantages in revealing information compared to the direct method.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Cash equivalents
- Cash flows
- Cash inflows
- Cash outflows
- Financing activities
- Funds flow
- Funds from financing
- Funds from investments
- Funds from operations
- Investing activities
- Negative cash flow
- Operating activities
- Positive cash flow
- Sources of funds
- Statement of cash flow
- Use of funds
- Working capital


## EXERCISES

## Multiple Choice Questions

1. The term 'cash' as used in Cash Flow Statements includes:

LO 1 EASY
(a) Only cash balances
(b) Only bank balances
(c) Bank balances and bank overdrafts
(d) Cash in hand plus bank balances less bank overdrafts
2. Which of the following are uses of funds?

LO 2 EASY
(a) Purchase of fixed assets
(b) Repayment of long-term loans
(c) New issue of share capital
(d) Only (a) and (b).
3. Lena Bank Limited received a gross of ₹ 900 crore demand deposits from customers. During the same financial year, customers had also withdrawn ₹800 crore of demand deposit. This amount would be shown as $\qquad$ in its Statement of Cash Flow.

LO 7 EASY
(a) Operating Activities, Net Cash Inflow of ₹ 100 crore
(b) Operating Activities, Net Cash Outflow of ₹ 100 crore
(c) Financing Activities, Net Cash Inflow of ₹ 100 crore
(d) Financing Activities, Net Cash Outflow of ₹ 100 crore
4. Tinkle Comics Limited paid income tax on Capital Gains resulting from disposal of capital assets. This amount would be shown in the statement of cash flow as a deduction in type of activities:

LO 7 DIFFICULT
(a) Operating activities
(b) Investing activities
(c) Financial activities
(d) None of the above
5. Rancho Brokerages Limited, a stock broking firm received ₹ 75 lakh as premium for forward contracts entered for dealing in equity shares. This amount would be classified as: LO 7 MEDIUM
(a) Operating activities
(b) Investing activities
(c) Financial activities
(d) None of the above

## True or False

1. Cash from operations are also known as trading profits.

LO 1 EASY
2. Disposal of real estate is an operating activity.

LO 1 MEDIUM
LO 1 MEDIUM
3. Dividend received in case of financial enterprises is an operating activity.
4. Shorter the duration of the operating cycle, more is the need for net working capital.

LO 3 MEDIUM
5. Cash flow statement helps in assessing the capacity of a business entity to meet its long-term obligations.

LO 7 MEDIUM

## Fill in the Blanks

1. Business entities operate at various stages of the industry cycle (namely, infant stage, growth stage, mature stage, and declining stage). It is said that one should make judgment about the quality of a Statement of Cash Flow based on the stage in which the industry/sector is in. This question is based on the same concept.

LO 1 EASY
For the current financial year, the three different cash flow activities (operating, financing, and investing) within the Statement of Cash Flow of select Indian companies are to be predicted. Based on your observation of the company and the industries position, please select the right option.

| Activity $\rightarrow$ <br> $\downarrow$ Company Name \& Sector | Operating Activities | Financing Activities | Investment Activities |
| :---: | :---: | :---: | :---: |
| (a). Aries Agro Limited (Agrochemicals) | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say |
| (b) Bharti Airtel Limited (Telecom) | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say |
| (c) Punjab \& Sind Bank Limited (Banking) | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say |
| (d) Pantaloon Retail India Limited (Retailing) | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say |
| (e) TravelAdvisor, Inc. (travel website providing reviews) | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say |
| (f) Onmobile Global Limited (Mobile Value Added Services) | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say |
| (g) Lawreshwar Polymers Limited (Footwear) | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / Net Cash Outflow / Can't say |
| (h) Hindalco Industries Limited (Aluminium) | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say | Net Cash Inflow / Net Cash Outflow / Can't say | Net Cash Inflow / <br> Net Cash Outflow / <br> Can't say |

(Contd.)

| (i)Oil \& Natural Gas Corporation <br> Limited (Oil Exploration) | Net Cash Inflow / | Net Cash Outflow / <br> Can't say | Net Cash Inflow / <br> Catflow / |
| :--- | :--- | :--- | :--- |
| (j) Reliance Industries Limited (Crude | Net Cash Inflow / | Net Cash Outflow / |  |
|  | Net Cash Inflow / | Net Cash Inflow / | Can't say |
|  | Net Cash Outflow / | Net Cash Outflow / | Net Cash Inflow / |
|  | Can't say | Can't say | Can't say |
| (k) Sutlej Jal Vidyut Nigam Limited | Net Cash Inflow / | Net Cash Inflow / | Net Cash Inflow / |
| (Hydel Power Project) | Net Cash Outflow / | Net Cash Outflow / | Net Cash Outflow / |
|  | Can't say | Can't say | Can't say |
| (I) Flipkart (e-Retailing) | Net Cash Inflow / | Net Cash Inflow / | Net Cash Inflow / |
|  | Net Cash Outflow / | Net Cash Outflow / | Net Cash Outflow / |
|  | Can't say | Can't say | Can't say |

2. Abridged summary of Bank of India's Cash Flow Statement is provided below for two consecutive years.

LO 1 MEDIUM

| Cash Flow <br> Items $\rightarrow$ | Starting Cash <br> Balance | Net Cash Flow <br> from Operating <br> Activities | Net Cash Flow <br> from Investing <br> Activities | Net Cash Flow <br> from Financing <br> Activities | Ending Cash <br> Balance |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Current Year $\rightarrow$ | $?$ | $?$ | $(8)$ | 13 | 769 |
| Previous Year $\rightarrow$ | 554 | 65 | $(8)$ | 7 | $?$ |

Note: All figures above are in ₹ billion
You are required to fill in the blank spaces above. Do you have any comments to make from the above.

## Discussion Questions

1. What is a 'Cash Flow Statement'? What is the main purpose of such a statement?

LO 1 EASY
2. What does the term 'cash equivalent' in the cash flow statement mean?

LO 2 EASY
3. How does a cash flow statement help investors, analysts, creditors, and managers in taking business decisions?

LO 10 MEDIUM
4. Refer to the Chapter Opener on the HDFC Bank's Cash Flows Statement. Briefly comment on the stated facts therein. How do you rationalize on the queries raised? How would that augur for the future of the organization?

LO 7 MEDIUM
5. Can a balance sheet show a company's liquidity? Discuss and elaborate.

LO 7 MEDIUM

## Numerical Problems

1. Ruks Industries Limited was a modest effort by Rukmini Iyer in Madurai. Day by day Rukmini found cash management to be a tough job as the firm was witnessing volatile cash situations. At times having severe cash crunch and at other times having excess cash glut. Rukmini was interested in finding out whether the increase in cash figures in balance sheet is exactly matching with cash flow or not. Using the figures given ahead and making relevant assumptions you are required to help her and analyze the same.

LO 1, 7 EASY

## Ruks Industries Limited

Balance Sheet as on $31^{s t}$ March (all figures in ₹ million)

| Assets | Previous <br> Year | Current <br> Year | Liabilities | Previous <br> Year | Current <br> Year |
| :--- | ---: | ---: | :--- | :--- | ---: |
| Cash | 10 | 30 | Short-term Loans | 10 | 5 |
| Loans \& Advances | 5 | 10 | Long-term Loans | 30 | 50 |
| Investments | 40 | 30 | Preference Share Capital | 10 | 10 |
| Machinery | 25 | 40 | Equity Share Capital | 50 | 60 |
| Other Fixed Assets | 35 | 50 | General Reserves | 10 | 10 |
|  | 0 | 0 | Retained Earnings | 5 | 25 |
| Total Assets | 115 | 160 | Total Liabilities | 115 | 160 |

Ruks Industries Limited
Profit \& Loss Account as on $31^{\text {st }}$ March 20X5 (all figures in ₹ million)

|  | Amount |
| :--- | ---: |
| Sales (all on cash basis) | 80 |
| Interest received | 12 |
| Dividend received | 8 |
| Cost of goods sold (all cash) | $(25)$ |
| Salary expenses | $(15)$ |
| Advertising expenses | $(15)$ |
| Income tax expenses | $(2)$ |
| Dividend payments | $(13)$ |
| Interest expenses | $(10)$ |
| Balance, net profit | 20 |

2. Pragati Exports Limited was created by Aashish Argade and Varun Aaron, both, veterans in commodity exports. Aashish and Varun were not happy with the firms accountant, Shan Mohan Sagili. Their concern was simple: always the net profit figures looked appealing and highly attractive; yet, Pragati Exports used to always face problems in meeting the cash requirement for working capital expenses.

LO 3, 5, 7 MEDIUM
The owners always felt that the indirect method of estimating cash flow is much more practical as it starts with the figure of net profit. The net profit for the year 20X5 has been stated as ₹500 lakhs. Additional information about Pragati Exports is being provided below:

|  | Pragati Exports Limited | (all figures in ₹ lakh) |
| :--- | :---: | :---: |
| Items | As on 31 March 20X5 | As on 31 March 20X6 |
| Account receivable | 200 | 300 |
| Account payable | 200 | 100 |
| Inventory | 40 | 30 |
| Prepaid rent | 5 | 2 |
| Advance from customers | 100 | 150 |
| Salaries payable | 10 | 17 |

During the year, the Pragati Exports has recorded the following activities:

1. The purchase of investment securities of ₹ 500 lakh
2. The payment of cash dividends of ₹ 15 Lakh
3. The sale of land costing ₹ 40 Lakh for proceeds of ₹ 55 lakh
4. The annual depreciation of plant \& equipment of ₹5 lakh
5. The issue of common stock for cash ₹ 100 lakh
6. Repayment of loan and hence loan retirement worth ₹ 50 lakh
7. Received dividends \& interests of ₹ 10 lakh from different investments.

Make relevant assumptions and see if Pragati Exports is going through a cash crunch.
3. Abrak Dabra ... Ends Here

LO 4, 5 MEDIUM
This problem is a continuation of Chapter 2, Numerical Problem \# 2. Please help Shiraz Dhaneshyar in completing the cash flow statement of T.V. Today Network by filling the following items with figures at the appropriate blanks below: Amortization 60; Cash generated from operations 1,166; Decrease in other long-term liabilities (2); Decrease in short-term loans and advances 40; Decrease in short-term provisions (3); Depreciation 240; Dividend distribution tax (10); Dividend paid (60); Fixed assets written off 1; Increase in long-term loans and advances (2); Increase in long-term provisions 3; Increase in other bank balances (268); Increase in other current assets (1); Increase in other current liabilities 69; Increase in trade payables 228; Increase in trade receivables (338); Interest and other finance costs (15); Interest and other finance costs 15 ; Interest Income (79); Interest received 74; Operating profit before working capital changes 1,440; Proceeds from share allotment under employee stock option scheme 11; Proceeds from short-term borrowings 67; Profit before taxation 1,228; Provision for doubtful debts and advances 86; Provisions/Liabilities written back to the extent no longer required (111); Purchase of tangible/intangible assets (571); Repayments of long-term borrowings (173); Sale of tangible assets 4; and Taxes paid (net of refunds) (389).

> T.V. Today Network Limited
> Statement of Cash Flow
> for the year ended March 31, 2015

Amount in ₹ million

| A. Cash Flow from Operating Activities |  |  |
| :--- | :--- | :--- |
|  | $?$ | $?$ |
| Adjustments for: | $?$ | $?$ |
|  | $?$ | $?$ |
|  | $?$ | $?$ |
|  | $?$ | $?$ |
| Changes in working capital: | $?$ | $?$ |
|  | $?$ | $?$ |
|  | $?$ | $?$ |

(Contd.)

| ? | ? |
| :---: | :---: |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| Net cash generated from operating activities | ? |
| B. Cash Flow from Investing Activities |  |
| ? | ? |
| ? | ? |
| ? | ? |
| Net cash provided by (used in) investing activities | ? |
| C. Cash Flow from Financing Activities |  |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| ? | ? |
| Net cash provided by (used in) financing activities | ? |
| Net Increase (Decrease) in Cash and Cash Equivalents Due to (A) + (B) + (C) | 104 |
| Starting Cash and Cash Equivalents Balance | 549 |
| Ending Cash and Cash Equivalents Balance | ? |

Note: All figures are rounded off (and thus, there can be rounding off errors)
Source: BSE India: TV Today Network Ltd Annual Reports, BSE India, Web, 18 Dec, 2015.
4. Looking at the position statement of the firm over the last two years, Little Flower was quite happy that the performance of the firm had changed for the better. Her husband, PaiBinoy, looked over the numbers and appeared unsatisfied with the performance. Binoy being a product from a premier business school, suggested that the best way to look at the performance would be to prepare a cash flow statement of the firm and evaluate it...

LO 3, 5 DIFFICULT The balance sheets of M/s Little Flower Imports Limited, as at March 31, 20X5 and 20X6, are as follows (all figures in ₹):


You are also provided with additional information for the year is as follows:

| Credit sales | (all figures in ₹ lakhs) |
| :--- | :---: |
| Credit Purchases | 40 |
| Overheads | 20 |
| Depreciation on machinery | 10 |
| Dividend for 20X5 paid | 20 |

Prepare a cash flow statement to show the cash flow from various activities of M/s Little Flower Imports Limited. Regarding the firms cash flow position, whom would you agree with, Binoy or Little Flower? Why?
5. Chinku's Mismash Part III

LO 2, 7 DIFFICULT
This problem is a continuation of Chapter 2, Numerical Problem \# 3. Please help Chinku in filling the 'Statement of Cash Flow' and also answering the queries below:

## SKS Microfinance Limited

Statement of Cash Flow for the year ended March 31, 2015 Amount in ₹ million

| A. Cash Flow from Operating Activities |  |
| :--- | ---: |
| Profit before tax | $\mathbf{1 , 9 3 6}$ |
| Adjustments for: | 6 |
| Increase on shortfall in payment of advance income tax | 46 |
| Depreciation and amortization | 38 |
| Provision for employee benefits | 106 |
| Stock option expenditure | 121 |
| Contingent provision against standard assets | $?$ |
| Provision for non-performing assets | 1,756 |
| Portfolio loans and other balances written off | 3 |
| Loss from assignment of loans | 32 |
| Other provisions and write offs | $(C o n d)$ |


| Operating profit before working capital changes | 2,264 |
| :---: | :---: |
| Changes in working capital: |  |
| Increase / (decrease) in other current liabilities | 319 |
| Decrease / (increase) in trade receivables | (8) |
| Decrease / (increase) in loans and advances | ? |
| Decrease / (increase) in other current assets | (66) |
| Decrease / (increase) in other non-current assets | (18) |
| Cash generated from / (used in) operations | $(11,352)$ |
| Direct taxes paid (net of refunds) | (112) |
| Net cash flow from / (used in) operating activities | ? |
| B. Cash Flow from Investing Activities |  |
| Purchase of fixed assets, including capital work-in-progress and capital advances | ? |
| Proceeds from sale of fixed assets | 2 |
| Margin money deposit (net) | 346 |
| Net cash provided by (used in) investing activities | 300 |
| C. Cash Flow from Financing Activities |  |
| Proceeds from issuance of equity share capital | 4,048 |
| Share issue expenses | (147) |
| Long-term borrowings (net) (including non-convertible debentures) | 14,713 |
| Short-term borrowings (net) (including commercial paper) | 2,773 |
| Net cash provided by (used in) financing activities | $?$ |
| Net Increase (Decrease) in Cash and Cash Equivalents Due to (A) + (B) + (C) | ? |
| Starting Cash and Cash Equivalents Balance | 4,152 |
| Ending Cash and Cash Equivalents Balance | ? |

Source: BSE India: SKS Microfinance Limited, Annual Reports, BSE India, Web, 18 Dec, 2015.

## Questions

(a) Fill the blank figures (marked '?' in the table above).
(b) What are the biggest sources of cash for this organization? What are the biggest uses of cash for this organization? Does it indicate anything specific about the business model?
(c) Connect SKS Microfinance's cash flow statement to its other financial statements?

## MINI CASES

## Case 4.1 Cash Flow Statements of Reliance Industries Limited Lo 1, 7 Medium

Mukesh Ambani led Reliance Industries Limited ranked $158^{\text {th }}$ on the Fortune Global 500 list of the world's biggest corporations, as of 2015. It contributes about one-fifth of India's total exports. It has business in energy and materials value chain and in retail and digital services. You are provided with the statement of cash flows of Reliance Industries for the latest two accounting periods. Compare the summarized cash flow statements of these two years and explain the nature of cash flows with their similarities and dissimilarities. Summarize your analysis with a rating of the company on a bankruptcy scale of 1 to 10 (with 1 for highest chances of going bankrupt).

## Reliance Industries Limited Cash Flow Statement for the Year 2014-15

(all figures in ₹ crore)

|  | $\begin{gathered} \text { Year Ended March } \\ 3 / 31 / 2015 \end{gathered}$ | $\begin{aligned} & \text { Year Ended March } \\ & 3 / 31 / 2014 \end{aligned}$ |
| :---: | :---: | :---: |
| A: CASH FLOW FROM OPERATING ACTIVITIES |  |  |
| Net Profit Before Tax as per Profit and Loss Statement | 31,114 | 28,763 |
| Adjusted for: |  |  |
| Miscellaneous Expenditure written off | 38 | 35 |
| Share in Income of Associates | (118) | (90) |
| Loss on Sale / Discard of Assets (Net) | 68 | 2 |
| Depreciation / Amortization and Depletion Expense | 11,547 | 11,201 |
| Effect of Exchange Rate Change | 1,364 | 3,272 |
| Net Gain on Sale of Investments | $(3,516)$ | $(2,493)$ |
| Dividend Income | (306) | (175) |
| Interest Income | $(4,513)$ | $(5,907)$ |
| Finance Costs | 3,316 | 3,836 |
| Operating Profit before Working Capital Changes | 7,880 | 9,681 |
| Adjusted for: | 38,994 | 38,444 |
| Trade and Other Receivables | 1,097 | $(1,913)$ |
| Inventories | 3,472 | $(1,396)$ |
| Trade and Other Payables | $(2,754)$ | 14,339 |
|  | 1,815 | 11,030 |
| Cash Generated from Operations | 40,809 | 49,474 |
| Taxes Paid (Net) | $(6,435)$ | $(6,213)$ |
| Net Cash from Operating Activities | 34,374 | 43,261 |
| B: CASH FLOW FROM INVESTING ACTIVITIES |  |  |
| Purchase of Fixed Assets | $(63,364)$ | $(60,087)$ |
| Sale of Fixed Assets | 402 | 148 |
| Purchase of Investments | $(678,241)$ | $(765,659)$ |
| Sale / Redemption of Investments | 666,383 | 749,849 |
| Movement in Loans and Advances | (232) | (426) |
| Maturity of / (Investment in) Fixed Deposits | 3,551 | $(3,624)$ |
| Interest Income | 6,055 | 6,413 |
| Dividend Income | 548 | 316 |
| Net Cash (Used in) Investing Activities | $(64,898)$ | $(73,070)$ |
| C: CASH FLOW FROM FINANCING ACTIVITIES |  |  |
| Proceeds from Issue of Share Capital | 226 | 183 |
| Proceeds from Issue of Share Capital to Minority | 117 | 5 |

(Contd.)

| Redemption of Preference Share Capital of Minority | $(1)$ | $(67)$ |
| :--- | ---: | ---: |
| Share Application Money | 17 | $\mathbf{1 7}$ |
| Proceeds from Long-term Borrowings | 29,413 | $(5,49,215$ |
| Repayment of Long-term Borrowings | $(6,444)$ | $\mathbf{( 1 9 , 8 3 5 )}$ |
| Short-term Borrowings (Net) | $(3,268)$ | $(3,123)$ |
| Dividends Paid (including Dividend Distribution Tax) | $(6,147)$ | $(5,619)$ |
| Interest Paid | $\mathbf{8 , 4 4 4}$ | $\mathbf{1 3 , 7 1 3}$ |
| Net Cash from Financing Activities | $\mathbf{( 2 2 , 0 8 0 )}$ | $\mathbf{( 1 6 , 0 9 6 )}$ |
| Net (Decrease) in Cash and Cash Equivalents | $\mathbf{3 4 , 3 6 0}$ |  |
| Opening Balance of Cash and Cash Equivalents | $\mathbf{1 9 2}$ | $\mathbf{5 0 , 4 5 6}$ |
| Add: Upon Addition of Subsidiaries |  | $\mathbf{-}$ |
| Closing Balance of Cash and Cash Equivalents | $\mathbf{5 0 , 4 5 6}$ |  |

Note: All figures are rounded off (and thus, there can be rounding off errors)

## Case 4.2 Vinyl Chemicals (India) Limited <br> LO 2, 3 MEDIUM

Vinyl Chemicals (India) Limited, a Parekh Group company, is a medium-sized, intermediate organic chemicals manufacturer. We present the balance sheet and income statement of the company in brief, for two financial years of 12 months each.

Vinyl Chemicals (India) Limited
Balance Sheet for the financial years... (all figures in ₹ million)

| Assets Side | Current Year | Previous Year |
| :--- | ---: | ---: |
| Cash \& Bank Balances | 33 | 10 |
| Accounts Receivable | 145 | 34 |
| Loans and Advances | 21 | 19 |
| Inventories | 141 | 119 |
| Fixed Assets | 3 | 3 |
| Other Assets (includes investments) | 101 | 25 |
| Total Assets | 444 | $\mathbf{2 1 0}$ |
|  |  |  |
| Liabilities Side | 342 | 163 |
| Current Liabilities \& Provisions | 11 | 11 |
| Long-term Liabilities | 91 | 36 |
| Net Worth | $\mathbf{4 4 4}$ | $\mathbf{2 1 0}$ |
| Total Liabilities |  |  |
|  |  | Previous Year |

$\left.\begin{array}{|l|cc|}\hline & & \\ \hline\end{array} \begin{array}{c}\text { Vinyl Chemicals (India) Limited } \\ \text { Income Statement for the financial years... }\end{array} \quad \begin{array}{c}\text { (all figures in ₹ Million) }\end{array}\right)$

Source: Vinyl Chemicals (India) Limted Financials, Vinyl Chemicals, Web, 15 Jan. 2016.


## Case Questions

Given the limited information, you are to prepare its funds flow statement as given below (i.e., fill in the blanks wherever appropriate). You may like to look at Annexure 4.1 on the OLC on Funds Flow Statement before answering this case.

Vinyl Chemicals (India) Limited
Funds Flow Statement for the current year (all figures in ₹ million)

|  | Long-term Short-term |
| :--- | :--- |
| Change in Receivables |  |
| Change in Current Assets (except receivables) |  |
| Change in Other Assets (basically investments) |  |
| Change in Fixed Assets |  |
| Change in Current Liabilities \& Provisions |  |
| Change in Long-term Liabilities (Loans) |  |
| Total |  |
|  |  |
| Change in Receivables |  |
| Change in Current Assets (except receivables) |  |
| Change in Other Assets (basically investments) |  |
| Change in Fixed Assets |  |
| Change in Current Liabilities \& Provisions |  |
| Change in Long-term Liabilities (Loans) |  |
| Dividend Payments including taxes |  |
| Total |  |
| Surplus/(Deficit) |  |
| Funds Generated from Operations |  |

Based on the funds flow statement above, answer the following questions about Vinyl Chemicals (India):
(a) Comment on the statement (stating whether you agree or disagree with the same) - 'Vinyl Chemicals (India) has essentially tapped short-term sources of financing for its long-term requirements'.
(b) The funds generated from operations were not sufficient to fund its increase of other assets - Do you agree or disagree? Comments.

## Case 4.3 Ram Traders: Statement of Cash Flow

LO 2,3, 5 MEDIUM
This case is a continuation of Mini Case 2.6 of Chapter 2, on Ram Traders Limited and his chilli business. Based on the transactions mentioned therein, you are required to prepare a statement of cash flow using both the direct method and the indirect method (preferably in the format provided below):

## Ram Traders

Statement of Cash Flow for the Period $\mathbf{1}^{\text {st }}$ to $\mathbf{3 0}^{\text {th }}$ June using the Direct Method
(all figures in ₹)
A. Cash Flow from Operating Activities

|  |
| :--- |
|  |
|  |
| Net cash from operating activities |
| B. Cash Flow from Investing Activities |
|  |
| Net cash from investing activities |
| C. Cash Flow from Financing Activities |
|  |
|  |
|  |
|  |
| Net cash from financing activities |
|  |
| Net Increase / (Decrease) in Cash and Cash Equivalents |
| Cash and cash equivalents at the beginning of the period |
| Cash and cash equivalents at the end of the period |

## Ram Traders <br> Statement of Cash Flow for the Period $1^{\text {st }}$ to $\mathbf{3 0}^{\text {th }}$ June using the Indirect Method

(all figures in ₹)
A. Cash Flow from Operating Activities

|  |
| :--- |
|  |
|  |
|  |
| Net cash from operating activities |

B. Cash Flow from Investing Activities

## Net cash from investing activities

C. Cash Flow from Financing Activities

|  |
| :--- |
|  |
|  |
| Net cash from financing activities |
|  |
| Net Increase / (Decrease) in Cash and Cash Equivalents |
| Cash and cash equivalents at the beginning of the period |
| Cash and Cash Equivalents at the end of the period |

## Case 4.4 L\&T: A Nice Dream

This case involves making use of your roll number and your date of birth.
Share prices of Lamb \& Tiger (L\&T) in the recent past are under pressure, primarily because of lack of growth in the profit figures of the company. Top bosses in the firm including its CEO were quite unhappy about this and were under tremendous pressure.

Worried about his reputation, the CEO of L\&T, Naik decided to call it a day and start on his own. He names his little enterprise as Mandodari Enterprises Private Limited. ${ }^{3}$ The firm under the leadership of Naik went in for the following transactions for his business entity:

Day 1: $\quad$ Naik started his business by investing cash worth $₹ \mathrm{XXXXXXXX}^{4}$ (by issuing equity shares to himself) on 1 April 2010.

[^16]Day 1: $\quad$ Naik had friends who had land and real estate in a prime location. ${ }^{5}$ They agreed to give the same in lieu of a share in the firm's start-up equity. So he took the land from his friends and issued shares worth ₹XXXXXXXX.
Day 1: Borrowed a loan equivalent of the issued share capital (interest @ $10 \%$ p.a.).
Day 2: He utilized $50 \%$ of the loan for plant and machinery. The plant and machinery had a life of 10 years and was thought to have a zero salvage value. ${ }^{6}$
Day 4 He utilized $25 \%$ of the loan for purchasing goods.
Day 5 Naik's home was looted by dacoits and his wife was taken away. Gang-member Bijli made a telephone call and demanded a ransom.
Day 15 Naik borrowed ₹ 5 lakh from the firm to pay to the dacoits.
Day 154 Naik's wife returned home.
Day 300 Naik went for a vacation to Bhagalpur. He took his family and friends (other equity partners) with him.
Day 340 Naik's vacation bill worth ₹ 2 lakh was paid by the enterprise. ${ }^{7}$
Day 360 The real estate prices in that area had shot up (due to huge oil find near that area by an Oil Exploration Company). Prof Pyarelal Godbole called up and offered to buy the real estate for ₹ 10 crore while Smt. Ram Dulari (a well-known politician) made a counter offer for ₹ 15 crore.
During the year the firm made (only) cash sales to the extent ₹ 167 lakh. The firm also paid salary to its employees totaling ₹ 2 lakh. There were other expenses to the extent of ₹ 2 lakh paid by cash. There was no stock left at the end of the year. The firm has to make a provision for tax payment. The corporate tax rate is $40 \%$.

Unfortunately, Naik did not have a hang of accounting - hence, he calls you on your dabba ${ }^{8}$ and asks you to help him in finalizing the firm's financial statements ending 31 March 2011. ${ }^{9}$

Based on the above discussion, please answer the following multiple choice questions:

1. The provision for corporate income tax of Mandodari Enterprises Private Limited would be
(a) Negative
(b) Positive, above ₹3 million
(c) Positive, below ₹ 3 million
(d) None of the above
2. The Networth of Mandodari Enterprises Private Limited would be
(a) Negative
(b) Positive, above ₹3 million
(c) Positive, below ₹3 million
(d) None of the above
3. The Cash Balance of Mandodari Enterprises Private Limited would be
(a) Negative
(b) Positive, above ₹50 million

[^17](c) Positive, below ₹50 million
(d) Can't say
4. In the Funds Flow Statement, the Funds from Operations of Mandodari Enterprises Private Limited would be
(a) Negative
(b) Positive, above ₹ 3 million
(c) Positive, below ₹ 3 million
(d) None of the above
5. In the Statement of Cash Flow, the "Cash from Investing Activities" of Mandodari Enterprises Private Limited would be
(a) Negative
(b) Positive, above ₹30 million
(c) Positive, below ₹30 million
(d) None of the above
6. In the Statement of Cash Flow, the "Cash from Financing Activities" of Mandodari Enterprises Private Limited would be
(a) Negative and odd number
(b) Positive and odd number
(c) Positive and even number
(d) None of the above
7. In the Funds Flow Statement, the "Change in Working Capital" of Mandodari Enterprises Private Limited would be
(a) Negative and odd number
(b) Positive and odd number
(c) Positive and even number
(d) None of the above
8. In the Balance Sheet, the "Other Assets" of Mandodari Enterprises Private Limited would be
(a) Negative and Odd Number
(b) Positive and Odd Number
(c) Positive and Even Number
(d) None of the above
9. At the end of the financial year, based on the above limited information, one can state that the Financial Health of the company is
(a) Good
(b) Bad
(c) Can't say
10. If Naik had agreed to Smt. Ram Dulari's proposal over phone (on day 360) then the financial statements being prepared would change:
(a) Yes
(b) No
(c) Can't say

## Case 4.5 Cash Flow Statements of Four Different Companies

LO 1,2, 7 DIFFICULT

This is a continuation of Mini Case 2.4 in Chapter 2 and Mini Case 3.2 in Chapter 3. In the following pages, you are provided with the statement of cash flows of four different companies for the latest two accounting periods.
Cash Flow - 1

## Infosys Technologies Ltd.

Cash Flow Statement for the Year 2014-15
(all figures in ₹ crore)

|  | $\begin{aligned} & \text { Year Ended } \\ & \text { March } \\ & \text { 3/31/2015 } \end{aligned}$ | $\begin{aligned} & \text { Year Ended } \\ & \text { March } \\ & 3 / 31 / 2014 \end{aligned}$ |
| :---: | :---: | :---: |
| CASH FLOWS FROM OPERATING ACTIVITIES |  |  |
| Profit before tax and after share in associate's profit | 17,283 | 14,728 |
| Adjustments to reconcile profit before tax to cash provided by operating activities |  |  |
| Depreciation and amortization expenses | 1,017 | 1,317 |
| Deferred purchase price | 219 | 228 |
| Interest and dividend income | $(2,892)$ | $(2,380)$ |
| Provision for bad and doubtful debts | 171 | 138 |
| Reversal of contingent consideration | - | (33) |
| Other adjustments | 82 | 54 |
| Effect of exchange differences on translation of assets and liabilities | 66 | 120 |
| Changes in assets and liabilities Trade receivables | $(1,475)$ | $(1,406)$ |
| Loans and advances and other assets | (221) | $(1,060)$ |
| Liabilities and provisions | 854 | 1,993 |
|  | 15,102 | 13,699 |
| Income taxes paid | $(6,751)$ | $(3,874)$ |
| NET CASH GENERATED BY OPERATING ACTIVITIES | 8,353 | 9,825 |
| CASH FLOWS FROM INVESTING ACTIVITIES |  |  |
| Payment towards capital expenditure (including intangible assets) | $(2,255)$ | $(2,748)$ |
| Payment for acquisition of business, net of cash acquired | $(1,282)$ | - |
| Payment for acquisition of interests in associate | (94) | - |
| Investments in liquid mutual fund units | $(23,892)$ | $(22,691)$ |
| Disposal of liquid mutual fund units | 25,103 | 22,383 |
| Investment in certificates of deposit | - | $(1,280)$ |
| Disposal of certificates of deposit | 830 | 450 |
| Investments in tax-free bond | - | (927) |
| Investment in fixed maturity plan securities | (30) | (143) |
| Redemption of fixed maturity plan securities | 157 | - |
| Interest and dividend received | 2,551 | 2,379 |


| NET CASH USED / (PROVIDED) IN INVESTING ACTIVITIES | $\mathbf{1 , 0 8 8}$ | $\mathbf{( 2 , 5 7 7 )}$ |
| :--- | ---: | ---: |
| CASH FLOWS FROM FINANCING ACTIVITIES | $(4,935)$ | $(3,144)$ |
| Dividends paid net of inter-company dividend (including corporate dividend tax) | $\mathbf{( 4 , 9 3 5 )}$ | $\mathbf{( 3 , 1 4 4 )}$ |
| NET CASH PROVIDED IN FINANCING ACTIVITIES | $(89)$ | 14 |
| Effect of exchange differences on translation of foreign currency cash and cash <br> equivalents | $\mathbf{4 , 4 1 7}$ | $\mathbf{4 , 1 1 8}$ |
| NET INCREASE IN CASH AND CASH EQUIVALENTS | $\mathbf{2 5 , 9 5 0}$ | $\mathbf{2 1 , 8 3 2}$ |
| CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR | $\mathbf{3 0 , 3 6 7}$ | $\mathbf{2 5 , 9 5 0}$ |
| CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR |  |  |

Note: All figures are rounded off (and thus, there can be rounding off errors) Source: Infosys Investors, Infosys, Web, 26 Jan. 2016.

Cash Flow - 2

## Raymond Limited

Cash Flow Statement for the FY 2015
(all figures in ₹ crore)

|  | Year Ended 31st March 2015 | Year Ended 31st March 2014 |
| :---: | :---: | :---: |
| A. Cash Flow arising from Operating Activities: |  |  |
| Net Profit before tax and exceptional items as per Statement of Profit and Loss | 160 | 160 |
| Add/(Deduct): |  |  |
| (a) Provision for doubtful debts, bad debts, advances, claims and deposits written off (Net) | 7 | 6 |
| (b) Provision no longer required | -13 | -10 |
| (c) Provision for diminution in value of investments | 0 | 4 |
| (d) Depreciation and amortization expense | 162 | 196 |
| (e) (Gain)/Loss on sale of assets | 1 | 3 |
| (f) Finance costs | 200 | 197 |
| (g) Interest income | -28 | -13 |
| (h) Dividend income | -6 | -2 |
| (i) Surplus on sale of investments | -17 | -31 |
|  | 306 | 350 |
| Operating cash profit before working capital changes | 466 | 510 |
| Add/(Deduct): |  |  |
| (a) Increase in trade and other payables | 170 | -33 |
| (b) Increase in trade and other receivables | -125 | -107 |
| (c) Increase in inventories | -65 | -119 |
|  | -20 | -260 |
| Cash Inflow from operations | 445 | 250 |
| Deduct: |  |  |
| Direct taxes/refunds (net) | -65 | -47 |

(Contd.)

| Net cash inflow in the course of operating activities | 380 | 203 |
| :---: | :---: | :---: |
| Deduct: Exceptional items (Net) | 0 | 11 |
| Net cash inflow in the course of operating activities after exceptional items | 380 | 192 |
| B. Cash Flow arising from Investing Activities: |  |  |
| Inflow: |  |  |
| (a) Sale of Fixed Assets | 7 |  |
| (b) Interest Received | 28 |  |
| (c) Dividend Received | 6 |  |
| (d) Sale of Non Current Investments | 5 |  |
| (e) Sale of Current Investments (Net) | 71 |  |
|  | 117 | 78 |
|  | 117 | 78 |
| Outflow: |  |  |
| (a) Acquisition of Fixed Assets | 231 |  |
| (b) Acquisition of Minority Interest | 1 |  |
| (c) Purchase of other Long-term Investments | 26 |  |
|  | 257 | 132 |
| Net Cash Outflow in the course of Investing Activities | -140 | -55 |
| C. Cash Flow arising from Financing Activities: |  |  |
| Inflow: |  |  |
| (a) Proceeds from Long-term Loans (Net) | 142 |  |
| (b) Proceeds from other Borrowings (Net) | 75 |  |
|  | 217 | 529 |
| Outflow: |  |  |
| (a) Repayment of Borrowings (Net) | 239 |  |
| (b) Repayment of other Borrowings (Net) | - |  |
| (c) Finance Charges (Net) | 213 |  |
| (d) Dividend Paid | 12 |  |
| (e) Tax on Dividend | 2 |  |
|  | 467 | 648 |
| Net Cash Outflow in the course of Financing Activities | -250 | 119 |
| D. Change in Currency Fluctuation Reserve arising on consolidation | 0 | -2 |
| Net Increase in Cash and Cash Equivalents ( $\mathrm{A}+\mathrm{B}+\mathrm{C}$ ) | -10 | 17 |
| Add: Balance at the beginning of the year | 49 | 32 |
| Add: Cash and Cash Equivalents transferred upon Acquisition of Subsidiary |  | 0 |
| Cash and Cash Equivalents at the close of the year (Refer Note 16) | 40 | 49 |

Note: All figures are rounded off (and thus, there can be rounding off errors)
Source: Raymond Investors Quarterly Results \& Annual Reports, Raymond, Web, 26 Jan. 2016.

Cash Flow - 3
Blue Dart Express Limited Cash Flow Statement for FY 2015
(all figures in ₹ crore)

|  | $\begin{aligned} & \text { Year Ended } \\ & \text { March } \\ & \text { 3/31/2015 } \end{aligned}$ | $\begin{aligned} & \text { Year Ended } \\ & \text { March } \\ & \text { 3/31/2014 } \end{aligned}$ |
| :---: | :---: | :---: |
| A. Cash flows from Operating activities: |  |  |
| Profit before taxation | 194 | 185 |
| Adjustments for: |  |  |
| Depreciation and amortization expense | 44 | 27 |
| Interest expense | 11 | 0 |
| Interest income | (18) | (28) |
| Dividend from mutual funds | (5) | (5) |
| (Gain)/Loss on sale/scrapping of fixed assets (Net) | 0 | (2) |
| Gain on account of foreign exchange | (0) | (1) |
| Bad debts/advances written off | 1 | 1 |
| Liabilities no longer required written back | - | (2) |
| Provision for compensated absences | 3 | 1 |
| Provision for gratuity | 9 | (5) |
| Provision for Managing Director's commission | 1 | 1 |
| Operating profit before working capital changes | 240 | 172 |
| Adjustments for changes in working capital: |  |  |
| (Increase) in Inventories | (1) | (0) |
| (Increase) in trade receivables | (25) | (40) |
| (Increase) in loans and advances | (14) | (14) |
| Increase in trade payables and other current liabilities | 29 | 64 |
| Cash generated from Operations | 229 | 181 |
| Taxes paid (net of refunds) | (75) | (61) |
| Net cash from Operating activities | 153 | 120 |
| B. Cash flows from Investing activities: |  |  |
| Purchase of fixed assets | (44) | (34) |
| Changes in capital work in progress | (16) | 4 |
| Proceeds from sale of fixed assets | 0 | 3 |
| Interest received/settled | 17 | 29 |
| Dividend from mutual funds | 5 | 5 |
| Investments in mutual funds | (2706) | (1961) |
| Redemptions from mutual funds | 2706 | 1961 |
| Loans granted to associate | 0 | (15) |
| Loans repaid/settled by associate | 69 | 47 |

(Contd.)

| Inter-corporate deposits granted to associate | 0 | (152) |
| :---: | :---: | :---: |
| Inter-corporate deposits repaid/settled by associate | 0 | 152 |
| Net cash from Investing activities | 32 | 39 |
| C. Cash flows used in Financing activities: |  |  |
| Proceeds from issue of Non-convertible debentures | 332 | 0 |
| Interest paid | (11) | (0) |
| Dividend paid | (368) | (252) |
| Dividend tax paid | (74) | (43) |
| Debenture issue expenses paid | (5) | 0 |
| Net cash used in financing activities | (126) | (294) |
| Net change in cash and cash equivalents | 60 | (136) |
| Cash and cash equivalents at the beginning of the year | 106 | 242 |
| Cash and cash equivalents at the end of the year | 166 | 106 |
| Cash and cash equivalents: | 0 | 0 |
| Cash on hand | 2 | 2 |
| Cheques and drafts on hand | 11 | 16 |
| Balances with banks: | 0 | 0 |
| In current accounts | 79 | 62 |
| Deposits with maturity period less than 3 months | 74 | 27 |
|  | 166 | 106 |
| Other Bank balances: | 0 | 0 |
| On unpaid dividend accounts | 1 | 1 |
|  | 166 | 106 |

Note: All figures are rounded off (and thus, there can be rounding off errors) Source: Blue Dart Financial Results, Blue Dart, Web, 26 Jan. 2016.

Cash Flow - 4

> Colgate-Palmolive (India) Limited Cash Flow Statement for the FY 2015
(all figures in ₹ crore)

|  | Year Ended <br> March <br> $\mathbf{3 / 3 1 / 2 0 1 5}$ | Year Ended <br> March <br> $\mathbf{3 / 3 1 / 2 0 1 4}$ |
| :--- | :---: | :---: |
| Cash flow from operating activities : | 780 | 664 |
| Profit before exceptional item and tax | $(0)$ | $(6)$ |
| Adjustment for : | 75 | 51 |
| Unrealized foreign exchange gain (Net) | 1 | 0 |
| Depreciation and amortization expenses | 1 | 1 |
| Lease rentals |  |  |
| Loss on sale of fixed assets (Net) |  |  |

(Contd.)

| Interest income | (26) | (36) |
| :---: | :---: | :---: |
| Bad debts written off | 0 | 1 |
| Provision for doubtful debts | 10 | 0 |
| Provisions no longer required written back | 0 | (2) |
| Operating profit before working capital changes | 839 | 672 |
| Adjustment for (increase)/decrease in working capital: |  |  |
| Inventories | (26) | (40) |
| Trade and other receivables | (22) | (40) |
| Trade and other payables | 53 | 44 |
| Cash Generated from Operations | 844 | 635 |
| Direct taxes paid (Net) | (206) | (178) |
| Net cash from operating activities (A) | 638 | 457 |
| Cash flow from investing activities: |  |  |
| Purchase of fixed assets | (300) | (324) |
| Sale of fixed assets | 1 | 0 |
| (Purchase)/Sale of other investments | 0 | 10 |
| Lease Rentals | 1 | 0 |
| Inter Corporate and Bank Deposits (Placed)/Matured (Net) | 0 | 31 |
| Interest received | 26 | 37 |
| Cash flow before exceptional item | (272) | (245) |
| Exceptional item | 0 | 64 |
| Net cash used in investing activities (B) | (272) | (180) |
| Cash flow from financing activities: |  |  |
| Dividend paid | (339) | (365) |
| Dividend distribution tax paid | (46) | (57) |
| Net cash used in financing activities (C) | (385) | (422) |
| Net decrease in cash and cash equivalents ( $\mathbf{A}+\mathrm{B}+\mathrm{C}$ ) | (18) | (145) |
| Cash and cash equivalents at the beginning of the year | 151 | 296 |
| Cash and cash equivalents at the end of the year | 132 | 151 |
| Cash and cash equivalents comprise: |  |  |
| Bank balances in : |  |  |
| - Current accounts | 26 | 9 |
| - Deposit accounts (with less than 3 months original maturity) | 106 | 142 |
| Cash and cash equivalents as at the end of the year | 132 | 151 |

Note: All figures are rounded off (and thus, there can be rounding off errors)
Source: Colgate Our Company: Investor, Colgate, Web, 26 Jan. 2016.

## Case Question

Compare the summarized cash flow statements of these four companies and explain the nature of cash flows with their similarities and dissimilarities. Also comment on the significant changes in the three activities (i.e., operations, investment, and financing) in the last one-year.

## Case 4.6 Financial Health of CNBC India - Last Visit LO 2, 6, 7 DIFFICULT

Television Eighteen India Limited runs the popular television channel 'CNBC India'. This case is a continuation of Mini Case 2.5 of Chapter 2 and Mini Case 3.5 of Chapter 3 on this company. You are required to take help of the Television Eighteen's abridged balance sheet (Mini Case 2.5) and profit and loss account (Mini Case 3.5) for two consecutive years (financial years 2009 and 2010) and prepare its funds flow statement (refer to Annexure 4.1 for the same) for the financial year 2010 in the format provided below:


Based on the funds flow statement above, how would you rate this company on a scale of 1 to 10 , wherein 1 stands for bad financial health and tending towards bankruptcy and 10 stands for excellent financial health? Please mention the reasons behind your above rating of the company.

Now, take a look at the relevant Statement of Cash Flow of Television Eighteen Limited for the same year.

Cash Flow Statement for the Year Ended 31 March 2010

|  | $\begin{gathered} \text { Year Ended } \\ \text { 31.03.2010 } \\ \text { (in ₹ million) } \end{gathered}$ | $\begin{gathered} \text { Year Ended } \\ \text { 31.03.2009 } \\ \text { (in ₹ million) } \end{gathered}$ |
| :---: | :---: | :---: |
| A. CASH FLOW FROM OPERATING ACTIVITIES |  |  |
| Profit before tax | $(1,114)$ | $(1,864)$ |
| Adjustments for: |  |  |
| Depreciation | 486 | 481 |
| Loss on sale/disposal of assets | 21 | - |
| Loss on disposal of investments | 11 | - |
| Preliminary expenses written off | 3 | 3 |
| Employee stock compensation expenses | 38 | 64 |
| Interest (Net) | 1,047 | 1,058 |
| Bad debts written off/provision for doubtful debts | 109 | 694 |
| Provision for doubtful advances | 37 | - |
| Loss on exchange rate fluctuation (Net) | 98 | 353 |
| Dividend | (1) | (183) |
| Profit on sale of investments | (35) | (100) |
| Excess provisions written back | (234) | (41) |
| Share in surplus of trust | (217) | (578) |
| Prior period adjustments (Net) | (6) | (17) |
| Operating profit before working capital changes | 243 | (130) |
| Decrease/(Increase) in current assets | $(2,107)$ | $(1,086)$ |
| Increase/(Decrease) in current liabilities | 879 | 1,094 |
| Cash generated from/ (used in) operations | (985) | (122) |
| Tax | (175) | (343) |
| Prior period adjustments (Net) | 5 | 17 |
| Net cash from/(used in) operating activities | $(1,155)$ | (448) |
| B. CASH FLOW FROM INVESTING ACTIVITIES |  |  |
| Purchase of fixed assets (including capital advances) | (121) | (512) |
| Additions to assets on acquisition of subsidiary | - | (319) |
| Sale of assets | 9 | 69 |
| Sale/purchase of investments (net) | $(2,431)$ | 1,122 |


| Share application money paid | (355) | - |
| :---: | :---: | :---: |
| Interest income | 197 | 123 |
| Dividend received | 1 | 88 |
| Share in surplus of venture capital trust-long term investment | - | 95 |
| Share in surplus of trust | 217 | 578 |
| Increase in goodwill | (774) | $(2,741)$ |
| Foreign exchange translation adjustment (on consolidation) | (60) | 184 |
| Net cash from/ (used in) investing activities | $(3,317)$ | $(1,313)$ |
| C. CASH FLOW FROM FINANCING ACTIVITIES |  |  |
| Dividend paid | - | (105) |
| Interest expenses | $(1,265)$ | $(1,244)$ |
| Proceeds from issue of equity shares | 5,832 | 629 |
| Redemption of ZCSPCD | - | (80) |
| Share issue expenses | (144) | (91) |
| Equity warrants refundable application | - | $(1,767)$ |
| Proceeds of loans (Net) | 1,086 | 4,388 |
| Net cash from/ (used in) financing activities | 5,509 | 1,730 |
| Effect of exchange differences on translation of foreign currency cash and cash equivalents | (21) | (61) |
| Net increase/(decrease) in cash and cash equivalents | 1,017 | (92) |
| Cash and cash equivalents as at the beginning of the year | 1,636 | 1,729 |
| Cash and cash equivalents as at the end of the year | 2,653 | 1,637 |

ZCSPCD in the above statement indicates "Zero Coupon Partly Convertible Debentures".


## Case Questions

(a) Please note that the cash flow statement format of reporting uses the earlier Schedule VI of the Companies Act, 1956. It has some differences from the presentation prescribed by the new Companies Act, 2013, and followed by all the recent financial statements. What are the significantly visible differences? Please list them down. Discuss the possible reasons behind the same.
(b) 'Investing activities' above has an item titled 'increase in goodwill' - what could that signify for Television Eighteen? Discuss.
(c) Has your perception about the company changed from your previous assessments in Chapters 2 and 3? Mention the reasons behind the change (if any).

## Case 4.7 Pioneer Distilleries Limited: Is it Distilling Profits?

Pioneer Distilleries Limited is a company located in the Dharmabad Taluk of Maharastra manufacturing industrial grade alcohol. The company was registered in the period 1992-93. The promoters went ahead and raised capital from the markets during the same time. We present below the statement of cash flow of the company from three annual reports at very different points in time:

- The first statement of cash flow captures the period of 2001-2002.
- The second statement of cash flow captures the period of 2005-2006.
- The third statement of cash flow captures the period of 2009-2010.

Pioneer Distilleries Limited

## Statement of Cash Flow

for the Periods 30 Sep. 2002 (18 months) and 31 Mar. 2001 (12 months)
(all figures in ₹ lakh)

| Particulars | 2001-2002 | 2000-2001 |
| :---: | :---: | :---: |
| A. CASHFLOW FROM OPERATING ACTIVITIES |  |  |
| Net Profit/(Loss) before tax | (599) | (184) |
| Adjustment for | - | - |
| Depreciation | 268 | 175 |
| Interest | 184 | 369 |
| Misc.exps written off | 6 | 4 |
| Prior Period expenes | - | (4) |
| OPERATING PROFIT BEFORE WORKING CAPITAL CHANGES | (140) | 359 |
| Adjustment for |  |  |
| Inventories | 52 | (201) |
| Trade and other receivables | (3) | (13) |
| Trade payables | 52 | (32) |
| Loans and advances | (95) | (178) |
| Working capital finance | 51 | 122 |
| CASH GENERATED FROM OPERATIONS BEFORE TAX | (84) | 57 |
| Direct taxes paid | - | - |
| NET CASH GENERATED FROM OPERATIONS | (84) | 57 |
| B. CASH FLOW FROM INVESTMENT ACTIVITIES |  |  |
| Purchase of fixed assets | (117) | (48) |
| Investments | - | (6) |
| Payment of capital creditors | - | (88) |
|  | (117) | (141) |

(Contd.)

| C. CASH FLOW FROM FINANCING ACTIVITIES |  |  |
| :--- | :---: | :---: |
| Increase in | - | - |
| Share capital | - | - |
| Borrowings from banks \& others (Net) | 201 | 88 |
| Unsecured loans | $\mathbf{2 0 1}$ | $\mathbf{8 8}$ |
|  | - | 4 |
| Net increase in cash and cash equivalents | $\mathbf{1 3}$ | 9 |
| Opening balance as on 1" April, 2001 | $\mathbf{1 3}$ | $\mathbf{1 3}$ |
| Closing Balance as on 31" March, 2002 |  |  |

Pioneer Distilleries Limited Statement of Cash Flow for the Periods 31 Mar. 2006 (12 months) and 31 Mar. 2005 (12 months)
(all figures in ₹ lakh)

| Particulars | 2005-2006 | 2004-2005 |
| :---: | :---: | :---: |
| A. CASHFLOW FROM OPERATING ACTIVITIES |  |  |
| Net Profit/(Loss) before tax | 165 | 167 |
| Adjustment for |  |  |
| Depreciation | 211 | 184 |
| Interest | 186 | 48 |
| Misc.exps written off | 5 | 4 |
| Provisions for doubtful debts | 0 | 1 |
| Profit/loss on sale of assets | 3 | - |
| OPERATING PROFIT BEFORE WORKING CAPITAL CHANGES | 570 | 404 |
| Adjustment for |  |  |
| Inventories | (90) | (312) |
| Trade and other receivables | 29 | (32) |
| Trade payables | 103 | 68 |
| Loans and advances | 126 | (436) |
| Working capital finance | (42) | 84 |
| CASH GENERATED FROM OPERATIONS BEFORE TAX | 696 | (224) |
| Direct taxes paid | (14) | (13) |
| NET CASH GENERATED FROM OPERATIONS | 682 | (237) |
| B. CASH FLOW FROM INVESTMENT ACTIVITIES |  |  |
| Purchase of fixed assets | (178) | (646) |
| Capital work in progress | (799) | 7 |
| Deferred revenue expenses | (46) | (4) |
| Sale of fixed assts | 1 | 1 |


|  | $\mathbf{( 1 , 0 2 2 )}$ |
| :--- | :---: |
| C. CASH FLOW FROM FINANCING ACTIVITIES |  |
| Increase in | $(\mathbf{6 4 2 )}$ |
| Share capital | 11 |
| Capital reserve (Profit on forfeited shares) | 6 |
| Borrowings from banks \& others (Net) | 469 |
| Unsecured loans | $(119)$ |
| Interest paid | $\mathbf{3 5 7}$ |
| Net increase in cash and cash equivalents | 17 |
| Opening Balance as at $1^{\text {st }}$ April, 2005 | 35 |
| Closing Balance as at $31^{\text {st }}$ March, 2006 | $\mathbf{5 2}$ |

## Pioneer Distilleries Limited

## Statement of Cash Flow

 for the Periods 31 Mar. 2009 (12 months) and 31 Mar. 2010 (12 months)(all figures in ₹ Lakh)
Particulars
2009-2010 2008-2009
A. CASHFLOW FROM OPERATING ACTIVITIES

| Net Profit/(Loss) before tax | 795 | 1,066 |
| :---: | :---: | :---: |
| Adjustment for | - | - |
| Depreciation | 387 | 355 |
| Interest | 294 | 213 |
| Misc.exps written off | 5 | 5 |
| Provisions for doubtful debts | 9 | 3 |
| Sundry balances written off | - | (2) |
| Profit/loss on sale of assets | (251) | - |
| OPERATING PROFIT BEFORE WORKING CAPITAL CHANGES | 1,238 | 1,639 |
| Adjustment for |  |  |
| Inventories | $(1,905)$ | (768) |
| Trade and other receivables | (244) | 126 |
| Trade payables | 1,142 | 361 |
| Loans and advances | (343) | (499) |
| Working capital finance | 193 | 869 |
| CASH GENERATED FROM OPERATIONS BEFORE TAX | 81 | 1,728 |
| Direct taxes paid | (126) | (283) |

(Contd.)

| FBT paid | - | (5) |
| :---: | :---: | :---: |
| MAT credit reversal | 34 | 162 |
| Preference shares redemption premium | (9) | - |
| Income tax 2005-06 | - | (1) |
| Dividend paid | (137) | (247) |
| Dividend tax paid | (23) | (42) |
| NET CASH GENERATED FROM OPERATIONS | (180) | 1,313 |
| B. CASH FLOW FROM INVESTMENT ACTIVITIES |  |  |
| Purchase of fixed assets | (69) | (876) |
| Capital work in progress | $(4,297)$ | $(2,392)$ |
| Purchase of investment | 401 | 258 |
| Deferred revenue expenses | - | 14 |
| Sale of fixed assts | - | - |
|  | $(3,965)$ | $(2,996)$ |
| C. CASH FLOW FROM FINANCING ACTIVITIES |  |  |
| Increase in |  |  |
| Share capital | (87) | 59 |
| Capital reserve (Profit on forfeited shares) | 318 | 65 |
| Share application money of warrants | 79 | (16) |
| Borrowings from banks \& others (Net) | 3,777 | 1,428 |
| Unsecured loans | 289 | 290 |
| Interest paid | (210) | (196) |
|  | 4,166 | 1,630 |
| Net increase in cash and cash equivalents | 21 | (53) |
| Opening balance as at 1" April, 2009 | 45 | 99 |
| Closing balance as at 31" March, 2010 | 66 | 45 |

Case Questions
(a) Analyze the company's statement of cash flow and rate this company on a scale of 1 to 10 during the different points in time, wherein 1 stands for bad financial health and tending towards bankruptcy and 10 stands for excellent financial health. Please mention the reasons behind your above rating of the company.
(b) Are there any possible structural changes in the business conditions? What is happening inside the company (operationally and financially)?
(c) If you were owner of the company's shares - would you be happy with its change in financial performance? At what points would you consider investing further in the company? And at what points would you be tempted to divest your stake from the company? Support your comments with appropriate reasoning.
(d) Would your reaction change differ for the above question - if you were an existing lender to the company? Comment.

## Case 4.8 Accounting Rockstar Swamiji and Open Air Classrooms

LO 2, 6, 7 DIFFICULT

At the start of the new academic year, Sehwag University's School of Business was facing lots of problems (in terms of student discipline). More than half of the students were not attending classes. Dean Prof. Santrupt Dandewala Saaheb was looking at ways of improving the classroom attendance. As a solution, he decided on testing the concept of open air classrooms.

Hence, the school started having open air classes in this new academic year. It was based on pilot programmes on Planet Jupiter. The experiment found that plenty of fresh air and open spaced classrooms allowed children to recover quickly from diseases. While students knew the multiple diseases other MBA students were having ... but they were wondering about the diseases they were infected with!

The term I open air lectures were happening peacefully. Attendance also improved. Financial Accounting course was going fine. For a change, Accounting Guru, Prof. Rockstar Swamiji was teaching the course. One fine day, Swamiji announced a surprise quiz. Students had to rate each of the four firms (Blue Dart Express, Colgate Palmolive India, Infosys Technologies, and Raymond) based on their three financial statements (in terms of their chances of going bankrupt). Being environment conscious and to save on paper, Swamiji pasted the three financial statements for the latest period of these four companies on a nearby wall (please read the relevant cases in Chapters 2, 3, and 4 on these four companies).

Just before the start of the class, a few hungry cows entered the School of Business Campus and walked into the open air classroom. Swamiji was quite impressed that they also wanted to learn Financial Accounting from him. Before the students (and Swamiji) could do anything, the hungry cows ate a few papers pasted on the wall, i.e., the balance sheet and income statement portion of all these four companies. Swamiji was adamant on the surprise quiz to be done. So, he asked the students to rate these four companies based on their 'statement of cash flow' alone.

Based on the 'statement of cash flow' alone, please rate these four companies on a scale of 1 to 10 . Where a rating of ' 10 ' would indicate 'Excellent cash flow (very few problems)' and ' 1 ' would indicate the other way round. Please also defend your responses by mentioning the overall assessment on each company within 100 words each.

This incident prompted the Dean Prof. Santrupt Dandewala Saaheb to softly close the open air classroom experiment for good.

## INTERNET ASSIGNMENTS

## Assignment 4.1 Statement of Cash Flow

In the online Learning Centre of this book we have provided annual reports of seven companies listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor, we have uploaded sample worked out assignments in our online website.

Your fourth assignment would answer the following two questions:

- Identify (and list) the clearly visible non-cash items in the Profit and Loss Statement of your Company's Annual Report. Are these items also visible in the Cash Flow Statement? Please add your quick comments (if any, within 100 words)
- Identify (and list) the five biggest 'Cash Inflow' and 'Cash Outflow' items in the Cash Flow Statement over the last two years. Comment on the changes in these big five items (within 100 words).


## Answers

## Answers to the "Let's Check Our Concepts!"

(a) 5
(b) 3
(c) 2
(d) 1
(e) 4
(f) 6
(g) False
(h) True
(i) False
(j) False
(k) False
(1) Total Current Assets
(m) Fixed Assets

## Answers to the Activity 4

1. (a)
2. (b)
3. (a)
4. (c)
5. (b)
6. (d)
7. (d)
8. (a)
9. (b)
10. (c)

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 4.1: Funds Flow Statement
- Annexure 4.2: Analyzing Changes in Working Capital
- Annexure 4.3: Basic Illustration of Indirect Method on Cash Flow Statement
- Annexure 4.4: Jamuna Tudu Illustration Using the Indirect Method
- Annexure 4.5: Solved Illustration
- Annexure 4.6: Additional Reading Material
- Annexure 4.7: Auxiliary Test Material
- Annexure 4.8: Internet Assignment


## Learning Objectives

After studying this chapter, you should be able to:
LO 1 Recognize the steps in Accounting Records
LO 2 Retrieve the Balance Sheet as an Accounting Equation
LO 3 Review the transactions in Journals
LO 4 Understand the posting of transactions in the ledger accounts leading to trial balance
LO 5 Prepare necessary adjustment entries leading to an adjusted trial balance
LO 6 Create trial balance leading to the balance sheet and income statement
LO 7 Assess the accounting entry errors

## Not So Funny Accounting Problems @Tesco

Tesco PLC is a British multinational grocery and general merchandise retailer. In 2014, it came in news in the wake of an unfortunate accounting scandal. It was found to have overstated its profits by about ₹ 2,500 crore after revenue recognition irregularities were spotted in its half-yearly results. This trick was as old as book-keeping itself: the premature recognition of revenue.

Suppliers make payments to supermarkets that meet certain sales targets for their products, run promotions or place the goods in eye-catching places, such as at the end of aisles. Tesco managers appear to have been very ambitious in capturing these "rebates". Perhaps, they also underreported the costs of stolen and out-of-date produce. The supermarket originally predicted its half-year trading profit would be around £l.lbn, but this figure was cut back by $£ 263 \mathrm{~m}$. The above discussion brings some interesting questions:

- Since Tesco PLC is a going concern, why is it such a big issue if factual revenues are realized a couple of months earlier or later?
- Doesn't flagging such concerns become funny? Where is the crisis? Numbers will be in place with time.
In a study of accounting scandals, the mis-recording of revenues was to blame in $60 \%$ of cases. Such manipulation generally falls into one of two categories. In the first, involving "timing differences", the revenue is genuine but, say, sales at the start of a quarter are booked as having been struck in the previous one. The flipside of this is "cookie jar" accounting: pushing today's revenue into tomorrow so it can be dipped into to shore up weak quarters.

In the second, more serious category, the sales are fake, often a related party poses as a customer to generate phoney invoices. For instance, Satyam Computer from India, wherein boss compared the escalation of the $\$ 1.5$ billion fraud to riding a tiger that was ever harder to dismount without being eaten.

Working out how much revenue to book and when can be a matter of fine judgment. It is especially tricky in long-term contracts, such as in construction, or when the sale of goods is bundled with a service agreement, as with photocopiers.

In sum, we conclude that the discussion above makes us aware of the need to know the process of accounting records. Our discussion in this chapter provides a few pointers to the above questions.

Source: "Tesco's accounting problems Not so funny," The Economist 27 Sept. 2014, print.

We have seen in the earlier chapters that there is an underlying structure behind the financial statements. This structure provides a practical and conceptual basis for accounting practice. The major ideas that guide accountants in their recording, classifying and reporting of the firm-related economic information, are the business entity, going concern, monetary measurement, consistency, realization, objectivity, conservation, matching and disclosure principles. These ideas provide the theoretical and practical basis for the various decisions to be made with respect to the accumulation and summarization of information. However, the structure and format for the accumulation of information is derived from the basic balance sheet equation.

In the following sections, we will learn about the same.

### 5.1 STEPS IN ACCOUNTING RECORDS



To know more on "With Automation Happening Are the Days of Accountants Numbered?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/537 Recognize the steps in accounting records

The basic information formats used for the accumulation of material, i.e., the measurable information relating to the entity, is an account. Thus, depending on the information needs of an organization, the information may be classified and accumulated in as many separate accounts as possible. The only technical consideration to be kept in mind while making such classification is that, once summarized, it should maintain the balance sheet equality intact. It is this requirement which dictates the form, contents and rules of preparing accounting records.

Accounting Record is the building block of financial statements. It begins with the identification of an economic activity/transaction, recording of such transaction and finally ends up with the preparation of financial statements. Figure 5.1 lays down the usual steps in the accounting record process. It is nothing


Figure 5.1 The Usual Steps Involved in Accounting Records
but a continuous process and which sees the start and end of the same process with every new activity/ transaction.

### 5.2 BALANCE SHEET EQUATION AND ACCOUNTS

## Retrieve the

balance sheet as an accounting equation

The preparation of an income statement and balance sheet is the objective of accounting. Accounting as an information processing system, should achieve the production of these two financial statements, with systematic facility. This, in turn, would require that the terms in the balance sheet equation should be the summary of all the accounting records from an accounting system.

Let us revisit the balance sheet equation and see how this equality is related to the accounting records. We have seen in Section 3.7 that the expanded accounting equality can be written as:

$$
A=L+C+R-(E+D)
$$

Where, $\quad \mathrm{A}=$ assets;
$\mathrm{L}=$ liabilities;
C = capital
$\mathrm{R}=$ revenue;
$\mathrm{E}=$ expenses, and
$\mathrm{D}=$ dividends or drawings.
This equation equates assets with liabilities plus capital plus revenue minus expenses and drawings or dividends. Now, transposing this equality, it is possible for us to write the equality without the negative sign. Thus, we have a new equation as follows:

$$
\mathrm{A}+\mathrm{E}+\mathrm{D}=\mathrm{L}+\mathrm{C}+\mathrm{R}
$$

This transposed equality is the basic accounting equality. The quantities on the left-hand side (LHS) are normally referred to as 'debit' or 'Dr.' in short, and the quantities on the right hand side (RHS), as 'credit', or 'Cr.' in short. We have also seen that because of the basic balance sheet equality, this accounting equality will hold true always.

The terms on the RHS and the LHS are represented by one or more separate accounts, where information is accumulated using the same framework. Thus, for all these accounts, we assign debits to LHS and credits to RHS. It can also be understood that all those accounts belonging to the LHS terms, namely, A (assets), E (expenses) and D (dividends or drawings), their basic accounting character being 'debit', have a debit balance. In other words, these accounts have debit side entries, which are more than or equal in value to the entries on the corresponding credit side. Normally, for such accounts, Debits-credits $\geq \mathbf{0}$.

When it is equal to zero, there is no balance in the account. Similarly, in the case of accounts relating to terms on the RHS of the equality, that is, L (liability), C (capital) and R (revenue), we have credit balances. For these accounts, the normal relation implies: Credits - debits $\geq \mathbf{0}$. When it is equal to zero, there is no balance in the account.

The process of accumulating information is also simple. In all accounts representing the LHS terms, all increases of those items are debited in the respective account and all decreases are credited in the same account, the net difference showing the actual position at any point in time. Similarly, in case of accounts representing the RHS, an increase with respect to an item is credited in that particular account and decreases in relation to those accounts are debited to that account. The actual balance of that item as at a point in time would be shown by the net difference.

From this discussion, it would also be clear that the terms 'debit' and 'credit' in accounting have no more practical significance than being on the 'left' or the 'right' side of an account. The next section consolidates on this piece of essential information.

### 5.3 ACCOUNT

An account is a basic information format used for recording transactions relating to a revenue, expense, asset, liability, or owners' equity. Since the transactions can either increase or decrease these items, an account is structured into two parts, like a capital T.

An account is a comprehensive and classified record of transactions affecting one person, one kind of property, or one class of gains or losses arising out of expenses or incomes.
'Each account is dignified as a separate financial entity, having Debtor-Creditor relations with other Accounts'.

- Rorrem and Kerrigan

An account can be perceived of as having a format similar to the capital letter T and can be denoted by 'Debit' on the LHS and 'Credit' on the RHS. All such accounts are titled or christened according to the nature of information accumulated in them. So, we have a 'cash account', 'receivable account', 'payable account', 'short-term investments account', 'long-term secured loan account', 'inventory account', and so on.

| Debit | Cash Account |
| :---: | :---: |
| Format for a Cash Account |  |

The 'T' account above is a cash account. The LHS will represent all cash receipts or increases and RHS will represent all cash payments or decreases. Thus, a 'debit to an account' implies a record on the LHS and a 'credit to an account' implies a record on the RHS.

Let us illustrate the ideas we have seen with respect to a simple example (Illustration 5.1).

## Illustration 5.1

The following information relates to Manoranjan's Enterprise for a month.

| Date | Transaction | Amount (₹) |
| :--- | :--- | ---: |
| January 1 | Starts business with | $\mathbf{1 , 0 0 , 0 0 0}$ |
| January 8 | Buys merchandise and stores them | 80,000 |
| January 10 | Receive order for half the merchandise from A |  |
| January 15 | Delivered the merchandise, customer invoiced | 50,000 |
| January 17 | Received order for other half of merchandise |  |
| January 31 | Customer A pays | 50,000 |

The first step involved in the accounting process is to understand the transactions. We can systematically understand each transaction by analyzing which accounts are affected as shown below:

| Date | Transaction | Accounts affected |
| :---: | :---: | :---: |
| January 1 | Starts business with | Cash increase <br> Capital increase |
| January 8 | Buys merchandize and stores them | Merchandize inventory increase <br> Cash decrease |
| January 10 | Receive order for half the merchandize from A | There is no transaction; transaction takes place only when transformation of value takes place |
| January 15 | Delivered the merchandize, customer invoiced | - Merchandize inventory decrease <br> - Cost of goods sold increase <br> - Revenue increase <br> - Receivable increase |
| January 17 | Received order for other half of merchandise | There is no transaction; transaction takes place only when transformation of value takes place |
| January 31 | Customer A pays | - Cash increase <br> - Accounts receivable decrease |

Having made the analysis, the rest of the accounting process is mechanical, that of recording the amounts in the appropriate $T$ accounts as given ahead.

| Dr. | Cash Account |  |  | Cr. |  |
| :--- | :--- | :--- | :--- | :--- | ---: |
| Date | Explanation | Amount | Date | Explanation | Amount |
| Jan 1 | Capital | $1,00,000$ | Jan 8 | Merchandize inventory | 80,000 |
| Jan 31 | Accounts receivable | 50,000 | Jan 31 | Balance | 70,000 |



You may try and list out all the debit amounts and credit amounts to verify that the total debit is equal to the total credit, when all the accounts are considered. You may also find that if you subtract the debit or credit, as the case may be, from the respective accounts with both debit and credit, and list the net amounts as debit and credit balances, you will still find that the debits are equal to the credits.

In Illustration 5.1, what we have attempted is to complete the accounting process based on a very simple situation. The process of recording and summarizing we resorted to, can be explained as follows:

1. Starts business with $₹ 1,00,000$. This transaction affects two accounts: Cash increase - entry on the debit side of the account; and Capital increase - entry on the credit side of the account.
2. Purchases merchandise and stores them. Merchandise inventory increase - entry on the debit side of the account. Cash account decrease - entry on the credit side of the account.
3. Receipt of order for half the merchandise. Receipt of order does not warrant any record. We consider realization of revenue only when goods are delivered.
4. Delivered goods and customer invoiced. Since cash is not collected simultaneously, it represents a credit transaction. Increase in claims against 'A' = accounts receivable, account created and debited. Revenue earned = sales account credited.
We should also consider the cost of goods sold. We part with merchandise inventory worth ₹ 40,000 . An expired cost, hence, a reduction in the owner's equity, an expense. Debit cost of goods sold account with the increase in expense or expiration of cost. We credit the merchandise inventory account to show the reduction in the inventory.
5. Receivables collected. Cash increase recorded by debit in the cash account and a credit to the receivables (A) account. The credit to receivables account shows the liquidation of our claim (asset). In practice, this amounts to repayment of the debt by $A$.

Exercise to cross check: Use accounting equation(s) to give effect to the above transactions of Manoranjan's Enterprise.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) The preparation of an income statement and balance sheet is the objective of accounting.
(b) Assets + Expenses + Dividends = Liabilities + Capital + Revenue

### 5.4 RECORDING OF TRANSACTIONS AND CLASSIFICATION

As we have seen in Chapter 2, it is possible for us to record each and every transaction of an entity in a balance sheet. However, it is not practically feasible to make such changes in the balance sheet after every transaction. Therefore, we accumulate the transactions in separate accounts relating to revenue, expenses, assets and liabilities. Since each of these elements may consist of different items, we have a separate account for each item. Usually, the accounts represent information on a particular item of the balance sheet or profit and loss account or subdivision thereof. Thus, the accounting records represent the effect of transactions on a balance sheet prior to those transactions. Since it is customary to prepare
financial statements only at periodic intervals, the accounts accumulate all the changes to these financial statements during the intervening periods. ${ }^{1}$

The record of changes in the particular item as a result of transactions is referred to as an 'account'. This account is summed up at the end of an accounting period and the result of this summing up is the balance that would appear in the profit and loss account or the balance sheet, as the case may be. For example, all the transactions involving cash will be recorded in the 'cash account'. Thus, all increase or receipts of cash will be debited to and all decreases or payments will be credited to the cash account. At the time of summarizing, the balance in an account will be the difference between all the receipts or debits and all the payments or credits. Since it is not possible to make payments in excess of cash receipts, the balance in the account will have to be a debit balance, implying that the receipts are more than the payments. If the payments are equal to the receipts, then there is no balance of cash.

## Activity 5

Relate items in column $A$ to all items in Column B

| Column A | Column B |
| :--- | :--- |
| a. Acquire assets by incurring debt | I. $\quad$ Debit Owners' Equity and Credit Asset |
| b. Distributions to Owners | II. $\quad$ Debit Liability and Credit Asset |
| c. Investments by Owners | III. Debit Asset and Credit Asset |
| d. Use assets to acquire other assets | IV. Debit Asset and Credit Owners' Equity |
| e. Use assets to extinguish debts | V. Debit Asset and Credit Liability |

### 5.4.1 Classification of Accounts

The basic accounting equation reminds us that accounts can be divided (see Figure 5.2) into the following five broad categories:
(a) Assets or the resources which a firm is enjoying, which can be in the form of land, building, machinery, stock, cash and bank balances, etc.
(b) Liabilities or the obligations of the firm towards outsiders, in the form of sundry creditors, bills payables, loans, etc.
(c) Capital or the amount invested by the owners. Income or expenses of the business increase or decrease the capital, along with further introduction of capital or drawings by the owners. Therefore, there can be two more forms of account, viz., income and expenses.
(d) Incomes or the amounts earned by the business during the period.
(e) Expenses or the amounts expended by the business during the period.

[^18]

Figure 5.2 Classification of Accounts
The classification in Figure 5.2 gives us the leeway to create simple rules for debit and credit.

## Let's Check Our Concepts!

Do you agree or disagree with the following statements? If you disagree, please do correct them:
(c) Machinery is a liability.
(d) Sundry creditors represent an asset.
(e) Investment is a liability.
(f) Salary payable to employees is an asset.
(g) Discount allowed is an income.
(h) Capital is an asset.
(i) Discount received is an expense.
(j) Stock consumed is an asset.
(k) Prior period expense written off is a liability.
(l) Prepaid expenses is an expense.

### 5.5 RULES FOR DEBIT AND CREDIT

From what we have studied in the earlier sections, it is possible for us to summarize the working rules for debit and credit, which would enable us to record the transactions. As we have observed earlier, the accounts can be affected only in two ways, that is, they can either be increased or decreased.

The rules for debit and credit can be understood in two ways on the basis of the classification of accounts. According to the first way, we can segregate the items into assets, liabilities, capital, income and expenditure. The other way in which they can be classified is on the basis of whether they are personal, tangible or intangible accounts.

In the first way, the rules for debit and credit are (see Figure 5.3):

1. Increases in assets are debits and decreases in assets are credits to the respective asset accounts. Suppose Rahim Enterprises purchases furniture valued at ₹ $1,00,000$. In this case, the furniture account is debited by its value or $₹ 1,00,000$, since the asset has been increased by this amount. Any sale of this furniture (either full or in part) in future will result in a crediting of the furniture account, as the asset (furniture) would be reduced on its sale.

# Accounting Equation <br> Assets = Liabilities + Shareholders' Equity <br> Assets $=$ Liabilities $+($ Equity Shares + Retained Earnings $\boldsymbol{-}$ Dividends + Revenue $\boldsymbol{-}$ Expenses $)$ <br> Expanded Rules of Debit and Credit 



Figure 5.3 Expanded Rules of Debit and Credit
2. Increases in liabilities are credits and decreases in liabilities are debits to the respective liability accounts. Suppose, in the earlier case, if Rahim Enterprises had purchased the said furniture from M/s Furniture Mart, the account of M/s Furniture Mart shall be credited with the debit entry of the furniture account, with $₹ 1,00,000$. This is because the liability has increased with the amount of purchases made on credit. On a repayment of this amount, the account of M/s Furniture Mart shall be debited with a corresponding credit to cash or bank account, as the case may be.
3. Increases in owners' equity (or capital account) are credits and decreases in owners' equity are debits to the owners' equity (or capital) account.
4. Increases in revenues or profits are credits and decreases in revenues are debits to the respective revenue accounts.
5. Increases in expenses or incurring losses are debits and decreases in expenses are credits to the respective expense accounts.

Please note that rules 4 and 5 are derived from rule 3 , since revenue minus expense is retained earnings, which is a part of the owner's equity. Therefore, it follows that revenues increase owner's equity and expenses decrease owner's equity. Often, this way of capturing things is found highly convincing. And, we shall stick to it.

In the second way, the rules of debit and credit can also be summed up in the following manner:
In the case of a personal account, debit denotes that the person has received some benefit against which either he will render some services or has already rendered the services. For accounting purpose, we debit the person who is the receiver. Similarly, credit denotes that some benefit is derived by the entity from the person, for which he is entitled to a claim either in the form of cash, goods or services. In a single statement, we can say, debit the receiver and credit the giver. So, personal accounts will usually include debtors (usually trade customers) and creditors (usually trade suppliers and vendors). All accounts like Lilly \& Co., Gurmeet \& Co, M/s Manoranjanlal, etc., are examples of personal accounts.

In case of tangible items (Real accounts) like goods, cash, etc., debit denotes that there has been an increase in the value of these accounts. Similarly, credit denotes that there has been a decrease in the value of the items. Again, we can say that debit what comes in and credit what goes out. Various examples of real accounts are land, building, vehicles, manufacturing equipment, cash in hand, cash at bank, etc.

In case of intangible items (nominal accounts) like incomes, expenses, etc, debit denotes that the entity has incurred some expenses or losses and credit denotes that the entity has generated some income or earned some profit. The transactions in this type of accounts are reflected in the profit and loss account for the period and the net result is transferred to the Capital Account. These accounts are temporary in nature. This rule can be stated as debit all the expenses and losses, credit all the gains and profits. The accounts which make up a profit and loss account are all nominal accounts (as is the profit and loss account itself).

Based upon the above, the student can check that the furniture account, in Rahim enterprises illustration, has been debited because the furniture is a tangible account and debit denotes that there has been an increase in the Furniture account and M/s Furniture Mart has been credited by virtue of the rule credit the giver. Similarly, on making the payment, the cash account is credited because of the rule credit what goes out and Furniture Mart was credited under the rule credit the receiver.

### 5.5.1 Form of Accounts

The basic structure of an account is in the form of a capital letter, T, of the English alphabet, representing debit records on the left-hand side and credit records on the right hand side. However, the debits that an account may contain are conditioned by the extent of information required, ease of recording, the structure of the accounting system and the technology involved in recording. A standard format of an account is illustrated below:

Dr. Account Cr.

| Date Explanation | Ref. Amount | Date | Explanation |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

The date column is used for recording the date of the transaction resulting in the entry on the debit side or credit side, as the case may be. The explanation column is used for recording the name of the account and any other particular of the transaction by which the debit or credit entry in the account is caused. The reference column is used for referring to the original record, forming the basis of the record
in the accounts. Usually, this reference is in terms of the folio of the primary record. The amount columns are meant for recording the monetary value of the transaction.

### 5.6 THE JOURNAL AND ITS DIVISIONS

Typically, all the transactions that occur are either written as and when they occurred as per the documents, vouchers, or papers relating to them. These documents/vouchers are then filed properly in the order of their occurrence. It is also known as the books of original entry. On the basis of these records, the accounts are maintained by way of the journal.

The primary record for a transaction is the journal. A journal is a chronological record of all transactions, showing the debit and credit of the accounts as affected by the transactions. The journal also contains a narrative description of the transaction, so as to explain the same. It will also record the source document of the transaction, which forms the basis of the record. The usual format of a journal record is illustrated below:

Journal

| Date | Explanation | Ref. | Debit <br> Amount |
| :--- | :--- | :---: | :---: |
|  |  | Credit <br> Amount |  |

Every transaction is recorded in the journal date-wise. The explanation column would record the debit account affected first and then the credit account affected, with the respective amounts in the amount column. Reference here is to the folio of the account kept in the ledger. After writing the debit account and the credit account affected by a transaction, the explanation column will also record a narrative description of the transaction.

## Illustration 5.2

There is a purchase of furniture for cash on January 1, 2011, as per Bill No.001, from Modern Furniture, for $\mathrm{F}_{1,00,000 \text {. }}$
The accounts affected are the furniture and cash account. Furniture being an asset, the account, namely the 'Furniture Account' where we have to record the asset, increases. The other account affected is the cash account, another asset account, where the payment of cash or decrease in the asset is to be recorded. Thus, the transaction above will be recorded in the journal as follows:

Journal

| Date | Explanation | Ref. | Debit Amount | Credit <br> Amount |
| :---: | :---: | :---: | :---: | :---: |
| Jan. 1, 2011 | Furniture account (Debit) <br> Cash Account (Credit) <br> (Being purchase of furniture for cash from Modern Furniture as per Bill No.001.) | Invoice no: 001 | 1,00,000 | 1,00,000 |

As a convention, debit account is recorded first and aligned to the margin and the credit account is recorded in the next line, after leaving some space from the margin.

The journal carries a primary record of all accounting transactions. It is often referred to as the 'book of prime entry'. In the journal each transaction is split up so as to clearly show the dual aspect, the accounts affected by each transaction and the narration explains the transaction. This record forms the basis of the records to be made in the accounts. Considering that organizations face many transactions each day, for practical purposes, the journal is often sub-divided on the basis or type of transaction. These sub-divisions of the journal are usually referred to as subsidiary books.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(m) Lilly and Co. is an example of real account.
(n) Cash at bank and cash in hand are examples of personal account.

### 5.6.1 Subsidiary Books-Divisions of the Journal

When the volume of transactions of a business is large, it is highly advantageous to classify them into groups of similar transactions. The basis of such classification is the accounts affected by the transactions. Usually, all transactions repeatedly affecting one aspect of an account could be grouped together and recorded in a subsidiary book. For example, all transactions involving cash payments will be affecting a credit to the cash account. In other words, credit to the cash account is common to all these journal entries. Thus, it is possible to record only the debits to the accounts with the narrative description affected by these transactions and periodically, credit the cash account with the sum of all transactions. This saves effort and resources and serves the same purpose of satisfying the duality. Such divisions also speed up the book keeping effort by possible specialization among account clerks. The types and number of such sub-divisions, which could be usefully made, will depend on the nature, volume and type of transactions in a particular organizational situation.

All those transactions which cannot be passed through the subsidiary books, will still be passed through the journal, usually referred to as a general journal. Some of the subsidiary journals most commonly used in business today, include the sales journal, purchases journal, cash receipts journal and cash payments journal. Obviously, journal proper will be used for all other transactions, which cannot be recorded in the subsidiary books.

Table 5.1 Division of Journal

| Subsidiary Books | Nature of Transactions Recorded |
| :--- | :--- |
| Cash Book | Cash and Bank Transactions |
| Purchase Journal/ Purchase Book/ Purchase Day Book | Credit Purchases |
| Sales Journal/Sales Book/ Sales Day Book | Credit Sales |
| General Journal/ Journal Proper | Transactions not classified and for which there is no special <br> journal |

A sales journal is used for recording all credit sales and is also known as the 'sales book' or the 'sales day book'. A purchases journal is used for recording all credit purchases and is also known as
the 'purchases book' or 'purchases day book'. Cash receipts journal records all cash receipts and is also known as the 'cash receipts book'. Cash payments journal records all cash payments and is also known as the 'cash payments book'. In many small businesses, it is usual to combine the cash receipts and payments book in the nature of an account, thereby combining the primary and secondary record in one place.

It is also possible to use multiple columns in these subsidiary books so as to classify the transactions for various purposes. For example, a sales book could have columns for recording amounts on the basis of groups of customers, location of customers or any such relevant information. Similarly, it is usual to have a cashbook with bank(s) column for cash transactions through bank(s), as also a discounts column for discounts allowed. In a later section, we will discuss this issue in more detail with an illustration.

### 5.7 LEDGER ACCOUNTS



> Understand the posting of transactions in the ledger accounts leading to trial balance

The ledger is a book of final entry in which a record of the debits and credits to the various accounts are kept. Usually, a ledger is a group of accounts. The ledger will contain at least as many separate accounts as there are items on the balance sheet and income statement. The number of accounts is governed by the management's need for information statutory requirements, if any, and the cost (of course, in relation to the benefits to be derived from it) of keeping it. For practical convenience, the ledger is also usually classified into groups of accounts. For example, a purchases ledger is one in which all accounts relating to the purchases book are maintained, or a sales ledger, where all customers' accounts related to the sales book are maintained.


To know more on "To Record a Journal Entry: Should we use Party Name(s) or Ledger Name?" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/538


Figure 5.4 Relation of Ledger with Individual Accounts

### 5.8 POSTING OF TRANSACTIONS

Once the transactions are recorded in the book of original entry - the journal or a subsidiary book, as the case may be - they are posted to the debit or credit side of the respective accounts affected, in the ledger (see Figure 5.5). This process of recording the transactions in the ledger, from the books of original entry, is termed as posting. The dual aspect principle ensures that each transaction finds a place in at least two accounts and the total amount of debits as a result of a transaction, will be equal to the credits.


Figure 5.5 From Journal to Ledger
As we move to an illustration to understand this, Table 5.2 below captures the essential difference between a Journal and a Ledger.

Table 5.2 Difference between Journal and Ledger

| Points | Journal | Ledger |
| :--- | :--- | :--- |
| Nature | Book of prime entry | Book of final entry |
| Style | Chronological record | Analytical Record |
| Process | Recording here is known as 'journalizing' | Recording here is known as 'posting' |
| Unit | Unit of classification of data is transaction | Unit of classification of data is account |
| Objective | Final Accounts cannot be prepared from this alone | Final Accounts maybe compiled with this |

## Illustration 5.3

Consider the following transactions.

| Jan. 1, 2011 | Sales for Cash | ₹ $3,00,000$ |
| :--- | :--- | ---: |
| Jan. 1, 2011 | Purchases for Cash | ₹ $1,00,000$ |
| Jan. 3, 2011 | Rent paid in Cash | ₹ 50,000 |


| The journal entries for these transactions would be as follows: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Journal |  |  |  |  |
| Date | Explanation | Ref | Debit Amount | Credit Amount |
| Jan 1, 2011 | Cash (Debit) Sales (Credit) (Being cash sales) | Sales Invoice <br> No: 001 | 3,00,000 | 3,00,000 |
| Jan 1, 2011 | Purchases (Debit) Cash (Credit) (Being cash purchases) | Purchase Invoice No: 101 | 1,00,000 | 1,00,000 |
| Jan 3, 2011 | Rent expense (Debit) Cash (Credit) <br> (Being rent paid in cash) | Payment Voucher No: 011 | 50,000 | 50,000 |

Now, posting of these transactions would involve debits to cash purchases and rent expenses accounts and credit to sales and cash accounts.


The journal records relating to the above three transactions are posted in their respective accounts. The arrows link the 'debit' and 'credit' aspect of each transaction. Please also note that for a cash sale transaction, which affects the sales account and the cash account, the explanation for the debit amount is by referring to the 'sales account', thereby implying that the debit or increase in the cash has been brought about by the sales transaction. Similarly, for the purchase account, the debit amount is explained by the
reference to cash account, thereby implying that the increase in the purchases (and hence, inventory) has been brought about by a cash purchase or a decrease in cash. Thus, it is also obvious that posting involves the debit and credit of every transaction to be entered into the respective accounts.

### 5.8.1 Posting from the Subsidiary Books

Subsidiary books represent a group of distinct transactions, such as credit purchases, credit sales, cash receipts, or cash payments. It is possible to post the transactions periodically. This is possible because of the fact that one aspect of all the transactions recorded in subsidiary books is a debit or credit to one account only. Thus, a debit or credit of the periodic total of the amount satisfies the requirement of duality. It is only the other aspect, which affects other accounts, that is posted to the respective accounts.

Illustration 5.4
Take the following transactions of credit purchases on different dates.

| Jan. 1 | Roy and Co. | ₹ 20,000 |
| :--- | :--- | :--- |
| Jan. 2 | Sen and Co. | ₹ 30,000 |
| Jan. 3 | Carmaker and Co. | ₹ 15,000 |
| Jan. 4 | Mondal and Co. | ₹ 60,000 |
| Jan. 5 | Naskar and Co. | ₹ 35,000 |

If journalized, each of these transactions would involve a debit to the purchase account and a credit to the respective supplier's account. Thus, by passing through the purchases book, we need only record the respective party's account, representing individual credits and the debit could be given effect to by the periodic total being debited to the purchase account.

Purchases Journal

| Date | Credit Account of: | Ref |
| :--- | :--- | ---: |
| Jan. $\mathbf{1}$ | Roy and Co. | Amount |
| Jan. $\mathbf{2}$ | Sen and Co. | ₹20,000 |
| Jan. 3 | Carmaker and Co. | ₹ 30,000 |
| Jan. 4 | Mondal and Co. | ₹ 15,000 |
| Jan. 5 | Naskar and Co. | ₹60,000 |
| Jan. 5 | Purchase Account - Debit | ₹35,000 |

The respective T accounts for the purchase journal illustrated will be as follows:

| Dr. | Purchases Account |  |  |  |  |  | Cr. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Explanation | Ref. | Amount | Date | Explanation | Ref | Amount |
| Jan 5 | Sundries |  | $1,60,000$ |  |  |  |  |
|  |  |  |  |  |  |  |  |



The five individual credits to the respective accounts are reflected by the one consolidated debit to the purchases account, thus completing the duality. We summarize in Table 5.3, the rules of posting for the various subsidiary books discussed.

Table 5.3 Rules for posting to subsidiary accounts

| Subsidiary Books | Rules of Posting |
| :--- | :--- |
| Purchases journal | Individual entries in the book are credited to the respective accounts. Periodic total of the <br> entries in the book is posted to the debit of purchase account. |
| Sales journal | Individual entries in the book are debited to the respective accounts. Periodic total of the <br> entries in the book is posted to the sales account. |
| Cash receipts journal | Individual entries in the book credited to the respective accounts. Periodic total of the entries <br> in the book is debited to the cash account. |
| Cash payments journal | Individual entries in the book are debited to the respective accounts. Periodic total of the <br> entries in the book is credited to cash account. |

### 5.8.2 Balancing and Closing of Accounts

At the end of an accounting cycle, the accounts need to be summarized, so as to produce the financial statements. Each account will show a balance, depending on which side of the account is heavier. If the total amount recorded on the debit side is larger than that on credit side, the account will have a debit balance. Similarly, if the total amount recorded on the credit side is larger than the total amount recorded on the debit side of the same account, that account will have a credit balance. Each account is balanced at the end of the accounting period to verify the accuracy of the records, by ensuring that the debit balances and credit balances match. This is usually done at the end of the accounting period. It is also possible that the accounts are summarized on any particular day say fortnightly, monthly or quarterly.

The accounting records in the form of ledger accounts would comprise the following groups of accounts.

Table 5.4 Nature of Balance in Ledger accounts

| Nature of the ledger accounts | Nature of balance |
| :--- | :--- |
| Asset accounts | Debit balance |
| Liability accounts | Credit balance |
| Capital and equity accounts | Credit balance |
| Revenue accounts | Credit balance |
| Expense accounts | Debit balance |

Each of the above accounts groups may have one or more accounts within them. The nature of the balance of each of those accounts group, will be as indicated in Table 5.4. Of the above accounts, Asset, Liability and Capital or Equity accounts are permanent in nature. This implies that these accounts are continued as long as the business exists. The revenue and expense accounts are temporary accounts, and hence they are summarized at the end of the accounting period as the income summary or profit and loss account and the net income is transferred to the equity account.

The temporary accounts are closed at the end of an accounting cycle by transferring their balance to the income summary. Permanent accounts are also closed at the end of the cycle to extract their balances for the preparation of the balance sheet. However, they are continued in the next period by bringing forward the balance in the account. In summary, transferring their balances to the income summary closes all temporary accounts and balancing closes all permanent accounts. Customarily, passing a transfer entry through the journal and posting it to the respective account affects the transfer (as seen in Table 5.5). ${ }^{2}$

Table 5.5 Posting of Closing Entries

| Closing Revenue and Expenses | Dr. | Cr. |
| :--- | :---: | :---: |
| All revenue accounts (Debit) <br> Profit and loss account or Income summary (Credit) <br> (being transfer of the balance in the revenue accounts to the profit and loss account) |  |  |
| Profit \& loss account or Income summary (Debit) <br> All expense accounts (Credit) <br> (being transfer of the balance in the expense accounts to the profit and loss account) |  |  |
| Closing Asset, Liability, and Equity | Dr. | Cr. |

[^19]```
Asset account of next accounting period (Debit)
    Asset account of current accounting period (Credit)
(being transfer of the balance in the account to the next accounting period)
Liability account of current accounting period (Debit)
    Liability account of next accounting period (Credit)
(being transfer of the balance in the account to the next accounting period)
Equity account of current accounting period (Debit)
    Equity account of next accounting period (Credit)
(being transfer of the balance in the account to the next accounting period)
```


### 5.9 ADJUSTING ENTRIES



## Prepare necessary adjustment entries leading to an adjusted trial balance

At the end of an accounting period, it is necessary to make adjustments in the accounts so as to recognize the effects of the known facts as of the closing date. These adjustments are necessitated by the fact that there may be some implicit accounting transactions, which are to be recognized in the records. These adjustments may arise out of incomplete transactions contracted during the period, such as advance taken for granted, liabilities or assets accrued but not due, or expirations of assets which are recognized on the basis of elapse of time. Whatever be the nature of the transaction, the net accounting effect has to be of the nature of normal accounting transactions. Adjusting entries are done to ensure that the realization and matching principles are followed before finalization of accounts (and thus, ensure that there are no misses).

Most frequently encountered situations, where adjusting entries have to be passed through the records, are discussed in Table 5.6. By observing the table, one can say that an adjusting entry is largely made at accounting period end to clarify, restate, re-categorize, and bring financial statements to the level of general accepted accounting standard principles. Observatory studies on manpower planning say that in large complex organizations, each adjusting entry can take as much as or more than three man-days of accounting work. And we wondered why the accountants could not get work completed and share the financial statements on the last day of accounting period itself.

Table 5.6 Types of Adjustment Entries and Accounting Treatment

| Adjustment Required | Debit account | Credit account |
| :--- | :--- | :--- |
| Asset increase as a result of revenue recognition not <br> previously recorded. Example, interest receivable. | Income or revenue receivable | Particular income or revenue <br> account |
| Asset decreases and expenses not previously <br> recognized. Example, depreciation on assets, loss of <br> assets etc. | Respective expense account | Respective asset account <br> decreases |
| Assets and liabilities not recorded. This usually arises <br> in case of transactions around closing period, which <br> could not be formally recorded due to non-receipt of <br> documents, etc. The accounting record takes the form <br> of a normal transaction only. |  |  |

```
Expenses and liabilities not recorded. Example, rent Respective expense account Outstanding or unpaid
expense due but not paid, interest expense accrued, etc.
Costs originally recorded as expenses remaining un- Prepaid expense account
    Expense account
expired at the time of closing of the accounting period.
```

In other words, typically, there are three types of adjusting entries, Deferrals, Depreciation and Accruals. An adjustment of an asset or a liability for which the business paid or received cash in advance is known as a deferral adjustment. The systematic allocation of the cost of a plant asset to expense over the asset's useful life is depreciation. Accrual is the process of recording an expense or revenue before paying or receiving cash.

### 5.10 TRIAL BALANCE AND WORK SHEET



## Create trial balance leading to the balance sheet and income statement

In a business organization with a large number of transactions at the end of an accounting period, the balances of both debit and credit accounts of all the ledger accounts are first transferred to a worksheet, which is called, the 'original trial balance' or 'unadjusted trial balance'. Adjustments are then worked out, giving rise to an 'Adjusted trial balance'. Finally, based on the type of the account, the balances of the individual accounts are then taken to either of the two final financial statements that is the balance sheet or the profit and loss account.

In other words, a worksheet consists of many columns, as shown in a sample worksheet (Table 5.7). It helps us in systematically finalizing an entities financial statement from its ledger account balances.

Table 5.7 Sample Work Sheet

| Various <br> Ledger <br> Items | Original Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  | Income Summary |  | Balance Sheet |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Debit | Credit | Debit | Credit | Debit | Credit | Debit | Credit | Assets | Liabilities and Equity |
| List all asset ledger accounts as per their liquidity order |  |  |  |  |  |  |  |  |  |  |
| List all liability and equity ledger accounts as per their liquidity order |  |  |  |  |  |  |  |  |  |  |

```
List all
revenue
accounts
    List all
expense
accounts
```

As can be made out from this worksheet, the unadjusted trial balance lists the accounts and their balances after the period's transactions have been recorded. It shows only the balances for each ledger account and does not show each detail. It is more of a summary document.

The purpose of preparing a trial balance is twin-fold. Firstly, it helps in checking whether the posting and other accounting processes have been carried out without committing any arithmetical errors. Secondly, it presents the summary of all the ledger accounts, resulting in clearly allocating the individual accounts to either of the two financial statements, viz., the balance sheet and the profit and loss account.

## Work Sheet IIlustrated

We will illustrate the whole accounting process and the preparation of the final accounts, using the following set of illustrations. You may visit Annexure 5.3 on the Online Learning Center i.e., OLC for more such solved illustrations.

## Illustration 5.5

## Rohan Software Limited (RSL)

The illustration is a repeat of Illustration 2.1 in Chapter 2.
At the end of the month, prepare the firms income statement and balance sheet using work sheet.

## Solution:

We take the transactions of the first accounting period below. The process starts by analyzing the transactions and journalizing them. The journal entries for the full accounting period are listed below:

## Rohan Software Limited

Journal entries

| Date | Particulars | Debit | Credit |
| :--- | :--- | :--- | :--- |
| 1-Mar | Cash | $5,000,000$ |  |
|  | Capital |  |  |
|  | (Being capital invested by the Promoters) | $5,000,000$ |  |
| 2-Mar | Cash | $2,000,000$ |  |
|  | Loan |  | $2,000,000$ |
|  | (Being loan taken from Venugopal) |  |  |


| 3-Mar | Computers | 5,800,000 |  |
| :---: | :---: | :---: | :---: |
|  | Cash |  | 5,800,000 |
| (Being purchase of two computers) |  |  |  |
| 4-Mar | Supplies | 600,000 |  |
|  | Sundry Creditors |  | 600,000 |
| (Being supplies purchased on credit) |  |  |  |
| 19-Mar | Cash | 1,200,000 |  |
|  | Sale of Software |  | 1,200,000 |
| (Being sale of software on cash basis to a retail store) |  |  |  |
| 21-Mar | Sundry Creditors | 200,000 |  |
|  | Cash |  | 200,000 |
| (Being part payment by cash to sundry creditors) |  |  |  |
| 29-Mar | Salaries Expense | 400,000 |  |
|  | Office Rent Expense | 100,000 |  |
|  | Cash |  | 500,000 |
| (Being salaries and rent expenses paid using cash) |  |  |  |
| 30-Mar | Accounts Receivable | 800,000 |  |
|  | Sale of Software |  | 800,000 |
| (Being sale of software on credit to a shoe shop) |  |  |  |
| 31-Mar | Dividend | 300,000 |  |
|  | Cash |  | 300,000 |
| (Being withdrawal of cash by Ram as profit share) |  |  |  |

Once these journal entries are made, the next step would be of posting the transactions above, to the individual ledger accounts. We create below the required T accounts and post the above journal entries into them.

Cash

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | ---: |
| 1-Mar | Capital | $50,00,000$ | 3-Mar | Computers | $58,00,000$ |
| 2-Mar | Loan | $20,00,000$ | $21-M a r$ | Sundry Creditors | $2,00,000$ |
| 19-Mar | Sale of Software | $12,00,000$ | $29-M a r$ | Salaries Expense | $4,00,000$ |
|  |  |  | $29-M a r$ | Office Rent Expense | $1,00,000$ |
|  |  |  | $31-M a r$ | Dividend | $3,00,000$ |
|  |  | $\mathbf{8 2 , 0 0 , 0 0 0}$ |  | Total | $14,00,000$ |
|  |  |  |  |  | $\mathbf{8 2 , 0 0 , 0 0 0}$ |

Capital

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  |  | $1-M a r$ | Cash | $50,00,000$ |
| 31-Mar | Balance | $50,00,000$ |  |  |  |
|  | Total | $\mathbf{5 0 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{5 0 , 0 0 , 0 0 0}$ |

Loan

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  |  | 2-Mar | Cash | $20,00,000$ |
| 31-Mar | Balance | $20,00,000$ |  |  |  |
|  | Total | $\mathbf{2 0 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{2 0 , 0 0 , 0 0 0}$ |

Computers

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | ---: | :--- | :--- | :--- |
| 3-Mar | Cash | $58,00,000$ |  |  |  |
|  |  |  | 31-Mar | Balance | $58,00,000$ |
|  | Total | $58,00,000$ |  | Total | $\mathbf{5 8 , 0 0 , 0 0 0}$ |

Supplies

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $4-\mathrm{Mar}$ | Trade Payables | $6,00,000$ |  |  |  |
|  |  |  | 31-Mar | Balance | $6,00,000$ |
|  | Total | $\mathbf{6 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{6 , 0 0 , 0 0 0}$ |

Sundry Creditors

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 21-Mar | Cash | $2,00,000$ | 4-Mar | Supplies | $6,00,000$ |
| 31-Mar | Balance | $4,00,000$ |  |  |  |
|  | Total | $\mathbf{6 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{6 , 0 0 , 0 0 0}$ |

Sale of Software

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  |  | 19-Mar | Cash | $12,00,000$ |
| 31-Mar | Balance | $20,00,000$ | 30-Mar | Receivables | $8,00,000$ |
|  | Total | $\mathbf{2 0 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{2 0 , 0 0 , 0 0 0}$ |

Salaries

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 29-Mar | Cash | $4,00,000$ |  |  |  |
|  |  |  | 31-Mar | Balance | $4,00,000$ |
|  | Total | $\mathbf{4 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{4 , 0 0 , 0 0 0}$ |

Office Rent

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 29-Mar | Cash | $1,00,000$ |  |  |  |
|  |  |  | $31-M a r$ | Balance | $1,00,000$ |
|  | Total | $\mathbf{1 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{1 , 0 0 , 0 0 0}$ |

Receivables

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 30-Mar | Sales | $8,00,000$ |  |  |  |
|  |  |  | $31-M a r$ | Balance | $8,00,000$ |
|  | Total | $\mathbf{8 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{8 , 0 0 , 0 0 0}$ |

Dividends

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 31-Mar | Cash | $3,00,000$ |  |  |  |
|  |  |  | 31-Mar | Balance | $3,00,000$ |
|  | Total | $\mathbf{3 , 0 0 , 0 0 0}$ |  | Total | $\mathbf{3 , 0 0 , 0 0 0}$ |

Now, we can start preparing our work sheet and transferring the balances in the above T-accounts to the same.

First entries in RSL Work Sheet

| Ledger Items | Original Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  | Income <br> Summary |  | Balance Sheet |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Debit | Credit | Debit | Credit | Debit | Credit | Debit | Credit | Assets | Liabilities and Equity |
| Cash | 14,00,000 |  |  |  |  |  |  |  |  |  |
| Receivable | 8,00,000 |  |  |  |  |  |  |  |  |  |
| Supplies | 6,00,000 |  |  |  |  |  |  |  |  |  |
| Computers | 58,00,000 |  |  |  |  |  |  |  |  |  |
| Sundry |  |  |  |  |  |  |  |  |  |  |
| Creditors |  | 4,00,000 |  |  |  |  |  |  |  |  |
| Loans |  | 20,00,000 |  |  |  |  |  |  |  |  |
| Capital |  | 50,00,000 |  |  |  |  |  |  |  |  |


| Sale of | $20,00,000$ |
| :--- | :---: |
| Software |  |
| Salaries | $4,00,000$ |
| Office Rent | $1,00,000$ |
| Dividend | $3,00,000$ |
| Total | $\mathbf{9 4 , 0 0 , 0 0 0} \mathbf{9 4 , 0 0 , 0 0 0}$ |

If there were no adjustments, one can straight go on to transfer each trial balance item to the financial statements, i.e., the balance sheet items would be transferred to the balance sheet and the income statement items would be transferred to the income summary. [One can verify the created items with the Solved Problem 2.1 and 3.2 solutions].

We of course, would like to include some adjustment entries (as discussed in Solved Problem 2.1). If the computers were to be depreciated by $₹ 2,00,00$ (due to reduced future economic utility of the computers) and also found that supplies worth ₹ $1,00,000$ to be consumed by RSL, this would have resulted in the position statement being adjusted for the same. The resulting adjustment entries would be:

RSL, Adjustment Entries

| Supplies consumed | $1,00,000$ |  |
| :--- | :--- | :--- |
| Supplies |  |  |
| (Being adjustment for the supplies consumed during the period ) |  |  |
| Depreciation expense | $2,00,000$ |  |
| Accumulated Depreciation | $2,00,000$ |  |
| (Being depreciation expense on computers for a month) |  |  |

These entries would then be included in the work sheet as shown below:

RSL Work Sheet

| Ledger Items | Original Trial Balance |  | Adjustments |  | Adjusted Trial Balance |  | Income Summary |  | Balance Sheet |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Debit | Credit | Debit | Credit | Debit | Credit | Debit | Credit | Assets | Liabilities and Equity |
| Cash | 14,00,000 |  |  |  | 14,00,000 |  |  |  | 14,00,000 |  |
| Receivable | 8,00,000 |  |  |  | 8,00,000 |  |  |  | 8,00,000 |  |
| Supplies | 6,00,000 |  |  | 1,00,000 | 5,00,000 |  |  |  | 5,00,000 |  |
| Computers | 58,00,000 |  |  |  | 58,00,000 |  |  |  | 58,00,000 |  |
| Sundry |  |  |  |  |  |  |  |  |  |  |
| Creditors |  | 4,00,000 |  |  |  | 4,00,000 |  |  |  | 4,00,000 |
| Loans |  | 20,00,000 |  |  |  | 20,00,000 |  |  |  | 20,00,000 |
| Capital |  | 50,00,000 |  |  |  | 50,00,000 |  |  |  | 50,00,000 |
| Accumulated |  |  |  |  |  |  |  |  |  |  |
| Depreciation |  |  |  | 2,00,000 |  | 2,00,000 |  |  |  | 2,00,000 |
| Interest |  |  |  |  |  |  |  |  |  |  |
| Payable |  |  |  | 40,000 |  | 40,000 |  |  |  | 40,000 |



* is transferred from income summary.

The above work sheet can be easily be converted to presented RSL's income summary and balance sheet as shown below.

Rohan Software Limited
Profit and Loss Account for the Period $1^{\text {st }}$ to $31^{\text {st }}$ March
(all figures in ₹)

| Rent Expense | $\mathbf{1 , 0 0 , 0 0 0}$ | Sales Net | $\mathbf{2 0 , 0 0 , 0 0 0}$ |
| :--- | ---: | :--- | :--- |
| Salaries Expense | $\mathbf{4 , 0 0 , 0 0 0}$ |  |  |
| Depreciation Expense | $\mathbf{2 , 0 0 , 0 0 0}$ |  |  |
| Supplies Consumed | $\mathbf{1 , 0 0 , 0 0 0}$ |  | $\mathbf{1 2 , 0 0 , 0 0 0}$ |
| Operating Profit | $\mathbf{1 2 , 0 0 , 0 0 0}$ |  |  |
| Interest Expense | $\mathbf{4 0 , 0 0 0}$ | Operating Profit | $\mathbf{1 1 , \mathbf { 0 0 , 0 0 0 }}$ |
| Net Profit | $\mathbf{1 1 , 6 0 , 0 0 0}$ |  |  |
| Dividends | $\mathbf{3 , 0 0 , 0 0 0}$ | Net Profit |  |
| Retained Earnings to Balance Sheet | $\mathbf{8 , 6 0 , 0 0 0}$ |  |  |

## Rohan Software Limited

Balance sheet as on March 31 (all amounts in ₹)

| Assets | Liabilities and Owners Equity |  |  |
| :---: | :---: | :---: | :---: |
| Current Assets |  | Liabilities |  |
| Cash | 14,00,000 | Sundry Creditors | 4,00,000 |
| Receivable | 8,00,000 | Loan from Venu | 20,00,000 |
| Supplies | 5,00,000 | Interest Payable | 40,000 |
| Current Assets Total | 27,00,000 | Liabilities Total | 24,40,000 |
| Fixed Assets |  | Owners Equity |  |
| Computer, Gross | 58,00,000 | Capital Invested | 50,00,000 |
| Less, Accumulated Depreciation | 2,00,000 | Retained Earnings (balance carried from income statement ) | 8,60,000 |
| Computer, Net | 56,00,000 |  |  |
| Fixed Assets Total | 56,00,000 | Owners Equity Total | 58,60,000 |
| Total Assets | 83,00,000 | Total Liabilities and Owners' Equity | 83,00,000 |

For readers convenience, we also present the second period of RSL below - the journal entries, ledgers, adjustments and the adjusted trial balance. Readers may like to tally the same with the final second period financial statements presented in Solved Problem 2.1 for balance sheet and in Solved Problem 3.2 for income statement.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(o) A journal is a chronological record of all transactions, showing the debit and credit of the accounts as affected by the transactions.
(p) A purchase journal is used for recording all credit purchases.

## Bong, Harry and Mallu Revisited

The illustration is a repeat of illustration of Numerical Problem 4 of Chapter 3.

## Question:

Prepare the profit \& loss account for the year and a balance sheet as at the end of the year.
The first step in the creation of the entity's financial statements would be creation of the journal entries, based on the various business transactions listed above. We list below, the respective journal entries for transactions during the accounting period. The entries below also include the adjustment entries.

| Journal | Debit (in ₹) | Credit (in ₹) |
| :--- | :--- | :--- |
| Bank | $36,00,000$ |  |
| Capital-Bong |  | $12,00,000$ |
| Capital-Harry | $12,00,000$ |  |
| Capital-Mallu | $12,00,000$ |  |
| (Being capital invested by the partners) |  |  |
| Delivery Vans | $12,84,000$ |  |
| Bank | $48,00,000$ |  |
| (Being purchase of fixed asset) |  |  |
| Accounts Receivable | $33,84,000$ |  |
| Sales Revenue |  |  |
| (Being sales on credit) |  |  |
| Purchases |  |  |
| Accounts Payable | $33,00,000$ |  |
| (Being purchases on credit) |  |  |


| Inventory | $33,20,800$ |  |
| :---: | :---: | :---: |
| Purchases |  | 33,20,800 |
| (Being purchases taken into inventory) |  |  |
| Bank | 41,52,000 |  |
| Accounts receivable |  | 41,52,000 |
| (Being collection of accounts receivable) |  |  |
| Bad debt Expense | 48,000 |  |
| Accounts receivable |  | 48,000 |
| (Being non-collectable accounts receivable written off) |  |  |
| Bad debt Expense | 9,000 |  |
| Provision for Doubtful Accounts |  | 9,000 |
| (Being provision for doubtful accounts receivable) |  |  |
| Accounts Payable | 29,52,800 |  |
| Bank |  | 29,52,800 |
| (Being payment of accounts payable) |  |  |
| Wages and expenses | 7,72,110 |  |
| Bank |  | 7,72,110 |
| (Being payment of wages and expenses) |  |  |
| Wages and expenses | 12,890 |  |
| Wages Outstanding |  | 12,890 |
| (Being payable on account of wages and expenses) |  |  |
| Bank | 85,000 |  |
| Notes payable |  | 85,000 |
| (Being notes payable signed) |  |  |
| Cost of goods sold | 30,64,300 |  |
| Inventory |  | 30,64,300 |
| (Being cost of inventory sold ) |  |  |
| Drawings-Bong | 20,000 |  |
| Drawings -Harry | 12,800 |  |
| Drawings -Mallu | 18,000 |  |
| Bank |  | 50,800 |
| (Being drawings made by the partners) |  |  |
| Depreciation expense | 2,43,960 |  |
| Accumulated Depreciation |  | 2,43,960 |
| (Being Depreciation expense on delivery Van) |  |  |
| Sales Revenue | 48,00,000 |  |
| Income Summary |  | 48,00,000 |
| (Being transfer of sales revenue to income summary) |  |  |


| Income Summary | $41,50,260$ |  |
| :--- | ---: | ---: |
| Bad debt expense |  | 57,000 |
| Cost of Goods sold | $30,64,300$ |  |
| Depreciation expense | $2,43,960$ |  |
| Wages and expenses | $7,85,000$ |  |
| (Being transfer of various expenses to income summary) |  |  |
| Income Summary | $6,49,740$ |  |
| Net Income | $6,49,740$ |  |
| (Being transfer profit to the net income account) |  |  |

Once the journal entries are there in place, the next step would be of posting the transactions above, to the individual ledger accounts. We create below, the required ' $T$ ' accounts and post the above journal entries into them.

## Accounts Receivable

| Sales Revenue | $48,00,000$ | Bank | $41,52,000$ |
| :--- | ---: | :--- | ---: |
|  |  | Bad Debt Expense | 48,000 |
|  |  | Balance | $\mathbf{6 , 0 0 , 0 0 0}$ |
| Total | $48,00,000$ | Total | $48,00,000$ |

## Accounts Payable

| Bank | $29,52,800$ | Purchases | $33,20,800$ |
| :--- | ---: | ---: | ---: |
| Balance | $3,68,000$ |  |  |
| Total | $33,20,800$ | Total | $33,20,800$ |

## Accumulated Depreciation

| Balance | $2,43,960$ | Depreciation Expense | $2,43,960$ |
| :--- | :--- | :--- | :--- |
| Total | $2,43,960$ | Total | $2,43,960$ |

## Bad Debt Expense

| Accounts Receivable | 48,000 | Income Summary | $\mathbf{5 7 , 0 0 0}$ |
| :--- | ---: | :--- | :--- |
| Provision for Doubtful debts | 9,000 |  |  |
| Total | 57,000 | Total | 57,000 |

Please observe that while we write balance for all the Balance Sheet T accounts, such as Accounts Receivable, Accounts Payable, and Accumulated Depreciation, we would write Income Summary (or transfer to Income Summary) for all the Profit and Loss T accounts, such as Bad Debts Expense, Sales, and Cost of Goods sold.

| Bank |  |  |  |
| :---: | :---: | :---: | :---: |
| Capital-Bong | 12,00,000 | Delivery Vans | 12,84,000 |
| Capital-Harry | 12,00,000 | Accounts Payable | 29,52,800 |
| Capital-Mallu | 12,00,000 | Wages and expenses | 7,72,110 |
| Accounts receivable | 41,52,000 | Drawings-Bong | 20,000 |
| Notes payable | 85,000 | Drawings -Harry | 12,800 |
|  |  | Drawings -Mallu | 18,000 |
|  |  | Balance | 27,77,290 |
| Total | 78,37,000 | Total | 78,37,000 |
| Capital account - Bong |  |  |  |
| Balance | 12,00,000 | Bank | 12,00,000 |
| Total | 12,00,000 | Total | 12,00,000 |
| Capital account - Harry |  |  |  |
| Balance | 12,00,000 | Bank | 12,00,000 |
| Total | 12,00,000 | Total | 12,00,000 |
| Capital account - Mallu |  |  |  |
| Balance | 12,00,000 | Bank | 12,00,000 |
| Total | 12,00,000 | Total | 12,00,000 |
| Cost of Goods sold |  |  |  |
| Inventory | 30,64,300 | Income Summary | 30,64,300 |
| Total | 30,64,300 | Total | 30,64,300 |
| Delivery Van |  |  |  |
| Bank | 12,84,000 | Balance | 12,84,000 |
| Total | 12,84,000 | Total | 12,84,000 |
| Depreciation Expense |  |  |  |
| Accumulated Depreciation | 2,43,960 | Income Summary | 2,43,960 |
| Total | 2,43,960 | Total | 2,43,960 |
| Drawings account - Bong |  |  |  |
| Balance | 20,000 | Bank | 20,000 |
| Total | 20,000 | Total | 20,000 |


| Drawings account - Harry |  |  |  |
| :---: | :---: | :---: | :---: |
| Balance | 12,800 | Bank | 12,800 |
| Total | 12,800 | Total | 12,800 |
| Drawings account - Mallu |  |  |  |
| Balance | 18,000 | Bank | 18,000 |
| Total | 18,000 | Total | 18,000 |
| Inventory |  |  |  |
| Purchases | 33,20,800 | Cost of goods sold | 30,64,300 |
|  |  | Balance | 2,56,500 |
| Total | 33,20,800 | Total | 33,20,800 |
| Notes Payable |  |  |  |
| Balance | 85,000 | Bank | 85,000 |
| Total | 85,000 | Total | 85,000 |
| Provision for Doubtful Debts Account |  |  |  |
| Balance | 9,000 | Bad Debt Expense Account | 9,000 |
| Total | 9,000 | Total | 9,000 |
| Purchases Account |  |  |  |
| Accounts Payable | 33,20,800 | Inventory | 33,20,800 |
| Total | 33,20,800 | Total | 33,20,800 |
| Sales Account |  |  |  |
| Income Summary | 48,00,000 | Accounts Receivable | 48,00,000 |
| Total | 48,00,000 | Total | 48,00,000 |
| Wages and Expenses |  |  |  |
| Bank | 7,72,110 | Income Summary | 7,85,000 |
| Wages Outstanding | 12,890 |  |  |
| Total | 7,85,000 | Total | 7,85,000 |
| Wages Outstanding |  |  |  |
| Income Summary | 12,890 | Wages and Expenses | 12,890 |
| Total | 12,890 | Total | 12,890 |

Once the process of posting the ledgers and computing their balances is over, the next step is to create and fill a work sheet for the organization. The work sheet given on the next page, results in the formation of the organization's income summary and balance sheet.

| Account | Original Balance |  | Adjustments |  | Adjusted Trial Balance |  | Income Summary |  | Balance Sheet |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Debit | Credit | Debit | Credit | Debit | Credit | Debit | Credit | Assets | Liabilities \& Equity |
| Accounts Receivable | 6,00,000 |  |  |  | 6,00,000 |  |  |  | 6,00,000 |  |
| Accounts payable |  | 3,68,000 |  |  |  | 3,68,000 |  |  |  | 3,68,000 |
| Accumulated depreciation |  | 2,43,960 |  |  |  | 2,43,960 |  |  |  | 2,43,960 |
| Bad Debt Expense | 48,000 |  | 9,000 |  | 57,000 |  | 57,000 |  |  |  |
| Bank | 27,77,290 |  |  |  | 27,77,290 |  |  |  | 27,77,290 |  |
| Capital Account-Bong |  | 12,00,000 |  |  |  | 12,00,000 |  |  |  | 12,00,000 |
| Capital Account-Harry |  | 12,00,000 |  |  |  | 12,00,000 |  |  |  | 12,00,000 |
| Capital Account-Mallu |  | 12,00,000 |  |  |  | 12,00,000 |  |  |  | 12,00,000 |
| Cost of Goods sold | 30,64,300 |  |  |  | 30,64,300 |  | 30,64,300 |  |  |  |
| Delivery Van | 12,84,000 |  |  |  | 12,84,000 |  |  |  | 12,84,000 |  |
| Depreciation Expense | 2,43,960 |  |  |  | 2,43,960 |  | 2,43,960 |  |  |  |
| Drawings Account-Bong | 20,000 |  |  |  | 20,000 |  |  |  | 20,000 |  |
| Drawings Account-Harry | 12,800 |  |  |  | 12,800 |  |  |  | 12,800 |  |
| Drawings Account-Mallu | 18,000 |  |  |  | 18,000 |  |  |  | 18,000 |  |
| Inventory | 2,56,500 |  |  |  | 2,56,500 |  |  |  | 2,56,500 |  |
| Notes Payable |  | 85,000 |  |  |  | 85,000 |  |  |  | 85,000 |
| Provision for Doubtful Debts |  |  |  | 9,000 |  | 9,000 |  |  |  | 9,000 |
| Sales |  | 48,00,000 |  |  |  | 48,00,000 |  | 48,00,000 |  |  |
| Wages and Expenses | 7,72,110 |  | 12,890 |  | 7,85,000 |  | $7,85,000$ |  |  |  |
| Wages Outstanding |  |  |  | 12,890 |  | 12,890 |  |  |  | 12,890 |
| Total | 90,96,960 | 90,96,960 | 21,890 | 21,890 | 91,18,850 | 91,18,850 | 48,00,000 | 48,00,000 | 49,68,590 | 43,18,850 |
| Net Income |  |  |  |  |  |  | 6,49,740 |  |  | 6,49,740 |


| Bong, Harry and Mallu Partnership Income Summary |  |  |  |  | (all figures in ₹) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost of Goods sold |  | 30,64,300 | Sales |  | 48,00,000 |
| Bad Debt Expense |  | 57,000 |  |  |  |
| Depreciation Expense |  | 2,43,960 |  |  |  |
| Wages and Expenses |  | 7,85,000 |  |  |  |
| Net Income |  | 6,49,740 |  |  |  |
| Total |  | 48,00,000 | Total |  | 48,00,000 |
| Bong, Harry and Mallu Partnership Balance Sheet |  |  |  |  | (all figures in ₹) |
| Assets |  |  | Liabilities and Eq |  |  |
| Cash at Bank |  | 27,77,290 | Accounts payable |  | 3,68,000 |
| Inventory |  | 2,56,500 | Notes payable |  | 85,000 |
| Accounts Receivable | 6,00,000 |  | Wages payable |  | 12,890 |
| Less: Provision for Doubtful Debts | 9,000 | 5,91,000 | Capital |  | 36,00,000 |
| Delivery Van | 12,84,000 |  | Net Income | 6,49,740 |  |
| Less: Accumulated depreciation | 2,43,960 | 10,40,040 | Less: Drawings | 50,800 | 5,98,940 |
| Total |  | 46,64,830 | Total |  | 46,64,830 |

## SPOTLTGHT 5.1

## The Various Acts

Unlike the Income Tax Act, under Companies Act, a financial year does not have to comprise of exactly 12 months. Under the Companies Act, 2013 as per Section 2(41), a financial year means the period ending on $31^{\text {st }}$ March every year.

## Let's Check Our Concepts!

State whether the following statements are True or False:
(q) Posting is the process of recording the transactions in the ledger from the books of original entry.
(r) The total amount of debits as a result of a transaction will be equal to the credits as per the dual aspect principle.

### 5.11 CASH BOOK: A SUBSIDIARY BOOK AS WELL AS A PRINCIPAL BOOK

As explained in the previous section, entries in the cash book can be passed directly. Based on these entries, the ledger accounts are prepared. Therefore, a cash book is known as a subsidiary book. Also, the cash book in itself, is a complete account, showing the cash and bank balances which would be considered for the balance sheet and hence, it is also a principal book. The cash book is, therefore, both a subsidiary book and a principal book.

There are three types of cash books:

1. Simple cash book (single column cash book)
2. Two-column cash book (having cash-bank, cash-discount or bank-discount columns)
3. Three-column cash book (having all 3 columns - cash, bank and discount)

Under a simple cash book, only the cash receipts and payments are recorded. All the receipts are recorded on the left hand side, while the payments are recorded on the right hand side. The left hand side has to be always greater than the right hand side because of the simple fact that the cash receipts have to be greater than the cash payments.

The two-column cash book is similar to the simple cash book with a difference that there is an additional column on both sides of the cash book. This additional column represents the discount amount. The discount column on the right side (payments side) reflects the 'discount received' while the column on the left side (receipts side) reflects the 'discount allowed’. For example, if M/s Subham \& Co. purchases furniture for ₹ 100,000 , on which they get a discount of $10 \%$. They also sell some goods to M/s Sohan for ₹ 150,000 . It is known that $\mathrm{M} / \mathrm{s}$ Sohan makes the full payment after availing a discount of $10 \%$. If the opening cash balance were $₹ 50,000$, the entries for these transactions would be passed in the following way:

M/s. Subham \& Co. Cash Book
$\left.\begin{array}{|llccccccc|}\hline \text { Date } & \text { Particulars } & \text { LF } & \text { Dis. } & \begin{array}{c}\text { Amount } \\ \text { (in ₹) }\end{array} & \text { Date } & \text { Particulars } & \text { LF } & \text { Dis. }\end{array} \begin{array}{c}\text { Amount } \\ \text { (in ₹) }\end{array}\right]$

It is important to note here that the discount columns are not accounts, so they are not closed but are taken to the discount account in the ledger.

When a bank column is added to the two-column cash book, it becomes a three-column cash book. Of course, the bank column is added on both the sides of the cash book, to represent the transactions related to the bank. Here, the amount on the payments side of a bank column may sometimes exceed the amount on the receipts side because the banks may allow overdraft facilities in some cases. For maintaining a three column cash book, the following points are required to be kept in mind:
(a) The opening balances of the cash and the bank accounts are written in the respective columns as 'Balance $\mathrm{B} / \mathrm{d}$ ' (meaning brought forward). If a new business is started, the capital introduced is written on the receipts side under the cash or bank column, as the case may be.
(b) All the receipts are written on the left hand side and the payments on the right hand side, under the respective column heads, that is, if cash is received/ paid, then the entry is made under the cash column and if a cheque is received/ issued, then the entry is made under the bank column.
(c) Entry for discounts is made in the same way as in the case of a double column cash book.
(d) If cash is deposited into the bank, on the receipts side, the amount is entered in the bank column, while on the payment side, the amount is entered in the cash column. In the ledger folio (LF) column, the letter ' C ' is written to indicate that it is a contra entry (that is, no further posting is required as the effect is nullified).
(e) The discount column on both the sides are totaled, but not balanced.

It is expected that the readers have understood and appreciated the different


To know more on "Banks create Money Out of the Magic of Accounting" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/539 types of processes adopted (such as the two- and three-column cash book), and the rationale behind the extensive use of the above cash books used in practice by most businessmen.

## Illustration 5.7

Jaggi started a business on April 4 , 2015 with a cash balance of $₹_{10,000 \text {. He enters the following transactions during }}$ the month, for which you are required to prepare a three-column cash book.

| Date | Transaction |
| :---: | :---: |
| 15-04-15 | Cash deposited into the bank. |
| 25-04-15 | Received cheque from Sharan for $₹^{2}, 000$ against the Sale Bill 0001. |
| 26-04-15 | Issued cheque to Smita for ₹ 4,000 against purchases made. |
| 27-04-15 | Cash received ₹ 6,000 (Discount allowed ₹ 500 ) against Sale Bill 0002. <br> Issued cheque to Raman against purchases made of $₹_{10,000}$ after deducting a cash discount of $₹_{1,000}$. |
| 28-04-15 | Received cheque from Aman for Sale Bill 0003 of $₹ 7,000$. |
| 30-04-15 | Paid salary to Mohan in cash $₹_{1,500}$. |
|  | Purchased stationery for $₹^{2}, 000$ in cash. |

## Solution:

| Receipts | M/S JaggiCASH BOOK |  |  |  |  |  |  |  |  | Payments |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | LF | Dis. | Cash | Bank | Date | Particulars | LF | Dis. | Cash | Bank |
| 04-04-15 | To, Capital |  |  | 10,000 |  | 15-04-15 | By, Bank | C |  | 5,000 |  |
| 15-04-15 | To, Cash | C |  |  | 5,000 | 26-04-15 | By, Smita |  |  |  | 4,000 |
| 25-04-15 | To, Sharan |  |  |  | 2,000 | 27-04-15 | By, Raman |  | 1,000 |  | 9,000 |
| 27-04-15 | To, Cash Sales |  | 500 | 6000 |  | 30-04-15 | By, Salary |  |  | 1,500 |  |
| 28-04-15 | To, Aman |  |  |  | 7,000 |  | By, Stationary |  |  | 2,000 |  |
|  |  |  |  |  |  |  | By, Bal. C/d |  |  | 7,500 | 1,000 |
|  |  |  | 500 | 16,000 | 14000 |  |  |  | 1000 | 16,000 | 14000 |

### 5.12 ERRORS AND DIFFERENCES IN TRIAL BALANCE

In the accounting records process, there can be two types of errors. The first is the one that leads to difference in trial balance. The second is the one that does not lead to a difference in trial balance.

In case there exists any differences in the balances of both the sides of a trial balance, it is clear that the accounts have not been made or posted properly. The reasons for the differences have to be located and rectified. This is because if the trial balance is not tallied, the balance sheet will also not tally, and there will always remain a difference between the total on the assets side as compared to the total on the liabilities side.

Generally, we see that when both the debit and credit sides of a trial balance are equal, then one can say that the accounting and posting has been done in a proper way. But there may be cases when in spite of agreement of both the debit and credit totals in a trial balance (see Annexure 5.1 on the OLC for more), there are a few errors because the errors may be of such a nature that they do not change the basic equation of debits equal to credits.
(a) Errors of Principle

When we commit a principle mistake, it will not be disclosed by the trial balance because the entry remains on the correct side. For example, if an expense is treated as an asset (or vice versa), or an income is treated as a liability (or vice versa), the disclosure of the mistake is not possible because the amount was taken on the correct side and hence, the trial balances on the debit and credit sides will be matching with each other. In practice, this is a common error, especially when the accountant lacks depth.
(b) Compensating error

If there are many errors, there is a possibility that the differences are cancelled by each other and hence, the net impact may not be visible (that is the net difference may be nil). For example, due to confusion while listening to figures over the phone, if the debtors closing balance was taken as ₹ 500 (instead of ₹ 750 ), furniture ₹ 1,000 (instead of ₹ 1,500 ), sundry creditors ₹ 1,500 (instead of $₹ 2,100$ ) and bills payable ₹ 600 (instead of ₹750), there will be a matching of the trial balance. But, on analysis, we will find that there is a mistake of ₹ 750 on both the sides of the trial balance and consequently, it will be difficult to trace such a mistake.
(c) Omitting a transaction

Omitting a transaction completely in the subsidiary books, i.e., omitting the amount on the debit side as well as omitting the corresponding credit figure of a transaction would result in the trial balance being matched. In reality, the rectification of such errors leads to a lot of paper work.
(d) Posting into a wrong account

This is an extension of the first type of error and it is the most often occurring error. For example, instead of debiting the furniture and fixtures account with ₹ 500 , if we debit the plant and machinery account with $₹ 500$, the difference remains untraced in the trial balance because the entry is posted on the correct side (debit side in this case).
(e) Clerical error

This again is restating one of the above types of error. In this case, error(s) occur due to a specific mistake in entering the amount in the books of original entry from the vouchers/invoices.

Therefore, it should be remembered that the trial balance is not a conclusive proof of accuracy or of the fact that no errors have been committed. However, in general practice, the accountant believes that the records are proper once the trial balance is agreed. Hence, it is only a prima facie evidence that the accounts are in order.

### 5.13 LOCATING ERRORS IN A TRIAL BALANCE

If both the sides of a trial balance are not matching, it indicates that there are some errors in the recording of the transactions. Even a difference of a very small amount can be the net result of a chain of mistakes. Therefore, proper care should be taken, irrespective of the amount of the mistake. There are many ways to locate the errors. Some of the commonly used steps are as follows:
(i) Check the total on both the sides of a trial balance. In case of the group accounting concept being used (for example, if a number of individual investments are written under a single head, viz., investments), the complete list under that group head should be re-checked.
(ii) Check whether all the balances have been taken to the trial balance, including the discount account, cash balance, and bank balance.
(iii) Check the balancing of the individual accounts properly.
(iv) If the difference is very large, it is better to compare the figures with the figures of the previous year. For example, if the previous year's closing stock was $₹ 5,00,000$ and the current years stock comes to $₹ 15,00,000$, there is a possibility that the error has occurred in the stock account.
(v) Many a times, an account might have been written on the wrong side (that is., a debit entry being made into the credit side and vice versa). In such cases, divide the amount of the difference on both the sides with two and check the accounts with a balance equal to half of the difference between the two sides. For example, if the difference in the total amounts on both the sides is ₹ 10,000 , try locating the accounts having a balance of $₹ 5,000$, because there is a possibility that the amount had been written on the wrong side.
(vi) If the error is not located even after trying all the possible alternatives, it is always better to check the posting of the subsidiary books first, such as the cash book, purchases book, sales book, purchases returned book, and sales returned book. Then the other accounts should to be checked
(vii) If the total of digits in different totals to 0 it would mean that there is an error in writing the amount with altered digits. For example, the amount 3,256 is written as 2,356 . This needs to be checked.

### 5.14 RECTIFICATION OF ERRORS

After locating the errors, a correct entry has to be passed instead of just changing the figures in the trial balance. Basically, there are two types of errors

- Errors that do not affect the trial balance; and
- Errors that affect the trial balance.

Errors that do not affect the trial balance are those errors which do not affect the matching of the total on both the sides of the trial balance. For example, if cash received from Roshan, ₹ 1,000 , is wrongly posted as received from Rahim, the trial balance will agree, but both, the accounts of Roshan and Rahim, will show wrong figures. So, in order to rectify such errors, the following entry is passed:

| Rahim Account | (Debit) | 1,000 |
| :--- | :--- | :--- |
| Roshan Account | (Credit) | 1,000 |
| (Being amount received from Roshan wrongly posted to Rahim account, now rectified) |  |  |

Similarly, if furniture purchased for $₹ 5,500$, is treated as purchases (of raw material), we have to pass the following rectification entry:

| Furniture account | (Debit) |  | 5,500 |
| :--- | :---: | :---: | :---: |
| Purchases account |  | (Credit) | 5,500 |

In the above entry, we see that there is no effect on the trial balance, but the individual accounts are required to be modified to present a correct picture.

Placing the right figure on the right side rectifies the errors that affect the trial balance. Here, the journal entry is not required to be passed because one account out of two has been accounted for properly. For example, goods purchased (as raw material) from M/s Shalini for ₹ 5,000 were taken to the purchases account with the same amount, but M/s Shalini account was credited with ₹ 500 only. In this case, the trial balance will not match because only one account is correct. Here, it is required to credit M/s Shalini account with another $₹ 4,500$, saying 'by mistake on date....rectified'.

### 5.14.1 Suspense Account

This is an account that is maintained till the trial balance is not matched. A suspense account is opened and the amounts relating to all the errors that affect the trial balance, are transferred to this account. As and when the errors are located, a corrective entry is passed in the respective account, with a corresponding entry to the suspense account. It is important to note that a suspense account is not required for the errors that do not affect the trial balance, because the errors in such cases occur in two accounts. When all the errors are located and rectified, the balance in the suspense account becomes nil.

## SPOTLGHT 5.2

## What type of account is Suspense Account?

The suspense account is 'characterless' in the sense that it cannot be classified as assets, liabilities, capital, expense or income. It is simply created to ensure that the trial balance balances as long as the errors are not found and rectified. So, in a sense, it is a residual account created to facilitate the process of making the books accurate and for upholding the duality principle of accounting transactions.

If there are no errors in the books, the suspense account would simply vanish or balance out to give a zero balance in the end. However, if errors go undetected, the suspense account appears in the balance sheet either on the asset side (for debit balance) or on the liabilites side (for credit balance). It may be noted that the absence of a suspense account does not mean the absence of errors in the books.

## Illustration 5.8

Sanjay Kumar Singh was preparing the final accounts for the year ending March 31, 2016. While preparing the same, he found that his trial balance debit and credit side figures were not equal. So he kept the difference of 35 , 270 in a new account called the 'Suspense Account'. The following errors were located on rechecking the transactions. Pass the necessary adjustment entries. Also show the effect on the suspense account.
(a) Amount received from Dilip Chawla was wrongly credited in the account of Dilip Chabbra, ₹ 5,000 .
(b) Goods sold to Sanjeev Gaur for ₹1,250 were entered in the sales book as ₹ 1,520 .
(c) Total purchases, as per the purchase book entry were worth ₹ 50,000 , while the actual purchase was worth ₹ 70,000 .
(d) While taking the figures of the sales from the sales book, an amount written in the trial balance was ₹ 71,000 , instead of the correct figure of ₹ 68,000 .
(e) Amount paid ₹ 10,000 to Aaron \& Co. was wrongly entered in Aaron \& Chandan Co.
(f) Goods sold to Abu Sufiyan for ₹6,000 were credited to his account.

## Suggested Solution

Journal Entries
(a) Dilip Chabbra Account
(Debit)
5,000
Dilip Chawla Account
(Credit)
5,000
(Being amount received from Dilip Chawla was wrongly credited to Dilip Chabbra account, now rectified)
(b) Sale Account

| (Debit) | 270 |
| :--- | :--- |
| (Credit) | 270 |

Suspense Account
(Credit)
270
(Being amount of sale to Sanjeev Gaur of ₹ 1250 entered as $₹ 1520$, now rectified)
(c) Purchases Account (Debit) 20,000

Suspense Account (Credit) 20,000
(Being amount of purchases recorded as ₹50,000 instead of ₹ 70,000 , now rectified)
(d) Sale Account (Debit) 3,000

Suspense Account (Credit) 3,000
(Being amount of Sales recorded as ₹ 71,000 instead of ₹ 68,000 , now rectified)
(e) Aaron \& Co. Account
(Debit) 10,000
Aaron \& Chandan Co. Account
(Credit)
10,000
(Being amount paid to Aaron \& Co. but recorded in the account of Aaron \& Chandan Co., now rectified)
(f) Abu Sufiyan Account (Debit) 12,000

Suspense Account
(Credit)
12,000
(Being amount of goods sold to Abu Sufiyan for ₹6,ooo but credited his account by ₹6,000, now rectified)

| Updated Suspense Account of Sanjay Kumar Singh | (all figures in ₹) |  |  |
| :--- | ---: | :--- | ---: |
| Particulars | Amount | Particulars | Amount |
| To, Difference in Trial Balance | 35,270 | By, Sales (Sanjeev) | 270 |
|  |  | By, Sales | 3,000 |
|  |  | By, Purchases | 20,000 |
|  |  | By, Abu Sufiyan | 12,000 |
|  |  |  |  |

## SPOTLTGHi 5.3

## Finalization of Accounts and Accounting Standard 5

The Department of Company Affairs (DCA) (now Ministry of Corporate Affairs (MCA) (Circular No. 3, March 30, 1956) had clarified that the annual accounts of a company should be deemed to be final and conclusive once adopted in its Annual General Meeting i.e., a meeting of all the owner(s) or shareholders. However, clerical mistakes can be corrected. This is also borne out by Accounting Standard 5 (Prior Period and Extraordinary Items and Changes in Accounting Policies). The corrections are usually made and shown while releasing the following year's financial statements (after discovery of the mistake). However, since the time lapse between the commission of the error and its rectification can be considerable, for significant errors, companies should make them public without waiting for the year end.

### 5.15 COLLECTION LOSSES

We had observed in Chapter 2 that selling and buying in most of the businesses is on credit basis and not on cash basis. This led us to the creation of an item in balance sheet known as accounts receivable or sundry debtors. We also stated that in most situations, these accounts are unsecured and have only the personal security of the customer.

It is quite normal that some of these accounts fail to pay. These collection losses are called bad debts or bad debtors. It is not possible for the management to always know exactly which accounts and what amount will not be collected. However, based on past experience and familiarity of the present market conditions, it is possible to estimate the future loss and make a provision for it. Such provisions are used to reduce the gross accounts receivable to its estimated realisable value. The estimated collection loss is variously known as 'provision for bad debts' or 'reserve for doubtful debts', etc.

In other words, there are two ways of accounting for bad or doubtful debts/receivables: (a) writing them off; and (b) creating a provision for bad and doubtful debts.

### 5.15.1 Writing the Bad Debts Off

Under the first method, the amount of debt which is irrecoverable is treated as a loss and is transferred as bad debts expense. For example, Chandu, who was a trade debtor in the books of M/s Nandu, with an outstanding amount of $₹ 50,000$, files a petition for bankruptcy. The accountant of M/s Nandu should immediately close the personal account of Chandu by way of the following entry;

| Bad Debt Expense | (Debit) |  | 50,000 |
| :---: | :---: | :---: | :---: |
| Chandu Account | (Credit) |  | 50,000 |
| (Being the amount receivable from Chandu transferred to the bad debts account) |  |  |  |

At the end of the year, the bad debts account is closed with the profit and loss account in the following way:

| Profit and Loss Account | (Debit) | 50,000 |
| :--- | :---: | :---: | :---: |
| Bad Debt Account | (Credit) | 50,000 |
| (Being the balance in the bad debt account transferred to the profit and loss account) |  |  |

As a result of the above entry, the profit for the period is reduced by ₹ 50,000 .
In a rare scenario, if the amount is recovered after the passing of the above entry, then it is logical that we will have to debit the cash account and credit the profit and loss account. In other words, the profit \& loss account is credited because the amount recovered is a type of profit for the entity. It is important to note that the debtors account is not credited as the account of debtor is already closed. And a new account called the 'Bad Debts Recovered Account' is opened.

Continuing with the same example, if it is further assumed that Chandu comes back from his bankruptcy crisis and pays $₹ 15,000$ in the next year then the following journal entries are to be passed:

| Cash / Bank Account | (Debit) |  | 15,000 |  |
| :--- | :--- | :--- | :--- | :--- |
| Bad Debts Recovered Account |  | (Credit) |  | 15,000 |
| (Being the amount recovered from Chandu) |  |  |  |  |


| Bad Debts Recovered Account | (Debit) |  |  |
| :---: | :---: | :---: | :---: |
| Profit and Loss Account | (Credit) |  | 15,000 |
| (Being the amount of bad debt recovered transferred to the profit and loss account for the period) |  |  |  |

### 5.15.2 Creating a Provision

Creating a provision for bad and doubtful debts means setting aside some amount, out of the profit and loss account for the period, on account of not knowing the exact amount of bad debt to be written off.

Many a times, it happens that the amount to be recovered from a debtor is doubtful, but the entity does not want to write it off because of lack of certainty. The entity, however, can guess and fix an informed percentage of the total amount (or absolute figure), based upon the facts and circumstances of each case, and create a provision for such amount. Any amount required to be written off in the coming year is met out of this provision.

It is a normal practice of businesses that at the end of each year, all the accounts relating to the debtors are properly examined and a list of doubtful debts is prepared, for which a provision is required to be created. Suppose, on March 31, 2015, the recovery of the following amounts was doubtful:

| Dinesh | 3,000 |
| :--- | ---: |
| Mahesh | 2,000 |
| Somesh | 5,000 |
| Ramesh | 10,000 |
| TOTAL | 20,000 |

The following entry is passed for the total amount of doubtful recovery, as follows:

| Profit and Loss Account | (Debit) | 20,000 |  |
| :---: | :---: | :---: | :---: |
| Provision for Bad and Doubtful Debt | (Credit) | 20,000 |  |
| (Being the amount of provision made for the accounts of Dinesh, Mahesh, Somesh and Ramesh) |  |  |  |

Let us further assume that the amount due on accounts of Dinesh and Mahesh were paid, while Ramesh and Somesh were declared insolvent in the financial year ending March 31, 2016. Also, on an
examination of the accounts, an amount of $₹ 8,000$ on account of Harish was considered doubtful. The following journal entries will be passed:

| Provision for Bad and Doubtful Debt | (Debit) |  | 15,000 |  |
| :--- | :--- | :--- | :--- | :--- |
| Bad Debt Account |  | (Credit) |  | 15,000 |
| (Being amount outstanding from Ramesh and Somesh written off as bad debt on becoming insolvent) |  |  |  |  |
| Profit and Loss Account | (Debit) |  | 3,000 |  |
| Provision for Bad and Doubtful Debt |  | (Credit) |  | 3,000 |
| (Being the amount of provision for the year) |  |  |  |  |

Now, our Provision for Bad and Doubtful Debts account will look as follows:

Provision for Bad and Doubtful Debts Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31-3-15 | To Balance c/d | 20,000 | 31-3-15 | By Profit \& Loss A/c | 20,000 |
| 31-3-16 | To Bad Debt account | 15,000 | 31-3-16 | By Balance b/d | 20,000 |
|  | To Balance c/d | 8,000 |  | By Profit and Loss A/c | 3,000 |
|  |  | 23,000 |  |  | 23,000 |
|  |  |  | 01-4-16 | By Balance b/d | 8,000 |

From the above account, it is clear that the amount which is doubtful as at March 31, 2015, is only $₹ 8,000$ and it represents the amount of provision made for the doubtful amount due from Harish. In the year 2015-16, we did not debit the profit and loss account with amount due from Harish ( $₹ 8,000$ ) but it has been automatically reduced from the accounts received from Dinesh and Mahesh ( $₹ 2,000$ plus 3,000 ).

Suppose, in the next year, the amount due from Harish is received fully, we will close the provision for bad and doubtful debts account (obviously, only if there is no doubtful recovery in the next year) by passing the following journal entry.

| Provision for Bad and Doubtful Debt | (Debit) |  | 8,000 |  |
| :--- | :--- | :--- | :--- | :--- |
| Profit and Loss Account | (Credit) |  | 8,000 |  |
| (Transfer of balance to the profit and loss <br> account) |  |  |  |  |

Therefore, the provision for bad and doubtful debts account keeps on continuing


To know more on "Origin, Accounting Treatment and Audit of Provisions" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/540 till all the doubtful debts are discovered by the entity. In the meantime, the balance in this account will represent the amount required to be set aside for doubtful recoveries.

## SOLVED PROBLEMS

## Solved Problem 5.1

Sundari Parlour India Limited is a retail chain, having retail outlets in almost all the major cities in India. It has opened one more branch in Navi Mumbai three months ago. The manager of this branch,

Murlidharan, provides you with the following information for the month of April 20X7. Based upon the information, prepare the individual ledger accounts after passing the necessary journal entries. Also, prepare the trial balance as on April 30, 20X7.
All figures in ₹ millions
Balance on 1-04-20X7:
$\begin{array}{lrll}\text { Fixed Assets } & 1,800 & \text { Bank Loan } & 750 \\ \text { Stock of Materials } & 150 & \text { Sundry Creditors } & 250 \\ \text { Sundry Debtors } & 350 & \text { Bills Payable } & 500 \\ \text { Capital Balance } & 1,500 & \text { Local Taxes Payable } & 100 \\ \text { Security Deposit } & 500 & \text { Cash in Hand } & 200\end{array}$ Bank Current Account 100

The following transactions took place during the month:
April 1 Paid sundry creditors $₹ 150$ million vide cheque no. 468523
April 2 Received Cheque No. 124656 from Md. Matein to whom goods were supplied in the previous year for ₹ 250 million
April 5 Received cash from other sundry debtor, Deepak, ₹ 100 million
April 10 Paid local taxes vide cheque number 468524
April 11 Purchased raw material from Mirchi Products Ltd. on credit for ₹500 million
April 25 Paid wages ₹ 250 million in cash
Electricity bill for the month of ₹ 50 million paid in cash
Cash sales for the period 700 million
Credit sales during the month ₹ 100 million
Interest on bank loan paid in cash ₹ 20 million
Miscellaneous expenses for the period paid in cash ₹ 50 Million

## Solution:

The journal entries could be listed as follows:

> All figures in ₹Million


| 02-04-X7 | Bank A/c <br> Sundry Debtors A/c <br> (Being cheque no. 124656 received from Md. Matein against the previous dues) | 250 | 250 |
| :---: | :---: | :---: | :---: |
| 05-04-X7 | Cash A/c Sundry Debtors A/c <br> (Being cash received from Deepak against the previous dues) | 100 | 100 |
| 10-04-X7 | Local Taxes Payable A/c <br> Bank A/c <br> (Being amount paid against local taxes payable vide cheque no. 468524) | 100 | 100 |
|  |  | 3,700 | 3,700 |
| 11-04-X7 | Purchases A/c <br> Mirchi Products Ltd. <br> (Being amount of materials purchased from M/s Mirchi Products <br> Ltd. on credit) | 500 | 500 |
| 25-04-X7 | Wages A/c Cash A/c <br> (Being amount of wages for the month paid in cash) | 250 | 250 |
| 25-04-X7 | Electricity Expenses A/c <br> Cash A/c <br> (Being amount of cash paid for electricity expenses for the month) | 50 | 50 |
| 25-04-X7 | Cash A/c <br> Sundry Debtors A/c <br> Sales A/c <br> (Being amount of goods sold during the period. ₹7,00,000 cash sales and ₹ $1,00,000$ credit sales) | $\begin{aligned} & 700 \\ & 100 \end{aligned}$ | 800 |
| 25-04-X7 | Interest on bank Loan A/c <br> Miscellaneous Expenses A/c <br> Cash A/c <br> (Being cash paid for interest on bank loan and miscellaneous expenses for the month) | $\begin{aligned} & 20 \\ & 50 \end{aligned}$ | 70 |
|  |  | 5,370 | 5,370 |

Now let us prepare and update the individual ledger accounts with all figures in ₹ million.

Capital Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| $30-04-X 7$ | Closing Balance | 1,500 | $01-04-X 7$ | By, Opening Balance | 1,500 |
|  |  | 1,500 |  |  | 1,500 |

## Bank Loan Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| $30-04-X 7$ | Closing Balance | 750 | $01-04-X 7$ | To Opening Balance | 750 |
|  |  | 750 |  |  | 750 |

Sundry Creditors Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :--- | :---: |
| 01-04-X7 | Bank A/c (Chq.468523) | 150 | $01-04-X 7$ | Opening Balance | 250 |
| 30-04-X7 | Closing Balance | 600 |  | Purchases for the year | 500 |
|  |  | 750 |  |  | 750 |

Bills Payable Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| $30-04-X 7$ | Closing Balance | 500 | $01-04-X 7$ | Opening Balance | 500 |
|  |  | 500 |  |  | 500 |

Local Taxes Payable Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 10-04-X7 | Bank A/c (Chq. 468524) | 100 | $01-04-X 7$ | Opening Balance | 100 |
|  |  | 100 |  |  | 100 |

Fixed Assets Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 01-04-X7 | To, Opening Balance | 1,800 | $30-04-X 7$ | Closing Balance | 1,800 |
|  |  | 1,800 |  |  | 1,800 |

Sundry Debtors Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01-04-X7 | To, Opening Balance | 350 | 02-04-X7 | By, Bank (Chq.124656) By, | 250 |
| 30-04-X7 | To, Credit Sales | 100 | 05-04-X7 | Cash | 100 |
|  |  |  | 30-04-X7 | Closing Balance | 100 |
| 450 |  |  |  |  | 450 |

## Security Deposit Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| $01-04-X 7$ | To, Opening Balance | 500 | $30-04-X 7$ | Closing Balance | 500 |
|  |  | 500 |  |  | 500 |

## Bank Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 01-04-X7 | To, Opening Balance | 100 | $01-04-\mathrm{X7}$ | By, Sundry Creditors | 150 |
| 02-04-X7 | To, Sundry Debtors | 250 | $10-04-$ X7 | By, Local Taxes | 100 |
|  |  |  | $30-04-$ X7 | Closing Balance | 100 |
|  | 350 |  |  | 350 |  |

Cash Account

| Date | Particulars | Amount | Date | Particulars | Amount |
| :--- | :--- | :---: | :---: | :--- | ---: |
| 01-04-X7 | To, Opening Balance | 200 | $01-04-X 7$ | By, Wages | 250 |
|  | To, Sundry Debtors (Deepak) | 100 |  | By, Electricity | 50 |
|  | To, Sales for the period | 700 |  | By, Bank Interest | 20 |
|  |  |  | By, Misc. Expenses | 50 |  |
|  |  |  |  | Closing Balance | 630 |
|  |  |  |  |  | 1,000 |

## Sundari Parlour India Limited <br> Trial Balance as on 31-04-20X7 <br> All figures in ₹ Million

| Particulars | Debit |
| :--- | ---: |
| Cash in hand | 630 |
| Cash at bank | 100 |
| Security deposits | 500 |
| Sundry Debtors | 100 |
| Stock | 150 |
| Fixed Assets | 1,800 |
| Bills Payable |  |
| Sundry Creditors |  |
| Loan from Bank |  |
| Capital Account | 500 |
| Sales | 250 |
| Purchases | 50 |
| Wages | $\mathbf{2 0}$ |
| Electricity expenses | 50 |
| Interest expenses | $\mathbf{4 , 1 5 0}$ |
| Miscellaneous expenses | $\mathbf{1 5 0 0}$ |
|  | $\mathbf{4 , 1 5 0}$ |

## Solved Problem 5.2

## Tushar Kataria Makes Plastics

One day, Tushar Kataria, an XLER, quit his job and started a firm, named Kataria Plastics Limited. Kattu did well in the first period of his business and decided to continue doing the same business. He appointed you as the firms' accountant. He shared with you the following data and requested you to prepare its two key financial statements at the end of the period.

The opening balance sheet of the firm is provided to you here:

## M/s Kataria Plastics

Audited Balance Sheet as on 30th September 20X5

| Assets | $₹$ | $₹$ | Liabilities | $₹$ | $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current Assets and |  |  | Current Liabilities |  |  |
| Advances |  |  | \& Provisions |  |  |
| Accounts Receivable: |  |  | Provision for Tax |  | - |
| M/s Mittal Pipes | 43,200 |  |  |  |  |
| M/s Digvijay Industries | 57,600 |  |  |  |  |
| M/s Anuj Junabhai \& Co. | 43,200 |  |  |  |  |
|  | 1,44,000 |  |  |  |  |
| Less: Provisions for Bad |  |  |  |  |  |
| Debts | 14,400 | 1,29,600 | Long Term Loans |  |  |
| Closing Stocks |  | 12,615 | 10 \% Long Term Loan |  | 5,16,250 |
| 9\% Investments |  | 2,28,055 |  |  |  |
| Prepaid Membership Fees |  | 2,200 |  |  |  |
| Prepaid Subscription |  | 1,000 |  |  |  |
| Cash in Hand |  | 26,027 |  |  |  |
| Cash in Bank |  | 2,000 |  |  |  |
| Investments |  | - |  |  |  |
| Fixed Assets |  |  | Capital Employed |  |  |
| Extruder Plant | 3,50,000 |  | Capital Introduced | 2,73,170 |  |
| Less: Depreciation | 4,750 | 3,45,250 | Add: Government Grant | 40,000 |  |
| Generator | 30,000 |  | Add: Net Profit for the period | 6,102 |  |
| Less: Depreciation | 500 | 29,500 |  | 3,19,272 |  |
| Digital Weighing Machine | 5,000 |  | Less: Drawings | 5,000 | 3,14,272 |
| Less: Depreciation | 100 | 4,900 |  |  |  |
| Office Furniture | 25,000 |  |  |  |  |
| Less: Depreciation | 208 | 24,792 |  |  |  |
| Computer | 25,000 |  |  |  |  |
| Less: Depreciation | 417 | 24,583 |  |  |  |
|  |  | 8, 30,522 |  |  | 8, 30,522 |

## Chronological statement of transactions for the month of October 20X5

## Date Summary of Transactions

| 01.10.X5 | - Raw Materials prices increased by $5 \%$. Rumors of more increases were heard <br> - Company follows 1.5 month ( 45 days) credit policy while selling goods on credit <br> - Paid Municipal Rates ₹3,143 cash for the period 01.10.X5-31.10.X5 <br> - Purchased Raw Material worth $₹ 10,090$ in cash. Paid carriage inward ₹500 <br> - Received a cheque on sale of Current Investments worth ₹2,28,055 <br> - Purchased Packing Material worth $₹ 2,720$ for cash |
| :---: | :---: |
| 02.10.X5 | - Gandhi Jayanti (Holiday) |
| 03.10.X5 | - Sunday Closed |
| 04.10.X5 | - Purchased Raw Material worth ₹ 10,090 in Cash. Paid carriage inward $₹ 500$ cash <br> - Sold goods on cash, 300 kgs @ ₹79.2/kg. Paid carriage outward ₹500 <br> - Purchased Diesel for the generator, ₹1,000 cash. |
| 05.10. X5 | - Purchased Raw Materials worth $₹ 60,540$ on credit from M/s Himanshu Traders. Carriage charges were paid by him <br> - Again heard rumors in the market that raw materials prices will raise by $5 \%$ around the $15^{\text {th }}$ <br> - Advertisement expenses, ₹500 in cash |
| 06.10. X5 | - Purchased Packing Material worth $₹ 2,720$ in cash <br> - The Computer suddenly crashed. Repairs to the same cost ₹500 cash <br> - Advertisement in the Trade Magazine, ₹500 cheque |
| 07.10. X5 | - Purchased Raw Materials worth ₹ 10,090 in cash. Paid carriage inward $₹ 500$ in cash <br> - Sent salesman on tour to nearby towns to market our product <br> - Purchased stationery worth ₹500 cash. |
| 08.10. X5 | - Mr. Vibhor Mittal, owner of M/s Mittal Pipes, visited the factory to discuss future prospects. Spent ₹500 on lunch with him to keep him in good spirits. <br> - Purchased Diesel for generator, ₹1,000 cash |
| 09.10. X5 | - Went to nearby children welfare home to see the condition of the children. Donated ₹500 cash in the firm's name. <br> - Purchased stationery worth $₹ 500$ cash. |
| 10.10. X5 | - Sunday (closed) |
| 11.10. X5 | - Sold goods to M/s Mittal Pipes on credit 800 kgs @ ₹79.2/kg <br> - Paid carriage outward ₹ 500 cash. <br> - Purchased Packing Material in cash, ₹2,720 <br> - There were rumors in the market that raw materials prices will increase around the $15^{\text {th }}$ by $5 \%$ <br> - Purchased Raw Material worth ₹ 18,162 . Paid by issuing a bearer cheque. Paid carriage inward charges ₹500 |
| 12.10. X5 | - Purchased Raw Materials worth ₹ 36,324 on credit from M/s Himanshu Traders. Paid carriage inward charges ₹500 <br> - Reimbursed salesman for tour expenses ₹2,500. <br> - Purchased Raw Materail worth ₹ 96,984 against Bills Payable from M/s Khosla \& Khosla, payable in 15 days time |
| 13.10. X5 | - Withdrew cash from Bank, ₹20,000 <br> - Reimbursed travelling expenses \& conveyance, ₹1,000 cash to office staff |


| 14.10. X5 | - Purchased Diesel worth $₹ 1,000$ cash for the generator. <br> - Sold goods $1,000 \mathrm{~kg}$ @ $₹ 79.2 / \mathrm{kg}$ to Bhupendra Co against Bils receivable. Paid carriage outward charges ₹500 |
| :---: | :---: |
| 15.10. X5 | - Purchased Packing Material worth $₹ 2,720$ cash <br> - General Expenses for the office ₹500 cash. <br> - Discounted M/s Bhupendra Co.'s bill @ $24 \%$ p.a. |
| 16.10. X5 | - Purchased stationery worth ₹500 in cash <br> - Advertisement expenses ₹500 in cheque <br> - Entertainment expenses for office staff ₹500 |
| 17.10. X 5 | - Sunday (Holiday) |
| 18.10. X5 | - Paid ₹ 29,060 by cheque to $\mathrm{M} / \mathrm{s}$ Himanshu Traders, on account of their bill of $₹ 36,324$ in part. They were in some emergent need <br> - $\quad$ Spent $₹ 2,000$ cash on Diesel for generator |
| 19.10. X5 | - Reimbursed ₹ 1,000 to the salesman for travelling and conveyance via a bearer cheque <br> - Sold 400 kgs @ ₹ $79.2 / \mathrm{kg}$ to $\mathrm{M} / \mathrm{s}$ Digvijay Industries on 45 days credit. Carriage charges ₹ 500 cash <br> - Sold 400 kgs @ $₹ 79.2 / \mathrm{kg}$ to M/s Sumit \& Sons against Bills Receivable. |
| 20.10. X5 | - Purchased Packing Materials worth ₹2,720 in cash <br> - Discounted the bill received yesterday @ $24 \%$ p.a. <br> - Paid $₹ 58,118$ to $\mathrm{M} / \mathrm{s}$ Himanshu Traders by cheque after deducting discount @ $4 \%$ on their bill outstanding to ₹ 60,540 |
| 21.10. X5 | - Sold goods on credit to M/s Anuj Junabhai \& Co, 400 kgs @ 79.2/kg <br> - Advertisement in the newsletter of the Association and in the Trade Magazine, ₹1,500 paid by cheque |
| 22.10. X5 | - Purchased computer stationery worth ₹1,000 cash <br> - Printing charges paid for brochures, etc, ₹500 |
| 23.10. X5 | - Paid ₹5,811 by cash to M/s Himanshu Traders, after deducting a discount of $4 \%$ in their bill of $₹ 36,324$. Discount received ₹1,453 <br> - Cash sales of $580 \mathrm{~kg} @$ ₹ $79.2 / \mathrm{kg}$. The customer took the delivery himself in his van <br> - Withdrew cash from the bank for personal use, ₹5,000 |
| 24.10. X5 | - Sunday (Closed) |
| 25.10. X5 | - Purchased Packing Materials worth ₹2,720 in cash. <br> - Sold goods to Bhupendra Co., $800 \mathrm{~kg} @$ ₹ $79.2 / \mathrm{kg}$ against Bills Receivable |
| 26.10. X5 | - Purchases Diesel worth ₹1,000 for generator <br> - Discounted the above bill of M/s Bhupendra Co. @ 24 \% p.a |
| 27.10. X5 | - Distributed brochures and other advertising paraphernalia to potential customers <br> - Courier charges for the same amounted to ₹550 and were paid in cash <br> - Honoured Bills payable to M/s Khosla \& Khosla , amounting to ₹96,864 |
| 28.10. X5 | - Purchased stationery worth ₹500 cash <br> - Received part payment from M/s Mittal Pipes ₹31,680 <br> - Paid wages to operator ₹ 11,000 and $₹ 5,500$ each to 5 laborers, after withdrawing the cash from bank |
| 29.10. X5 | - Paid ₹ 4,000 as factory rent, cash <br> - Purchased Packing Material worth ₹2,040 in cash <br> - Sold Goods on credit to M/s Anuj Junabhai \& Co; 600 kg @ 79.2/kg <br> - Paid interest on loan, ₹4,302 and 2nd installment of principal repayment, ₹8,750 by cheque. |


| 30.10. X5 | - Reimbursed traveling \& conveyance expenses to office staff, ₹ 1,000 cash <br> - |
| :--- | :--- | :--- |
|  | Paid both the bills, electricity and telephone bills, amounting to ₹ 12,000 and ₹2000 respectively by <br> cheque |
| 31.10. X5 | -Paid salary to watchman (₹1,500), computer operator (₹1,000), Salesman (₹1,500) and selling <br> commission (₹2,090) |
|  | - Threw party for the office staff, ₹500 |

## Suggested Solution

The journal entries are listed as follows:

In the Books of M/s Kataria Plastics
Purchase Day Book for the period ended 30.10. X5

| Date | Particulars | Details |
| :--- | :---: | :---: |
| 5 -Oct | To M/s Himanshu Traders A/c | ₹ |
|  |  | 60,540 |
| 12 -Oct | $" M / s$ Khosla \& Khosla A/c | 96,864 |
|  |  | $M / s$ Himanshu Traders A/c |
| $12-O c t$ |  | 36,324 |
|  |  | $1,93,728$ |

Note: Day books are prepared only for those purchases or sales that have been made on credit. Hence, cash purchases/sales balances reflect in Cash Book.

In the Books of M/s Kataria Plastics
Sales Day Book for the period ended 30.10. X5

| Date | Particulars | Details |
| :--- | :---: | :---: |
| $11-$ Oct | By $\mathrm{M} / \mathrm{s}$ Mittal Pipes A/c | ₹ |
|  | $(800 \mathrm{~kg} @ 79.2 / \mathrm{kg})$ | 63,360 |
| $14-$ Oct | $" \mathrm{M} / \mathrm{s} \mathrm{Bhupendra} \mathrm{Co} \mathrm{A/c}$ | 79,200 |
|  | $(1,000 \mathrm{~kg} \mathrm{@} \mathrm{79.2/kg)}$ | 31,680 |
| $19-O c t$ | $" \mathrm{M} / \mathrm{s}$ Digvijay Industries A/c | $(400 \mathrm{~kg}$ @ $79.2 / \mathrm{kg})$ |
|  |  |  |


| 19-Oct | " M/s Sumit \& Sons A/c | 31,680 |
| :---: | :---: | :---: |
| (400 kg @ 79.2/kg) |  |  |
| 21-Oct | " M/s Anuj Junabhai \& Co A/c | 31,680 |
| (400 kg @ 79.2/kg) |  |  |
| 25-Oct | " M/s Bhupendra Co A/c | 63,360 |
| (800 kg @ 79.2/kg) |  |  |
| 29-Oct | " M/s Anuj Junabhai \& Co A/c | 47,520 |
| (600 kg @ 79.2/kg) |  |  |
|  |  | 3,48,480 |

In the Books of M/s Kataria Plastics
Cash Receipt Book for the period ended 30.10. X5

| Date | Particulars | Cash | Bank |
| :---: | :---: | :---: | :---: |
| 1-Oct | To Investment |  | 2,28,055 |
| 4-Oct | To Sales A/c | 23,760 |  |
|  | (300 kg @ 79.2/kg) |  |  |
| 13-Oct | " Bank A/c | 20,000 |  |
|  | (Cash withdrawn) |  |  |
| 15-Oct | " Bills Receivable A/c |  | 76,824 |
|  | (Bills of M/s Bhupendra Co. discounted) |  |  |
| 20-Oct | " Bills Receivable A/c |  | 30,730 |
|  | (Bills of M/s Sumit \& Sons discounted) |  |  |
| 23-Oct | " Sales A/c | 45,936 |  |
|  | (580 kg @ 79.2/kg) |  |  |
| 26-Oct | " Bills Receivable A/c |  | 61,460 |
|  | (Bills of M/s Bhupendra Co. discounted) |  |  |
| 28-Oct | " Bank A/c | 38,500 |  |
|  | (Cash withdrawn) |  |  |
| 28-Oct | " M/s Mittal Pipes | 31,680 |  |
|  | (Received part payment) |  |  |
|  |  | 1,59,876 | 3,97,069 |

In the Books of M/s Kataria Plastics
Cash Payment Book for the period ended 30.10. X5

| Date | Particulars | Cash | Bank |
| :---: | :---: | :---: | :---: |
| 1-Oct | By Municipal Rates A/c | 3,143 |  |
| 1-Oct | " Purchases A/c | 10,090 |  |
| 1-Oct | " Carriage Inward A/c | 500 |  |
| 1-Oct | " Packing Material A/c | 2,720 |  |
| 4-Oct | " Purchases A/c | 10,090 |  |
| 4-Oct | " Carriage Inward A/c | 500 |  |
| 4-Oct | " Carriage Outwards A/c | 500 |  |
| 4-Oct | " General Expenses A/c | 1,000 |  |
| 5-Oct | " Advertisement A/c | 500 |  |
| 6-Oct | " Packing Material A/c | 2,720 |  |
| 6-Oct | " Repairs A/c | 500 |  |
| 6-Oct | " Advertisement A/c |  | 500 |
| 7-Oct | " Purchases A/c | 10,090 |  |
| 7-Oct | " Carriage Inward A/c | 500 |  |
| 7-Oct | " Stationery A/c | 500 |  |
| 8-Oct | " Entertainment Expenses A/c | 500 |  |
| 8-Oct | " General Expenses A/c | 1,000 |  |
| 9-Oct | " Donations A/c | 500 |  |
| 9-Oct | " Stationery A/c | 500 |  |
| 11-Oct | " Carriage Outwards A/c | 500 |  |
| 11-Oct | " Packing Material A/c | 2,720 |  |
| 11-Oct | " Carriage Inward A/c | 500 |  |
| 11-Oct | " Purchases A/c |  | 18,162 |
| 12-Oct | " Carriage Inward A/c | 500 |  |
| 12-Oct | " Selling Overheads A/c | 2,500 |  |
| 13-Oct | " Cash A/c |  | 20,000 |
| 13-Oct | " Travelling \& Conveyance A/c | 1,000 |  |
| 14-Oct | " General Expenses A/c | 1,000 |  |
| 14-Oct | " Carriage Outwards A/c | 500 |  |
| 15-Oct | " Packing Material A/c | 2,720 |  |
| 15-Oct | " General Expenses A/c | 500 |  |
| 16-Oct | " Stationery A/c | 500 |  |


| 16-Oct | " Advertisement A/c |  | 500 |
| :---: | :---: | :---: | :---: |
| 16-Oct | " Entertainment Expenses A/c | 500 |  |
| 18-Oct | " M/s Himanshu Traders A/c |  | 29,060 |
| 18-Oct | " General Expenses A/c | 2,000 |  |
| 19-Oct | " Selling Overheads A/c |  | 1,000 |
| 19-Oct | " Carriage Outwards A/c | 500 |  |
| 20-Oct | " Packing Material A/c | 2,720 |  |
| 20-Oct | " M/s Himanshu Traders A/c |  | 58,118 |
| 21-Oct | " Advertisement A/c |  | 1,500 |
| 22-Oct | " Stationery A/c | 1,000 |  |
| 22-Oct | " Advertisement A/c | 500 |  |
| 23-Oct | " M/s Himanshu Traders A/c | 5,811 |  |
| 23-Oct | " Drawings A/c |  | 5,000 |
| 25-Oct | " Packing Material A/c | 2,720 |  |
| 26-Oct | " General Expenses A/c | 1,000 |  |
| 26-Oct | " Courier Expenses A/c | 550 |  |
| 27-Oct | " Bills Payable |  | 96,864 |
| 28-Oct | " Stationery A/c | 500 |  |
| 28-Oct | " Cash A/c |  | 38,500 |
| 28-Oct | " Wages A/c | 38,500 |  |
| 29-Oct | " Office Rent A/c | 4,000 |  |
| 29-Oct | " Packing Material A/c | 2,040 |  |
| 29-Oct | " Interest on Loan A/c |  | 4,302 |
| 29-Oct | " $10 \%$ Term Loan A/c |  | 8,750 |
| 30-Oct | " Travelling \& Conveyance A/c | 1,000 |  |
| 30-Oct | " Electricity A/c |  | 12,000 |
| 30-Oct | " Telephone A/c |  | 2,000 |
| 31-Oct | " Salary to Watchman A/c | 1,500 |  |
| 31-Oct | " Salary to Computer Operator A/c | 1,000 |  |
| 31-Oct | " Salary to Salesman A/c | 1,500 |  |
| 31-Oct | " Selling Commission A/c | 2,090 |  |
| 31-Oct | " Entertainment Expenses A/c | 500 |  |
|  |  | 1,28,724 | 2,96,256 |

$\left.\begin{array}{llccccc|}\hline & & & & \\ \text { Dr. } & & & \\ \text { Ledgers Accounts } \\ \text { Own Capital }\end{array}\right]$

Dr. $10 \%$ Long Term Loan A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | ---: | :--- | :--- | :--- | :---: |
| 29-Oct | To Bank A/c | 8,750 | 1-Oct | By | Balance b/d | $5,16,250$ |
| 31-Oct | $"$ Balance c/d | $5,07,500$ |  |  |  |  |
|  |  | $5,16,250$ |  |  | $5,16,250$ |  |


| Dr. |  | Extruder Plant A/c |  |  | Cr. |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 1-Oct | To Balance b/d |  | $3,45,250$ | 31-Oct | By | Depreciation A/c | 3,453 |
|  |  |  |  | $"$ | $"$ | "Balance c/d | $3,41,797$ |
|  |  | $3,45,250$ |  |  | $3,45,250$ |  |  |


| Dr. | Generator A/c |  |  |  |  |  | Cr. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 1-Oct | To Balance b/d |  | 29,500 | 31-Oct | By | Depreciation A/c | 492 |
|  |  |  | $"$ | $"$ Balance c/d | 29,008 |  |  |
|  |  |  |  |  |  |  | 29,500 |
|  |  |  |  |  |  |  |  |


| Dr. | Office Furniture A/c |  |  |  |  |  | Cr |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Par | ticulars | JF | ₹ |
| 1-Oct | To Balance b/d |  | 24,792 | 31-Oct | By | Depreciation A/c |  | 207 |
|  |  |  |  |  |  | Balance c/d |  | 24,585 |
|  |  |  | 24,792 |  |  |  |  | 24,792 |

Dr.
Computer A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1-Oct | To Balance b/d |  | 24,583 | 31-Oct | By | Depreciation A/c |


| Dr. |  | Digital Weighing Machine A/c |  |  |  |  |  | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Par | ticulars | JF | $₹$ |
| 1-Oct | To Balance b/d |  | 4,900 | 31-Oct | By | Depreciation A/c |  | 98 |
|  |  |  |  | " |  | Balance c/d |  | 4,802 |
|  |  |  | 4,900 |  |  |  |  | 4,900 |



Dr. Wages A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 28-Oct | To Cash A/c |  | 38,500 | 31-Oct | By Manufacturing A/c | $₹$ |
|  |  | 38,500 |  |  | 38,500 |  |


| Dr. |  | Salary to Watchman A/c |  |  | Cr. |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 31-Oct | To Cash A/c |  | 1,500 | 31-Oct | By P \& L A/c | 1,500 |  |
|  |  |  | 1,500 |  |  | 1,500 |  |


| Dr. |  | Salary to Computer Operator A/c |  | Cr. |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 31-Oct | To Cash A/c |  | 1,000 | 31-Oct | By P \& L A/c | 1,000 |  |
|  |  |  | 1,000 |  |  | 1,000 |  |

Dr.
Salary to Salesman A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :---: | :--- | :--- | :---: | :---: |
| 31-Oct | To Cash A/c |  | 1,500 | 31-Oct | By P \& L A/c | $₹$ |
|  |  | 1,500 |  |  | 1,500 |  |


| Dr. |  | Selling Commission A/c |  |  |  | Cr. |  |
| :--- | :--- | :---: | :--- | :--- | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 31-Oct | To Cash A/c |  | 2,090 | 31-Oct | By P \& L A/c | 2,090 |  |
|  |  |  | 2,090 |  |  | 2,090 |  |

Dr.
Carriage Inwards A/c
Cr.
$\left.\begin{array}{|llcllll|}\hline \text { Date } & \text { Particulars } & \text { JF } & ₹ & \text { Date } & \text { Particulars } & \text { JF }\end{array}\right\}$

Dr.
Carriage Outwards A/c $\quad \mathrm{Cr}$.
$\left.\begin{array}{|lcccccc|}\hline \text { Date } & \text { Particulars } & \text { JF } & ₹ & \text { Date } & \text { Particulars } & \text { JF }\end{array}\right) ₹$

Dr. Stationery A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7-Oct | To Cash A/c |  | 500 |  |  |  |  |
| 9-Oct | " Cash A/c |  | 500 |  |  |  |  |
| 16-Oct | " Cash A/c |  | 500 |  |  |  |  |
| 22-Oct | " Cash A/c |  | 1,000 |  |  |  |  |
| 28-Oct | " Cash A/c |  | 500 | 31-Oct | By P \& L A/c |  | 3,000 |
|  |  |  | 3,000 |  |  |  | 3,000 |

Dr.
Selling Overheads A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 12-Oct | To Cash A/c | 2,500 |  |  | JF |
| 19-Oct | " Bank A/c | 1,000 | 31-Oct | By P \& L A/c |  |
|  |  | 3,500 |  |  | 3,500 |


| Dr. |  | Drawings A/c |  |  |  |  | Cr. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 23-Oct | To | Bank A/c |  | 5,000 | 31-Oct | By | Balance c/d |

Dr.
Advertisements A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5-Oct | To Cash A/c |  | 500 |  |  |  |  |
| 6-Oct | " Bank A/c |  | 500 |  |  |  |  |
| 16-Oct | " Bank A/c |  | 500 |  |  |  |  |
| 21-Oct | " Bank A/c |  | 1,500 |  |  |  |  |
| 22-Oct | " Cash A/c |  | 500 | 31-Oct | By P \& L A/c |  | 3,500 |
|  |  |  | 3,500 |  |  |  | 3,500 |


| Dr. | Travelling \& Conveyance A/c |  |  |  |  | Cr. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | ₹ | Date | Particulars | JF | $₹$ |
| 13-Oct | To Cash A/c |  | 1,000 |  |  |  |  |
| 30-Oct | " Cash A/c |  | 1,000 | 31-Oct | By P \& L A/c |  | 2,000 |
|  |  |  | 2,000 |  |  |  | 2,000 |

Dr. $\quad$ Municipal Rates A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1-Oct | To Cash A/c | 3,143 | 31-Oct | By P \& L A/c | $₹$ |  |
|  |  | 3,143 |  |  | 3,143 |  |

Dr. Courier Expenses A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 26-Oct | To Cash A/c | 550 | 31-Oct | By P \& L A/c | ₹ |  |
|  |  | 550 |  |  | 550 |  |

Dr.
Entertainment Expenses A/c

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ₹


| Dr. |  | Electricity |  |  |  | Expenses A/c | Cr. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | ₹ |
| 30-Oct | To Bank A/c |  | 12,000 | 31-Oct | By | Manufacturing A/c | 12,000 |
|  |  |  | 12,000 |  |  | 12,000 |  |

Dr. Telephone Expenses A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 30-Oct | To Bank A/c |  | 2,000 | 31-Oct | By P \& L A/c | $₹$ |
|  |  |  | 2,000 |  |  | 2,000 |


| Dr. |  | Factory Rent A/c |  |  | Cr. |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 29-Oct | To | Cash A/c |  | 4,000 | 31-Oct | By | Manufacturing A/c |


| Dr. | Subscription fees A/c |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 31-Oct | To Prepaid Subscription fees A/c |  | 500 | 31-Oct | By P \& L A/c |  | 500 |
|  |  |  | 500 |  |  |  | 500 |


| Dr. |  | Prepaid Subscription fees A/c |  | Cr. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 1-Oct | To Balance b/d |  | 1,000 | 31-Oct | By | Subscription fees A/c | 500 |
|  |  |  |  | $"$ | $"$ | Balance c/d | 500 |
|  |  | 1,000 |  |  | 1,000 |  |  |


| Dr. |  | Membership Fees A/c |  |  |  | Cr. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| 31-Oct | To Prepaid Membership A/c | 200 | 31-Oct | By P \& L A/c | ₹ |  |
|  |  |  | 200 |  |  | 200 |

Dr.
Prepaid Membership A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :---: | :--- | :--- | :--- | ---: |
| 1-Oct | To Balance b/d |  | 2,200 | 31-Oct | By | Membership Fees A/c |


| Dr. |  | Interest on Loan A/c |  |  | Cr. |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 29-Oct | To Bank A/c |  | 4,302 | 31-Oct | By P \& L A/c | 4,302 |  |
|  |  |  | 4,302 |  |  | 4,302 |  |

Dr.
Discount Received A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | $20-O c t$ | By | M/s Himanshu Traders A/c | 2,422 |  |
| 31-Oct | To P \& L A/c |  | 3,875 | $23-O c t$ | " M/s Himanshu Traders A/c | 1,453 |  |
|  |  |  | 3,875 |  |  | 3,875 |  |



| Dr. | Packing Material A/c |  |  |  |  |  | Cr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 1-Oct | To Cash A/c |  | 2,720 |  |  |  |  |
| 6-Oct | " Cash A/c |  | 2,720 |  |  |  |  |
| 11-Oct | " Cash A/c |  | 2,720 |  |  |  |  |
| 15-Oct | " Cash A/c |  | 2,720 |  |  |  |  |
| 20-Oct | " Cash A/c |  | 2,720 |  |  |  |  |
| 25-Oct | " Cash A/c |  | 2,720 |  |  |  |  |
| 29-Oct | " Cash A/c |  | 2,040 | 31-Oct | By Manufacturing A/c |  | 18,360 |
|  |  |  | 18,360 |  |  |  | 18,360 |

$\begin{array}{lcr}\text { Dr. } & \text { Cash A/c } & \text { Cr. }\end{array}$

| Date | Particulars | JF | $₹$ | Date | Particulars |
| :--- | :--- | ---: | :--- | :--- | :--- |


| Dr. |  | Bank A/c |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 1-Oct | To Balance b/d |  | 2,000 | 31-Oct | By | Cash Payments Book A/c | 296,256 |
|  |  |  |  |  |  |  |  |
| 31-Oct | " Cash Receipts Book A/c | $3,97,069$ | $"$ | $"$ Balance c/d | $1,02,813$ |  |  |
|  |  | $3,99,069$ |  |  | $3,99,069$ |  |  |


| Dr. | Purchases A/c |  |  |  |  |  | Cr. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 1-Oct | To Cash A/c |  | 10,090 |  |  |  |  |
| 4-Oct | " Cash A/c |  | 10,090 |  |  |  |  |
| 7-Oct | " Cash A/c |  | 10,090 |  |  |  |  |
| 11-Oct | " Bank A/c |  | 18,162 |  |  |  |  |
| 31-Oct | " Credit Purchases A/c |  | 1,93,728 | 31-Oct | By Manufacturing A/c |  | 2,42,160 |
|  |  |  | 2,42,160 |  |  |  | 2,42,160 |


| Dr. | Sales A/c |  |  |  |  | Cr. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | ₹ | Date | Particulars | JF | $₹$ |
|  |  |  |  | 4-Oct | By Cash A/c |  | 23,760 |
|  |  |  |  | 23-Oct | " Cash A/c |  | 45,936 |
| 31-Oct | To Trading A/c |  | 4,18,176 | 31-Oct | " Credit Sales A/c |  | 3,48,480 |
|  |  |  | 4,18,176 |  |  |  | 4,18,176 |

Dr.
Bills Receivable A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| 14-Oct | To M/s Bhupendra Co A/c | 79,200 | 15-Oct | By | Bank A/c | 76,824 |
| 19-Oct | " M/s Sumit \& Sons A/c | 31,680 | $"$ | $"$ | Discount on Bill A/c | 2,376 |


| 25-Oct | $" M / s$ Bhupendra Co A/c | 63,360 | $20-$ Oct | $"$ Bank A/c | 30,730 |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  |  | $"$ | $"$ | Discount on Bill A/c | 950 |
|  |  | 26 -Oct | $"$ | Bank A/c | 61,460 |
|  |  | $"$ | $"$ Discount on Bill A/c | 1,900 |  |
|  | $1,74,240$ |  |  | $1,74,240$ |  |


| Dr. |  | Bills Payable A/c |  |  |  |  | Cr. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 27-Oct | To | Bank A/c |  | 96,864 | 12-Oct | By | M/s Khosla \& Khosla A/c |
|  |  |  | 96,864 |  |  | 96,864 |  |
|  |  |  |  |  | 96,864 |  |  |

Dr.
M/s Khosla \& Khosla A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 12-Oct | To Bills Payable A/c |  | 96,864 | 6-Oct | By Purchases A/c | 96,864 |  |
|  |  |  | 96,864 |  |  | 96,864 |  |


| Dr. |  | M/s Himanshu Traders A/c | Cr. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| 18-Oct | To | Bank A/c | 29,060 | 5-Oct | By | Purchases A/c |
| 20-Oct | " Bank A/c | 58,118 | 12-Oct | " Purchases A/c | 60,540 |  |
| $"$ | $"$ | Discount Received A/c | 2,422 |  |  | 36,324 |
| 23-Oct | " Cash A/c | 5,811 |  |  |  |  |
| $"$ | $"$ | Discount Received A/c | 1,453 |  |  |  |
|  |  | 96,864 |  | 96,864 |  |  |


| Dr. | M/s Digvijay Industries A/c |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | ₹ |
| 1-Oct | To | Balance b/d |  | 57,600 |  |  |  |
| 19-Oct | " Sales A/c | 31,680 | 31-Oct | By | Balance c/d | 89,280 |  |
|  |  | 89,280 |  |  | 89,280 |  |  |

Dr.
M/s Mittal Pipes A/c
Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars |
| :--- | :--- | :---: | :--- | :---: | ---: |


| Dr. |  | M/s Sumit \& Sons A/c |  |  |  | Cr. |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF | $₹$ |
| 19-Oct | To Sales A/c |  | 31,680 | 31-Oct | By | Bills Receivable A/c | 31,680 |
|  |  |  | 31,680 |  |  | 31,680 |  |

Dr. M/s Bhupendra Co A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | ---: | :--- | :--- | :--- | ---: |
| 14-Oct | To Sales A/c | 79,200 | 14-Oct | By | Bills Receivable A/c | 79,200 |
| 25-Oct | "Sales A/c | 63,360 | 25-Oct | " Bills Receivable A/c | 63,360 |  |
|  |  | $1,42,560$ |  |  |  | $1,42,560$ |


Dr. $\quad$ Repairs A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6-Oct | To Cash A/c | 500 | 31-Oct | By P \& L A/c | $₹$ |  |
|  |  | 500 |  |  | 500 |  |

Dr. Donation A/c Cr.

| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9-Oct | To Cash A/c | 500 | 31-Oct | By P \& L A/c | ₹ |  |
|  |  | 500 |  |  | 500 |  |



| Dr. |  | Provision for Bad Debts A/c |  | Cr. |  |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| Date | Particulars | JF | $₹$ | Date | Particulars | JF |
|  |  |  |  | 1-Oct | By | Balance b/d |
| 31-Oct | To | Balance c/d | 28,656 | 30-Oct | By P\&L | 14,400 |
|  |  |  | 28,656 |  |  | 14,256 |

In the books of M/s Kataria Plastics
Trial Balance as at 31.10. X5

| Particulars | LF | Debit (₹) | Credit (₹) |
| :---: | :---: | :---: | :---: |
| Cash |  | 57,179 |  |
| Bank |  | 1,02,813 |  |
| Opening Stock |  | 12,615 |  |
| Prepaid Subscription Fees |  | 500 |  |
| Prepaid Membership Fees |  | 2,000 |  |
| Provisions for Bad Debts |  |  | 14,400 |
| 10\% Term Loan |  |  | 5,07,500 |
| Capital employed |  |  | 3,14,272 |
| Discount received |  |  | 3,875 |
| Sales |  |  | 4,18,176 |
| Wages |  | 38,500 |  |
| Salary to Watchman |  | 1,500 |  |
| Salary to Computer Operator |  | 1,000 |  |
| Salary to Salesman |  | 1,500 |  |
| Selling Commission |  | 2,090 |  |
| Selling Overheads |  | 3,500 |  |
| Extruder Plant |  | 3,41,797 |  |
| Office Furniture |  | 24,585 |  |
| Computer |  | 24,173 |  |


| Generator | 29,008 |  |
| :---: | :---: | :---: |
| Digital weighing machine | 4,802 |  |
| Depreciation | 4,660 |  |
| M/s Mittal Pipes | 74,880 |  |
| M/s Digvijay Industries | 89,280 |  |
| M/s Anuj Junabhai \& Co. | 1,22,400 |  |
| Purchase | 2,42,160 |  |
| Packing Material | 18,360 |  |
| Carriage Inwards | 2,500 |  |
| Carriage Outwards | 2,000 |  |
| Stationery | 3,000 |  |
| Drawings | 5,000 |  |
| Advertisements | 3,500 |  |
| Travelling \& Conveyance | 2,000 |  |
| Municiapal Rates | 3,143 |  |
| Entertainment Expenses | 1,500 |  |
| Courier Expenses | 550 |  |
| Electricity Expenses | 12,000 |  |
| General Expenses | 6,500 |  |
| Subscription | 500 |  |
| Membership Fees | 200 |  |
| Interest on Loan | 4,302 |  |
| Telephone Expenses | 2,000 |  |
| Repairs | 500 |  |
| Donation | 500 |  |
| Office Rent | 4,000 |  |
| Discounts on Bills | 5,226 |  |
|  | 12,58,223 | 12,58,223 |

In the books of M/s Kataria Plastics
Manufacturing and Trading A/c for the period ended 31.10. X5

| Particulars | $₹$ | $₹$ | Particulars | $₹$ |
| :--- | :--- | :--- | :--- | :--- |
| To | Raw Materials |  | By | Trading A/c |
| $"$ | Consumed: | $"$ | Finished Goods Transferred |  |


|  | Opening Stock | - |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Add: Purchases | 2,42,160 |  |  |  |
|  | Less: Closing Stock | - | 2,42,160 |  |  |
|  | Carriage Inward |  | 2,500 |  |  |
|  | Packing Material |  |  |  |  |
|  | Consumed: |  |  |  |  |
|  | Opening Stock | - |  |  |  |
|  | Add: Purchases | 18,360 |  |  |  |
|  | Less: Closing Stock | 18,360 |  |  |  |
|  | Wages | 38,500 |  |  |  |
|  | Office/ Factory Rent | 4,000 |  |  |  |
|  | Electricity | 12,000 |  |  |  |
|  | Depreciation: |  |  |  |  |
|  | Extruder Plant | 3,453 |  |  |  |
|  | Digital Weighing Machine | 98 |  |  |  |
|  | Generator | 492 4,043 |  |  |  |
|  |  | 3,21,563 |  |  | 3,21,563 |
| To | Opening Stock A/c |  | 12,615 By | Sales | 4,18,176 |
|  | Manufacturing A/c |  | " | Closing stock | 13,974 |
|  | Transfer of Finished Goods | 3,21,563 |  |  |  |
|  | Profit \& Loss A/c | 97,972 |  |  |  |
| (Gross Profit c/d) |  |  |  |  |  |
| 4,32,150 |  |  |  |  | 4,32,150 |

## In the books of <br> M/s Kataria Plastics

Profit \& Loss A/c for the period ended 31.10.20X5

| Particulars | ₹ | $₹$ | Particulars |  | ₹ | $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Donation |  | 500 | By | Trading A/c |  |  |
| Subscription |  | 500 |  | Gross Profit b/d |  | 97,972 |
| Membership Fees |  | 200 |  |  |  |  |
| " General Expenses |  | 6,500 |  | Discount Received |  | 3,875 |
| " Telephone |  | 2,000 |  |  |  |  |


| " | Courier Expense | 550 |  |
| :---: | :---: | :---: | :---: |
| " | Entertainment | 1,500 |  |
| " | Municipal Rates | 3,143 |  |
| " | Travelling \& Conveyace | 2,000 |  |
| " | Advertisement | 3,500 |  |
|  | Selling Overheads | 3,500 |  |
| " | Stationery | 3,000 |  |
| " | Carriage Outwards | 2,000 |  |
| " | Selling Commission | 2,090 |  |
| " | Salary to Watchman | 1,500 |  |
| " | Salary to Computer Operator | 1,000 |  |
| " | Salary to Salesman | 1,500 |  |
| " | Repairs | 500 |  |
| " | Interest On Loan | 4,302 |  |
| " | Bills Discount | 5,226 |  |
| " | Depreciation: |  |  |
|  | Office Furniture | 207 |  |
|  | Computer | 410617 |  |
| " | Provision For Bad Debts | 14,256 |  |
| " | Provision for Tax (@ 33.60\%) | - |  |
| " | Net Profit | 41,963 |  |
|  |  | 1,01,847 | 1,01,847 |

In the books of
M/s Kataria Plastics
Balance Sheet as on 31.10. X5

| Assets | $₹$ | $₹$ | Liabilities | $₹$ | $₹$ |
| :--- | ---: | ---: | :--- | ---: | :--- |
| Current Assets and Advances |  |  | Current Liabilites \& Provisions |  |  |
| Accounts Receivable: |  |  | Provision for Bad Debts | 14,400 |  |
| M/s Mittal Pipes | 74,880 |  | Add: October'10 | 14,256 | 28,656 |
| M/s Digvijay Industries | 89,280 |  | Long-term Loans |  |  |
| M/s Anuj Junabhai \& Co. | $1,22,400$ |  | $10 \%$ Long-term Loan | $5,16,250$ |  |
|  | $2,86,560$ | $2,86,560$ | Less : Repaid | 8,750 | $5,07,500$ |
| Closing Stocks |  | 13,974 |  |  |  |
| $9 \%$ Investments | 0 |  |  |  |  |


| Prepaid Subscription Fees | 500 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Prepaid Membership Fees | 2,000 |  |  |  |  |
| Cash in Hand | 57,179 |  |  |  |  |
| Cash in Bank | 1,02,813 |  |  |  |  |
| Investments | Capital Employed |  |  |  |  |
| Fixed Assets | Capital Introduced |  |  | 3,14,272 |  |
| Extruder Plant | 3,45,250 |  | Add: Net Profit for the period | 41,963 |  |
| Less: Depreciation | 3,453 | 3,41,797 |  | 3,56,235 |  |
| Generator | 29,500 | Less: Drawings |  | 5,000 | 3,51,235 |
| Less: Depreciation | 492 | 29,008 |  |  |  |
| Digital Weighing Machine | 4,900 |  |  |  |  |
| Less: Depreciation | 98 | 4,802 |  |  |  |
| Office Furniture | 24,792 |  |  |  |  |
| Less: Depreciation | 207 | 24,585 |  |  |  |
| Computer | 24,583 |  |  |  |  |
| Less: Depreciation | 410 24,173 |  |  |  |  |
| Total | 8,87,391 |  | Total |  | 8,87,391 |

## SUMMARY

In most business organizations, large number of economic events and transactions take place. Accounting records is a process to systematically evaluate and take these events and transactions into consideration in determining a business entity's financial statements at the end of each accounting period. Figures 5.6 and 5.7 summarize the process.

The first step in the process is to identify the transaction on the basis of the transaction's source document, such as a customer's cheque payments or purchase invoice. The next step is to analyze and classify the transaction based on the benefit and sacrifice aspect of each transaction. This involves identifying the accounts that are to be debited and credited and quantifying the amounts. One should record the transaction by making entries into a journal. For repetitive transactions, there may also be specific journals such as cash receipts journal and cash payments journal. The next step is to post the journal entries to ledger accounts.

Finally, at the end of the accounting period, a worksheet is prepared. A worksheet consists of a series of columns starting with the trial balance, adjustments, adjusted trial balance and finally the two financial statements, that is., income summary and balance sheet. A trial balance is a listing of all the ledger accounts at the end of the accounting period and makes sure that debits equal credits. The next stage involves the preparation of adjusting entries to record the accrued, deferred, and depreciation adjustments. An adjusted trial balance updates the original trial balance with the adjustment entries. Based on the type of ledger accounts involved, the amounts are transferred to either the profit and loss account or the balance sheet.


FINANCIAL STATEMENTS
P\&L A/c and Balance Sheet ---
They together provide valuable information to management and the outsiders for making decisions

Figure 5.6 Intricacies Involved in Accounting Records

The ledger accounts are of two types - permanent and temporary. Temporary ledger accounts such as revenues and expenses are closed to an income summary account, from which the balances are transferred to the owners' equity by way of the retained earnings account. Permanent ledger accounts, such as assets and liabilities, are carried forward to the next accounting period with their closing balances for this accounting period becoming the opening balances for the next accounting period.


Figure 5.7 Steps in Formation of Accounting Records

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Account
- Adjustment entries
- Adjusted trial balance
- Balance sheet equation
- Cash book
- Credit
- Collection losses
- Debit
- Journal
- Ledger, permanent
- Ledger, Temporary
- Posting
- Purchase book
- Rectification entry
- Sales book
- Subsidiary book
- Suspense account
- Transaction
- Trial balance
- Worksheet


## EXERCISES

## Multiple Choice Questions

Below each of the following questions, we have provided multiple choices - pick the ones that best fit as answers (remember there can be more than one correct answer for a few of them):

1. The CEO of Reliable Petroleum Limited, Peter Lakra, was weak in finance. On the last day of the year i.e., $31^{\text {st }}$ March, he stood before the CFO \& accounts department demanding that the firm give the financial statements of the company without any delay (being the last day). The CFO was not able to comply with this request of CEO. Which of the following could be a strong reason for the CFO to defend his decision?

LO 6 EASY
(a) Computers not working on the last working day
(b) Creating Primary Accounting Records
(c) Creating Adjustment Entries
(d) None of the above
2. Purchase of a new car debited to Car Maintenance account. It is:

LO 7 EASY
(a) Principle Error
(a) Compensating Error
(b) Posting to Wrong Account
(c) Omission
3. If a sole trader operating as a florist, purchases a van for $₹ 55,000$ for business use, paying by cheque, when completing his double entry accounts he will:

LO 3 MEDIUM
(a) Credit van account and debit bank account.
(b) Debit van account and credit bank account.
(c) Debit van account and credit cash account.
(d) Debit purchases account and credit bank account.
4. Credit balance of a personal account shows:

## LO 4 DIFFICULT

(a) Accounts Receivable
(b) Accounts Payable
(c) Income
(d) Provision
5. Prepaid expenses require an adjustment to be made to the double entry accounts as follows:

LO 5 DIFFICULT
(a) Credit relevant expense account with prepayment before balancing off account; debit prepayment to same account after balancing off.
(b) Debit relevant expense account with prepayment before balancing off account; credit prepayment to same account after balancing off.
(c) Credit relevant expense account with prepayment before balancing off account; debit profit and loss account.
(d) Debit relevant expense account with prepayment before balancing off account; credit profit and loss account.

## True or False

1. An account is a basic information format used for recording transactions relating to revenue, expense, asset, liability or owners' equity.

LO 1 EASY
2. Increases in assets are debits and decreases in assets are credits to the respective asset accounts.

LO 2 EASY
3. Increases in liabilities are debits and decreases in liabilities are credits to the respective liability accounts.

LO 2 EASY
4. Shareholders Equity $=$ Equity Shares + Retained Earnings - Dividends + Revenue - Expenses.

LO 3 MEDIUM
5. An adjustment of an asset or a liability for which the business paid or received cash in advance is known as a deferral adjustment.

LO 5 EASY

## Discussion Questions

1. What is the main purpose of a journal and ledger in maintaining the accounting records?

LO 3, 4 EASY
2. What are 'closing journal entries'? Can an organization with minimal transactions do away with closing journal entries?

LO 5 MEDIUM
3. Trial balance is a conclusive proof of the accuracy of the account books. Do you agree with this statement? Explain.

LO 6 MEDIUM
4. What are the main reasons for disagreement of a trial balance?

LO 7 MEDIUM
5. Refer to the Chapter Opener on the Tesco's accounting scandal at the start of the chapter. Briefly comment on the questions mentioned therein. Does it raise any industry level issue at an international level? Discuss.

LO 3, 6, 7 DIFFICULT

## Numerical Problems

1. Bade Miya \& Chote Miya. LO 2, 3 EASY

Bade Miya \& Chote Miya decided to buy a house. They searched and found a house worth $₹ 25 \mathrm{Cr}$ at a good locality. Now the problem of funding arises.

They decided to take a Housing loan. The bank was willing to give the loan of ₹ 18 Cr based on the income of Bade Miya and an additional loan of ₹ 2 Cr based on the Chote Miya's income. So, the funding of ₹ 20 Cr was done by taking the Housing loan and the balance was brought by their personal saving of ₹ 2.5 Cr each. Based on the contribution they decided the ownership ratio in the house.

The Bade Miya had a bank account through which the monthly EMI payment of ₹ $2,00,000$ was taking place. They let out the house on monthly rent of ₹ $1,00,000$. This amount was credited in the Chote Miya's bank account. At the year end the housing loan certificate showed the total principal payment for the year as $₹ 5,00,000$ and the balance as Interest payment of the loan.

Request you to pass the necessary journal entries in the books of Bade Miya \& Chote Miya, and tell them the amount of settlement between them at the year end.
2. Debjit Rose Trading Company.

LO 3, 4 MEDIUM
Finally the day has come when Debjit can leave his 7-9 boring job of one of the blind alley of North Kolkata. Debjit always dreamt of having his own organization. But lack of capital and business contacts had made him to operate his business only in dreams. But yesterday's sudden contact with Ohio Matshuhita from Japan has given him enough courage to start "Debjit Rose Trading Company". Debjit was an Agricultural graduate and did not appreciate the nuances of accounting.

The following are the transactions happened in first two weeks of his business. Please help him to enter these transactions in the journal (including cash transactions).

- Jan1: Debjit brought his personal savings of ₹2 lakh to the business as share capital.
- Jan1: He took an office space in Ballygunge area after negotiating a rent of ₹ 5,000 per month. But getting this space itself cost him ₹ 50,000 as Salami $^{3}$ (a one time payment which is never recovered).
- Jan 2: He purchased two computers from near by store and paid ₹ 20,000 which is just $50 \%$ of the entire price. The shopkeeper assured Debjit that he can pay the rest as and when revenue starts flowing.
- Jan 3: He recruited Anish, a pass out from St. Xavier, at ₹ 10,000 per month.
- Jan 5: The most significant day in Debjit's life, he got the order (as promised by Matshuhita) of ₹ 75,000 at CIF.
- Jan 6: Debjit traveled to Bagnan (a place in Howrah district) for sourcing quality rose. The expenditure came out as ₹ 500 . On that day he purchased a wonderful doll worth ₹ 100 for his daughter and to memorize the initiation of business.
- Jan 10: Debjit received the roses at a cost of ₹ 25,000 . He paid the entire amount by cash and got a cash discount of $0.5 \%$.

[^20]- Jan11: Due to lack of knowledge, he outsourced the entire export documentation, freight etc. by paying ₹ 5000 to an agent.
- Jan 12: Anish resigned after getting a job with Ferns \& Petals (leading cut flower chain). Debjit settled the salary account on prorate basis.
- Jan 15: Debjit received ₹ 74000 from Japan into his account. He was angry by realizing the discrepancy. Later he realized the erosion in value has occurred due to fluctuation in exchange rate.


## Required:

Please record all the transactions in the journal and post them to the ledger.

## 3. Ram Traders Revisited <br> LO 3, 4, 5, 6 MEDIUM

This problem has been detailed in Chapter 2, Mini Case 2.6 and Chapter 3, Mini Case 3.6.
Required:
Prepare the journal, ledgers, worksheet, and income summary for the period and a balance sheet as of end of the period.
4. Kanni Badshah Filters Limited:

LO 5, 6 MEDIUM
The following is a trial balance for the firm for the year ending $31^{\text {st }}$ Dec. 20X7. It is known that the closing stock of the company as on $31^{\text {st }}$ Dec 20X7 stood at ₹ $1,00,000$ :

| Sundry Debtors | 15,000 |  |
| :--- | ---: | ---: |
| Stock (1-1-20X7) | 50,000 | $2,50,000$ |
| Land \& Building | $1,00,000$ | 6000 |
| Capital |  |  |
| Rent | 16,000 |  |
| Cash in hand | 40,000 |  |
| Cash at bank | 30,000 |  |
| Wages |  |  |
| S.Crs. | 20,000 |  |
| B/R | 2000 |  |
| Interest | 5000 |  |
| Bad debts | 3000 |  |
| Repairs |  |  |
| T.Sales | 15,000 |  |
| B/P | 10,000 |  |
| Furniture \& fixtures | 8000 |  |
| Depreciation | 20,000 |  |
| Rates and Taxes | 20,000 |  |
| Salaries | $1,00,000$ |  |
| Drawings | 25,000 |  |
| Purchases | 57,000 |  |
| Office expenses |  |  |
| Plant \& Machinery |  |  |
| Total |  |  |

1. At the end of the accounting period, the gross profit of the industrial firm would be:
(a) Less than ₹ 10,000 ;
(b) Between ₹ 10,001 and $₹ 80,000$;
(c) Above ₹ 80,001 ;
(d) None of the above
2. At the end of the accounting period, the net profit of the industrial firm would be:
(a) Less than ₹ 10,000 ;
(b) Between ₹ 10,001 and ₹ 40,000 ;
(c) Above ₹ 40,001 ;
(d) None of the above
3. At the end of accounting period, the net worth of the industrial firm would be:
(a) Less than $₹ 1,00,000$;
(b) Between $₹ 1,00,001$ and $₹ 2,80,000$;
(c) Above ₹ $2,80,001$;
(d) Can't say
4. M/s Khilona \& Khilona

LO 6, 7 DIFFICULT
Niti founded M/s Khilona \& Khilona, a toy retail shop, and invested $₹ 2,80,000$ in the business as equity shares. At the beginning of the year, she borrowed $₹ 1,50,000$ from the local bank, to be paid in five years, bearing an interest rate of $10 \%$ payable annually. She was now ready to rent a store, buy a godown and inventory, and begin selling toys.

She signed a two-year lease for a store in Chowpati beach, paying the full amount of ₹ $1,24,000$, in advance. During the year, she bought on credit, toys and stuffed animals at a cost of ₹ $1,00,000$ for resale in her store. The toy inventory was stored in a new warehouse that she purchased for cash at the beginning of the year, at a cost of ₹ 80,000 . The warehouse had an estimated useful life of 10 years and no salvage value.

By the end of the year, she paid in cash, for 50 percent of the inventory purchases she had made on credit. After making this payment, the store had a cash balance of $₹ 86,000$. By the end of the year, she sold inventory that cost ₹ 75,000 for $₹ 1,80,000$. Seventy per cent of the customers paid in cash and the remaining $30 \%$ were extended credit. During the year, she paid ₹ 15,000 for electricity. The last telephone bill for ₹ 1,200 was received but not paid by the end of the year. She had to prepare the trial balance, profit and loss account, and balance sheet for the firm.

Based on the discussion above, please answer the following multiple-choice questions:

1. If gross profit were defined as sales less cost of goods sold and if gross margins were defined as gross profit-to-sales ratio, then we can state that the gross margins of M/s Khilona \& Khilona were:
(a) Negative
(b) Positive, less than $50 \%$
(c) Positive, more than $50 \%$
(d) Insufficient information
2. Ignoring taxes, the net income of the firm was:
(a) Negative
(b) Positive, less than ₹ 50,000
(c) Positive, more than ₹ 50,000
(d) Insufficient information
3. The biggest constituent of assets seems to be:
(a) Fixed Assets
(b) Other Assets
(c) Non-Cash Current Assets
(d) None of the above
4. The firm can pay a maximum dividend of
(a) $16.9 \%$
(b) $26.9 \%$
(c) $36.9 \%$
(d) None of the above
5. If ₹ 14,000 worth of Accounts Receivables were found to be bad debts and were to be provided for, then:
(a) Accounts Receivable $=$ Accounts Payable
(b) Accounts Receivable + Prepaid Rent $=$ Accounts Payable
(c) Accounts Receivable + Prepaid Rent + Inventory $=$ Accounts Payable
(d) None of the above

## MINI CASES

## Case 5.1 Ram Traders: Accounting Records

LOD 3, 4, 5 EASY
This case is in continuation to Mini Case 2.6 of Chapter 2, on Ram Traders Limited and his chilli business. Please solve the same problem using book-keeping process of recording entries and creating financial statements.

## Case 5.2 Third Period of Kataria Plastics

LO 5, 6 DIFFICULT
This case is in continuation to Solved Problem 5.2 of this Chapter on Kataria Plastics. The promoter of the firm, Kattu provides you with its third period of transactions. You are required to prepare its trial balance and its financial statements.

## Tushar Kataria Makes Plastics ... Part II Chronological statement of transactions for the month of November 2015

| Date | Summary of Transactions |
| :---: | :---: |
| 01.11. X5 | - Paid Municipal Rates ₹ 3,571 |
|  | - Purchased Raw Materials worth ₹ 12,236 and paid by cheque. Prices have increased by $5 \%$. |
|  | - Received payment from M/s Digvijay Industries, ₹55,296, net of discount allowed @ 4\% (₹2,304) |
| 02.11. X5 | - Purchased Packing Material worth ₹5,440 for cash |
|  | - Sold 168 kg of pipes @ ₹ $87.12 / \mathrm{kg}$, amounting to ₹ 14,636 for cash |
| 03.11. X5 | - Purchased stationery worth ₹500 in cash |
|  | - Purchased Raw Material worth ₹36,708 from M/s Khosla \& Khosla against Bills Payable after 15 days |
| 04.11. X5 | - Advertisement expenditure $₹ 1,000$ cash in the Trade Magazine |
| 05.11. X5 | - Purchased Packing Material worth ₹2,720 cash |


|  |  | - |
| :--- | :--- | :--- |
|  |  | Inwards ₹500 cash |
|  | - | Purchased Raw Materials worth ₹36,708 from M/s Khosla \& Khosla against Bills Payable after |
|  |  | 15 days |


| 23.11. X5 | - Discounted the Bills received @ $24 \%$ p.a. |
| :---: | :---: |
|  | - Purchased Diesel for generator by paying cash ₹1,000 |
| 24.11. X5 | - Paid ₹ 36,708 less discount @ $4 \%$ via cheque to M/s HImanshu Traders |
|  | - Received money against ₹ 11,520 less $10 \%$ Bad Debts from Mittal |
|  | - Purchased Office stationery ₹500 cash |
| 25.11. X5 | - Advertisement expenses ₹500 cash |
|  | - Honoured the Bill Payable to M/s Khosla \& Khosla, amounting to ₹ 48,944 |
| 26.11. X5 | - Paid wages to the operator (₹11,616), 5 laborers ( $₹ 5,808$ each), salary to watchman ( $₹ 1,500$ ), salary to computer operator ( $₹ 1,000$ ) and salary to salesman ( $₹ 1,500$ ) |
|  | - Received a cheque from Digvijay for ₹31,680 |
|  | - Sold goods 700 kg @ 87.12 to M/s Bhupendra Co., amounting to ₹ 60,984 against Bills Receivable |
| 27.11. X5 | - Discounted the bill of 26th Nov. with the bank @ $24 \%$ p.a. |
|  | - Sold 500 kg @ ₹ 87.12 to M/s Digvijay Industries on Credit |
| 28.11. X5 | - Sunday Closed |
| 29.11. X5 | - Received $₹ 15,552$ via cheque from $\mathrm{M} / \mathrm{s}$ Anuj Junabhai \& Co. in full settlement for sales in September. The rest, ₹ 1,728 is written off as Bad Debt |
|  | - Paid M/s Himanshu Traders their bill by cheque after deduting 4\% discount |
|  | - Paid interest on loan ₹4,229 and 3rd installment of ₹ 8,750 / on principal |
| 30.11. X5 | - Paid sales commission of ₹2,530 to the salesman, cash |
|  | - Paid electricity bill ₹ 12,000 and Telephone bill ₹2,000 by cheque and factory rent ₹ 4,000 by cash |
| Issues to consider on Closing Date | 1. Closing Stock of 242 kg is value is valued at ₹ 16,045 |
|  | 2. Provision of Bad Debts to be created @ 10\% of Accounts receivable |
|  | 3. Make any other adjustments, if needed |

## Case 5.3 'Accounting' Bouncers on IPL Franchises

LO 3, 4, 5 DIFFICULT

The Indian Premier League (IPL) is a professional Twenty-Twenty cricket league in India contested annually by franchise teams representing Indian cities, such as, Chennai Super Kings (CSK), Delhi Daredevils (DD), Mumbai Indians (MI), Kings XI Punjab (KXIP), Kolkata Knight Riders (KKR), Royal Challengers Bangalore (RCB), Rajasthan Royals (RR), and Sunrisers Hyderabad (SH). The league, founded by the Board of Control for Cricket in India (BCCI), is scheduled over April and May of every year. Almost all the franchisees were unlisted, closely-held private entities.

D Murali and N S Vageesh spent some time in looking at the accounting practices among the IPL teams. And to their surprise, they found significant variances in critical items of cost, revenue, fixed assets accounting and reporting. For instance, on amortization of aggregate franchisee fee (essentially, IP rights), the period of write off by RCB was 50 years, SH 25 years while all other franchisees have rationally adopted 10 years. As a corollary CSK, SH, KXIP, RCB, and RR amortized the same as intangible rights; while DD, MI and KKR directly charged the same to operating cost as franchisee fee. Correspondingly,
the sums due to BCCI have been reflected as 'unsecured loans' by RR, long-term liability by SH, current liability by RCB and KXIP, and none by DD, MI, and KKR.

Based on the above note, please answer the following questions:
(a) Assuming each of the above mentioned transaction by the IPL teams to be ₹ ' X ' amount (say, for aggregate franchisee fee), write down the possible accounting entries (in the first two years) for CSK, DD, KXIP, RCB, RR, and SH.
(b) What could be the possible explanation behind the divergent accounting practices among IPL teams? From a analyst perspective, what type of difficulties will be posed by the users of such information? Give example. Also suggest possible way in which the difficulties could be tackled.
(c) As part of the regulatory process participant (say, ICAI advisor OR NACAS membership), if you were asked to ensure a way out to rectify these divergent accounting practices - how would you resolve the same (say, using existing global accounting and reporting norms)? Discuss.

Source: "IPL: 'Wide' accounting and wild valuations," The Hindu Business Line 06 May 2010, print.

## INTERNET ASSIGNMENTS

## Assignment 5.1 Accounting Records

On the OLC of the book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). You may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online website.

Your fifth assignment would answer the following two questions:

- Pick any schedule from the latest annual report. Based on your understanding, make three accounting entries that the organization would have made to finalize its accounts. While doing the same, please list down your assumptions.
- Based on the latest annual report, list down all the visible provisions the organization has made during the period? Comment on the same (within 100 words).


## Answers

## Answers to the "Let's Check Our Concepts!"

(a) True
(b) True
(c) Asset
(d) Liability
(e) Asset
(f) Liability
(g) Expense
(h) Liability
(m) False
(r) True

## Answers to Activity 5

(a) V
(b) I
(c) IV
(d) III
(e) II

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 5.1: More Examples of Errors in a Trial Balance
- Annexure 5.2: Solved Illustration
- Annexure 5.3: Additional Reading Material
- Annexure 5.4: Auxiliary Test Material
- Annexure 5.5: Sample Assignment Reports

Accounts for Joint Stock Companies

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Remember the importance of a Joint Stock Company
LO 2 Understand the financial instruments used by companies
LO 3 Generalize the legal requirements as to company accounts
LO 4 Recognize other financial information, its disclosure and linkage with balance sheet
LO 5 Use the rules for preparing Consolidated Financial Statements

Negative Networth Indigo Airlines Public Offering
Interglobe Aviation, which owns IndiGo, is a low-cost airline headquartered at Gurgaon. It is the largest airline in India in terms of passengers flown with market share of 36-39\% (2016). This consistently profitable airline caused a bit of a stir during its initial public offering (IPO) in October 2015. In spite of making a net profit of ₹ 640 crore during the June quarter, IndiGo reported negative networth of minus ₹ 139 crore as on $30^{\text {th }}$ June. A big reason for this: ₹ 1,103 crore dividend that the promoters decided to pay themselves ahead of the offer.

In accounting terms, NetWorth is the total owner's capital invested in a company. Refer to Section 2.1 wherin the term is introduced; a company's networth is a key indicator of its financial health. Stereotypically, chronically loss-making companies carry negative networth in their balance sheet. This is why even the statutory auditors examining a company's books of accounts are required to make a special mention to shareholders in their report, if they find that the company has run up a negative networth in any accounting period.

A negative networth is normally a warning that the company needs a quick infusion of fresh equity. Even with such shocking news, $₹ 3,130$ crore IPO of InterGlobe Aviation ended with a fabulous investor response and oversubscription of 6.14 times the shares it offered to investors. Sure, such puzzling sequence of events brings many interesting questions to the 'financial accountant' in you, such as:

- How do companies treat IPO subscription funds and record the accounting entries? How is the oversubscribed amount treated?
- Can companies raise the IPO money in installments to ensure investor-friendly approach? In such cases, how will the accounting entries differ?
- What are the circumstances, when a company's networth can change? Since InterGlobe Aviation had a negative networth, why was it allowed to pay dividends? What attracted investors to such an enterprise?
A small hint to the possible answer could be that - if any firm decides to pay dividend far higher than the outstanding balance in its reserves and surplus account, it should automatically lead to a negative or deficit networth. Nevertheless, one may conclude that the discussion above and, more importantly, the questions raised, makes us aware of the need to know more on the accounting of joint stock companies and the process of accounting records for joint stock companies. Our discussion in this chapter provides a few pointers to the above questions.

Source: "All you wanted to know about," The Hindu Business Line 10 Nov. 2015, print.

A friend working as a CEO uttered "I can claim a 140-inch TV as a business expense because my accountant said it's important to look at the big picture" - of course that is a joke, as business entity concept will not allow such extravagance. It brings us back to basics.

We have seen that one of the basic tenets of accounting is the business entity concept. Even though this used to be one of the foundations of accounting theory and practice since its very origin, there was no legal sanction or official acceptance of this concept in the case of many forms of business organizations. But with the emergence of association of persons as the dominant form of business organizations since the seventeenth century in general, and after the industrial revolution in particular, this concept has been granted legal sanction in the free world in the form of joint stock companies. Joint Stock Companies are recognized as 'artificial juridical personalities', i.e., they are recognized in law as a separate and distinct entity from the members constituting it.

Thus, from a managerial perspective, it is fundamental to comprehend the legal bearings of this artificial judicial personality - as it pervades each and every aspect of our formal economy.

### 6.1 COMPANY AS INCORPORATED ASSOCIATION



## Remember the importance of a joint stock company

A company is an incorporated association. It is formed by a group of people, but it acquires its status as a juridical personality with perpetual succession by registration under the law. In India, the Companies Act, 2013, regulates the formation and working of joint stock companies.
The two most commonly used forms of joint stock companies in India are public limited companies and private limited companies. A mention of them and their examples was made in Table 1.1 and Annexure 1.5 of Chapter 1 (on the Online Learning Center i.e., OLC). Please see Annexure 6.1 on the OLC for the differences between the two of them. Apart from this, there are statutory corporations and guarantee companies.

Statutory corporations are created by an Act of Parliament and are closely controlled by the state. They are usually created for a specific and narrow purpose, and are allowed to bring and defend legal actions in the state's own name accordingly protecting the financiers from personal responsibility should the corporation fail. Two instances of the statutory corporations in our regular life are the Life Insurance Corporation of India (LIC) and the Food Corporation of India (FCI). Guarantee companies are limited by guarantees. They are licensed by the state laws and are appropriately empowered to grant guarantees, bonds, policies, and contracts in respect of any legal proceedings. For example, the Export Import Bank of India (Exim Bank) established an export-credit guarantee company in Zimbabwe.

### 6.1.1 Characteristics of Companies

By default, large business organizations are registered as joint stock companies. And thus, in such entities, managers are different from owners. They are agents of their principals (herein, shareholders). Consequently, it is pertinent for managers to know more about the characteristics of the joint stock companies to perform effectively.

Joint stock companies, as a form of business organization, acquire the legal status and powers of a legal entity, which enable them to carry on business like a normal person. ${ }^{1}$ There are some characteristics which distinguishes such a company from other organizations. They are:

- Voluntary Association - It is a voluntary association with pre-determined objectives as contained in the memorandum of association.
- Separate legal entity - It has got a separate legal entity from its members. It can sue and be sued in a court of law, enter into contracts, acquire and dispose of assets, etc.
- Perpetual succession - It has got perpetual succession. Death, insolvency or lunacy of the members does not interfere with the continuance of the company.
- Distinct entity from the owners - A shareholder cannot be held liable for the actions of the company; nor can the company be held liable for the actions of the shareholder.
- Limited Liability - A shareholder's financial liability is limited to the extent of the unpaid amount on the face value of the shares.
- Artificial Judicial person - Since the company is only a 'legal personality' and not a 'physical personality', it has to operate through its agents. Manage-


To know more on "Shortcomings of Joint Stock Companies Using Mocktail of Yoga and Political Theory" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/541 ment, the members of the board of directors are the agents for the company.
A company owes its existence and life to two fundamental documents to be filed at the time of incorporation, namely, the memorandum and the articles of association.

## The Memorandum of Association

This contains many important particulars relating to the company, viz, its (1) name; (2) domicile; (3) the objects; (4) statement of liability; (5) authorized capital and its divisions; and (6) the declaration of association. In theory, the company can only operate in the areas mentioned in the objects clause, but in practice the clause is drawn to cover as wide an area as possible. Just, in case, a particular business area (say, financial activities by a manufacturing entity) has not been covered in the object clause of the Memorandum of Association (MoA) and may be desired at a later date, it can be added in the

[^21]Memorandum when desired. A 75 per cent majority of the members of the company can change the objects whenever they like. Nevertheless, it is worth bearing in mind that directors of the company will incur personal liability, if a company engages in a type of business which is not authorized by the objects clause. So, MoA is known as the charter of the company and any act beyond. ${ }^{2}$

## Articles of Association

This determines the constitution for the internal management of the company. It defines the relationship between the various members within the company, as well as between the company and its members.

An important driver for creating and amending the MoA and the Articles of Association (AoA) are the board of directors. These board members often have board meetings on various issues related to a company's incorporation, working, (re)writing down its MoA and AoA and executing other contracts for the formation and smooth functioning of the company. Annexure 6.2 on the OLC lists down the requirements related to a board meeting as per the Companies Act, 2013.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) A limited company is a separate legal entity, independent of its owners.
(b) An article of association defines the scope of activities and relations of the company with outside world.

### 6.2 SHARES AND SHARE CAPITAL



Understand the
financial instruments used by companies

Ordinary equity shares represent the risk capital of an entity, that is, they have no right to fixed dividends but have management control over the company through voting rights. On the other hand, preferential rights with respect to payment of a fixed dividend and repayment of capital at the time of liquidation; characterize preference equity shares, commonly known as preference shares. Additional rights can be granted to preference shares by virtue of provisions contained in the memorandum and articles of the company. We shall learn more about them in this section.

### 6.2.1 Classification of Preference Shares

Preference shares are classified into different classes, depending on the rights attached to them:
Cumulative Preference Shares: The holders of this class of shares are entitled to unpaid dividends in the past. That is, the unpaid dividends are to be paid to the cumulative preference shareholders before any profit can be distributed among other classes of shares.
Non-Cumulative Preference Shares: In this case, the shareholders do not carry any right to unpaid dividends. Unless otherwise mentioned, preference shares are cumulative in character.

[^22]Participating Preference Shares: These shares carry a right to a share in the profit after a fixed rate is paid to the equity shareholders, in addition to the fixed rate of dividend. Unless specifically mentioned, preference shares are non-participating in character.

Redeemable Preference Shares: These shares will be repaid on or after a certain date, as per the terms of the issue. In India, as per the provisions of the Companies Act, 2013, any company cannot issue irredeemable preference shares or even preference shares that will be redeemed after 20 years from the date of issue. A Company may issue preference shares that for a period exceeding twenty years for infrastructure projects, if authorized by its articles, subject to the redemption of such percentage of shares as may be prescribed on an annual basis at the option of such preferential shareholders. On the other hand, irredeemable preference shares


To know more on "Norms for Issue of Preference Shares" scan the QR code, or visit:
http://qrcode.flipick.com/
index.php/542 are quite popular in many western nations.

Among the types of preference shares mentioned above, the most commonly found are the cumulative redeemable non-participating preference shares.

### 6.2.2 Equity Shares and the Companies Act

We know that the total share capital of a company is divided into units of small denominations. One of such unit, in which the total capital of the company is divided, is called an 'equity share'. Section 2(84) of the Companies Act, 2013, defines a share as a unit in the share capital of the company and includes stock, except where a distinction between stock and shares is expressed or implied. For example, if the total capital of Eklavya Services (Tripura) Limited is ₹ $88,00,000$, divided into $8,80,000$ units of $₹ 10$ each, then each such unit of $₹ 10$ is called an equity share of Eklavya Services (Tripura) Ltd. Every share has a distinct number for identification.

In India, the most common units of equity shares in descending order are ₹ 10 (utmost visible), ₹ 1 , ₹ 5 , ₹ 100 and ₹ 1,000 . Section 43 of the Companies Act allows


To know more on "Differential Voting Rights" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/543 a company to issue only two types of shares, viz., ordinary or equity share (with or without differential voting rights) and preference shares. In most countries, ordinary equity shares and preference shares are known as common stock and preferred stock, respectively.

### 6.2.3 Share Capital Types

While we all know that the share capital of a company means the amount raised by a company by the issue of shares, we also need to understand that a company lists many types of share capital (see Figure 6.1). The different types of share capital of a company are:
Authorized or Registered or Nominal Share Capital: This is the maximum amount of capital which a company is allowed to raise during its lifetime. This amount is usually based on the amount mentioned in the memorandum of association by the company. This capital is shown under the liabilities side, but


Figure 6.1 Share Capital Types the amount is not added to the total under the liabilities.

Issued Capital: The portion of authorized capital that has been issued to all the investors, including the public, is known as the 'issued capital'. The remaining portion of the authorised capital is called the un-issued capital. The amount of issued capital is taken in the balance sheet only if the total amount of issued capital has been subscribed, called up by the company and paid by the shareholders. In all the other cases, the total of issued capital is presented in the same way as the authorized capital.
Subscribed Capital: The portion of the issued capital that has been subscribed by all the investors, including the public, and also the portion allowed to the directors, is known as the subscribed capital. More often than not, issued capital and subscribed capital are equal.
Called up Capital: The portion of the subscribed capital that has been called up by the company for payments, is the called up capital and the remaining amount becomes the un-called capital. Hence, one can make out that issued capital, subscribed capital and called up capital would typically be different for companies at various stages of raising capital through issue of common equity shares.
Paid-up Capital: It is the part of called up capital that has been paid up by the subscribers of the share capital. The amount that is due but yet to be received, is known as calls in arrears.

A company which is in the process of raising capital having a specific target may have all the above items differing from each other. We will come across a few examples at a later stage.

Under the liabilities side of the balance sheet, this information is required to be disclosed under the 'Share Capital' head. Usually, companies provide these details in a schedule of share capital as part of the presentation of financials (within the annual report). We provide below three real-life examples of publicly listed companies' share capital details showcasing various types of capital:

> Revathi Equipment Limited Share Capital Details as at $31^{\text {st }}$ March ... $^{\text {Sa }}$


In the case of Revathi Equipment Limited, we see that the total amount of issued capital has been subscribed, called up and paid by the shareholders, and thus equal to each other.

[^23]| Indiabulls Real Estate Limited ${ }^{5}$ Share Capital Details as at $31^{\text {st }}$ March ... |  | Amount in Rupees |
| :---: | :---: | :---: |
|  | Current Year | Previous Year |
| Share Capital |  |  |
| Authorized: |  |  |
| 50,00,00,000 (Previous Year 50,00,00,000) Equity Shares of ₹2 each | 1,00,00,00,000 | 1,00,00,00,000 |
| $3,00,00,000$ (Previous Year 3,00,00,000) Preference Shares of ₹ 138 each | 4,14,00,00,000 | 4,14,00,00,000 |
|  | 5,14,00,00,000 | 5,14,00,00,000 |
| Issued, Subscribed and Paid up: |  |  |
| Equity Share Capital |  |  |
| 40,15,39,239 (Previous Year 25,75,20,646) Equity Shares of ₹2 each fully paid up | 80,30,78,478 | 51,50,41,292 |
| (i) Of the above, $16,86,75,378$ Equity Shares of ₹2 each were allotted to eligible Shareholders pursuant to and in terms of a Scheme of Arrangement with Indiabulls Financial Services Limited as approved by Hon'ble High Court of Delhi at New Delhi on November 24, 2006, without consideration being received in cash. <br> (ii) Of the above, $1,66,85,580$ Equity Shares of ₹2 each [representing $1,66,85,580$ Global Depository Receipts ${ }^{6}$ ("GDRs")] were allotted to Dev Property Development Limited ("DPD")'s shareholders pursuant to and in terms of a Scheme of Arrangement approved by High Court of Justice of the Isle of Man on May 7, 2008, for the acquisition of $100 \%$ ordinary shares of DPD, without consideration being received in cash. |  |  |
| Preference Share Capital |  |  |
| Nil (Previous Year 99,66,667) 10\% Non-Convertible, Cumulative, Redeemable Preference Shares of ₹138 each fully paid up |  | 1,37,54,00,046 |
|  | 80,30,78,478 | 1,89,04,41,338 |

**Note: 2010 is the Current year and 2009 is the previous year.
In the case of Indiabulls Real Estate Limited, we see that the total amount of issued, subscribed and paid up capital has reduced compared to the last year. Opposite is the scenario visible in the case of the Andhra Pradesh Paper Mills Limited, we see that the total amount of issued, subscribed and paid up capital has increased compared to the last year.

[^24]Andhra Pradesh Paper Mills Limited ${ }^{7}$
Share Capital Details As At $31^{s t}$ March ...

| Share Capital (all amounts in ₹ lakh) |  | Current Year | Previous Year |
| :---: | :---: | :---: | :---: |
| Authorized: |  |  |  |
| 4,00,00,000 | Equity Shares of ₹ 10 each | 4,000 | 3,000 |
| 5,00,000 | Redeemable Cumulative Preference Shares of ₹100 each | 500 | 500 |
|  | Total | 4,500 | 3,500 |
| Issued, Subscribed and Paid Up: |  |  |  |
| 3,27,51,797 | Equity Shares of ₹ 10 each fully paid up | 3,275 | 2,573 |
| (Previous year 2,57,33,555 Equity Shares of ₹10 each) |  |  |  |
|  | Total | 3,275 | 2,573 |
| Of the above Equity Shares: <br> Note 1: $9,98,500$ Equity Shares of ₹10 each were allotted as fully paid up pursuant to a contract without payment being received in cash. <br> Note 2: 11,25,000 Equity Shares of ₹10 each fully paid up were allotted for consideration other than cash as Bonus Shares by Capitalization of Reserves. <br> Note 3 : $5,80,000$ Equity Shares of ₹10 each were allotted to the shareholders of amalgamating company, Coastal Papers Limited pursuant to the Scheme of Amalgamation without payment being received in cash. <br> Note 4: 70,18,242 Detachable Warrants ${ }^{8}$ allotted will be converted into equivalent number of Equity Shares of $₹ 10$ each, on payment of warrant exercise price of ₹ 50 per warrant at any time before the expiry of 18 months from the date of allotment (i.e., 30/09/11). |  |  |  |

**Note: 2010 is the Current year and 2009 is the previous year.
Based on the observations in these three real life cases, we conclude that - Revathi Equipment Limited share capital details conveys a status quo in its share capital. Indiabulls Real Estate Limited share capital details convey complete redemption of preference shares. Andhra Pradesh Paper Mills Limited share capital details convey new issue of equity shares (through detachable warrants).

### 6.3 DEBENTURES AND OTHER DEBT INSTRUMENTS

A bond or debenture is an acknowledgement under seal of a debt or loan. A debenture is a large amount of loan raised by a company, wherein the loan is divided into regular parts (serially numbered), and is usually offered to retail and institutional investors, including the public. A bond or debenture issue can also be privately placed. The basic distinction between shares and debentures is that the former represents 'ownership', whereas the latter represents long-term creditors, looking forward to a fixed rate of return on their investments. Hence, the interest on debenture is a charge against profits.

Fixed Deposits are unsecured loans raised by corporates from retail investors with pre-decided terms and conditions yet they are different from bonds and debentures. Fixed deposits are non-tradable whereas debentures are tradable instruments. Being non-tradable, an investor needing funds would be forced to request termination of a fixed deposit (usually involves some penal clauses and costs) whereas a debenture

[^25]holder can sell debentures in the open market whenever there is in need of funds. Depending on the terms and conditions at the time of issue, a debenture will have lots of other benefits for the investors compared to fixed deposits. Debentures can be of different classes. Some of the important types of debentures are as follows:

Redeemable Debentures: These are repaid at the end of a specified period or by installments during the existence of the company.

Irredeemable Debentures: These are of the nature of a permanent loan to the company and are repayable only on the liquidation of the company. However, they are paid periodical interest on the irredeemable debentures for the sum borrowed till the liquidation. Issue of these instruments is not allowed in India.
Secured or Mortgage Debentures: Debentures that are secured by a fix charge (by some specific assets, usually a tangible long-term asset such as plant and machinery) or by a floating charge (by any class of floating assets of the company, in general, it would be accounts receivable or inventory) are known as secured or mortgage debentures.

Simple or Naked Debentures: These are unsecured debentures, that is, in case of a default, there is no asset that backs them as security.
Registered Debentures: These debentures are registered in the names of their holders and only executing a regular transfer deed can affect transfers.

Bearer Debentures: These debentures are not registered in the names of their holders and are transferable by mere delivery.

First and Second Debentures: The terms 'first' and 'second' denote priority in repayment, sometimes, these are also known as senior and junior debentures.

Debentures by default are redeemable in nature. In India, usually we come across redeemable unsecured debentures. A few other interesting debt instruments that are commonly used for funding by corporates are commercial papers and external commercial borrowings.

Commercial Papers (commonly known as CPs) are used to meet working capital needs. Issue of CP requires that certain norms be met, such as minimum credit rating. The company is allowed to set the terms of borrowing, rather than the banking sector.

External commercial borrowings (commonly known as ECBs) are used to fund long-term investments, usually in fixed assets. Given that ECBs involve foreign exchange risk for the country thus they are highly regulated. ECBs are usually allowed for infrastructure projects.

As we move further in this chapter, we will come across illustrations of them at one place or the other; and even get to know of the accounting entries to be made.

### 6.4 ISSUE OF SECURITIES

A public company can raise its capital by issuing shares or debentures to the public, including institutional investors, both domestic and foreign. Figure 6.2 shows the various steps taken by a company to raise capital by an issue of shares. Further, we discuss the essential points involved.


Figure 6.2 Steps to Raise Capital

## Prospectus

Only a public limited company can offer shares and debentures to all the investors. A public limited company can commence its business only after it has secured a Certificate of Commencement of Business from the Registrar of Companies. For this purpose, the company has to issue a prospectus, signed by every director before its publication and file a copy of the same with the Registrar and to the regulator, Securities Exchange Board of India (SEBI) in case of listed company. A prospectus is a regulator-approved document inviting offers from the public, for the subscription or purchase of any shares or debentures of the corporate.

A prospectus usually, includes documents inviting offers from the public for the subscription or purchase of any shares or debentures of a body corporate. It should supply all the important information of the company, on the basis of which, the general public can take a decision whether to subscribe for the share capital or not. A prospectus being a public document, also implies that the offer to buy the shares can be made even by those to whom the prospectus was not issued.

## Receiving Applications ${ }^{9}$

After the approval of the prospectus, the intending shareholders will make applications for equity shares in the prescribed form, along with the prescribed application money. The existing norm is that this initial application money shall not be less than 5 per cent of the face value of the shares. If a company does not receive applications equal to the minimum subscription (currently 90 per cent of the issue size) within the prescribed time (currently 60 days), the whole of the application money received has to be refunded to the applicants within the next 15 days. In case of a delay beyond 15 days, the share application money will be treated as a deposit; and the company is liable to repay the amount with a penal interest.

The money received from the applicants of shares has to be deposited in a separate bank account until the certificate of commencement of business is obtained and the shares are allotted. If the company has already obtained the certificate, the application money has to be so deposited until the company has received the entire amount payable on applications with respect to the minimum subscription.

## Allotment of Shares

Allotment of shares means acceptance of the offer of the applicant for the purchase of the shares of the company by the directors. Once the company has received applications amounting to the minimum

[^26]subscription, the directors will proceed to make the allotment of shares to the applicants. In case of over subscription, the allotment is based on a pro-rata basis, in consultation with a stock exchange. Once the allotment is made, the applicant becomes liable to pay the full amount of the shares allotted to him.

## Making Calls

Installments demanded by the directors against the sum payable by the shareholders on their shares (after the allotment is made), are known as calls. The company can either collect the whole amount due on such shares on allotment, or a part on allotment and the balance in one or more installments, known as making calls. Calls must be made on a uniform basis on all shares within the same class.

In sum, each of these three key fund-raising instruments discussed, i.e., equity shares, preference shares and debentures have varied features (see Table 6.1); and hence have different risk-benefit (say, returns for investors or cost for issuer) profiles from both, the issuer and the investor perspective.

Table 6.1 Comparing Preference Shares, Equity Shares, and Debentures

| Points | Preference Shares | Equity Shares | Debentures |
| :---: | :---: | :---: | :---: |
| Status | Owner-cum-creditors of the company. Their contribution constitutes preference share capital for the company. | The actual owners of the company. Their contribution constitutes equity share capital for the company. | Creditors of the company and their contribution are a loan for the company. |
| Dividend/ Interest | Fixed rate of dividend is paid after payment to debenture holders. <br> But, there is no upside other than the pre-decided terms and conditions (if the company is doing well). | Entitled to any amount of dividend as decided in the shareholders meeting (usually Annual General Meeting) after payments to debenture holders and preference shareholders. Equity being residual in nature, there is tremendous scope for upside (if the company is doing well). | Entitled to fixed rate of interest, irrespective of whether the company makes profits or losses. But, there is no upside (if the company is doing well). |
| Voting Rights | Excepting in certain cases, no voting rights are given. | Entitled to voting rights and hence management control. | No voting rights. |
| Order of Claim | In case of winding up, they are paid after the debenture holders and creditors. | Residual in nature. Hence, they are paid last of all, as they are the highest risk-takers (owners) of the company. | Paid before either preference or equity shareholders. |

### 6.5 PAR VALUE AND NO PAR VALUE SHARES

In many countries (such as, Canada, Singapore and the US), the company law permits companies to have shares without a par value. ${ }^{10}$ No-par stocks have no par value printed on its certificates. In such cases, the company will only have a certain number of shares issued. The value will be what a shareholder is prepared to pay for it. However, in the case of Indian company laws, which require the shares to have a par value, a certain amount of joint stock is divided into a number of shares. The amount of joint stock represented by a share is the par value of the shares.

[^27]For instance, the initial public offer of the Avon Weighing Systems Limited led to issue shares of ₹248 crore, at par value of ₹ 10 each. On similar lines, infrastructure projects development company Brahamputra Infrastructure Limited took SEBI approval to tap the capital market with an issue of 29 million equity shares of ₹ 10 . The company wanted the funds for purchasing of capital equipment and also pursuing various projects. The offering was made and Brahmaputra Infrastructure issued equity shares smoothly.

However, the companies may issue a share at a price above, equal to or below the par value. This would pose some specific accounting problems in case of joint stock companies. And, we will grapple about the same.

### 6.6 SHARES AT A PREMIUM

When the shares are issued at a price higher than the par value, the amount received in excess of the par value is considered a premium. The difference between the issue price and the par value is the premium. There are no restrictions on the issue of shares at a premium, but Section 52 of the Companies Act, 2013, places certain restrictions on the application of share premium.

Jubilant Foodworks Limited is the franchisee for two international brands for India, Domino's Pizza and Dunkin Doughnuts. It had entered the capital markets with a public issue of ₹ 329 crore by way of issuing each $₹ 10$ equity share priced at $₹ 145$. The proceeds funded its loan pre-payments and general purposes. On similar lines, Eros International Media Limited entered the capital market with an initial public issue of ₹ 350 crore, each ₹ 10 equity share priced at $₹ 175$. The main reason for this issue was to acquire and co-produce Indian films, including primarily Hindi, Tamil and other regional language films.

As a rule, the amount received as premium has to be credited to a separate account called the 'securities premium account', and the company can use it for:

1. Issuing un-issued shares as fully paid bonus shares to the members.
2. Writing off the preliminary expenses of the company.
3. Writing off any expenses of, or any commission paid or any discount allowed on any issue of shares or debentures of the company.
4. Payment of any premium payable, on the redemption of any redeemable preference shares, or of any debentures of the company.
5. Purchase of its own shares or securities

In many countries, the additional price paid over and above the face value is known as "Additional Paid-in Capital".

### 6.7 SHARES AT A DISCOUNT

As per Section 53 of the Companies Act, 2013, a company cannot issue any shares at discount except "sweat equity shares". ${ }^{11}$ Equity shares issued by a company to its directors or employees at a steep discount or for small consideration, other than cash, for providing their human capital, know-how or such value additions, by whatever name are known as sweat equity shares. Any other type of shares issued at discount will be void. Following rules are to be followed for issue of sweat equity shares at discount:

1. They are authorized by a special resolution passed by the company.

[^28]2. Such resolution specifies the number of shares, the current market price, consideration if any, and the class of directors or employees to whom such equity shares are issued.
3. At least one year has elapsed since the date on which the company was entitled to commence its business.
4. In case the shares are listed with a recognized stock exchange the rules prescribed by the Securities and Exchange Board of India (SEBI) also needs to be followed
Further, for all issue of shares, the Companies Act, 2013, provides for "Calls in Advance" by the shareholders. If the AoA permits and the Board of Directors think fit, the company may receive from its shareholders, the amount remaining unpaid on equity shares, even if the amount has not been called up. The company can pay interest on such advance payment, as agreed by the Board and members paying the sum, subject to a maximum of 12 per cent per annum.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(c) A share's book value is the price for which a person could buy or sell a share of the share.
(d) The Share Premium Account is a capital reserve and the Profit and Loss Account is a revenue reserve.

### 6.8 FORFEITURE OF SHARES

When the shareholders, to whom shares have been allotted, fail to pay on demand, any money due on such shares, the directors may, as provided for in the articles and in the Companies Act, proceed to forfeit such shares. The effect of forfeiture is that the names of such defaulting shareholders are removed from the register of members of the company. The company forfeits the amount already paid in by such shareholders.

The directors of the company, without any restriction, can reissue the forfeited shares, except that the price charged should not be less than the amount that was in arrears when the shares were forfeited. We provide two examples of the same. Riba Textiles Limited, a Haryana based company, had informed BSE that the Board of Directors of the Company at its meeting held in July had taken a decision to: Reissue of 10,86,500 Equity Shares of ₹10 each out of 17,62,769 Unsubscribed Forfeited Equity Shares to the promoters as well as to the non-promoters for cash at a premium of $₹ 22$ per share. ${ }^{12}$ This price was the reissue price of forfeited shares to all shareholders on proportionate basis. Similarly, Neuland Laboratories Limited, the Hyderabad-based pharmaceutical company, informed the stock exchanges that its board of directors at a meeting decided to reissue $1,03,276$ forfeited shares to the existing shareholders on a prorata basis to their existing shareholders at the rate of ₹ 100 per share. ${ }^{13}$

### 6.9 ISSUE OF SHARES - ACCOUNTING RECORDS

Accounting records for joint stock companies, though based on the Generally Accepted Accounting Principles, have to be in accordance with the Company Law. See Annexure 6.3 on the OLC to know about

[^29]the SEBI guidelines for the issue of share capital. The recording of the financial transactions relating to the issue of shares, has to follow the sequence prescribed by the law.

For the purpose of understanding the accounting entries easily, let us divide the transactions into three categories, viz., accounting entries on: (a) issue of shares, (b) allotment of shares, and (c) making calls for the balance payment of the allotted equity shares. The journal entries that will be required to record these transactions are discussed ahead.

### 6.9.1 Journal Entries on Issue of Shares

On receipt of share applications, along with the application money, the following entry is posted:
Bank
Share Application
(Narration: Being the amount of application money received on

## (Cr.)

$\qquad$ shares at

$$
₹ \ldots \quad \text { per share) }
$$

Money is collected by the banks on behalf of the company and is kept in a separate account opened for the purpose. When there are different classes of shares issued, the share application account will be titled accordingly and separate accounts will be kept for the different classes of securities.

We know that the application money received is a part of the total share capital of the company, so this amount is transferred to the share capital account when the directors allot the shares, by way of the following journal entry:

Share application
Share capital
(Dr)
(Cr.)
(Narration: Being the amount of application money transferred to the Share capital account)
In some cases, the directors do not allot any shares to some applicants. In this case, the application money is required to be returned and the journal entry supporting this transaction becomes:

Share Application
(Dr)
Bank Account
(Cr.)
(Narration: Being the excess of application money returned back to the applicants who have not been allotted any shares)
Let us now consider the above entries by way of an example.

## Illustration 6.1

Lakhpat Rai Company Limited issued a prospectus inviting applications for $1,00,000$ shares of $₹_{10}$ each, for which $₹_{2}$ per share is required to be paid with the application. The company received applications for $1,10,000$ shares, alongwith the application money. The directors of the company decide to allot shares to applicants applying for $1,00,000$ shares and return the money to the applicants who have not been allotted any shares. The following journal entries are passed for the said transactions:
Bank
(Dr)
2,20,000
Share Application
(Cr.)

$$
2,20,000
$$

(Narration: Being the amount of application money received on $1,10,000$ shares at $₹ 2$ per share)
Share application
(Dr)
2,00,000
Share capital
(Cr.) 2,00,000
(Narration: Being the amount of application money transferred to Share capital account)

> Share Application (Dr) Bank Account (Nr) 20,000 not allotted any shares)

### 6.9.2 Journal Entries on Allotment of Shares

The company sends allotment letters to the applicants who have been allotted the shares. With the allotment letter, the allotment money becomes due and the entry required to be passed is:
Share Allotment
$\left.\begin{array}{l}\text { Share Capital } \\ \text { (Being amount due on ____ } \\ \text { Shares at } ₹ \ldots \\ \text { (Cr) }\end{array}\right)$

On receipt of the allotment money from the equity shareholders, we pass the same entry that is passed for a receipt of money that is,

Bank Account
Share Allotment
(Being amount received on allotment of
(Dr)
(Cr)
$\qquad$ shares)


To know more on "How is Share Issue Expenses Treated?" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/544

We continue with the same example of Lakhpat Rai Company. If the amount payable on allotment is ₹ 5 per share, then the journal entry becomes

| Share Allotment (Dr) | $5,00,000$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Share Capital |  | (Cr) |  | $5,00,000$ |

(Being amount due on $1,00,000$ Shares at ₹ 5 per share)

| Bank Account (Dr) | $5,00,000$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Share Allotment |  | (Cr) |  | $5,00,000$ |

(Being amount received on allotment of $1,00,000$ Shares)

### 6.9.3 Journal Entries on Call Payments

Whenever the shareholders are asked to pay the call money, the call money becomes due for payment by the shareholders and we pass the following journal entry.

Share Call
(Dr)
Share Capital
(Being the amount due on call on $\qquad$ shares at $\qquad$ per share)

On receipt of the call money, we pass the following entry:

> Bank Account
(Dr)
Share Call
(Being the amount received on $\qquad$ shares at $\qquad$ (Cr)

Similar entries are passed on subsequent calls. In the ongoing example, if we assume that ₹ 3 is to be paid on account of the first and final call, then we pass the entry for call payment due in the following way:

| Share Call (Dr) | $3,00,000$ |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Share Capital |  | (Cr) | $3,00,000$ |

(Being the amount due on call on $1,00,000$ shares at $₹ 3$ per share)
On receipt of the call money, we pass the following entry

| Bank Account (Dr) | $3,00,000$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Share Call |  | (Cr) | $3,00,000$ |  |

(Being the amount received on $1,00,000$ shares at ₹ 3 per share)
This is how we make the journal entries for the issue of shares. Finally, if we look at all the entries in the above example, we find that the bank account (on the assets side of the balance sheet) has a balance of ₹ $10,00,000$ due to the issue of shares and also, the share capital account (on the liabilities side of the balance sheet) has a balance of ₹ $10,00,000$.

We considered the above simplistic situation to introduce the process of passing the entries only. Rarely will we find such situations because of the fact that it is not necessary that every person pays the full money as and when the amount is due. This type of situation gives rise to the concepts of: (1) Calls in arrear and (2) Calls in advance.

1. Calls in Arrear: Calls in arrear indicate the amount of called up money, which has not been received in full. All such unpaid amounts are transferred to the calls in arrears account at the end of the accounting year and this account is shown as a deduction from the paid up capital. If there is a provision in the articles of association of the company, the company can charge a nominal interest from the shareholders who have not paid such arrears. In case no rate is mentioned in Articles of Association, interest is charged at $10 \%$ per annum.
2. Calls in Advance: Calls in advance indicate the amount which is received from the shareholders before the calls are made. The balance of calls in advance for the period is shown separately in the balance sheet, under the called up and paid up capital of the company. The rate of interest payable on the calls in advance is prescribed by the articles of association of the company. As per the Companies Act, 2013, in the absence of clause in Articles of Association, interest is payable at $12 \%$ per annum.

It is important to note that interest on calls in arrear as well as calls in advance, to be credited or debited, as the case may be, to the profit and loss account of the company for the period.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(e) The rate of interest payable on the calls in advance is prescribed by the articles of association of the company.
(f) The board of directors of the company must pass a resolution for the forfeiture of the shares.

## Illustration 6.2

Suppose Munger Laddu Company Limited issued 1,000 shares of ₹ 10 each. The payment for these shares is made in the following manner

| $01-01-20 X_{7}$ | $₹_{2}$ per share (on application) |
| :--- | :--- |
| $01-03-20 X_{7}$ | ₹6 per share (on allotment) |
| $01-05-20 X_{7}$ | ₹2 per share (on first and final call) |

Rakesh, to whom 100 shares had been issued, paid the amount of call money on 31-12-20 $X_{7}$ and Srimannarayana, to whom 200 shares had been issued, paid the first call money along with the allotment money. We will pass the journal entries ignoring the interest factor, for the above equity shares issued. Assume interest is payable at $12 \%$ on calls in advance and charged at 10\% for calls in arrears.

We know that the application money has been received in full and so, the journal entries for the receipt and transfer of the application money to the share capital account, would be similar to the entries that we have discussed earlier:

| 01-01-20X7 | Bank Account | (Dr) |  | 2,000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share Application account |  | (Cr) |  | 2,000 |
|  | (Being amount of application money received on 1,000 shares) |  |  |  |  |
|  | Share Application account |  |  | 2,000 |  |
|  | Share Capital Account |  | (Cr) |  | 2,000 |
|  | (Being amount of application money transferred to share capital) |  |  |  |  |
| 01-03-20X7 | Share Allotment Account | (Dr) |  | 6,000 |  |
|  | Share capital Account |  | (Cr) |  | 6,000 |
|  | (Being amount of allotment money due on 1,000 shares at ₹ 6 per share) |  |  |  |  |
|  | Bank Account | (Dr) |  | 6,400 |  |
|  | Share Allotment Account |  | (Cr) |  | 6,000 |
|  | Calls in Advance Account |  | (Cr) |  | 400 |
|  | (Being amount of money rec first call money from Sriman |  | share <br> ved in | ₹6 per sha vance on 200 | allotm res at |
| 01-05-20X7 | Share Call Account |  |  | 2,000 |  |
|  | Share Capital Account |  | (Cr) |  | 2,000 |
|  | (Being amount of first call due on 1,000 shares at ₹2 per share) |  |  |  |  |
|  | Bank Account | (Dr) |  | 1,400 |  |
|  | Calls in Advance Account |  |  | 400 |  |
|  | Share Call Account |  | (Cr) |  | 1,800 |
|  | (Being amount of call money received from holder of 700 shares. The advance given by |  |  |  |  |
|  | Srimannarayana on his part of 200 shares at ₹2 per share being adjusted and the amount on account of Rakesh yet to be received) |  |  |  |  |
|  | Interest on calls in advance | (Dr) |  | 8 |  |
|  | Bank Account |  | (Cr) |  | 8 |
|  | (Being interest paid on calls |  | the c | money receiv | with allo |

Bank Account (Dr)

$213 \quad$|  |  |
| ---: | ---: |
|  | 200 |
| 13 |  |

(Cr)
(Cr)
13
(Being the amount of money due on call and interest on arrear received from Rakesh)

### 6.9.4 Forfeiture of Shares and their Re-issue

If the amount is not paid by any shareholder as and when the amount is due, the directors of the company are empowered, by the articles of association of the company, to forfeit the shares. However, this is done only after issuing a 14 days' valid notice to the shareholder who has not paid the amount due. The board of directors of the company must pass a resolution for the forfeiture of the shares.

On forfeiture of the shares, the name of the shareholder who has not paid the amount is struck off from the register of members and the amount received till date on such shares, is forfeited by the company.

The accounting entries for a forfeiture of shares can be understood by the following example.
Santoshi Andrews was holding 100 shares of ₹ 10 each, of Bhuva Tea Limited. He had paid ₹ 3 on application and ₹ 5 on allotment, but failed to pay the first and final call of ₹ 2 per share. The company forfeited these shares after passing a valid resolution by the board of directors of the company. The company passes the following entry

| Share capital account | (Dr) | 1,000 |  |
| :--- | :--- | :--- | :--- |
| Share first \& final call account |  | $(\mathrm{Cr})$ | 200 |
| Shares forfeiture account | $(\mathrm{Cr})$ | 800 |  |

(Being 100 shares forfeited on account of non-payment of first and final call of ₹ 2 per share. The amount already paid on these 100 shares at ₹ 8 per equity share has been forfeited pursuant to the forfeiture)

The forfeited shares can be re-issued by the company at par, premium or discount. But till these shares are re-issued, the balance in the forfeiture account is shown in the balance sheet under the liabilities side, as a part of the paid up capital. The gain on re-issue of these shares is a capital gain in nature. Therefore, the amount of profit is transferred to the Capital Reserve Account (see, Section 2.14.1 for clarity on reserve accounts). Suppose, in the above example, the shares forfeited of Santosh Andrews are re-issued by the company at ₹ 10 per share. Here, the company is earning a profit of ₹ 800 (the credit balance in the shares forfeiture account), which shall be transferred to the Capital Reserve Account.

If the reissue is at a discount, such discount should not exceed the amount originally paid up on such shares (that is, the balance is the forfeited shares account). The entries would be

$$
\begin{array}{ll}
\text { Bank (face value less discount allowed) } & \text { (Dr) } \\
\text { Discount on reissue of forfeited shares } & \text { (Dr) } \\
\text { Share capital (face value of shares) }
\end{array}
$$

Transfer to the forfeited shares account will write off the discount on the 'reissue of forfeited shares account'.

Forfeited shares account
Discount on reissue of forfeited shares
(Dr)
(Cr.)

After the reissue of the forfeited shares and adjusting for any discounts allowed on such reissue, the balance remaining in the forfeited shares account, if any, will be transferred to the capital reserves.

Forfeited shares account
(Dr)
Capital reserves
(Cr.)

Readers can observe that the profit earned herein due to reissue of shares in not due to a company's day-to-day operations and hence, the profit earned is not treated as a 'revenue reserve' but transferred to 'capital reserves'.

### 6.10 LEGAL REQUIREMENTS AS TO COMPANY ACCOUNTS

 Generalize the legal requirements as to company accountsIn every country, the relevant regulations specify the minimum requirements as to the book of accounts to be kept by the company. In India, Section 128 of the Companies Act, 2013, lists these minimum requirements. Every company shall keep proper books of account at its registered office, with respect to:

- All sums of money received and expended by the company and the matters in respect of which the receipt and expenditure take place;
- All sales and purchases of goods by the company;
- The assets and liabilities of the company; and
- In the case of a company pertaining to any class of companies engaged in production, processing, manufacturing or mining activities, such particulars relating to utilization of material or labor or to other items of cost as may be prescribed, if such class of companies is required by the Central Government to include such particulars in the books of account (say, a firm manufacturing specific items related to the Central Bank).


## SPOTLTGHT 6.1

## Interesting Query

Can the Board of Directors of a company decide to prepare the balance sheet and profit and loss account for a financial year exceeding 12 months?

The Companies Act, 2013, states that the period for which the profit and loss account is prepared shall be referred to as a financial year. As per Section 2(41) of the Companies Act, 2013, a "financial year would mean the period ending on $31^{\text {st }}$ day of March every year. However, where a company has been incorporated after $1^{\text {st }}$ day of January of a year, the period ending on $31^{\text {st }}$ March of the following year would be the financial year for that company. So, the Board of Directors may decide to prepare the financial statements for a financial year only in the first year of its incorporation, if it is incorporated after $1^{\text {st }}$ January of a year but before $31^{\text {st }}$ March.

The books of account of every company, relating to a period of not less than eight financial years immediately preceding the relevant financial year, together with the vouchers relevant to any entry in such books of account, shall be preserved in good order. The books of accounts may be maintained in electronic form. The books of accounts must be kept on accrual basis and according to double entry system and must give a true and fair view of the state of affairs of the company. The books of account and other books and papers of every company shall be open to inspection during business hours: (a) by
the Registrar, or (b) by such officer of the government as may be authorized by the Central Government in this behalf.

At every annual general meeting of a company held, the board of directors of the company shall lay before the company its financial statements as per the Companies Act, 2013. Financial statements in case of a joint stock company consist of:

- Balance sheet,
- Profit and loss account (in case of non-profit organization, it would be 'income and expenditure account'),
- Cash flow statement, and
- Statement of changes in equity (if applicable).


## SPOTLTGHT 6.2

## Approval of the Accounts

The Companies Act, 2013, makes it compulsory for every limited company to prepare a profit and loss account and a balance sheet every year. For the companies which do not carry on the business for profit (such as, educational institutions, charitable trusts, welfare organizations, and other not-for-profit institutions), an income and expenditure account may be prepared in lieu of the profit and loss account.

The financial statements must be approved by the Board of Directors before they are signed by or on behalf of the Board of Directors by the persons authorized under the Act. The Directors responsibility statement and Auditors report should form part of the financial statements before they are approved at the annual general meeting (AGM). Section 129(2) makes it mandatory to lay the financial statements of the financial year in each AGM of the company.

### 6.10.1 Form and Contents of Financial Statements

As explained at the start of the previous section, every country, based on its business environment and other factors, even defines the broad form and content of the financial statements in order to give a true view of the state of affairs of the company. The form of presentation in India, of the balance sheet is set out in Part I of Schedule III of Companies Act, 2013, with due regard to the general instructions for the preparation of a balance sheet under the heading 'notes' at the end of the schedule. Similarly, every profit and loss account of a company shall give a true and fair view of the company for the financial year and comply with the requirements of Part II of Schedule III of the Act. ${ }^{14}$

Every balance sheet and profit and loss account of a company shall be signed on behalf of the board of directors, by the chairperson of the company where he is authorized by the Board or by two directors of which one shall be managing director in the company, the Chief Financial Officer and the company secretary of the company wherever they are appointed. The board of directors shall approve these financial statements before they are signed on behalf of the board, and they are submitted to the auditors for their report thereon. The profit and loss account is usually annexed to the balance sheet and the auditor's report (including supplementary reports, if any) shall be attached thereto.

[^30]The essential parts of Schedule III, Part III and Part I of the Act are given in Section 6.12, which provide the detailed requirements for the Balance Sheet, Profit and Loss Account and explanations thereto, respectively.

### 6.11 DISTRIBUTION OF PROFITS IN CASE OF COMPANIES

There are two types of dividend payments by a company, final dividend and interim dividend. Final dividend is paid at the end of an accounting period and is based on the performance of the company during the whole of the accounting period. In a scenario wherein a company is performing exceedingly well, a company can announce dividends during the accounting period, which is known as 'interim dividend'.

No dividend shall be declared or paid by a company for any financial year except out of the profits of the company after providing for depreciation for that year; or out of the profits of the company for any previous financial year or years arrived at after providing for depreciation remaining undistributed, or out of both, or out of money provided by the Central Government or a state government for the payment of dividend in pursuance of a guarantee given by that government. No dividend shall be payable except in cash.

The provisions in the Companies Act relating to dividend payment have been framed in such a way that a company retains some profits for the rainy day and does not fritter away the past and current profits by way of current dividends. Having ensured this, it does not want to micromanage the company affairs and hence, has left the company to decide the path for its accumulated profits.

Section 173 clearly contemplates that after the end of the accounting year, Annual General Meeting (AGM) of shareholders should devote itself, among other things, to consideration of accounts and its concomitant declaration of dividend. This dividend is popularly known as final dividend. The regulations for final dividend are stringent. Within five days of the declaration of dividend, the amount has to be deposited in a separate bank account. ${ }^{15}$ Once the amount is deposited in a separate account, final dividend cannot be revoked.

As per Section 123(2), the Board of Directors may declare interim dividend during any financial year out of the surplus in the profit and loss account and out of the profits of the financial year in which the interim dividend is sought to be declared. Interim dividend is to be treated similar to final dividend. In other words, within five days of the declaration of dividend, the amount has to be deposited in a separate bank account.

## SPOTLTGH 6.3

## Why Company's Provide for Tax Provisions?

It is a normal practice for companies to create income tax provisions anticipating future revenues which may accrue and charge it in its accounting books. This would result in affecting the profitability for a particular period. When the revenue doesn't accrue as per company's expectations, it reverses the "tax buffer" so created by reversing in its books.

[^31]
## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) A final dividend for the year is shown in both the profit and loss account and the balance sheet.
(h) External Commercial Borrowings (ECB) are made for long-term investments often in fixed assets.

## Illustration 6.3

Loyola Real Estate Limited offered 10,000 ordinary shares of ₹ 10 each to the public. The amount was to be collected as follows:

| On application | ₹ 2.50 |
| :--- | :--- |
| On allotment | ₹ 2.50 |
| First call | ₹ 2.50 |
| Second and final call | ₹ 2.50 |

The company received applications for 20,000 shares. The following table gives the number of applications and the shares applied for:

Loyola Real Estate Limited: Details of Subscription

| No. of applicants | No. of shares applied for |
| :---: | :---: |
| 50 | 100 each |
| 20 | 150 each |
| 10 | 200 each |
| 10 | 500 each |
| 5 | 1,000 each |

The Board of Directors of the company decided to make the allotment as follows:

Loyola Real Estate Limited: Allotment Pattern

| No. of shares applied for | No. of shares to be allotted |
| :---: | :--- |
| 100 | All the shares applied for |
| 150 | 2 shares for 3 applied for |
| 200 | 1 share for 2 applied for |
| 500 | 1 share for 5 applied for |
| 1,000 | 1 share for 5 applied for |

One of the shareholders, Ashis Pani, who had applied for 150 shares, defaulted on the payment of the allotment money and subsequent calls. The rest of the money payable by the shareholders were duly received. The Board of

Directors decided to forfeit the shares allotted to Ashis Pani and reissue the same to $\operatorname{Dr} \operatorname{TK}$ Banerjee, at a discount of $₹_{1}$ per share. Show the journal and ledger accounts in the books of the company, and the balance sheet after all the transactions are completed.

Listing out a summary of the transactions, as shown in the table below, could make our job easier:

Loyola Real Estate Limited: Summary of Transactions

|  |  |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of applicants | 50 | 20 | 10 | 10 | 5 | 95 |
| Number of shares applied by respective applicants | 100 | 150 | 200 | 500 | 1000 | - |
| Total number of applications applied | 5,000 | 3,000 | 2,000 | 5,000 | 5,000 | 20,000 |
| Total amount received on application @ 2.5 | 12,500 | 7,500 | 5,000 | 12,500 | 12,500 | 50,000 |
| Number of shares allotted to respective applicants | 100 | 100 | 100 | 100 | 200 | - |
| Total number of applications approved | 5,000 | 2,000 | 1,000 | 1,000 | 1,000 | 10,000 |
| Amount accepted for application | 12,500 | 5,000 | 2,500 | 2,500 | 2,500 | 25,000 |
| Allotment money payable | 12,500 | 5,000 | 2,500 | 2,500 | 2,500 | 25,000 |
| First call payable | 12,500 | 5,000 | 2,500 | 2,500 | 2,500 | 25,000 |
| Second call payable | 12,500 | 5,000 | 2,500 | 2,500 | 2,500 | 25,000 |
| Further amount payable on equity shares allotted | 37,500 | 15,000 | 7,500 | 7,500 | 7,500 | 75,000 |
| Excess of money received over application (to adjust) | - | 2,500 | 2,500 | 10,000 | 10,000 | - |
| Amount to be returned to applicants | - | - | - | 2,500 | 2,500 | 5,000 |

The suggested journal entries are shown below (readers are suggested to fill the narration in the gaps provided):

Loyola Real Estate Limited: Journal Entries

| Date Journal Entry | Dr (₹) | Cr. (₹) |
| :---: | :---: | :---: |
| Bank | 50,000 |  |
| Share Application |  | 50,000 |
| Share application 50,000 | 50,000 |  |
| Share capital |  | 25,000 |
| Excess application money received |  | 20,000 |
| Bank |  | 5,000 |
| Share allotment | 25,000 |  |
| Share capital |  | 25,000 |
| Bank | 14,875 |  |
| Excess application money received | 10,000 |  |
| Allotment in arrears | 125 |  |
| Share allotment |  | 25,000 |
| Share first call | 25,000 |  |
| Share capital |  | 25,000 |
|  |  | (Con |


| Bank <br> Calls in arrears <br> Excess application money received <br> Share first call | $\begin{array}{r} 19,750 \\ 250 \\ 5,000 \end{array}$ | $25,000$ |
| :---: | :---: | :---: |
| Share second call Share capital | $25,000$ | 25,000 |
| Bank <br> Calls in arrears <br> Excess application money received Share second call | $\begin{array}{r} 19,750 \\ 250 \\ 5,000 \end{array}$ | 25,000 |
| Share capital <br> Calls in arrears <br> Allotment in arrears <br> Forfeited shares | 1,000 | $\begin{aligned} & 500 \\ & 125 \\ & 375 \end{aligned}$ |
| Bank <br> Discount on reissue of forfeited shares Share capital | $\begin{aligned} & 900 \\ & 100 \end{aligned}$ | 1,000 |
| Forfeited shares <br> Discount on reissue <br> Capital reserve | 375 | 100 275 |

The T account for cash and bank balance would be as follows:
Loyola Real Estate Limited: Bank T-Account

| Bank Account |  |  | Cr. |
| :--- | ---: | :--- | ---: |
|  | Dr. |  | 5,000 |
| Share application | 50,000 | Share application | 100,275 |
| Share allotment | 14,875 | Balance |  |
| Share first call | 19,750 |  |  |
| Share second call | 19,750 |  | 105,275 |
| Share capital | 900 |  |  |
|  | 105,275 |  |  |

The implication on the balance sheet would be as follows:
Loyola Real Estate Limited

| Balance Sheet |  |  |  |
| :--- | :--- | :--- | :--- |
| Assets | 1,00,275 |  |  |
|  | Share capital |  |  |
|  | 10,000 shares of $₹_{10}$ each | $1,00,000$ |  |
|  | Capital reserve | 275 |  |
|  |  | $1,00,275$ |  |

### 6.12 COMPANY LAW REQUIREMENTS

## Recognize other financial information, its disclosure and linkage with balance sheet

The Companies Act requires that the Board shall lay before the company financial statements for the financial year, at every annual general meeting (before its equity shareholders). It lays down elaborate requirements as to the disclosure and presentation of a company's accounts. We reproduce below a summary of the essential requirements as contained in Schedule III of the Indian Companies Act, 2013, to let you know and understand the regulatory necessities involved.
Schedule III has been prescribed by the Government for preparing the Balance Sheet and Profit and Loss account of the companies. The schedule sets out the minimum requirements for disclosure on the face of the Balance Sheet, and the statement of Profit and Loss and notes. As discussed in Section 2.15, it prescribes a vertical format for presentation of balance sheet. Thus, a company will not have option to use horizontal format for presentation of financial statements. The following is a sample format of the same.

## Form of Balance Sheet

...... Limited
Balance Sheet as at ...
(Rupees in $\qquad$

| Particulars | Note No. | As at the end of Current Financial Year | As at the end of Previous Financial Year |
| :---: | :---: | :---: | :---: |
| I. EQUITY AND LIABILITIES |  |  |  |
| (1) Shareholder's Funds |  |  |  |
| (a) Share Capital | 1 | - | - |
| (b) Reserves and Surplus | 2 | - | - |
| (c) Money received against Share Warrants |  | - | - |
| (2) Share Application Money pending allotment |  | - | - |
| (3) Non-Current Liabilities |  |  |  |
| (a) Long-Term Borrowings | 3 | - | - |
| (b) Deferred Tax Liabilities (Net) |  | - | - |
| (c) Other Long Term Liabilities | 4 | - | - |
| (d) Long-Term Provisions | 5 | - | - |
| (4) Current Liabilities |  |  |  |
| (a) Short-Term Borrowings | 6 | - | - |
| (b) Trade Payables |  | - | - |
| (c) Other Current Liabilities | 7 | - | - |
| (d) Short-Term Provisions | 8 | - | - |
| TOTAL |  | - | - |

(Contd.)

| II. ASSETS |  |  |  |
| :---: | :---: | :---: | :---: |
| (1) Non-Current Assets |  |  |  |
| (a) Fixed Assets |  |  |  |
| (i) Tangible Assets | 9 | - | - |
| (ii) Intangible Assets | 10 | - | - |
| (iii) Capital work-in-progress |  | - | - |
| (iv) Intangible assets under development |  | - | - |
| (b) Non-Current Investments | 11 | - | - |
| (c) Deferred Tax Assets (Net) |  | - | - |
| (d) Long-Term Loans and Advances | 12 | - | - |
| (e) Other Non-Current Assets | 13 | - | - |
| (2) Current Assets |  |  |  |
| (a) Current Investments | 14 | - | - |
| (b) Inventories | 15 | - | - |
| (c) Trade Receivables | 16 | - | - |
| (d) Cash and Cash Equivalents | 17 | - | - |
| (e) Short-Term Loans and Advances | 18 | - | - |
| (f) Other Current Assets | 19 | - | - |
| TOTAL |  | - | - |


| NOTE \# 2 | As at the end of Current Financial Year | As at the end of Current Financial Year |
| :---: | :---: | :---: |
| Reserves and Surplus <br> (a) Capital Reserve |  |  |
| As per the last Balance Sheet | - | - |
| Addition during the year | - | - |
|  | - | - |
| (b) Securities Premium |  |  |
| As per the last Balance Sheet | - | - |
| Addition during the year | - | - |
|  | - | - |
| (c) Surplus i.e. Balance in the Statement of Profit and Loss |  |  |
| As per the last Balance Sheet | - | - |
| Addition during the year | - | - |
| Allocations \& Appropriations |  |  |
| Transfer to Reserves | - | - |
|  | - | - |

## NOTE \# 14

Current Investments<br>Investments in Equity Instruments<br>Investments in Preference Shares<br>Investments in Government or Trust Securities<br>Investments in Debentures/ Bonds<br>Investments in Mutual Funds<br>Investments in Partnership Firms<br>Other Investments (specify nature)

* Under each classification, following details shall be given:
- Name of Body Corporate (also indicating whether it is subsidiary/associate/JV/ Special Purpose Entities)
- Nature and Extent of Investment so made (showing separately investments that are partly paid)
* For Investments in capital of Partnership firms, following details shall be given:
- Name of the Partnership Firm.
- Names of all Partners, Total Capital \& share of each Partner.
* Further disclosures required:
- Basis of valuation of Individual Investments
- Aggregate amount of Quoted Investments \& Market Value thereof.
- Aggregate amount of Unquoted Investments.
- Aggregate provision for diminution in the value of Investments.


## SPOTLGMT 6.4

## When can an Asset or a Liability be Classified as Current or Non-current?

The revised Schedule VI says that an asset shall be classified as current when it satisfies any of the following criteria:
(a) it is expected to be realized in, or is intended for sale or consumption in, the company's normal operating cycle;
(b) it is primarily held for the purpose of being traded;
(c) it is expected to be realized within 12 months after the reporting date; or
(d) it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.
All other assets shall be classified as non-current. An operating cycle is the time taken between the acquisition of assets for processing and their realization in cash or cash equivalents - where the normal operating cycle cannot be identified, it is assumed to have a duration of 12 months.

A liability shall be classified as current when it satisfies any of the following criteria:
(a) it is expected to be settled in the company's normal operating cycle;
(b) it is held primarily for the purpose of being traded;
(c) it is due to be settled within 12 months after the reporting date; or
(d) the company does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.
All other liabilities shall be classified as non-current.
We reproduce a summary of the essential requirements of the Companies Act, 2013, for the Profit and Loss Statement, to give you a feel of the regulatory necessities involved.

Name of the Company...
Profit and loss statement for the year ended ...
(Rupees in...)

|  | Particulars | Note No. | Figures as at the end of current reporting period | Figures as at the end of the previous reporting period |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |
| 1 | Revenue from operations |  | xxx | XXX |
| II | Other income |  | xxx | xxx |
| III | Total Revenue ( $\mathrm{+}$ II) |  | xxx | xxx |
| IV | Expenses: <br> Cost of materials consumed <br> Purchases of Stock-in-Trade <br> Changes in inventories of finished goods, work-in- <br> progress and Stock-in-Trade <br> Employee benefits expense/Finance costs <br> Depreciation and amortization expense <br> Other expenses <br> Total expenses |  | Xxx <br> Xxx <br> Xxx <br> xxx | Xxx <br> Xxx <br> Xxx <br> Xxx |
| V | Profit before exceptional and extraordinary items and tax (III - IV) |  | XXX | XXX |
| VI | Exceptional items |  | xxx | xxx |
| VII | Profit before extraordinary items and tax (V-VI) |  | xxx | xxx |
| VIII | Extraordinary items |  | xxx | XXX |
| IX | Profit before tax (VII - VIII) |  | xxx | xxx |
| X | Tax expense: <br> (1) Current tax <br> (2) Deferred tax |  | $\begin{aligned} & \text { Xxx } \\ & \text { Xxx } \end{aligned}$ | $\begin{aligned} & \text { Xxx } \\ & \text { Xxx } \end{aligned}$ |
| XI | Profit (Loss) for the period from continuing operations (VII - VIII) |  | xxx | xxx |
| XII | Profit/(loss) from discontinuing operations |  | xxx | xxx |
| XIII | Tax expense of discontinuing operations |  | xxx | xxx |
| XIV | Profit/(loss) from Discontinuing operations (after tax) (XII - XIII) |  | XXX | XXX |

(Contd.)
(Contd.)

| XV | Profit (Loss) for the period (XI + XIV) | $x x x$ |  |
| :--- | :--- | :--- | :--- |
| XVI | Earnings per equity share: |  |  |
|  | (1) Basic | Xxx | Xxx |
|  | (2) Diluted |  | xxx |

## SPOTLTGHT 6.5

## Depreciation Related Issues

In India, depreciation for fixed assets is allowed and computed under Section 32 of Income Tax Act, 1961. Depreciation is also envisaged under the Schedule II of Companies Act, 2013. Accordingly, Income Tax rate and its effect on assets are important factors in determining corporate income and its tax. You may refer to Section 3.9 for further discussions.

### 6.13 CLASSIFICATION OF EQUITY RESERVES

A reserve is the amount taken out (or separated) from the profit for some purpose. The main reserve is clearly the accumulated balance on the profit and loss account, which represents the company's retained profits. In Section 2.14.3, we had touched upon this issue at a conceptual level. The term 'reserve fund' means a fund that is earmarked for some purpose other than the normal business activities. This is the reason why an amount used for business operations is usually not termed as a reserve. Reserves can be broadly classified into two types -'Revenue Reserves' and 'Capital Reserves'.

### 6.13.1 Revenue Reserves

Reserves created out of the revenue profits of a business are called 'revenue reserves'. Revenue profits arise due to the operational or business activities of an entity. These reserves can be distributed among the shareholders as dividends. To give other stakeholders confidence in funding the business, the directors may decide to transfer some of the profit and loss account balance to general reserve. Revenue reserves can be classified into two types - General reserves and Specific reserves.
General Reserves: General reserves are created to add strength to the financial position of the business. These types of reserves ensure the availability of funds to meet future expenses or contingencies. By creating general reserves, the directors are communicating their intention not to use those funds for distribution of dividends. This voluntary procedure does not change the fact that the general reserves are created out of distributable profits, and so also are all other types of revenue reserves that could be used for payment of dividends. Hence, these are also termed as free reserves. Examples of general reserves names visible in Indian balance sheets include 'general reserves', 'undistributed balance of the profit and loss account', or 'the contingency reserve'.
Specific Reserves: These are created for some specific purpose. Once the specific purpose is attained, the balance in this reserve (can be, and) is usually transferred to the general reserve. Examples of
specific reserves include investment allowance reserve, debentures redemption reserve (reserve created for redemption of debentures) and dividend equalization reserve (reserve created to maintain a minimum dividend rate). Debenture redemption reserve is fairly visible among Indian corporates.

### 6.13.2 Capital Reserves

Reserves created out of capital profits are known as 'capital reserves'. Capital profits arise due to nonoperational activities of a business. Profit on sale of fixed assets, premium on issue of shares/debentures, and revaluation of fixed assets/liabilities are all examples of capital reserves.

Since these are not earned, capital reserves are unavailable for distribution among the shareholders as dividends. However, from a regulatory perspective, in a famous international case, it was held that the profit on sale of fixed assets can be distributed among the shareholders as dividend, if the following conditions are satisfied:

- The articles of the company do not prohibit such a distribution.
- Profits on sale of fixed assets have been actually realised in cash.
- There remains some profit after revaluation of all the assets and liabilities of the company.

Section 52(2) entails the liberty by which the securities premium reserve account can be used in the following different ways:

- in writing off the expenses of any issue of securities of the company;
- in writing off the preliminary expenses of the company;
- in providing for the redemption of any preference shares or debentures of the company;
- towards the issue of bonus shares of the company; or
- for the purchase of its own shares or other securities.


### 6.14 BUYBACK OF SHARES

When funds are needed, companies can and do issue securities (shares or debentures). In such a case, when a company has excess of securities as per the management's own assessment, then they should be legally allowed to buy back their shares (and say, cancel it out). And yes, that is feasible.

Buyback is a corporate action in which a company repurchases its own shares from the existing shareholders. Often it is undertaken by companies possessing huge cash reserve, but has no new capital expenditure projects to invest in. Few companies also use buyback for reasons such as, a tool to change their capital structure (i.e., debt-to-equity ratio); to improve the earnings per share of the company; and such.

Buyback of shares can be done using either the revenue reserves as per the latest audited balance sheet or the capital reserves permitted to doing the same (such as, securities premium account). The conditions for buyback include authorization by the company's articles of association. Shareholders meeting must pass a special resolution authorizing buyback (for larger quantities) or by a resolution passed at the Board meeting (for smaller quantities). Other conditions include that the company must physically destroy such shares so bought back within 7 days of last date of completion of buyback.

Where a company purchases its own shares out of free reserves or securities premium account, a sum equal to the nominal value of shares so purchased shall be transferred to the capital redemption reserve. Buyback of shares are typically done: (a) from the existing shareholders on a proportionate basis; and (b) from the open market.

### 6.14.1 Accounting Treatment for Buyback of Shares

Compared to the journal entries for issue of shares, accounting treatment for buyback of shares are relatively simplistic. We provide the journal entries below without providing the explanations therein.

The accounting entry on buying back the shares using bank balance would be:

$$
\begin{aligned}
& \text { Equity shareholders A/c (Dr) XXXX } \\
& \text { Bank A/c (Cr) }
\end{aligned}
$$

After purchase, the journal entry for cancellation of shares brought back at premium would be as follows:

| Equity share capital A/c (Dr) | XXXX |  |
| :--- | :--- | :--- |
| Securities premium A/c (Dr) |  | XXXX |
| Free reserves A/c (Dr) <br> $\quad$ Equity shareholders (Cr) |  |  |
|  |  | XXXXXX |

Accounting entry for transfer of nominal value of shares purchased out of free reserves/securities premium to capital redemption reserve would be:

$$
\begin{array}{ll}
\text { Securities premium A/c (Dr) } & \text { XXXX } \\
\text { Free reserves A/c (Dr) } & \text { XXXX }
\end{array}
$$

Capital redemption reserve ( Cr )
XXXX
Finally, the accounting entry for paying the buy-back expenses incurred and transferring them to the profit and loss account would be:
$\begin{array}{ccc}\begin{array}{c}\text { Buyback expenses A/c (Dr) } \\ \text { Bank A/c (Cr) }\end{array} & \text { XXXX } & \\ \begin{array}{c}\text { Profit and Loss A/c (Dr) } \\ \text { Buyback expenses (Cr) }\end{array} & \text { XXXX } & \\ \text { XXXX } \\ & & \text { XXXX }\end{array}$

## Illustration 6.4

Vinay George, CEO of George Turbines Limited decided to buyback the shares of his company ensuring a better usage of existing funds. The summarized balance sheet of George Turbines Ltd. as on 31.03.20X6 is given:

| Assets | Amount (₹ In 'ooo) | Liabilities | Amount (₹ In 'ooo) |
| :--- | :---: | :--- | :---: |
| Fixed Assets | 2,700 | Share Capital: |  |
| Non-trade Investments | 300 | Equity shares of ₹ 10 each | 800 |
| Inventory | 600 | Securities Premium | 100 |
| Trade Receivables | 360 | General Reserve | 780 |
| Cash and Bank | $\mathbf{1 6 0}$ | Profit and Loss Account | $\mathbf{1 2 0}$ |
|  |  | $10 \%$ Cumulative Debentures | $\mathbf{2 , 0 0 0}$ |
|  |  | Trade Payables | $\mathbf{3 2 0}$ |
|  | $\mathbf{4 , 1 2 0}$ |  | $\mathbf{4 , 1 2 0}$ |

George Turbiines Ltd. buysback 16,000 shares at ${ }^{2} 20$ per share. And, for this purpose, the company sold its non-trade investments for ₹3,20,000.

## Solution

We pass the necessary journal entries as follows:

| Particulars | Amount ( $\overline{\text { ( }}$ ) | Amount (₹) |
| :---: | :---: | :---: |
| 1. Bank $A / C$ (Dr) <br> Non-trade Investments (Cr) <br> Profit and Loss $\mathrm{A} / \mathrm{c}(\mathrm{Cr})$ <br> (Being investments sold at profit) | 3,20,000 | $\begin{array}{r} 3,00,000 \\ 20,000 \end{array}$ |
| 2. Equity Shareholders $\mathrm{A} / \mathrm{C}$ (Dr) <br> Bank A/c (Cr) <br> (Being 16,000 shares @ ₹ 20 bought back) | 3,20,000 | 3,20,000 |
| 3. Equity Share Capital A/C (Dr) <br> Securities Premium A/c (Dr) <br> Equity Shareholders A/c (Cr) <br> (Being shares bought back on premium cancelled) | $\begin{aligned} & 1,60,000 \\ & 1,60,000 \end{aligned}$ | 3,20,000 |
| 4. Securities Premium A/c (Dr) <br> General Reserve A/c (Dr) <br> Capital Redemption Reserve A/C (Cr) <br> (Being premium paid on buy-back of shares adjusted) | $\begin{array}{r} 1,00,000 \\ 60,000 \end{array}$ | 1,60,000 |
| 5. General Reserve A/c (Dr) <br> Capital Redemption Reserve A/c (Cr) <br> (Being nominal value of shares bought back transferred to Capital redemption reserve) | 1,60,000 | 1,60,000 |

### 6.15 CONSOLIDATED FINANCIAL STATEMENTS

Use the rules for preparing consolidated financial statements

If a company wants to enter a new country to operate, what are the options? Typically, it boils to one of the three: a branch or a representative office or a subsidiary. Annexure 6.4 on the OLC provides a side-by-side comparison of the three incorporation options for companies intending to set up and operate in a typical developed country. Tax and compliance to regulatory requirements varies depending on the type of entity chosen. Currently, given the growing advantage, the subsidiary route of expansion - both geographical and productwise has become popular. Naturally, this results in accounting issues and complexities for the parent entity, especially as the number of business affiliate-concerns (including subsidiaries or joint ventures and such) increase and the dealings between them increase.

As a large number of companies in the modern business create their own subsidiaries - primarily to reduce the bankruptcy risk involved. In such a case, provisions of the company law relating to the accounts of a holding company and its subsidiary do apply. The holding company shall prepare consolidated financial statements (CFS) by aggregating all items of assets, liabilities, income, expenses, etc. All subsidiaries, associates and joint ventures (whether Indian or foreign) will be covered under CFS, also known as Group Accounts. Many view consolidated financial statements as nothing more than line-by-line addition of numbers. But when complex group structures are involved (such as, Tata Steel), accounting teams have a real task on hand to put together accurate statements on time. ${ }^{16}$

Further, a holding company shall attach to its balance sheet some of the documents relating to each of its subsidiaries, like balance sheet and profit and loss account, report of Board of Directors, report of auditors of the subsidiary, a statement of holding company's interest in the subsidiary, statement showing the changes in holding company's interest (in some cases). We touch upon key discussion issues to know the preparation of CFS in the following paragraphs.

### 6.15.1 Regulations on Presentation of Consolidated Statements ${ }^{17}$

The Companies Act, 2013, mandates all companies, to whom it is applicable, to prepare CFS. The Act mandates CFS preparation even when a company has only associates or joint ventures. A 'subsidiary' is stated as an entity where the holding company controls more than $50 \%$ of the total share capital (even indirectly) or it controls the board members composition.
'Control' not only just includes the ability to control directly the management decisions but also indirect control of management decisions say by way of shareholders agreements. Further, an 'associate company' definition includes a joint venture, wherein another company has significant influence by controlling at least $20 \%$ of its share capital or decisions under an agreement.

The financial statements used in consolidation should have the same reporting date. If that is not practical for one or more subsidiaries, there should be adjustments for the effect of significant transactions or other events occurring in between the reporting dates. Nevertheless the difference in reporting dates should not exceed six months.

### 6.15.2 Rules for Preparation of Consolidated Accounts

CFS should be prepared using uniform accounting policies for transactions and other events in similar circumstances. If that is not practically feasible, the fact should be disclosed, together with the proportions of the items to which different accounting policies have been applied. Thus, if an organization has subsidiaries in foreign countries that follow different accounting principles, then the local accounting teams need to be made well-versed with Indian GAAP.

Indian Accountnig Standards (Ind AS) has significantly changed the accounting and reporting of transactions by corporate India by bringing on the books many fundamental transactions which escaped earlier Indian GAAP. For instance, Annexure 6.5 on the OLC mentions the way Ind AS has fully redefined the related party deals accounting norms. Hence, it makes sense to update oneself with the basic rules for preparation of consolidated accounts:
(a) Intra group balances under the account of "Investment in Subsidiary" in the books of holding company have to be cancelled out from the share capital of the subsidiary company.
(b) Minority interest has to be calculated. When the holding company owns all the shares of the subsidiary company, the latter is a wholly-owned subsidiary. However, when the subsidiary company is not a wholly-owned subsidiary, the minority shareholders' interest in the subsidiary company's net assets has to be computed.
(c) Goodwill or Capital Reserve on consolidated is computed. When the value of investment in subsidiary in the holding company's balance sheet is more than the book value of the net assets acquired, the difference represents goodwill. Conversely, if the value is less, then it is called 'capital reserve'.

[^32](d) Intra group transactions are to be cancelled out. Sometimes the member companies of the group may have transactions among themselves, such as loan advances, debt in respect of supply of goods by one company to the other company of the same group, debentures issued by one company held by another, etc. Such intra group transactions are eliminated while consolidating accounts.
(e) Intra group unrealized profits/losses included in unsold goods are to be eliminated. If the goods are sold by one company to the other, i.e., by the holding company to its subsidiary or vice-versa at a profit and a part of it remains unsold at the end of the year, then the unrealized profit/loss and such goods remaining unsold have to be eliminated. In other words, the unrealized profits should be deducted from the revenues of the company selling these goods and also from the value of inventory of the company buying them.


To know more on "What to Expect in Joint Stock Company Accounts in Financial Crisis?" scan the QR code, or visit:
http://qrcode.flipick. com/index.php/545
(f) A similar adjustment (same as above) is required to be made when a fixed asset is transferred at a profit/loss.

## Illustration 6.5

## Utterly Butterly Delicious

Utterly Limited holds $88 \%$ shares of Butterly Limited. It had given a loan of ₹ 1 million to Butterly Ltd. Now, the balance sheet of Utterly Ltd (holding company) will show "Loans and Advances (Butterly Ltd)" worth ₹ 1 million and the "Unsecured Loans" in the balance sheet of Butterly Ltd will show ₹ 1 million taken from Utterly Ltd.

Since, the transaction is within the group and no money has moved outside the group, in the eyes of the group this transaction will have no significance, and hence this should be eliminated while preparing the consolidated statement.

| Extract from Balance Sheet of Utterly Ltd (Standalone) | All figures in ₹ ‘000 |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Liabilities | Assets |  |  |  |  |
| Long-term Borrowings (Unsecured Loans) |  | Loans and Advances |  |  |  |
| Others | ₹ 9,000 | Butterly Ltd | ₹ 1,000 |  |  |
|  |  | Others | ₹8,000 |  |  |

Extract from Balance Sheet of Butterly Ltd.
All figures in ₹ ‘000

| Liabilities |  | Assets |  |
| :--- | :--- | :--- | :--- |
| Long-term Borrowings (Unsecured Loans) |  | Loans and Advances |  |
| Utterly Ltd | $₹_{1,000}$ | Others | $₹_{7,000}$ |
| Others | $₹_{4,500}$ |  |  |


| Extract from Consolidated Balance Sheet of Utterly Ltd | All figures in ₹ 00 |  |  |
| :--- | :--- | :--- | :--- |
| Liabilities |  | Assets |  |
| Long-term Borrowings (Unsecured Loans) |  | Loans and Advances |  |
| Others | $₹_{10,000}$ | Others | $₹_{15,000}$ |
| $(9,000+1,000)$ | $(8,000+7,000)$ |  |  |

## SPOTLTGHT 6.6

## Audit Norms for Joint Stock Companies

Companies Act, 2013, mandates the rotation of external auditors after the specified time period. It also includes an enabling provision for joint audits. Further, it restricts any other services, such as consulting from the same auditor without approval by the Board of Directors or the Audit Committee. Additionally, the auditor is also restricted from providing certain specific services.

The 2013 Act has given signal to Ind AS, which are standards converged with International Financial Reporting Standards. In respect of listed companies, it provides for a mandatory requirement to have secretarial audit.

The 2013 Act now moves a step forward and mandates the appointment of an internal auditor who shall either be a chartered accountant or a cost accountant, or such other professionals as may be decided by the Board to conduct internal audit of the functions and activities of the company.

## Activity 6

Fill in the blanks with appropriate word/words:
(a) Profit on sale of fixed assets and revaluation of fixed assets/liabilities are all examples of $\qquad$ reserves.
(b) The $\qquad$ regulates the management of company's affairs, including meetings, election of directors and relations between members and the company, and members within.
(c) That part of the company's profit that is distributed among the shareholders for the shares held by them is known as $\qquad$ _.
(d) A document that invites the public to subscribe shares and debentures of the company, so that the company may collect the funds needed is known as $\qquad$ _.
(e) The capital raised by a company by way of issuing shares is known as $\qquad$ .
(f) The unit into which the capital of an incorporated company is divided is known as $\qquad$ _.
(g) The different types of share capital are $\qquad$ , $\qquad$ , $\qquad$
$\qquad$ and
$\qquad$ _.
(h) Incorporation fees of a company are based on $\qquad$ capital sum.
(i) Commercial paper is used to meet $\qquad$ needs.

## SOLVED PROBLEMS

## Solved Problem 6.1

Dhanush Sports Goods Ltd issued $2,00,000$ shares of ₹ 100 each, at a premium of ₹ 20 per share, to Shyamlal, on which he paid ₹ 40 on application, but failed to pay ₹40 (including premium) on allotment. On a subsequent failure to pay the first and final call of ₹ 40 , his shares were forfeited. Pass the necessary journal entries.

## Solution

When a company issues shares at premium, whether for cash or otherwise, a sum equal to the aggregate amount or value of the premiums on those shares, shall be transferred to an account, to be called the 'Securities Premium Account'.

Accordingly, when the allotment money becomes due, we have to pass the following journal entry in the case of shares issued to Shyamlal:

Dhanush Sports Goods Ltd

| Share Allotment A/c | (Dr) $80,00,000$ |  |
| :--- | :--- | :--- |
| Share Capital | (Cr) $40,00,000$ |  |
| Securities Premium A/c | (Cr) $40,00,000$ |  |
| (Being amount due on $2,00,000$ shares at $₹ 40$ per share including premium of $₹ 20$ per share) |  |  |

Upon the forfeiture of the shares due to non-payment of the allotment and call money, we shall pass the following entry:

Dhanush Sports Goods Ltd

| Share Capital A/c $(2,00,000 \times 100)$ | (Dr) $2,00,00,000$ |
| :--- | :--- |
| Securities Premium A/c $(2,00,000 \times 20)$ | $(\mathrm{Dr}) 40,00,000$ |
| Share Allotment A/c $(2,00,000 \times 40)$ | $(\mathrm{Cr}) 80,00,000$ |
| Share Call A/c $(2,00,000 \times 40)$ | $(\mathrm{Cr}) 80,00,000$ |
| Share Forfeiture A/c $(2,00,000 \times 40)$ | $(\mathrm{Cr}) 80,00,000$ |
| (Being $2,00,000$ shares of Shyamlal forfeited on which only the application money was received $)$ |  |

The securities premium account is debited here because Dhanush Sports Goods Ltd. did not receive any money on account of securities premium from Shyamlal.

In Problem 6.1, if Shyamlal had paid both the application and the allotment money, but failed to pay the call money, what would be the journal entries?

In the given case, Dhanush Sports Goods Ltd. receives the application and allotment money from Shyamlal as and when they were due. We know that the Companies Act strictly prohibits the use of the securities premium account for purposes other than those mentioned initially, therefore, the entry relating to the reversal of the securities premium account will not be passed. In other words, only the amount received on account of share application and the allotment (excluding premium) shall be transferred to the shares forfeiture account. The entry in this case will be:

## Dhanush Sports Goods Ltd

| Share Capital A/c $(2,00,000 \times 100)$ | (Dr) $2,00,00,000$ |  |
| :--- | ---: | ---: |
| Share Call A/c $(2,00,000 \times 40)$ |  | (Cr) $80,00,000$ |
| Share Forfeiture A/c $(2,00,000 \times 60)$ | (Cr) $1,20,00,000$ |  |
| (Being $2,00,000$ shares forfeited due to non-payment of call money) |  |  |

The students, at this stage, should know that the share call account was credited in both the above two illustrations because MP Co. Ltd. had passed the entry as and when the money was payable on the part of Shyamlal. The entry for making the call money due, under both the illustrations, was:

## Dhanush Sports Goods Ltd

| Share Call A/c $(2,00,000 \times 40)$ | (Dr) $80,00,000$ |  |
| :--- | :--- | :--- |
| Share Capital A/c $(2,00,000 \times 40)$ |  | (Cr) $80,00,000$ |

For the same reason, the share capital account is debited with the full amount of share, that is, ₹ 100 per share.

## Solved Problem 6.2

Aab-e hayat Drinks Ltd. issued $1,00,000$ shares of ₹ 10 each, at a premium of ₹ 4 per share, payable as ₹6 (including premium) on application, ₹5 on allotment, ₹ 2 on first call and ₹ 1 on the final call.

Arman, to whom 5,000 shares were allotted, failed to pay the allotment money and on a subsequent failure to pay the call money, his shares were forfeited. The forfeited shares were subsequently re-issued as fully paid for ₹ 45,000 .

Pass the entries for the forfeiture and re-issue of the shares, in the books of Aab-e hayat Drinks Ltd., assuming that the company has passed all the entries for the money due from Arman.

## Solution

We note the entries for the shares forfeiture, re-issue of forfeited shares (including the loss on shares re-issue), and transfer to capital reserve account.
(a) Aab-e hayat Drinks Limited

| Share Capital A/c $(5,000 \times 10)$ | (Dr) 50,000 |
| :--- | :---: |
| Share Allotment A/c $(5,000 \times 5)$ | (Cr) 25,000 |
| Share First Call A/c $(5,000 \times 2)$ | (Cr) 10,000 |
| Share Final Call A/c $(5,000 \times 1)$ | (Cr) 5,000 |
| Share Forfeiture A/c $(5,000 \times 2)$ | (Cr) 10,000 |
| (Being shares forfeited) |  |

(b) Aab-e hayat Drinks Limited

| Bank A/c | (Dr) 45,000 |  |
| :--- | :--- | :--- |
| Share Forfeiture A/c | (Dr) 5,000 |  |
| Share Capital A/c | (Cr) 50,000 |  |
| (Being shares forfeited were re-issued and the loss on re-issue was adjusted with the <br> Shares Forfeiture account) |  |  |

(c) Aab-e hayat Drinks Limited

| Share Forfeiture $\mathrm{A} / \mathrm{c}$ | (Dr) 5,000 |
| :--- | :--- |
| Capital Reserve $\mathrm{A} / \mathrm{c}$ | (Cr) 5,000 |
| (Being the balance in Shares Forfeiture account transferred to Capital Reserve Account) |  |

(Please note that the amount received on account of the securities premium account was not forfeited. In other words, the reversal of the entry in the premium account is not required on a forfeiture of shares)

## SUMMARY

Due to the large number of investors and the large amounts of money involved, joint stock companies have to comply with a large number of regulatory restrictions. Though, many may view this as a cumbersome exercise involving unnecessary paper work, its non-existence would make the whole system extremely susceptible to frequent scams and fraudulent means of duping investors. Considering that the economy of most of the countries depends on these joint stock companies in many ways, we should appreciate the importance of rules, regulations and broad norms created as part of the Companies Act, Registrar of Companies (ROC), SEBI, and other institutional regulators.

In this chapter, we also appreciated the various types of capital, steps involved in raising of each type of capital, the process of allocating and recording the same in the books of the business entity. We learnt that raising capital from both public and private investors either by way of shares (equity or preference) or debt instruments (debentures or bonds) or even hybrid securities (optional convertibles and warrants) needs compliance to norms and ensuring error free accounting entries. The process of rewarding or repaying them by way of dividends or interest (or even redemptions) of some of these instruments also involves adherences to severe institutional diktats.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Articles of Association
- Called-up Capital
- Convertible Instruments
- Debentures
- Dividend
- Guarantee Companies
- Issued Capital
- Joint Stock Company
- Limited Liability
- Memorandum of Association
- Nominal Share Capital
- Paid-up Capital
- Prospectus
- Share Capital
- Shares
- Statutory Corporation
- Warrants


## EXERCISES

## Multiple Choice Questions

1. On 1st April, Gaana.com Limited was registered as a public company with a capital of $₹ 1$ crore. How many maximum shareholders can Gaana.com have on 1st April?

LO 1 EASY
(a) 200
(b) 1 crore
(c) 7
(d) 10 Lakh
2. Lawreshwar Polymers Limited is a Jaipur-based public company listed on the Bombay Stock Exchange with an issued and fully paid up share capital of ₹ 13.6 crore (each share of ₹ 10 par value). Theoretically, the maximum number of members Lawreshwar Polymers can have as its shareholders would be equal to:

LO 2 EASY
(a) 13.6 crore shareholders
(b) 13.6 lakh shareholders
(c) 1.36 crore shareholders
(d) None of the above
3. A newly formed company has had a successful first year of operations and posted net income on its books. The accounting records reflect this fact because:

LO 4 EASY
(a) The Retained Earnings account has a credit balance.
(b) Expenses are closed to the Income Summary with a credit.
(c) The Retained Earnings account has a debit balance.
(d) Sales Revenue is closed to the Income Summary with a debit.
4. Preference shareholders enjoy certain advantages over equity shareholders. Which of the following is not an advantage of owning a preference share?

LO 2 MEDIUM
(a) No voting rights.
(b) Dividend amounts are fixed for preference shares.
(c) The right to receive assets before equity shareholders if liquidation occurs.
(d) The right to receive dividends before equity shareholders.
5. Hardik Company Limited is facing losses from its business. It is bought by Bahujan Company Limited. At the time of takeover, Bahujan Company finds that after deducting assets at its market value from liabilities, Hardik Company has just ₹ 37 lakh. So, Bahujan Company pays all Hardik Company's external liabilities and takes over all its assets. Now, Bahujan Company has to return the share capital of Hardik Company. Suppose, there are 10 shareholders of Hardik Company owning it equally, then:

LO 5 MEDIUM
(a) Bahujan Company will pay only ₹ 3.70 lakh per shareholder.
(b) Hardik Company will raise a voucher in favour of its shareholders.
(c) Hardik Company shareholders will have voting rights in the Bahujan Company.
(d) All of the above.

## True or False

1. Memorandum of Association determines the constitution for the internal management of the company.

LO 1 EASY
2. If a share is sold by a company for $₹ 3.75$ and its nominal value is $₹ 1$, the difference of $₹ 2.75$ is known as a share premium.

LO 4 EASY
3. Dividend to equity shareholders is always cumulative.

LO 4 EASY
4. The forfeited shares can be re-issued by the company at par, premium or discount.

LO 3 MEDIUM
5. Calls in arrear indicate the amount of called up money, which has not been received in full.

LO 4 MEDIUM

## Discussion Questions

1. Refer to the Chapter Opener on the InterGlobe Aviation's Initial Public Offering. Briefly comment on the wide range of questions raised there.

LO 3,4 DIFFICULT
2. What is 'share capital'? Explain the various types of share capital found in a balance sheet.

LO 2,4 MEDIUM
3. Where do you show the following items in a Balance Sheet?
(a) Securities Premium Account
(b) Authorized Share Capital
(c) Capital Reserve
(d) Redeemable Cumulative Debentures
(e) Cumulative Preference Shares
4. There is always an independent authority verifying a company's account, namely, the external auditor for every company! In such a scenario, why should there be a regulator for monitoring of public offerings from capital markets?

LO 3 MEDIUM
5. In the recent past, has there been any change in SEBI regulations for raising finance by issuing equity shares? If yes, please list the essential ones out (hint: visit www.sebi.gov.in and answer this question).

LO 3 DIFFICULT
6. If you were to raise money from equity markets to start a firm, mention a brief list of the things you would need to comply with as per the local regulations.

LO 3 DIFFICULT

## Numerical Problems

1. The following balances are extracted from the books of Banshi Lal Power Cables Ltd.
(a) Authorized Capital ₹ 1 crore divided into Equity Shares of ₹ 2 each.
(b) Issued and fully paid up 2 lakh equity shares of ₹ 2 each (including 25,000 equity shares issued during the year).
(c) Fixed Assets: Expenditure up to 1 January, 2016
(i) Land and Buildings ₹20 lakh; (b) Machinery ₹10 lakh
(d) Additions during the year-Machinery ₹5.5 lakh
(e) Depreciation:
(i) Machinery ₹2 lakh, and b) Buildings ₹2 lakh.
(f) 12 per cent Debentures ₹ 10 lakh secured by a charge on fixed assets.
(g) A/c payables ₹2 lakh; Reserve Fund ₹5 lakh; Investments at cost ₹5 lakh; (Market Value $₹ 5,25,000)$.
(h) Inventory ₹3 lakh; A/c Receivables ₹5 lakh; Cash at Bank ₹4 lakh; Cash on Hand ₹1 lakh. You are instructed to prepare the Balance Sheet as on 31 December, 2016 according to Schedule III to the Companies Act, 2013.
Based on the above information, you are required to complete the following balance sheet.
Fill the blank portions: LO 4 EASY
Particulars
Amount
I. Equity and Liabilities
2. Shareholder's Funds
a. Share capital

| Authorized : XXX equity shares of ₹ XXX each |  | xxx |
| :---: | :---: | :---: |
| Issued subscribed and paid up: XXX equity shares of ₹ XXX each |  | xxx |
| b. Reserves and Surplus |  |  |
| Reserve Fund | xxx |  |
| Profit and Loss Account | xxx | xxx |
| 2. Non-current liabilities |  |  |
| a. Long-term borrowings 12\% Debentures (Secured by a charge on fixed assets) |  | xxx |
| 3. Current liabilities |  |  |
| Trade payables |  | xxx |
| Total |  | xxx |
| II. Assets |  |  |
| Non-Current Assets |  |  |
| 1. a. Fixed assets |  |  |
| Land and Buildings (at cost) | XXX |  |
| Less: Depreciation | xxx | xxx |
| Machinery (at cost) | xxx |  |
| Add: Addition during the year | xxx |  |
|  | xxx |  |
| Less: Depreciation | xxx | xxx |
| b. Non-Current investments |  |  |
| Investments |  | xxx |
| (Market value xxx) |  |  |
| 2. Current Assets |  |  |
| a. Inventories | xxx |  |
| b. Trade Receivables | xxx |  |
| c. Cash and Cash equivalents | xxx | xxx |
| Total |  | xxx |

Note: a. (c) Few balancing figures / assumptions can be made use of.
2. As a director of Nagaland Trucks Company Limited, you have invited applications for 2,00,000 equity shares of ₹10 each, payable as follows:
On application ₹2 per share;
On allotment ₹3 per share;
On 1st Call ₹3 per share; and
On final call balance amount.
The applications were received for $2,50,000$ equity shares.
Mention the type of subscription. Also list the various alternatives available for allotting these shares.
Suppose all the directors of Nagaland Trucks Company agree to allot the shares in the following way:
Full refund to applicants of 30,000 shares
Full allotment to applicants of $1,60,000$ shares
Allotment of 40,000 shares to applicants of 60,000 shares
All the sums were received as and when due. Pass the necessary journal entries.
3. Vanshika Sinha started a firm, naming it Rangoli Colors Limited, with an authorized capital of $₹ 2,00,000$, with $12 \%$ preference shares of ₹ 100 each and $3,00,000$ equity shares of ₹ 100 each, payable as follows:

LO 2,4 MEDIUM

## Preference shares Equity shares

On application
On allotment
On first call
On final Call
₹25 Per share
₹25 Per share
₹50 Per share
₹25 Per share
₹ 30 Per share
₹20 Per share
₹ 25 Per share

Applications were received for the 12 per cent preference shares in full and $3,20,000$ equity shares. The application of 20,000 shares was rejected. Damayanti, to whom 5,000 equity shares were allotted, failed to pay the allotment money. On a subsequent failure to pay the first call money, his shares were forfeited. All these shares were re-issued to Kartik for ₹ 90 per share, as fully paid. Prepare the journal entries, cashbook and balance sheet of Rangoli Colors Limited.
4. Jai Jawan Jai Kisan Company Limited forfeits $2,00,000$ shares of ₹ 5 each, originally issued at a premium of ₹ 1 per share. The shareholder paid ₹ 2 per share on application but did not pay the allotment money of ₹2 per share (including premium) and call of ₹ 2 per share. Jai Jawan Jai Kisan Company takes credit for the premium as soon as it becomes due. The shares are subsequently reissued at $₹ 5.50$ per share fully paid up.

LO 2,3,4 MEDIUM
The journal entries for the forfeiture of the shares are passed as follows:
By Share capital a/c Dr. ₹10,00,000
By Securities premium a/c Dr. ₹2,00,000

| To share allotment a/c | Cr. | $₹ 4,00,000$ |
| :--- | :--- | :--- |
| To share call a/c | Cr. | $₹ 4,00,000$ |
| To shares forfeited a/c | Cr. | $₹ 4,00,000$ |

Explanation: being forfeiture of $2,00,000$ shares on account of non-payment of allotment and call moneys.
Based on the above, please answer the questions:
(i) Pass the journal entry for reissue of forfeited shares (explanation provided would be: being reissue of forfeited shares).
(ii) Pass the journal entry for transfer of profit on shares forfeited (explanation provided would be: being transfer of profit on shares forfeited to ... reserve (please fill the blank therein)
5. The following is the balance sheet of Robin's Utthappam Ltd. as on $31^{\text {st }}$ March, 2016:

| Assets | ₹ | Liabilities |  |
| :--- | ---: | :--- | ---: |
| Goodwill | 50,000 | 20,000 Equity shares of $₹ 10$ each | $20,00,000$ |
| Land and buildings | $1,50,000$ | $24 \%$ Debentures | $5,00,000$ |
| Plant and machinery | $5,00,000$ | Outstanding debentures interest | $1,20,000$ |
| Furniture | 80,000 | Creditors | $3,00,000$ |
| Inventory | $2,70,000$ |  |  |
| Trade receivables | 60,000 |  |  |

(Contd.)

| Cash at bank | 70,000 |
| :--- | ---: |
| Preliminary expenses | 20,000 |
| Profit and Loss A/c | $17,20,000$ |
|  | $29,20,000$ |

All the stakeholders meet and it is settled that the company would be worthless being liquidated at that point in time. Thus, each stakeholder foregoes some benefits/claims from their side. The following scheme of reconstruction is executed:
Equity shares are reduced by ₹ 9 per share.
Debenture holders agree to forego outstanding debenture interest with a belief that it is better to take something back rather than go empty.
Creditors are given the option to either accept $50 \%$ of their claim in cash in full settlement or to convert their claim into equity shares of ₹ 1 each. Creditors for ₹ 1 lakh opt for shares in satisfaction of their claims.
To make payment to creditors opting for cash payment and to augment working capital, the company issues 8 lakh equity shares of ₹ 1 each at par, the entire amount being payable along with applications. The issue was fully subscribed by promoters.
Land and buildings are revalued at ₹ 3 lakh whereas plant and machinery is to be written down to ₹ 2.5 lakh. A provision amounting to ₹5,000 is to be made for doubtful debts. Pass journal entries and draft the company's balance sheet immediately after the reconstruction.
Based on the above information on Robin's Utthappa Ltd., you are required to make adjustments to the balance sheet and prepare the balances again. Based on the same, please fill the following blanks:

LO 4 DIFFICULT
(i) The issued and subscribed share capital of the company would be $\qquad$
(ii) The long-term liabilities would be having the following $\qquad$
(iii) The current liabilities and provisions of the company would be
(iv) The fixed assets of the company would be equal to $\qquad$
(v) The bank balance of the company would be $\qquad$
(vi) The current assets of the company would be $\qquad$

## MINI CASES

## Case 6.1 Ram Traders, a Joint Stock Company

## LO 2,4 EASY

This case is in continuation of Mini Case 2.6 of Chapter 2, on Ram Traders Limited and his chilli business. Please present the financial statements of Ram Traders as a Joint Stock Company with relevant notes to accounts as per Schedule III of the Companies Act, 2013.

## Case 6.2 Forfeiture of Shares at Arati Drugs

LO 2 EASY
Arati Drugs Limited wanted to extend its production operations in the northern region of India. For this, the directors issued a prospectus inviting applications for $50,00,000$ equity shares of $₹ 10$ each, at a premium of ₹ 1 per share. The amount payable was ₹ 4 on application, ₹ 5 (including premium) on allotment and the balance on the first and final call.

The equity issue was fully subscribed and all the money due was received, except in the case of Rajesh, to whom 500 shares were allotted, and Brajesh, to whom 2,000 shares were allotted. Both failed to pay the allotment money. The directors of the company were empowered by the articles of the company to forfeit the shares on which any amount remained unpaid. Accordingly, the directors sent a 14 days' notice to Rajesh and Brajesh asking them to pay the amount due, along with the accrued interest. After the expiry of the notice period, the board of directors passed a resolution to forfeit all the shares on which the amount was not paid.
Pass the journal entries under the two cases:
(a) Shares were forfeited upon non-payment of allotment money.
(b) Shares were forfeited upon non-payment of call money only.

Also, suggest the maximum discount that can be allowed on a reissue of the forfeited shares under both the above cases, by the directors of Arati Drugs Limited.

## Case 6.3 Changing Share Capital at Pioneer Distilleries ${ }^{18}$

## LO 4 MEDIUM

Pioneer Distilleries Limited manufacturing ethanol and industrial alcohol is listed on the Bombay Stock Exchange. For the accounting year ended $31^{\text {st }}$ March of 2010, Pioneer Distilleries came out with its annual report.

The following are excerpts forming part of the schedules related to shareholders funds portion of Pioneer Distilleries Limited. ${ }^{19}$

(Contd.)

[^33]| (30,000 shares issued on 06.05.2009 @ ₹10 each) |  |  |
| :---: | :---: | :---: |
| (8,00,000 shares issued on 10.12.2009 @ ₹10 each) |  |  |
| (Forfeited Shares (62,400 @ ₹5 each)) | 3,12,000 | 3,12,000 |
|  | 13,26,94,000 | 14,13,94,000 |
| SCHEDULE 2: RESERVES AND SURPLUS |  |  |
| Share Premium Account ( 30,000 shares issued on 06.05.2009 premium @ ₹43 each) \& (8,00,000 shares issued on 10.12.2009 premium @ ₹ 26.10 each) | 4,12,46,600 | 1,90,76,600 |
| Capital Reserve | 1,87,06,527 | 90,74,000 |
| General Reserve | 1,79,05,755 | 1,79,05,755 |
| Capital Redemption Reserve | 1,70,00,000 | 0 |
| Profit and Loss Account Balance | 15,87,38,945 | 16,07,83,580 |
|  | 25,35,97,827 | 20,68,39,935 |

Source: Pioneer Distilleries Limited. Investor Relation, Pioneer Distilleries, Web, 1 Feb. 2016.
**Note: 2010 is the Current year and 2009 is the previous year.
"On $24^{\text {th }}$ July 2010, remaining 8,00,000 convertible warrants of ₹ 10 each issued at a premium of $₹ 26.10$ per warrant were converted into $8,00,000$ equity shares of ₹ 10 each, resulting in increase in the paid-up capital of the Company from ₹ $12,58,82,000$ to ₹ $13,38,82,000$."
Based on the above information, please answer the following questions:
(a) During FY2009 and 2010, please explain the differences between the Pioneer Distilleries authorized capital, issued and subscribed capital and paid-up capital.
(b) Was there any issue of shares by Pioneer Distilleries Limited during the two financial years? If so, please prepare journal entries related to same? Make relevant assumptions.
(c) Is the company expanding or declining? Is the company having any future plans related to the share capital? Discuss and take a call on the same.
(d) Why has the company created Capital Redemption Reserve?

Case 6.4 Once Upon a Time ... Reliance Industries ${ }^{20}$ LO 2,4 MEDIUM
The Reliance group started growing initially, through an expansion of Reliance Textile Industries Limited. The following are the excerpts forming a part of the balance sheet of Reliance Textile Industries Limited, from its annual report for the financial year ending 1979.

[^34]Schedule ' $A$ ' of Balance Sheet of Reliance Textile Industries Limited

| Share Capita |  | $\begin{gathered} \text { As at } 31^{\text {st }} \text { December, } \\ 1979 \\ ₹ \end{gathered}$ | $\begin{gathered} \text { As at } 31^{\text {st }} \text { December, } \\ 1978 \\ ₹ \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Authorized |  |  |  |
| 1,80,00,000 | Equity Shares of ₹10 each <br> (Previous year : 80,00,000 shares of <br> ₹10 each) | 18,00,00,000 | 8,00,00,000 |
| 1,00,000 | $11 \%$ Cumulative Redeemable Preference shares of ₹100 each | 1,00,00,000 | 1,00,00,000 |
| 10,00,000 | Unclassified Shares of ₹10 each | 1,00,00,000 | 1,00,00,000 |
|  |  | 20,00,00,000 | 10,00,00,000 |
| Issued and Subscribed |  |  |  |
| 75,38,932 | Equity shares of ₹10 each fully paid-up (Of the above, 59,50,000 shares are allotted as fully paid-up, pursuant to a scheme of amalgamation without payments being received in Cash-Previous Year : 59,51,000 Equity Shares of ₹10 each) | 7,53,89,320 | 5,95,11,000 |
| 30,000 | $11 \%$ Cumulative Redeemable Preference shares of ₹100 each fully paid-up (Redeemable at any time after $16^{\text {th }}$ March, 1990 but not later than $15^{\text {th }}$ March, 1993) |  | 00 |
|  |  | 7,83,89,320 | 6,25,11,000 |

## Notes to Schedule ' $A$ '

1. The company had issued and allotted $9,40,000$ equity shares of $₹ 10$ each at par, to financial institutions on their exercising the option during the year to convert twenty percent of their loans into the company's equity capital.
2. The Company had issued and allotted $6,47,832$ right equity shares of $₹ 10$ each, for cash, at a premium of ₹ 15 per share.

Excerpts from Schedule ' $\mathbf{C}$ ' of Balance Sheet of Reliance Textile Industries Limited

|  |  | As at 31 ${ }^{\text {st }}$ December, 1979 |  | As at 31 ${ }^{\text {st }}$ December, 1978 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ₹ | ₹ | $₹$ | ₹ |
| DEBENTURES |  |  |  |  |  |
| 2,464 | $11 \%$ Privately placed Debentures of ₹1000 each fully paid, issued to Unit Trust of India (UTI) redeemable in fourteen half yearly instalments between $30^{\text {th }}$ June 1980 and $31^{\text {st }}$ December, 1986 | 24,64,000 |  | - |  |

(Contd.)

| $1,40,000$ | 11\% Convertible Mortgage <br> Debentures of ₹500 each fully <br> paid | $7,00,00,000$ | - |
| :--- | :--- | :--- | :--- | :--- |
|  | Interest accrued and due | $19,48,359$ | - |
|  |  | $7,44,12,359$ | - |

## Notes to Schedule 'C'

1. Term Loans from Banks are secured by hypothecation of specific items of plant and machinery by way of prior charge in their favor.
2. Privately placed Debentures and the Term Loan from LIC is secured by way of Legal Mortgage in English Form. Term Loans from the above referred financial institutions and deferred payment liabilities guaranteed by banks are secured by a Joint Equitable Mortgage of immovable properties, both present and future, by way of deposit of the Title Deeds and hypothecation of present and future moveable assets of the company. The aforesaid charges shall rank pari-passu without preference of one over the other, subject to a prior charge in favour of the Company's bankers referred to in (1) above and 'Bankers' Goods'.
3. The holders of $1,40,00011 \%$ Convertible Mortgage Debenture of ₹ 500 each have an option to convert $20 \%$ of the nominal value of each Debenture into four Equity shares of ₹ 10 each, credited as fully paid, at a premium of ₹ 15 per share, at any time during 1st October, to 30th November, 1980. In the event of the Company issuing bonus shares prior to Debenture holders exercising their option of conversion, the price of Equity Shares at which the conversion is to be effected shall get reduced in the same ratio of such Bonus Share Capital to the expanded Equity Share Capital. The balance face value of the Debentures after Conversion shall be redeemable in five equal annual installments between 25th October (1987) and 25th October (1991). Equitable Mortgage shall secure the said Debentures, by deposits of Title Deeds of the Company's immovable properties, both present and future, and hypothecation of movable assets. The charge so created shall rank pari-passu with the Legal Mortgage in English Form and Equitable Mortgage referred to in (2) above, subject to the prior charge in favor of the Company's Bankers referred to in (1) above and on 'Bankers' Goods' (Relevant documents are to be executed between the Company and the Trustees).
4. Bridge Loans are secured by hypothecation of moveable assets, but subject to prior charge in respect of 'Bankers' goods' for working capital purpose, and further secured by personal guarantees of some of the Directors.
5. The figures of the privately placed Debentures issued to UTI and Rupee Term Loans from Financial Institutions as at the end of the year, are arrived at after their exercising the option of conversion amounting to ₹94 lakh.


## Case Questions

(a) What are the long notes to the schedule is (below each schedule) trying to convey? Is there anything good or bad about presenting such long notes to schedules?
(b) Was there any issue of shares or debentures during the financial year 1979 by Reliance Textiles? If so, please prepare entries assuming $100 \%$ subscription.
(c) Are the above products novel compared to the existing ways of raising money by a large number of publicly listed firms? Can we conclude that the Reliance Group has been innovative in many ways while raising finance from the capital markets?

## Case 6.5 Learning from ... Deepak Fertilizers <br> LO 2,3,4 DIFFICULT

Deepak Fertilizers and Petrochemicals Corporation Limited (DFPCL) is part of the CK Mehta business group. It is a multi-product portfolio company consisting of chemicals, petrochemicals, fertilizers and other agri-inputs. We present here the excerpts (Schedules 1 to 3 ) forming part of the balance sheet of DFPCL's annual report for the financial year ending 2010.

Excerpts from Schedule '1' of Balance Sheet of Deepak Fertlizers and Petrochemicals Corporation Limited (all figures in ₹ lakh)

|  |  | Current Year | Previous Year |
| :---: | :--- | :---: | :---: |
| Authorized | Equity Shares of ₹10 each |  |  |
| $12,50,00,000$ | Cumulative Redeemable Preference Shares of <br> ₹100 each | 1,000 | 12,500 |
| $10,00,000$ |  | 13,500 | 13,000 |
|  |  |  |  |
| Issued, Subscribed and Paid Up | 8,800 |  |  |
| $8,82,04,943$ | Equity Shares of ₹10 each fully paid up | 8,820 | 8,80 |
|  |  | 8,820 |  |

**Note: 2010 is the Current year and 2009 is the previous year.

## Excerpts from Schedule ' 2 ' of Balance Sheet of Deepak Fertilizers and Petrochemicals Corporation Limited



| General Reserve |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Balance as per last Balance Sheet | 8,010 |  | 7129 |  |
| Less: Forex Loss Adjustment | - |  | 619 |  |
| Add: Transferred from Profit and Loss Account | 1,750 |  | 1,500 |  |
|  |  | 9,760 |  | 8,010 |
| Surplus in Profit and Loss Account | 60,918 | 51,178 |  |  |
|  |  | 84,220 | 71,491 |  |

${ }^{(*)}$ Represents relieflincentive granted by the Government of India by way of refund of $90 \%$ of Customs Duty paid on NP Project imports. This amount will be adjusted against depreciation over the remaining useful life of the fixed assets of the NP Project. (all figures in ₹ lakh)

| Loan Funds - Secured Loans | Current Year | Previous Year |
| :---: | :---: | :---: |
| A. LONG TERM LOANS* |  |  |
| (a) External Commercial Borrowings | 7,636 | 5,579 |
| (b) From Banks | 24,247 | 16,868 |
| B. SHORT-TERM BORROWINGS FROM BANKS C. SECURED NON-CONVERTIBLE DEBENTURES** | - | 7,000 |
| (1) 7.5\% Privately Placed Non-Convertible Debentures | 800 | 1,400 |
| (2) 7.25\% Privately Placed Non-Convertible Debentures | 720 | 1,260 |
| (3) 10.80\% Privately Placed Non-Convertible Debentures | 12,500 | 12,500 |
| (4) 9.75\% Privately Placed Non-Convertible Debentures | 5,000 | - |
| (5) 10.00\% Privately Placed Non-Convertible Debentures | 5,000 | - |
| (6) 8.35\% Privately Placed Non-Convertible Debentures | 5,000 | - |
|  | 29,020 | 15,160 |
| Total Secured Loans | 60,903 | 44,607 |
| UNSECURED LOANS \# |  |  |
| A. Short-Term Loan from Bank | 5,000 | 5,000 |
| B. Buyers Credit | 7,216 | 11,168 |
| Total Unsecured Loans | 12,216 | 16,168 |
|  | 73,119 | 60,775 |

Source: Deepak Fertilisers \& Petrochemicals Corp. Investor Relation, dfpcl, Web, 1 Feb. 2016.
\# Repayable within one year

## Notes:

## A. Long-Term Loans

1. 500 Secured Redeemable Non-Convertible Debentures of the face value of $₹ 10$ lakh each on Private Placement basis aggregating ₹5,000 lakh carrying coupon rate of $9.75 \%$ per annum payable quarterly and redeemable in three equal instalments from 25th November, 2013 to 25th November, 2015.
2. 500 Secured Redeemable Non-Convertible Debentures of the face value of ₹ 10 lakh each on Private Placement basis aggregating ₹ 5,000 lakh carrying coupon rate of $10 \%$ per annum payable quarterly, and redeemable in three equal instalments from 25th November, 2013 to $25^{\text {th }}$ November, 2015.
3. The Rupee Term Loan of $₹ 9,100$ lakh made available from 10th September, 2009, is repayable in 28 quarterly installments of ₹ 325 lakh each commencing from 10th September, 2011, and the last instalment is payable on 10th June, 2018.
4. The Rupee Term Loan of $₹ 3,500$ lakh made available from 8th September, 2009, is repayable in 28 quarterly instalments of ₹ 125 lakh each commencing from 8th September, 2011, and the last instalment is payable on 8th June, 2018.
5. The ECB loan of US $\$ 20$ million is repayable in 27 quarterly instalments of US $\$ 7.15$ lakh each commencing from the first date of disbursement and balance of US $\$ 6.95$ lakh shall be payable as last instalment. The loan is yet to be availed.
6. The ECB loan of US $\$ 25$ million made available from 18th February, 2010, is repayable in 6 equal half-yearly instalments from 31st January, 2014, and last installment is payable on 29th July, 2016.
The above debentures and loans are secured by pari passu first charge on the entire fixed assets pertaining to Technical Ammonium Nitrate (TAN Project), the leasehold rights and interest in Plot Nos. K-7 \& K-8 at MIDC Industrial area, Taloja, Dist. Raigad and the building(s)/structure(s) standing or to be constructed thereon and all fixed plants and machineries installed/to be installed thereon and all movable machineries, equipment and other movable assets of the said project, both present and future, and the equipment, furniture, fixtures and fittings (excluding current assets) along with payment of interest and additional interest on the said loans, debentures, costs, charges, expenses and remuneration of the trustees and all other monies thereto.
7. 500 Secured Redeemable Non-Convertible Debentures of the face value of ₹ 10 lakh each on Private Placement basis aggregating ₹ 5,000 lakh carrying coupon rate of $8.35 \%$ per annum payable quarterly and redeemable in single installment on 9th February, 2013.
The above Debentures are secured by a pari passu first charge on the entire fixed assets pertaining to Ishanya Mall of the Company off Airport Road, Shastri Nagar, Yerawada, Pune, along with interest, additional interest, costs, charges, expenses and remuneration of the Trustees and all other monies thereto.

## B. Short-term Borrowings

Credit facility of ₹ 5,500 lakh repayable within 180 days in one single payment together with interest, costs, charges and expenses is secured by way of deposit and pledge of Fertilizers Subsidy Bonds issued by Government of India, together with the required related transfer documents as applicable in respect thereof duly signed/executed as collateral security for the repayment on demand. The Company has option to avail this facility.

## C. Cash Credit Facilities

Cash credit facilities from banks including Working Capital Demand Loan are secured by :
(a) a first charge by way of hypothecation of stocks of raw materials, finished goods, stock-in-process, consumable stores and book debts of the Company; and
(b) mortgage by deposit of title deeds, such mortgage to always rank subject to, subservient and subordinate to the mortgages, charges and securities that have been already created or may be created hereinafter by the Company in favor of public financial institutions, banks, credit agencies incorporated or constituted in India or abroad or machinery suppliers and/or other persons providing finance for purchase of assets or for purchase of specific items of machinery and equipment under any deferred payment schedule or bills rediscounting scheme.


## Case Questions

(a) Are the debentures secured? What are the covenants mentioned in the issue of these debentures?
(b) What are the covenants attached to short term borrowings?
(c) What were the main changes in the above schedule during the year 2010 ?
(d) Were there any issues of equity shares, preference shares, or debentures during the financial year 2010 by DFPCL? If so, please prepare entries assuming exact subscription, for the above changes in the balance sheet items?
(e) Why is the Special Reserve decreasing whereas all other reserves are either constant or increasing?

## INTERNET ASSIGNMENTS

## Assignment 6.1 Accounting for Joint Stock Companies

On the OLC of this book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online website.
Your sixth assignment would answer the following questions:

1. Please state the key components in the Share Capital portion for the last two years from the latest report. Please comment (within 100 words).
2. In the Share Capital portion, are there any changes in the last year? If yes, please make assumptions to make appropriate accounting journal entries.
3. Mention five biggest items as part of the Reserves \& Surplus with their proportions. Also, identify the Capital Reserves vs Revenue Reserves of the company as mentioned in the annual report (to the extent available). Please comments (within 100 words).
4. As part of its annual report, has the company also presented its consolidated financials? If yes, then state the list of related companies (such as, subsidiaries, joint ventures, sister concerns and such) included in the consolidated financial statements. Give reasons for their inclusion. List the names of related companies (such as, subsidiaries, joint ventures, sister concerns and such investments) that are excluded in the consolidated statements. Mention possible reasons for exclusion.

## Answers

## Answers to the "Let's Check Our Concepts!"

(a) True
(b) False
(c) False
(d) True
(e) True
(f) True
(g) True
(h) True

## Answers to the Activity 6

(a) Capital
(b) Articles of Association
(c) Dividend
(d) Prospectus
(e) Share Capital
(f) Shares
(g) Authorized, Issued, Subscribed, Called-up and Paid-up.
(h) Authorized
(i) Working Capital

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 6.1: Public Vs Private Company - Sneak Preview of Indian Scenario
- Annexure 6.2: Indian Companies Act, 1956 on Board Meetings
- Annexure 6.3: SEBI Guidelines for Issue of Share Capital
- Annexure 6.4: Comparison of Entry Options in a New Country
- Annexure 6.5: Ind AS on related party deals
- Annexure 6.6: Solved Illustration
- Annexure 6.7: Additional Reading Material
- Annexure 6.8: Auxiliary Test Material
- Annexure 6.9: Internet Assignment

Financial Statement Analysis

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Know the usefulness of financial statement analysis
LO 2 Execute common size analysis to interpret information in financial statements
LO 3 Implement Index Based analysis to interpret information in financial statements
LO 4 Use Financial Ratios to aid Financial Analysis
LO 5 Analyze the Financial Statements for effective decision-making

PSU Laggards OR Out-Performers?
A public sector undertaking (PSU) is a state-owned enterprise - with majority owned by either the Union Government of India or any State Government or both. They are further classified as Central Public Sector Enterprises (CPSEs), Public Sector Banks (PSBs) or State Level Public Enterprises (SLPEs).

Despite the new global economic order contributing over 27 percent to India's fiscal budget in 2015 and despite the flak that the PSUs receive, whenever they are compared with their peers in the industry, some champions stand out. Of course, it was not an easy task evaluating the performance of 235 PSUs - four of which also happen to feature in the Fortune 500 list.

Financial performance of an organization, based on the total scores on all financial parameters, is critical for the overall evaluation of any company and Governance Now awards process ensured thrust on the same. The awards research team made good use of the data from the respective annual reports and CMIE Prowess Database to arrive at the scores. The scores thus arrived at were normalised by the research team to make sure that the jury got a clear picture of how well a PSU is performing, given the inherent characteristics of industry, market and time.

And to make sure they use the best industry benchmark, the team decided to adopt Moody's Metrics: Key Financial Ratios by Industries for Global Non-Financial Corporation (editions 2007, 2009, and 2014). This enabled the team to compare the individual PSU scores against their respective industry segment and geographies. Normalization of scores using industry standard helped remove the impact of prevailing conditions of the economy and measures its performance against the benchmarks of the industry at a global scale (for example, performance of oil PSUs was pitted against global benchmarks of the oil industry). Irrespective of the award winners, such intensive award selection process brings many interesting questions to the 'manager' in you, such as:

- What were the parameters chosen for measuring the financials?
- What were the chosen financial ratios for these parameters?
- How were the selected financial ratios computed?
- Why did they decide to adopt Moody's Metrics of Key Financial Ratios by Industries?
- Why did they choose the three stated years $(2007,2009$ and 2014$)$ for measuring success? Why did they ignore the other years?
The questions raised above makes us aware of the need to know more on the financial statement analysis. Our discussion in this chapter provides a few pointers to the above questions.

Source: 'How we selected PSU outliers," Governance Now, 24 Dec 2015, print.

What does a financial accountant say when boarding a train? 'Mind the GAAP'! Jokes apart, almost all the business decision-making involves evaluating the operating performance and the financial condition of a company. This, in turn, involves a careful selection, evaluation, and interpretation of financial data and other pertinent information to assist in evaluating. It would more often involve taking a call on an entity's comparative liquidity position and/or its comparative profitability position - either present or future. This is what analysis of financial statement is all about. The need of which is equally applicable to all key stakeholders - right from large customers (say, to evaluate an entity's ability to provide credit and to decide on the terms of trade) to an employees union leader (say, to decide on the terms of wage revision). So, it becomes imperative for all the stakeholders of a business entity, especially its managers to have rudimentary knowledge about the analysis of financial numbers and to probe their relation with other corporate characteristics.

### 7.1 FINANCIAL STATEMENTS - BASIC RELATIONSHIPS

## Know the usefulness of financial statement analysis

We have seen that the term 'financial statements' refer to the balance sheet, profit and loss account and cash flow statement. Of these, the first two are primary in the sense that they contain the information required for preparing the third one.

### 7.1.1 The Balance Sheet

The balance sheet reveals the financial position of the business in terms of the assets owned and the different claims against these assets held by outsiders and owners. It is also possible to understand this position by looking at it from the point of view of the business entity. The entity, in order to achieve its objectives, has arrived at a decision to apportion the resources and deploy it in fixed assets and in current assets. Similarly, we can also see how the entity raised the resources for the purpose of acquiring the assets. It tells us what proportions of the funds are borrowed on short term, and hence are to be repaid in the near future, what portion of the assets are borrowed on long term, as well as what is the contribution of the owners towards the total financial requirement of the entity. We also know that the funds borrowed on long term, require payment of interest and principal on a regular basis. This information would also help the lender in judging the extent of margin available from the owner(s) investment, as a cushion for their claims against the business assets.

### 7.1.2 The Profit and Loss Account

The profit and loss account summarizes the revenues and expenses of an accounting period. In other words, it gives the cost structure of the business and the relationship of the costs to the revenues. It gives information relating to the margin available on sales.

We must be aware of the fact that the data contained in the financial statements in absolute terms and in isolation, does not provide any meaningful information to the user. The analyst, therefore, tries to compare and relate the data contained in the statements. For example, the revenue as shown by the profit and loss account, is compared against the assets shown in the balance sheet. Since the revenues are earned with the help of these assets, it surely adds more meaning to the revenue figure. Similarly, the profit shown by the profit and loss account may be related to the revenue and assets, so as to see whether the return justifies the risks carried by the owners.

### 7.1.3 Interconnecting Numbers vis-à-vis Stakeholders Perspectives

Converted intelligently using analysis tools, these financial numbers can be used for all kinds of purposes. These include the assessment of the ability of a firm to pay its debts, the evaluation of business and managerial success, and even the statutory regulation of a firm's performance. Not surprisingly, these numbers often become norms and actually affect performance. ${ }^{1}$ For instance, the largest Indian firm, i.e., Reliance Industries' operating performance would be a measure of how well it has used its assets, both tangible and intangible, to produce a return on investment. Hence, it would be keenly watched by shareholders and potential equity investors. Reliance Industries' debenture holders and lenders would look

[^35]at its financial condition to measure its ability to satisfy its obligations, such as payment of interest on its debt in a timely manner. So, the objective of analysis depends on the user. Further instances would be:

- A trade creditor would be more concerned about Reliance Industries purchasing the goods and services on credit (and the specific terms of credit).
- It helps the fixed deposit holders of Reliance Industries in judging its ability to repay the unsecured loans taken from them on time.
- Credit rating agencies, banks, and financial institutions would be keen to understand the company's capital structure, the component of debt, company's track record, its sources of working capital, etc., and thereon use the same to gaze at warning signals.
- A Reliance Industries shareholder would be concerned about their own investment in the company and its performance. Even before purchasing any equity shares, a lot of investors would like to know the company's worth, its past performance vis-à-vis promises, and its future outlook.
- Executives of Reliance Industries would like to know the performance of their peers for the purposes of benchmarking the costs and to determine their pricing policy.
- Union leaders of Reliance Industries (if any) would make use of financial analysis for better understanding of the company financials to decide on their demands and terms on the negotiation table.
We can observe the needs and uses of the Reliance Industries specific financial numbers varies from user to user and, thus, even the tools used for number crunching may vary from hands to hands. Thus, a rich understanding of the key analysis techniques will help in practical decisions, especially in picking the right tools depending upon the space required to be filled. To sum it up, one can say that:
Financial Analysis enables us to gauge the returns and risks, both, present and future and hence ensures in improving decision-making.


## Steps to Analyze Financials

1. Establish the objectives of analysis of the firm (or group of firms)
2. Study the industry, in which the firm (or group of firms) operates, the dynamics therein, and the impact on the present and future on the objective of our analysis under focus
3. Based on the objectives of analysis, decide on the appropriate financial tools. Make use of the appropriate data to compute the required financial ratios and other numbers
4. Know about the firm(s) and their management styles; and take the same into account at the time of making your interpretations
Thus, the resources used for financial analysis would compulsorily include:
(a) Published Financial Statements
(b) Auditors' Report plus Report on Corporate Governance
(c) Report of the Directors plus Management Discussion \& Analysis

### 7.2 RELATION AND COMPARISON OF ACCOUNTING DATA

Accounting data in absolute terms does not provide much meaning. Therefore, all the analysis of accounting data involves comparisons and relations. Whenever one item is expressed in terms of another item, we are stating a 'ratio'. This relationship could be expressed as a fraction or a decimal fraction or an integer. Relations expressed as a ratio, make comparisons simple. A firm earns a net profit of ₹ 2,000 on a sale of ₹ 50,000 . We could express this relationship as $1 / 25$ or 0.04 or $4 \%$ or $1: 25$. All forms indicate the same thing.

## SPOTLTGH゙ 7.1

## "Within an industry, what should a firm be compared with?"

Like human beings, comparison of any company is done - (a) with its past (known as current year vis-à-vis prior years); and/ or (b) with the current year's figures of a peer group, preferably having a similar profile i.e., apples should preferably not be compared with oranges, unless it is necessary; and/or (c) rarely, against an absolute standard (prior decided benchmark including budget).

Any comparison will have to be carefully used in terms of drawing quick interpretations. Any single comparison may not be sufficient to draw valid conclusions. It may be necessary to use a series of comparisons, one supporting the others, so as to enable us to draw reasonably logical conclusions.

It is a common practice to evaluate the trend of the economy and the industry to which the firm belongs, for making more meaningful conclusions from the ratios. We must be aware of the fact that in most cases, there are no standards against which a particular ratio value can be tested. Rather, there are no acceptable or unacceptable ratio values in most cases. A possible way out is to make relative conclusions by comparing the ratios with industry averages. Here again, at best, the conclusions could be 'better than' or 'worse than' or 'average' only. At times, as a short cut, one also tends to make use of the industry figures and averages available with the popular databases (like Bloomberg, CMIE Prowess, ISI Markets Database, and Reuters). ${ }^{2}$

Analysis of financial statements is like solving a puzzle. One should not rush to make expansive conclusions based on one or two clues / pieces of puzzle.

It is also necessary for the analysts to guard themselves against possible pitfalls in comparisons. It is possible that the companies may be following different accounting conventions. For example, say, for valuing inventory, one company makes use of FIFO (First In First Out) method, while the other one makes use of WAC (Weighted Average Cost) method. This would obviously lead to differences in cost of goods sold, even when the quantity used may be the same. Similarly, they could be using different methods of depreciation. Another point for note for the one who is new to number crunching using excel sheets is being aware of the rounding error i.e., a totaling difference that results from rounding off numbers to a convenient number of decimals.

It is also possible to use budgets as a basis of comparison. It gives an insight into the plans and their achievement. For management, this provides an opportunity for evaluating the reasons for a particular performance. The deviations from the budget become useful information in further planning and control of the business. Please note that this may not be possible for outsiders (such as, potential investors), in most cases, as they have no access to the budgets of the company.

[^36]
## SPOTLGHi 7.2

## "Where to find the company's Annual Reports"

We can find the annual reports (or even financial statements) from the following places:
a. Company's websites
b. Regulators website (such as, SEBI - Securities and Exchange Board of India)
c. Stock Exchange website (where the company is listed)
d. Independent Financial Data Providers (for example, Bloomberg, CMIE PROWESS, ISI Emerging Markets, ReportJunction.com, and Reuters.com)
e. Many financial brokerage websites also provide various forms of the same.

Quarterly financials are also available at the above mentioned sources.

So, we can conclude that Financial Statement Analysis is like the post mortem of the financial data generated by any company. This analysis in isolation does not help much in terms of strategic decisionmaking, but an analysis along with comparison with industry average or with other companies within the same industry over time provides understanding about the company's capability in several financial and operational dimensions.

Without deliberating too much on other things - now we move to the first tool of financial analysis, i.e., common size analysis.

### 7.3 COMMON SIZE FINANCIAL STATEMENTS



> Execute common size analysis to interpret information in financial statements

Away to analyze a firm is to look at its financial data more meticulously. Financial statements presented by representing each item as a percentage to the total amount of which it is a part, is referred to as a 'common size financial statement'. As the magnitude of absolute numbers is removed, it becomes comparatively easy to examine and understand the relationship of the various components forming part of the total, to such total. When we say that company X had a sale of ₹ 150 million during the year and the cost of goods sold was ₹ 120 million, compared with company Y , which had a sale of ₹ 80 million and its cost of goods sold was ₹ 48 Million, it is not amenable to direct understanding. If we represent the same information about company X and Y as sales 100 and cost of goods sold of X as $80 \%$ of sales and Y 's as $60 \%$ of sales, the understanding is more direct and easy. Whenever we have to deal with many companies in the same industry, common size statement becomes a very useful tool for a preliminary review of the statements.

### 7.3.1 Common Size Profit and Loss Account

The profit and loss account summarizes the revenues and expenses of an accounting period. We can prepare a commons size profit and loss account by showing the net sales as $100 \%$ and each of the components of expenses and profits as a percentage of the net sales. We observe that the data are the same but it has been reorganized. Where there are other revenues and expenses of a non-operating nature, it may be advantageous to treat them separately.

A common size income statement provides information on the profitability of different aspects of the firm's business. However, the picture is not complete, one must observe the trends overtime and make comparisons with other companies in the same industry to make concrete conclusions. Common-size financial statements could either be prepared in summary or in as much detail as one would like.

### 7.3.2 Common Size Balance Sheet

A common size balance sheet is constructed by showing each item of asset as a percentage of the total assets, and similarly, each item of liability and owners' equity is shown as a percentage of the total liabilities and owners' equity.

Common-size financial statements could either be prepared in summary or in as much detail as one would like. In the illustration given below, the common size balance sheet and profit and loss account of Tools \& Tools Ltd. is presented.

| TOOLS \& TOOLS LIMITED <br> COMMON SIZE PROFIT \& LOSS ACCOUNT <br> For the year ended December 31, 20X7 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 20X7 |  | 20X6 |  |
|  | ₹ million | \% | $₹$ million | \% |
| Sales | 300 | 100 | 280 | 100 |
| Cost of goods sold | 148 | 49.33 | 140 | 50.00 |
| Gross profit | 152 | 50.67 | 140 | 50.00 |
| Selling expenses | 25 | 8.33 | 22 | 7.86 |
| General expenses | 60 | 20.00 | 58 | 20.71 |
| Total operating expenses | 85 | 28.33 | 80 | 28.57 |
| Operating income | 67 | 22.33 | 60 | 21.43 |
| Interest expense | 14 | 4.67 | 13 | 4.64 |
| Net income before tax | 53 | 17.67 | 47 | 16.79 |
| Income tax | 26 | 8.67 | 23 | 8.21 |
| Profit after tax | 27 | 9.00 | 24 | 8.57 |
| Dividends | 2 | 0.67 | 2 | 0.71 |
| Profit retained | 25 | 8.33 | 22 | 7.86 |


| TOOLS \& TOOLS LIMITED COMMON SIZE BALANCE SHEET As at December 31, 20X7 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 20X7 |  | 20X6 |  |
| ASSETS | $₹$ million | \% | $₹$ million | \% |
| Cash | 19 | 5.76 | 11 | 4.07 |
| Accounts receivable | 32 | 9.70 | 20 | 7.41 |
| Loans and advances | 43 | 13.03 | 34 | 12.59 |

(Contd.)

| Inventory | 121 | 36.67 | 99 | 36.67 |
| :---: | :---: | :---: | :---: | :---: |
| Other current assets | 17 | 5.15 | 26 | 9.63 |
| Total current assets | 232 | 70.31 | 190 | 70.37 |
| Fixed assets(Net) | 94 | 28.48 | 79 | 29.26 |
| Other assets | 4 | 1.21 | 1 | 0.37 |
| Total assets | 330 | 100.00 | 270 | 100 |
| LIABILITIES \& CAPITAL |  |  |  |  |
| Current Liabilities: |  |  |  |  |
| Acceptances | 5 | 1.52 | 2 | 0.74 |
| Accounts payable | 27 | 8.18 | 19 | 7.04 |
| Advance against sales | 26 | 7.88 | 21 | 7.78 |
| Other liabilities | 9 | 2.73 | 8 | 2.96 |
| Interest accrued but not due | 3 | 0.90 | 2 | 0.74 |
| Total current liabilities | 70 | 21.21 | 52 | 19.26 |
| Provisions: |  |  |  |  |
| for taxation | 26 | 7.88 | 21 | 7.77 |
| for proposed dividends | 2 | 0.61 | 2 | 0.74 |
| for bonus | 3 | 0.90 | 2 | 0.74 |
| for others | 4 | 1.21 | 3 | 1.11 |
| Total provisions | 35 | 10.61 | 28 | 10.37 |
| Total current liabilities and provisions | 105 | 31.82 | 80 | 29.63 |
| Long-term liabilities |  |  |  |  |
| Bank term loans | 40 | 12.12 | 32 | 11.85 |
| 10.5\% Debentures | 26 | 7.88 | 26 | 9.63 |
| Financial institutions | 24 | 7.27 | 22 | 8.15 |
| Total long-term liabilities | 90 | 27.27 | 80 | 29.63 |
| Total liabilities | 195 | 59.08 | 160 | 59.26 |
| Shareholders' equity |  |  |  |  |
| Paid up capital | 37 | 11.21 | 37 | 13.70 |
| Retained earnings | 98 | 29.70 | 73 | 27.04 |
| Total shareholders' equity | 135 | 40.91 | 110 | 40.74 |
| Total Liabilities \& Shareholders' Equity | 330 | 100 | 270 | 100 |

The comparative balance sheet presented as a common size statement, lends itself to answering many questions an analyst may have. For example, we may be interested in the proportion of current assets in the total assets and its change over the two periods. During 20X6, $70.37 \%$ of the total assets were current assets. During 20X7, this percentage was, $70.31 \%$. This, in other words, means that more than two-thirds of the company's assets are current assets and over two years, this proportion has remained stable. Similarly, we can say that during 20X6, $29.26 \%$ of the company's total assets were fixed assets and this was marginally reduced during 20 X 7 , to $28.48 \%$.

Similarly, we may be interested in the proportion of the total assets financed by outside sources of finance. We find that the financing pattern of the company has remained stable over the two years at
around $59 \%$ by outside sources and $41 \%$ by shareholders. From this information, we can readily conclude that the company has maintained a stable financial structure during the two years period, in terms of current assets versus fixed assets and outside finances versus shareholder's equity.

The working capital situation of Tools \& Tools shows that the working capital has increased in Rupee terms by 17 million. However, we find that in proportionate terms, working capital has declined by $2.3 \%$.

|  | TOOLS \& TOOLS LIMITED <br> Structure of assets and liabilities |  |
| :--- | ---: | :---: |
|  |  |  |
| Total current assets | $\mathbf{2 0 X 7}$ in \% | 20X6 in \% |
| Fixed assets (Net) | 70.31 | 70.37 |
| Other assets | 28.48 | 29.26 |
| Total assets | 1.21 | 0.37 |
| Total current liabilities and provisions | 100.00 | 100.00 |
| Total long-term liabilities | 31.82 | 29.63 |
| Total liabilities | 27.27 | 29.63 |
| Total shareholders' equity | 59.09 | 59.26 |
| Total Liabilities \& Shareholders' Equity | 40.91 | 40.74 |

Working Capital Change as Percentage of Total Assets

|  | 20X7 | 20X6 | Change in WC |
| :--- | :--- | :--- | :---: |
| Total current assets | 70.31 | 70.37 | -0.07 |
| Total current liabilities and provisions | 31.82 | 29.63 | -2.19 |
| Working capital | 38.49 | 40.74 | -2.25 |


| TOOLS \& TOOLS LIMITED <br> Dis-aggregation of Change in Net Income |  |
| :--- | :--- |
|  | \% Change in expenses and net income in relation to sales. |
| Decrease in cost of goods sold | 0.67 |
| Decrease in general expenses | 0.71 |
| Total decrease in cost increasing net income | $\mathbf{1 . 3 8}$ |
| Increase in selling expense | 0.47 |
| Increase in interest expense | 0.03 |
| Increase in income tax | 0.46 |
| Cost increases decreasing net income | $\mathbf{0 . 9 6}$ |
| Net Change in Net income | $\mathbf{0 . 4 2}$ |

The comparative profit and loss account in a condensed form, would reveal the relative importance of its different constituents. In this statement, each individual item is presented as a percentage of the sales revenue. This shows us how the net sales amount or revenue has been distributed over the different expenses and the net profit. The net profit earned by the company has increased from $8.6 \%$ to $9.0 \%$.

The dis-aggregation of the change in net income shows that an increase in net income of $0.4 \%$ is the combined result of about $1.4 \%$ reduction in the cost and $1.0 \%$ increase in the indirect costs, in relation to sales revenue.

Common size statements provide an important tool for comparing the results of a company across the years. This also forms a very useful tool for a comparison across companies.

### 7.4 INDEX BASED ANALYSIS

## Implement index based analysis to interpret information in financial statements

In an indexed based analysis we represent the accounting information over multiple years as a percentage of amounts of an observant base year. It helps to compare accounts for two or more years to the corresponding items for a single company. The base year figures of each item are always indexed to 100 , and the changes from the base year are determined.

A longer time-frame of data always helps in better understanding index based analysis. Thus, we shall explain this tool by illustrating them on two Indian companies from the Fast Moving Consumer Goods (FMCG) space, namely, Colgate Palmolive India Limited ${ }^{3}$ (henceforth, CPIL) and Marico Limited ${ }^{4}$ (henceforth, ML). We provide a brief introduction for these two companies here:

- Colgate-Palmolive (India) Limited is part of Colgate-Palmolive Company, ${ }^{5}$ an American multinational corporation focused on the manufacture and distribution of personal care products. The products of the group include toothpaste, tooth powder, toothbrushes, soaps, shaving brushes, cosmetics and toilet preparations. It has operations in India and Nepal. The brands of the company include Colgate, Palmolive, Ajax, and Softsoap. CPIL scrip is listed on the Bombay Stock Exchange (BSE) and on the National Stock Exchange (NSE).
- Marico Limited ${ }^{6}$ is a leading Indian Group focused on the manufacture and distribution of consumer products and services. The products of the Group include haircare, skincare and healthy foods. It has presence in India, Bangladesh, the Middle East and parts of the African continent. Marico's well-known brands include Parachute, Saffola, Mediker, and Kaya. Lately, ML has been growing inorganically with acquisitions focused on geographical diversification. ML scrip is listed on the BSE and the NSE.
Annexure 7.1 on the Online Learning Center i.e., OLC provides both firms Balance Sheet, Income Statement, and Stock Market figures for four consecutive years to make use of them. All the financial analysis tools numbers below are based on the same.

[^37]
### 7.4.1 Index-based Balance Sheet

Table 7.1 presents the Index-based balance sheet numbers of CPIL with Year 1 (FY 2010) taken as base year:

Table 7.1 Index Based Balance Sheet Colgate Palmolive (India) Limited

| Balance Sheet Items |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Assets Side | Year 4 | Year 3 | Year 2 | Year 1 |
| Cash \& Bank Balances | 123.4 | 89.1 | 113.7 | 100.0 |
| Accounts Receivable | 831.3 | 893.3 | 770.8 | 100.0 |
| Loans and Advances | 79.5 | 88.7 | 66.7 | 100.0 |
| Inventories | 167.6 | 196.9 | 139.0 | 100.0 |
| Current Assets | 134.2 | 122.5 | 119.5 | 100.0 |
| Fixed Assets | 151.1 | 127.9 | 104.0 | 100.0 |
| Other Assets | 337.0 | 211.0 | 166.3 | 100.0 |
| Total Assets | 148.0 | 128.0 | 117.1 | 100.0 |
| Liabilities Side | Year $\mathbf{4}$ | Year 3 | Year 2 | Year 1 |
| Accounts Payables | 124.8 | 98.7 | 101.2 | 100.0 |
| Other Current Liabilities and Provisions | 176.8 | 165.3 | 136.7 | 100.0 |
| Current Liabilities and Provisions | 141.5 | 120.2 | 112.7 | 100.0 |
| Long-term Liabilities | 779.2 | 671.9 | 606.0 | 100.0 |
| Net Worth | 150.1 | 133.5 | 117.8 | 100.0 |
| Total Liabilities | $\mathbf{1 4 8 . 0}$ | $\mathbf{1 2 8 . 0}$ | $\mathbf{1 1 7 . 1}$ | $\mathbf{1 0 0 . 0}$ |

On comparing the above figures with actual numbers of CPIL, one can make out that it involves calculating each year's financial statement balances as percentages of an initial year, also known as the base year. It computes percentage changes from year to year for all items in balance sheet, such as cash and inventory. We show you the computations for the Cash and Bank Balances account for Year 4:

| Balance Sheet Item | Year 4 | Year 3 | Year 2 | Year 1 |
| :--- | :---: | :---: | :---: | :---: |
| Cash and Bank Balances | 4,288 millions | 3,098 millions | 3,951 millions | 3,476 millions |

$$
\text { Common Base Cash in Year } 4=\frac{\text { Cash in Year } 4 \times 100}{\text { Cash in Year } 1}=\frac{4288 \times 100}{3476}=123.3
$$

Table 7.1 shows that during the four year period CPIL's assets had increased by $46 \%$. The Loans \& Advances items decreased continuously but a stark contrast to these items is the massive rise in its Other Assets and Accounts Receivables, they have gone by over three times and eight times, respectively. Reasons discussed earlier include: (a) In Year 2, CPIL's reducing its advances and parking them as longterm investments (as part of other assets) - possibly indicating higher comfort level to increased capital
market exposure. (b) Change in its credit policy to its large customers in Year 2. (c) Large profits and no big capital investment needs (in fixed assets) during Year 1-Year 4 would also be added reasons.

Please note that while making the above interpretations we are making wide use of items connecting both the financial statements. For example, large loans \& advances or higher cash \& bank balance figures does result in higher other income figures. Large changes in the investment figures of balance sheet also results in high other income figures (such as, due to sale of investments). Figure 7.1 uses arrows to show the recognizable connections between balance sheet and income statement items.

Simple reasons for each of the arrow would be as follows:

- Higher credit sales and/or credit sale period often leads to more account receivable in the balance sheet. Similarly, higher credit purchases and/or credit purchase period would result in higher accounts payable in the balance sheet.
- Higher bank balances, inter-corporate deposits (part of Loans and Advances), and long-term investments (part of Other Assets) would often lead to higher Other Income.
- A longer production and/or marketing cycle of a firm would often lead a higher level of inventory position for the firm.
- Larger operating and other expenses would lead to a larger size of Loans and Advances in the current assets.
- Interest expenses would often be linked to the amount of long-term debt a company would have. It is also linked to the net worth of a company. High net worth company would seldom need interest bearing debt leading to low interest expenses.
- Higher fixed assets base would often lead to higher depreciation charges.
- Items such as income tax expense tend to influence the current liabilities of a firm by influencing the provisions made for them.
- Higher profits should normally lead to increasing the net worth for a firm (assuming high retained earnings).
Using arrows in Figure 7.1 and the connections one can quickly say that the low long-term debt policy is giving CPIL the advantage of near negligible interest expenses. A good decision maker would make note of all such connections while making logical interpretations using financial data.

Consequently, we can state that index-based (or even common size) financial numbers do not convey much on their own; they tend to convey when they are - (a) logically linked with other recognizable connections among various items of the financial statement of the same period; and/ or (b) using data of the firm for longer period to capture trends; and/ or (c) compared with related data of peers from the same industry; etc.

### 7.4.2 Index Based Profit and Loss Statement

CPIL's index based income statement in presented in Table 7.2. We observe that during the four-year period of Year 1-Year 4, CPIL's net income had gone up by just $17 \%$ compared to an increase in asset base by a meager $46 \%$. The following would be strong reasons for such a result:

- During the period, CPIL's sales increased by a higher rate ( $61 \%$ ) compared to increase in asset base by $46 \%$. Indicating that the company was able to increase its asset utilization, i.e., it was able to rotate capital at a faster rate than earlier.
- Even though annual inflation rates were $7 \%-8 \%$ during Year $1-$ Year 4 , yet, CPIL was able to keep a tab on its cost of goods sold and its depreciation expenses, both increased by $60 \%$ and $16 \%$, respectively, compared to sales increase of $61 \%$. It indicates the improved manufacturing efficiency levels and pricing strategies achieved by the company.

|  |  | Balance Sheet of Colgate-Palmolive (India) Limited for Year 4 |  |
| :---: | :---: | :---: | :---: |
| Income Statement of ColgatePalmolive (India) Ltd. for Year 4 | $\begin{gathered} ₹ \\ \text { million } \end{gathered}$ | Assets Side | million |
| Total Sales | 31,638 | Cash \& Bank Balances | 4,288 |
| Add : Other Income | 499 | Accounts Receivable | 812 |
| Less: Cost of Goods Sold | 12,501 | Loans and Advances | 977 |
| Gross Profit | 19,636 | Inventories | 1,853 |
| Less : Operating/Other Expenses | 12,556 | Current Assets | 7,930 |
| EBITDA | 7,080 | Fixed Assets | 3,826 |
| Less : Interest | 13 | Other Assets (Investments, Goodwill, etc.) | 1,311 |
| Less : Depreciation \& Amortization | $37$ | Total Assets | 13,068 |
| Profit before Tax | 6,630 | Liabilities Side |  |
| Less : Tax | 1,663 | Accounts Payables | 4,666 |
| Net Income | 4,968 | Other Current Liabilities \& Provisions | 3,148 |
| Dividend to Shareholders | 3,808 | Total Current Liabilities \& Provisions | 7,814 |
|  |  | Long-term Liabilities | 357 |
|  |  | Net Worth | 4,896 |
|  |  | Total Liabilities | 13,068 |

Figure 7.1 Connections between Income Statement and Balance Sheet
Table 7.2 Index Based Profit and Loss Statement

|  | Colgate Palmolive (India) Limited |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Profit and Loss Statement Items | Year 4 | Year 3 | Year 2 | Year 1 |
| Total Sales | $\mathbf{1 6 1 . 2}$ | $\mathbf{1 3 7 . 2}$ | $\mathbf{1 1 3 . 2}$ | $\mathbf{1 0 0 . 0}$ |
| Add : Other Income | $\mathbf{5 0 . 7}$ | $\mathbf{5 1 . 5}$ | $\mathbf{1 0 8 . 5}$ | $\mathbf{1 0 0 . 0}$ |
| Less: Cost of Goods Sold | 160.9 | 135.2 | 112.2 | 100.0 |
| Gross Profit | 152.9 | 131.9 | 113.3 | 100.0 |
| Less : Operating/Other Expenses | 165.2 | 140 | 113.3 | 100.0 |
| EBITDA | $\mathbf{1 3 5 . 1}$ | $\mathbf{1 2 0 . 1}$ | $\mathbf{1 0 6 . 1}$ | $\mathbf{1 0 0 . 0}$ |
| Less : Interest | 86.4 | 100.6 | 106.4 | 100.0 |
| Less : Depreciation | 116.3 | 104.6 | 91.2 | 100.0 |
| Profit before Tax | 136.8 | 121.4 | 107.3 | 100.0 |
| Less : Tax | 270.2 | 230.7 | 190.7 | 100.0 |
| Net Income | 117.4 | 105.5 | $\mathbf{9 5 . 1}$ | $\mathbf{1 0 0 . 0}$ |
| Dividend to Shareholders | 140.0 | 125.0 | 110.0 | 100.0 |

- On the other hand, operating expenses and corporate income tax expenses both increased at a faster pace and dented the final growth in net profit. Operating expenses tripled during the period and income tax expenses double during the period. The above two points were a prime reason for the low growth in net profits of the company by a meager $17 \%$.
- Other income figures nearly halved primarily due to the reduced deposits and bank balances of the company (see, Table 7.1).
- Given that interest expense has been a very low figure, we do not need to add much importance in analyzing these figures.
Hence, we observe that intelligent use of Index-based analysis of Balance Sheet and Income Statement, especially combining them together, can lead to very insightful journey.


### 7.4.3 Comparison of Index-based Statements

In Tables 7.3 and 7.4, we provide the index-based numbers of ML's balance sheet and profit and loss statement. Interested readers could spend time in coming with insights about ML by observing the same. They can also make comparisons of CPIL's index-based numbers with ML's index-based numbers and make conclusions about the common industry trends and also understand each company intensively.

However, a few important points to remember while doing index-based analysis are:

- Given that base year is the reference point for all comparisons in index-based analysis - hence, an analyst should try to choose a normal year with regard to business cycles and conditions as the base year. In other words, for highly cyclical industries such as steel, paper, and sugar - one should take extra care while choosing the base year.

Table 7.3 Index Based Balance Sheet

| Balance Sheet Items | Marico Limited |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Assets Side | Year $\mathbf{4}$ | Year 3 | Year 2 | Year 1 |
| Cash \& Bank Balances | 239.3 | 118.5 | 191.2 | 100.0 |
| Accounts Receivable | 130.4 | 138.2 | 124.7 | 100.0 |
| Loans and Advances | 138.6 | 189.2 | 114.8 | 100.0 |
| Inventories | 193.9 | 161.9 | 135.1 | 100.0 |
| Current Assets | 177.2 | 158.3 | 136.0 | 100.0 |
| Fixed Assets | 355.9 | 125.6 | 122.5 | 100.0 |
| Other Assets | 303.3 | 303.0 | 225.3 | 100.0 |
| Total Assets | $\mathbf{2 4 2 . 9}$ | $\mathbf{1 7 1 . 5}$ | $\mathbf{1 4 5 . 9}$ | $\mathbf{1 0 0 . 0}$ |
| Liabilities Side | Year | Year 3 | Year 2 | Year 1 |
| Accounts Payables | 154.6 | 115.8 | 99.0 | 100.0 |
| Other Current Liabilities \& Provisions | 732.6 | 631.9 | 202.9 | 100.0 |
| Current Liabilities \& Provisions | 300.0 | 245.6 | 125.1 | 100.0 |
| Long-term Liabilities | 108.8 | 102.7 | 173.1 | 100.0 |
| Net Worth | 297.3 | 171.5 | 140.6 | 100.0 |
| Total Liabilities | $\mathbf{2 4 2 . 9}$ | $\mathbf{1 7 1 . 5}$ | $\mathbf{1 4 5 . 9}$ | $\mathbf{1 0 0 . 0}$ |

Table 7.4 Index Based Profit and Loss Statement

|  | Marico Limited |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Profit and Loss Statement Items | Year $\mathbf{4}$ | Year 3 | Year 2 | Year 1 |
| Total Sales | $\mathbf{1 7 2 . 7}$ | $\mathbf{1 4 9 . 6}$ | $\mathbf{1 1 7 . 6}$ | $\mathbf{1 0 0 . 0}$ |
| Add : Other Income | 205.5 | 178.4 | 152.8 | 100.0 |
| Less: Cost of Goods Sold | 160.9 | 135.2 | 112.2 | 100.0 |
| Gross Profit | 152.9 | 131.9 | 113.3 | 100.0 |
| Less : Operating/Other Expenses | 165.2 | 140 | 113.3 | 100.0 |
| EBITDA | $\mathbf{1 3 5 . 1}$ | $\mathbf{1 2 0 . 1}$ | $\mathbf{1 0 6 . 1}$ | $\mathbf{1 0 0 . 0}$ |
| Less : Interest | 225.8 | 165.0 | 153.1 | 100.0 |
| Less : Depreciation | 144.2 | 120.7 | 117.9 | 100.0 |
| Profit before Tax | 182.0 | 132.7 | 126.4 | 100.0 |
| Less : Tax | 220.8 | 118.3 | 135.9 | 100.0 |
| Profit After Tax | $\mathbf{1 7 0 . 9}$ | $\mathbf{1 3 6 . 9}$ | $\mathbf{1 2 3 . 6}$ | $\mathbf{1 0 0 . 0}$ |
| Dividend to Shareholders | 80.2 | 107.0 | 100.8 | 100.0 |

- While examining index based financial statements - one should focus the analysis on only the significant items rather than each and every item of the financial statement. A case in point would be the 'other income' figures of Table 7.4. Given the small base on which the changes occurred readers could ignore this item while examining Table 7.4.
- While making comparative analysis, one should keep note of any change in accounting procedures, policies, and assumptions or a restatement of items by the firm from one category to another. For example, in Table 7.4, given ML's restatement of few liabilities (from long-term to current) in Year 3 - its indexed figures for 'other current liabilities \& provisions' do not convey a meaningful (year-on-year) picture. We now move to analysis using financial ratios.


## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) In common size analysis, we measure and compare every item of balance sheet with respect to sales.
(b) Trend analysis involves comparing a firm's financial ratios with similar ratios for another firm in the same industry.

### 7.5 ANALYSIS USING FINANCIAL RATIOS



Use financial ratios to infer financial analysis

A meaningful analysis of financial statements involves aggregation and dis-aggregation of the information and comparison and relation of that information. What we have seen in the previous sections is an illustration of how we can reduce the financial statements into a common basis either horizontally or vertically. This reconstitution of the financial statements as $100 \%$ statements enable comparison and disaggregation of the net changes. When it comes to relationships, they
are better expressed by means of ratios. It is obviously understood that many pieces of information do not have significant meaning in isolation. They become more meaningful when related to an appropriate base. For example, the information that a firm earned a profit of ₹ 1,000 means little. The profit of ₹ 1,000 could have been earned on a sale of ₹ $1,00,000$ or ₹ 1 million. ₹ 1,000 profit earned on a sale of ₹ $1,00,000$ or that on ₹ one million, has totally different meanings.

Ratios reduce large figures to an easily understandable relationship. It is a device which has to be very carefully handled. Ratios do not make conclusions. It is for the analyst to draw conclusion by evaluating and relating the ratios. In most cases, there are no 'good' ratios and 'bad' ratios. It is only possible to make relative inferences by using financial ratios. Since ratios are the relation of two numerical values, it is possible to compute a large number of ratios using financial statement figures. However, since most of these ratios will have common items, forming part of either the numerator or the denominator, it may not be necessary to have such a large number of ratios to make meaningful inferences.

Investments in assets and their financing vary during the year. The revenues earned during a year arise out of assets held during the entire period and the financing of the same during the same period. Hence, for an evaluation of the profitability and efficiency of these assets and their sources of financing, we would prefer using an average during the period. The average would be computed by taking the average of the beginning and the ending figures during an accounting period. ${ }^{7}$

We present ratios that are commonly used. We present them in a schematic grouping in Figure 7.2 based on the objective of the use of a particular group of ratios. There are several ways of grouping together financial ratios and what is presented here is only one such grouping. We have tried to focus our area of interest into two broad factors relating to company performance, namely, profitability and solvency.

Profitability is disaggregated into margin on sales, return on investments, return per share of equity and the efficiency of the use of assets and is covered in Section 7.6. Solvency is looked into from the point of view of short-term solvency (or liquidity) and long-term solvency (or the ability to meet longterm obligations) and is covered in Section 7.7.

Readers may note that for the next two sections on ratios, we use the figures presented in Section 7.3.2 of Tools \& Tools Limited.

### 7.6 PROFITABILITY RATIOS

Profitability is an important concern, around which many other aspects of the corporate financial structure revolve. It is obvious for the simple reason that only if the operations are profitable, the company will survive in the long run. The long-term survival of the company depends on its ability to earn sufficient surpluses and to grow.

### 7.6.1 Margin on Sales

Profits are generated by sales. The first step in analyzing profitability is understanding on costs in relation to the revenue and thus, profits in relation to the revenue. We have seen while discussing the common-size financial statements, that each component of the profit and loss account could be expressed as percentages to sales. The following figures are extracted from the profit and loss account of Tools \& Tools Ltd.

[^38]| COMMON FINANCIAL STATEMENT RATIOS |  |  |
| :---: | :---: | :---: |
| PROFITABILITY | Margin on sales | Gross Profit Margin |
|  |  | Operating Profit Margin |
|  |  | Earnings before Interest \& Tax |
|  |  | Profit before Tax |
|  |  | Net Profit Margin (i.e., Profit after tax) |
|  | Return on investment | Operating Profit to Operating Assets |
|  |  | Net Income to Total Assets |
|  |  | Return on Equity |
|  | Efficiency | Total Asset Turnover |
|  |  | Operating Asset Turnover |
|  |  | Working Capital Turnover |
|  |  | Shareholder Equity Turnover |
|  | Return per share | Earnings per Share |
|  |  | Earnings to price |
|  |  | Dividends per Share |
| SOLVENCY | Short-term | Net Working Capital |
|  |  | Current Ratio |
|  |  | Quick Ratio |
|  |  | Accounts Receivable Turnover |
|  |  | Collection Period |
|  |  | Inventory Turnover |
|  |  | Conversion Period |
|  | Long-term | Total Debt to Total Capital |
|  |  | Long Term Debt to Total Capital |
|  |  | Long Term Debt to Fixed Assets |
|  |  | Interest Cover |
|  |  | Times Fixed Charges Covered |
|  |  | Gearing |
|  |  | Equity Multiplier |

Figure 7.2 A Schematic Presentation of Common Financial Ratios

| Tools \& Tools Limited Profit Margins |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | FY 20X7 |  | FY 20X6 |  |
|  | $₹$ million | \% | $₹$ million | \% |
| Sales | 300 | 100 | 280 | 100 |
| Cost of goods sold | 148 | 49.33 | 140 | 50.00 |
| Gross Profit (i) | 152 | 50.67 | 140 | 50.00 |
| Total operating expenses | 85 | 28.33 | 80 | 28.57 |
| Operating Profit (ii) | 67 | 22.33 | 60 | 21.43 |
| Interest expense | 14 | 4.67 | 13 | 4.64 |
| Profit Before Tax (iii) | 53 | 17.67 | 47 | 16.79 |
| Income tax | 26 | 8.67 | 23 | 8.21 |
| Profit After Tax (iv) | 27 | 9.00 | 24 | 8.57 |
| Dividends | 2 | 0.67 | 2 | 0.71 |
| Profit Retained (v) | 25 | 8.33 | 22 | 7.86 |
| Depreciation expense | 13 |  | 11 |  |

The following well-known ratios are created on the above figures:
(i) Gross Profit Margin: The gross profit margin is the surplus available out of sales revenues, after subtracting the cost of goods sold.

$$
\begin{gathered}
\text { Gross Profit }=\text { Sales }- \text { COGS } \\
\text { Gross Profit } \operatorname{Margin}(\mathbf{G P M})=\frac{\text { Gross Profit } \times 100}{\text { Sales }} \\
\hline
\end{gathered}
$$

When different products are sold, this is the net result of the different margins. It is also possible that we might have incurred losses on some of the product lines. This, in other words, is the overall mark up on all the products put together. This surplus is obtained over the input costs and as such, would reflect the efficiency of the use of the direct inputs, given the price.
(ii) Operating profit margin: The operating margin is a reflection of the operations of the company, and hence, is considered as a reflection of the performance of the management. Operating expenses are mostly fixed costs of operations, such as general, marketing, and administrative expenses. The level or operating profits will be determined by the company's ability to maintain a sufficient volume of sales and gross margin. This margin is frequently used as a basis of comparison across companies, since it is not influenced by different financing decisions.

$$
\begin{gathered}
\text { Operating } \text { Profit }^{8}=\text { PBDIT }- \text { Depreciation } \\
\text { Operating Profit Margin }(\mathbf{O P M})=\frac{\text { Operating Profit } \times 100}{\text { Sales }}
\end{gathered}
$$

[^39](iii) Earnings before interest and taxes: Any non-operating surplus or deficit is adjusted to the operating profit margin, to obtain the earnings before interest and taxes.
(iv) Profit before taxes: This is the amount of surplus obtained after meeting the interest expense. This is influenced to a great extent, by the financing decisions of the firm. This shows the percentage of sales revenue that is available before taxation.
(v) Profit after tax: The profit after tax or net income is the overall surplus available out of the sales. This is also the amount available to the shareholders. This is influenced by three major factors, namely, operating efficiency, financing efficiency and taxation. This amount, which the company is able to make, is evaluated in relation to the amount of assets invested in the operations and the amount invested by shareholders. As a percentage of the sales, it is often known as the Net Profit Margin and is also used to compare margins of various players in the same industry.
$$
\text { Net Profit Margin }(\mathbf{N P M})=\frac{\text { Net Profit } \times 100}{\text { Sales }}
$$

## SPOTLTGHT 7.3

## "Which is more important - Net Profit Margin (NPM), Gross Profit Margin (GPM) or Operating Profit Margin (OPM)?"

It all depends on the type of user and his purpose, for instance,

- Gross Profit Margin is of utmost importance for the people in the production department. Since it represents the relationship between sales and cost of goods sold; perhaps, it also reflects their performance better than other margins.
- Net Profit Margin is of importance for the people in the finance department, as they are more concerned about the overall result of the company.
- Operating Profit Margin is a key measure for the marketing department executives. As the marketing strategy influences the advertising, selling, and distribution expenses which in turn are reflected in the operating margins.

Alternatively, one can look at the type of industry and then decide on the margin measure to used, for example,

- GPM is useful for the companies such as Hatsun Agro, Heritage Foods, Modern Dairies, Umang Dairies, and Vadilal Dairies - who are basically dairy players. Relatively, they have a higher cost of goods sold than the other sectors (since, the cost of procuring raw milk is the biggest cost item).
- OPM is useful for the companies like Colgate, Dabur, Hindustan Unilever, ITC, etc who basically are marketing in nature and have high operating expenses. This also is for those companies who mostly outsource their manufacturing activities.
- NPM is useful for all the companies but its importance increases when different companies are compared across each other.
Hence, each ratio has its own importance to varied stakeholders and is sector-specific.

Most of the margin indicators seem to be improving in the case of Tools \& Tools. Net margins have improved by around half a percent to $9 \%$, and gross margins also seem to have improved by half a per cent to, $50.6 \%$. This seems to be primarily due to a decrease in the company's direct costs and operating expenses.
(vi) Profit Retained: This is the amount of profit remaining after the distribution of dividends. This amount would signify an increase in the owner's equity during the year that has been contributed by operations.

## Let's Check Our Concepts!

State whether the following statements are True or False:
(c) One of the biggest advantages of ratios is that they standardize financial information.
(d) If a firm is profitable, it also has a positive cash flow.

### 7.6.2 Return on Investment

Profitability does not exist in a vacuum. It has to be judged on the basis of the amount of resources used for obtaining the profit. The management has to be evaluated on the basis of how far they had been successful in profitably utilizing the assets. For this purpose, the assets used are to be related to the profit earned.

Operating profit to operating assets: The operating profit to operating assets or return on operating assets is obtained by dividing the operating profit by the average (average of opening and ending balance) value of operating assets used during the year. Operating assets refer to the total current assets and fixed assets used.

$$
\text { Return on Operating Assets }(\mathbf{R O A})=\frac{\text { Operating Profit } \times 100}{\text { Average Operating Assets }}
$$

The return on operating assets for Tools \& Tools can be computed as follows:

Tools \& Tools Limited: R0A Computation

| Return on Operating Assets (ROA) | 20X7 | 20X6 |
| :--- | ---: | ---: |
| Current assets (₹ million) | 232 | 190 |
| Fixed assets (₹ million) | 94 | 79 |
| Total operating assets (₹ million) | 326 | 269 |
| Operating Profit Before Interest and Taxes (OPBIT) (₹ million) | 67 | 60 |
| Return on Operating Assets (\%) | 20.55 | 22.30 |
| ROA based on average operating assets (326 + 269)/2(\%) | 22.52 |  |

Tools \& Tools was able to earn an operating profit of $22.5 \%$ on its operating assets. The company had used an average of ₹ 297.5 million and it has to be justified in terms of the opportunity cost of the investment in the least. For example, if we had invested the amount in a risk free deposit with a bank, the interest obtainable on the deposit could be the opportunity cost of the investment.

Net income to total assets The net income to total assets or Return on Total Assets (ROTA) is the rate of profit the company is able to earn after meeting the cost of financing a portion of the total assets. This is the amount available to the shareholders, in relation to the total amount of resources used in the business. Here again, the average of the total assets is used on the justification that the income earned during the whole year is better related to the average investment, than to the beginning or end of period investment.

$$
\text { Return on Total Assets }(\text { ROTA })=\frac{\text { Net Profit } \times 100}{\text { Average Total Assets }}
$$

For Tools \& Tools, this ratio could be computed as follows:

Tools \& Tools Limited: R0TA Computation

| Return on Total Assets (ROTA) | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Total Assets (₹ million) | 330 | 270 |
| Profit After Taxes (PAT) | $\mathbf{2 7}$ | 24 |
| Return on Total Assets | $8.18 \%$ | $8.89 \%$ |
| ROTA based on average total assets $(330+270) / 2$ | $9.00 \%$ |  |

Tools \& Tools Ltd. was able to earn a $9 \%$ return on total assets. The company used on an average, ₹ 300 million in total assets, to earn a net profit of ₹ 27 million.
Return on Equity: This measures the net income (or PAT) as a percentage of the shareholders' investment. Net income after tax is the amount available to the shareholders for compensating their investment and the risk being carried by them.

Return on Equity (ROE) $=\frac{\text { Net Income } \times 100}{\text { Average Net Worth }}$
For Tools \& Tools, we can compute this ratio by relating the profit after tax to the average shareholders’ equity during 20X7.

Tools \& Tools Limited: ROE Computation

| Return on Equity (ROE) | 20X7 | 20X6 |
| :--- | ---: | :---: |
| Total Equity (₹ million) | $\mathbf{1 3 5}$ | $\mathbf{1 1 0}$ |
| Profit After Taxes (PAT) | 27 | 24 |
| Return on Equity (\%) | 20.00 | 21.82 |
| ROE based on average total assets $(135+110) / 2(\%)$ | 22.04 |  |

Return available to the shareholders is 22 per cent. This return is not only the result of the management's ability to employ the assets profitably, but is also the result of its ability to use a favorable debt-equity structure. Whenever management is able to borrow money and use it in business so as to earn more than the cost of such borrowing, the return on owners' equity will be increased. The extent of such increase is the beneficial result of gearing in the capital structure.

### 7.6.3 Return Per Share

As far as an individual shareholder is concerned, his/her major interest in the company is in the amount of dividend that can be earned on the investment in the shares and in the increase in the price of the shares. The return on owners' equity, which is the rate of return on shareholders' funds, though important, is not as much of interest for an individual shareholder as the earnings on a per share basis.


To know more on "Dealing with Ratios when a Balance Sheet figure interacts with Income Statement figures" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/546

Earnings per Share: This is one of the most commonly used measures of expressing corporate earnings. This measure is computed by dividing the net income by the number of equity or ordinary shares outstanding.

$$
\text { Earnings Per Share }(\mathbf{E P S})=\frac{\text { Net Income }(\text { PAT })}{\text { Number of Equity Shares }(n)}
$$

For Tools \& Tools Ltd., the share capital is made up of 3.7 million shares of ₹ 10 , in each 20 X 7. Thus, the earnings per share of equity capital of Tools \& Tools would be:

Tools \& Tools Limited: EPS Computation

| Earnings per Share (EPS) | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Profit After Taxes (PAT) (₹ million) | 27 | 24 |
| Number of ordinary shares (Million) | 3.7 | 3.7 |
| Earnings per Share (EPS) $(₹)$ | 7.30 | 6.49 |

The earnings per share when compared to the current market price of the share, provides a measure of the rate of yield. This yield measure can be used by a shareholder while making decisions about this investment, in comparison to other alternate investments. Assuming that the market price of ₹ 10 par value of common equity share of Tools \& Tools Ltd. is ₹ 30 as on December 31, 20X7, the earnings price ratio will be:

$$
\text { Earnings Price Ratio }=\frac{\text { Earnings per share }}{\text { Market price per share }}
$$

Tools \& Tools Limited: EPS and P/E Computation

| Earnings Price Ratios $(E / P)$ | 20X7 | 20X6 |
| :--- | :---: | :---: |
| Earnings per Share (EPS) $(₹)$ | 7.30 | 6.49 |
| Market price per share $(₹)$ | 30 | 28 |
| Earnings/Price Ratio $(\%)$ | 24.3 | 23.18 |
| Price Earnings Ratio | 4.1 | 4.31 |

It is a common practice to express this ratio by reversing the relationship, so as to measure the priceearnings relationship, popularly known as the P/E Ratio. Rather, this relationship expresses the market price as a certain multiple of the earnings per share.

$$
\text { Price-Earnings Ratio }=\frac{\text { Market Price Per Share }}{E P S}=\frac{\text { Market Capitalization }}{\text { Net Income }}
$$

The ratio conveys the number of a times market is willing to pay to buy a firm compared to its current net profits. If a firm has a bright future compared to its present performance, then it would have a high P/E Ratio. On the same lines, a firm having a poor future compared to its present performance would have a low P/E Ratio.

Dividend per share: This is another important per share calculation, which shows the cash income available to the shareholder on each share.

$$
\text { Dividend Per Share }(\mathbf{D P S})=\frac{\text { Dividend }}{\text { Number of Equity Shares }(n)}
$$

The DPS computation of Tools \& Tools Limited has been given below:

Tools \& Tools Limited: DPS Computation

| Dividend per Share (DPS) (₹) | 20X7 | 20X6 |
| :--- | :--- | :--- |
| Dividend (₹ Million) | 2 | 2 |
| Number of ordinary shares (Million) | 3.7 | 3.7 |
| Dividend per Share $(₹)$ | 0.54 | 0.54 |

Dividend Payout Ratio: Net Income of a company is either distributed or retained. Dividend payout ratio is the portion of the net income that gets distributed with the equity shareholders as dividend. Hence, this ratio can be measured as:

$$
\text { Dividend Payout Ratio }=\frac{\text { Dividend } \times 100}{\text { Net Income }}=\frac{n \times \text { Dividend Per Share } \times 100}{n \times \text { Earnings Per Share }}
$$

Hence, this also can be written as,

$$
\text { Dividend Payout Ratio }=\frac{\text { Dividend Per Share }}{\text { Earnings Per Share }}
$$

In a rare scenario when the dividend payout ratio is more than $100 \%$ - it would indicate that the company has paid to shareholders beyond its earnings during the year and hence, it would lead to an erosion of net worth, i.e., shareholders money inside the company. Companies normally tend to go for such extreme dividends only on special occasions and needs, such as Silver/Golden Jubilee Dividend or an


To know more on "EPS, DPS, Payout Ratios and their Importance" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/547

### 7.6.4 Efficiency in Asset Utilization

We have seen profitability in terms of the profit margin on sales and rate of return on assets employed. It is easily recognised that the rate of return on assets employed is a function of both, the margin on net sales and the relationship of net sales to assets used. The relationship of assets used to sales, measures the level of sales generated by a given quantum of assets. In other words, it measures the efficiency of the use of assets. This relationship of assets to sales indicates the number of times the assets turned over as a result of the volume of sales generated. Thus, the relationship of net income to assets is the turnover of assets times the margin on sales.

For example, the return on total assets, measured by net income to total assets, comes about by calculating the net income to sales times' sales to total assets as follows:

$$
\text { Return on Total Assets }(\text { ROTA })=\frac{\text { Net Profit }}{\text { Sales }} \times \frac{\text { Sales }}{\text { Average Total Assets }}
$$

Tools \& Tools Limited: Computing Profitability Component

| Asset Utilization and Returns | 20X7 | 20X6 |
| :--- | ---: | :---: |
| Total Assets (₹ million) | 330 | $\mathbf{2 7 0}$ |
| Profit After Taxes (PAT) (₹ million) | 27 | 24 |
| Sales(₹ million) | 300 | 280 |
| Net Income/ Sales (\%) | 9.00 | 8.57 |
| Sales / Total Assets (also known as Asset Utilization Ratio) | 0.91 | 1.04 |
| Return on Total Assets (Net Income /Total Assets) (\%) | 8.18 | 8.89 |
| Sales / Average Total Assets | 1.00 |  |

It is obvious from the above, that various asset/investment turnover ratios are measures of efficiency of their use in terms of their ability to convert profit margins to rate of return on assets. In case of Tools \& Tools Ltd., the average total assets turnover is 1 . And the rate of return on assets employed $=$ rate of return on sales $\times$ asset turnover.

For Tools \& Tools Ltd., since the average total assets turnover is one, the return on total assets employed is net income on sales times one, that is, $9 \%$.

Operating assets turnover: The operating assets turnover tries to relate sales to the operating assets used. This ratio assesses the efficiency of the use of operating assets, that is, their ability to generate revenue. Similar to the return on total assets, the operating assets turnover times the operating profit margin, gives us the operating profit to operating assets. In equation form, these can be stated as:

$$
\text { Operating Assets Turnover Ratio }=\frac{\text { Sales }}{\text { Average Operating Assets }}
$$

So, the Return on Operating Assets can be broken into:

$$
\text { Return on Operating Assets }(\text { ROA })=\frac{\text { Operating Profit }}{\text { Sales }} \times \frac{\text { Sales }}{\text { Average Operating Assets }}
$$

And hence, can be simply written as:
Return on Operating Assets $(\mathrm{ROA})=\mathrm{OPM} \times$ Operating Assets Turnover Ratio
For Tools \& Tools Ltd., this relationship is:
Tools \& Tools Limited: Operating Assets Turnover Computation

| Operating Assets Turnover and Return (ROA) | 20X7 | 20X6 |
| :--- | ---: | :---: |
| Sales (₹ million) | 300 | 280 |
| Operating profit (₹ million) | 67 | 60 |
| Operating Profit Margin (OPM) (\%) | 22.33 | 21.43 |
| Fixed assets (₹ Million) | 94 | 79 |
| Total operating assets (₹ million) | 326 | 269 |
| Operating Asset Turnover (OAT) | 0.92 | 1.04 |
| Fixed Asset Turnover | 3.19 | 3.54 |
| Return on Operating Assets (OPM*OAT) (\%) | 20.55 | 22.30 |
| Average Operating Assets Turnover $=$ Sales /AO Assets | 1.01 |  |
| ROA - on average operating assets (326+269)/2 (\%) | 22.52 |  |

## SPOTLTGHT 7.4

## "Operating Assets Different from Total Assets"

If it is a case of evaluation of a company's standalone performance, then we exclude the non-operating assets from the total assets just to know the operating assets of a company. Based on these operating assets and operating performance, we can predict its future performance.

Non-operating assets of a company largely include its long-term investments in assets not related to the actual/ standalone operations of the company. These long-term investments often include investment in subsidiaries, joint ventures, strategic investments, and long-term portfolio investments in both publicly listed and non-listed companies. Lately, cash and bank balance has been getting treated as a non-operating asset and has been getting excluded from the operating assets computation. The argument being large unused cash and bank balance does not help the firm in its operating business.

Any income from the non-operating assets of a company is also excluded from the total income to know the efficiency of the use of the operating assets.

Working Capital Turnover: It is an efficiency ratio, intended at evaluating the efficiency of the use of working capital. It tries to look at the relationship of the revenues earned to the working capital investment. For Tools \& Tools Ltd., this ratio is:

$$
\text { Working Capital Turnover }=\frac{\text { Sales }}{\text { Average Working Capital }}
$$

Tools \& Tools Limited: Working Capital Turnover Computation

| Net Working Capital efficiency | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Sales (₹ million) | 300 | 280 |
| Net Working Capital | $\mathbf{1 2 7}$ | 110 |
| Working Capital Turnover | 2.36 | 2.55 |
| Average Working Capital Turnover $(127+110) \times 0.5$ | 2.53 |  |

Shareholders equity turnover: It shows the management's ability in terms of efficiently utilizing the shareholders' funds, both with respect to efficient operations and in terms of efficient financial management. In case of Tools \& Tools Ltd., this ratio is:
Shareholders' Equity Turnover $=\frac{\text { Sales }}{\text { Average Shareholders' Equity }}$

Tools \& Tools Limited: Shareholder Equity Turnover Computation

| Average Equity Turnover | 20X7 | 20X6 |
| :--- | :---: | :---: |
| Sales(₹ Million) | 300 | 280 |
| Shareholders' Equity | 135 | 110 |
| Shareholders' Equity Turnover (ETO) | 2.22 | 2.55 |
| Net Profit Margin (NPM) (\%) | 9 | 8.57 |
| Return on Equity (ETO*NPM) (\%) | 19.98 | 21.85 |
| Average Equity Turnover (135 + 110)×0.5 | 2.45 |  |
| Return on Average Equity (\%) | 22.05 |  |

Return on equity is related to the efficiency of the use of equity as well as the profit margin on sales.

$$
\text { Return on Equity }=\text { Equity Turnover } \times \text { Net Profit Margin }
$$

Similar to other relationships, the shareholders equity turnover times the net income margin, gives us the return on equity. For Tools \& Tools Ltd., this ratio is just above $22 \%$. Considering the overall economy, one can conclude the firm's profitability to be above average.

### 7.7 SOLVENCY RATIOS

The ongoing discussion and case studies do give us enough indications that companies are always to be measured on two parameters - their profitability and liquidity positions. We can have companies which are liquid (solvent), but not profitable. For example, imagine a cash-rich construction company with no orders. Similarly, we can also have companies which are profitable, but not liquid. For example, imagine a construction company with a lot of orders but no cash to execute them. Hence, we would need companies to be both profitable and solvent.

In the following pages, we will discuss the important ratios which can capture the two important aspects of the solvency position of a company, namely, its short-term solvency and long-term solvency.

### 7.7.1 Short-Term Solvency Position: WC Perspective

Solvency is the star of an organization - it is situation where it is capable of meeting all its liabilities by its existing assets. Since assets have two distinct features from the point of view of their ability to be converted into cash or the liquidity they offer. Similarly, the solvency too involves the ability to meet all the short-term commitments or to maintain liquidity as well as the ability to keep sufficient assets to cover all the liabilities in the long run.

Liquidity of a company is of a major concern for short-term creditors and the management. It is obvious that debts falling due within the current year require the use of not only cash held by the company, but also cash generated from sale of merchandise and collection of receivables. It is this premise which prompts the analysis of the relationship between current assets and current liabilities, with a view to evaluating the liquidity of a company. The most rigorous way of evaluating liquidity is by relating the current liabilities to cash and other quickly realisable current assets, referred to as the quick ratio or the acid test ratio.

Net Working Capital As a first step in evaluating the liquidity, it is necessary to assess the excess of current assets over the current liabilities. This excess of current assets is usually referred to as Working Capital. In case where current assets are referred to as the working capital, the excess of current assets is called the net working capital.

Net working capital is financed by long-term sources of funds and as such, it provides a cushion for liquidity. This is obvious that since it is financed by long-term sources, it is not required to be repaid in the short-term. An example could clarify the position.

|  | RAMSONS <br> Balance Sheet |  |  |
| :--- | ---: | :--- | ---: |
| Assets | $₹$ | Liabilities and Capital | ₹ |
| Current Assets | 500 | Current Liabilities | 500 |
| Net Fixed Assets | 500 | Long-term Loans | 250 |
|  |  | Shareholders' Equity | 1000 |
| Total Assets | 1000 | Liabilities and Capital |  |

Working capital in this example is, current assets - current liabilities $=500-250=250$
The total short-term finance available to the firm is ₹ 250 . Thus, subtracting this from the current assets, we get the remainder of the current assets that have been financed by long-term sources, namely, long-term loans and shareholders' funds. Thus, it is possible for us to present the above balance sheet as representing only the long-term items.

|  | RAMSONS |  |  |
| :--- | :---: | :--- | :---: |
|  | Balance Sheet (Alternate Presentation) |  |  |
| Assets | $₹$ | Liabilities and Capital | $₹$ |
| Net Working Capital | 250 | Long-term Loans | 500 |
| Net Fixed Assets | 500 | Shareholders' Equity | 250 |
| Total Assets | 750 | Liabilities and Capital | 750 |

The working capital represents the investment of current assets, which have been financed by longterm assets. The rationale for financing a part of the current assets with long-term finance is that a part
of the current asset remains in stock all through the life of the business. The above core working capital, though made up of items which are rotated constantly, is maintained by the business on a long-term basis. In other words, working capital is the long-term investment in operating current assets. Even though the working capital reflects a margin of safety, an excessive amount of working capital would imply an inefficient use of the resources, say by means of accumulation of inventory, over-due receivables and idle cash. It is in this context that turnover of working capital gains significance.
Current Ratio Current ratio measures the relationship of current assets with current liabilities. It is mathematically represented as:

$$
\text { Current Ratio }=\frac{\text { Current Assets }}{\text { Current Liabilites }}
$$

For Tools \& Tools, this ratio for 20X6 and 20X7 has been worked out in an earlier section of this chapter. These ratios are:

Tools \& Tools Limited: Current Ratio Computation

| Current Ratio | 20X7 | 20X6 |
| :--- | :---: | :---: |
| Current Assets (₹ million) | 232 | 190 |
| Current Liabilities (₹ million) | 105 | 80 |
| Net Working Capital (₹ million) | 127 | 110 |
| Current ratio: Current Assets/Current Liabilities | 2.21 | 2.38 |

The net working capital or the margin of safety has increased by ₹ 17 million. However, we also observe that the current ratio, which measures the relative spread between current assets and current liabilities, has decreased. This implies that even though the amount of current assets over current liabilities has increased, it has not increased in proportion to the increase in the current liabilities.

This ratio is one of the most widely used balance sheet ratios. However, making a specific conclusion on the adequacy of any value of current ratio would depend on several factors, such as the proportion of various components in the current assets and the time taken for conversion of these current assets to cash. It would also depend on the speed of maturity of the current liabilities.

Quick ratio Quick ratio or acid test ratio is usually computed by taking assets, which are quick to be converted into cash and divide them by the current liabilities. As a practical simplification, it is usual practice to subtract the inventories from the current assets, to arrive at the quick assets.

For Tools \& Tools, the quick ratio for 20X7 and 20X6 could be computed as follows:
Tools \& Tools Limited: Quick Ratio Computation

| Quick ratio | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Current assets (₹ million) | 232 | 190 |
| Inventory (₹ million) | 121 | 99 |
| Quick Assets (₹ million) | 111 | 91 |
| Current Liabilities (₹ million) | 105 | 80 |
| Net Working Capital (₹ million) | 127 | 110 |
| Quick ratio: Quick Assets/Current Liabilities | 1.06 | 1.14 |

For Tools \& Tools this, ratio is 1.06 during the year 20X7 and 1.14 during year 20X6. This implies that the company has slightly more than a rupee of quick assets for every rupee of current liabilities. The company is in a comfortable position with respect to liquidity from the point of view of holding assets, which are relatively closer to cash in relation to current liabilities.

A company with no or negligible inventory (like software companies) would have both quick and current ratio equal. Thus, the current ratio and the quick ratio should be examined in relation to the firm's own trend and also compared with the other firms in the same industry.

## SPOTLTGHひ 7.5

## "Which is more important, Current ratio or Quick ratio?"

It depends on the situation of company and industry.
Inventories remain as inventories in a few companies that are unable to sell them off. Companies in highly competitive products and/or which are unable to sell off their inventory would have inventory piling up because they are not able to sell it. For such companies, quick ratio should be given more importance over current ratio while taking a call on the short-term solvency position of the company. The most appropriate example for such companies could be the writing and stationary firms such as Linc Pen \& Plastics or Luxor Writing Products.

On the other hand, we also observe many companies (and industries) wherein procurement of the raw material inventory (and its processing) happens after they receive an order from customer. It does happen in most turnkey equipment suppliers such as Bharat Heavy Electricals Limited (BHEL) or PSL Limited. This is done to minimize the inventory and due to the customized nature of the product. For such companies, current ratio could be given more importance than quick ratio while taking a call on the short-term solvency position of the firm.

Expenses Cover It is not very difficult to appreciate the fact that we hold current assets mostly as an insurance against future contingencies. Cash is held with the objective of making payments whenever required, inventory is held to meet the need for inventory, either for production or for sale. Therefore, it is possible to look at the question of liquidity from the point of view of the extent of cover it provides for the daily operating expenses. We start by defining daily operating expenses as follows:

$$
\text { Average Daily Expenses }=\frac{(\text { Cost of Goods Sold }+ \text { Operating Expense }+ \text { Tax-Depreciation })}{365}
$$

The current assets could thus be expressed as 'number of days' expenses equivalent'. Similarly, cash and quick assets could be viewed as a cover for expenses.

| Current Assets Cover $=$ |
| ---: |
| Carrent Assets |
| Average Daily Expenses |
| Cover $=\frac{\text { Cash }}{\text { Average Daily Expenses }}$ |

Tools \& Tools Limited: Expenses Covered Computation

|  | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | ---: | :---: |
| Cash | 19 | 11 |
| Current Assets (₹ million) | 232 | 190 |
| Quick Assets (₹ million) | 111 | 91 |
| Current Liabilities (₹ million) | 105 | 80 |
| Average Daily Expenses (₹ million) | 0.6027 | 0.5726 |
| Cash Cover (number of days) | 32 | 19 |
| Quick Assets Cover (number of days) | 184 | 158 |
| Current Assets Cover (number of days) | 384 | 332 |
| Current Liabilities Cover (number of days) | 174 | 140 |

Current assets amount to more than one year's operating expenses. Cash holding is sufficient to meet one month's expenses. Current liabilities amount to almost six months' daily expenses.

### 7.7.2 Short-Term Solvency: Operating Cycle Perspective

Apart from the above two working capital relationships, we know that sale of merchandise and collection of receivables generates liquidity. How much liquidity a firm needs depends on its operating cycle (see Figure 7.3). The operating cycle is the duration of time taken by a unit of cash to circulate through the business operations and return back as cash.

For evaluating the efficiency in the management of current assets and the time taken for their conversion to cash, such measures as inventory turnover and receivables turn over, are computed. Similarly, the need for liquidity arises out of a need to meet payments. This, of course, is directly related to the speed with which debts mature for payment. In order to evaluate this aspect, usually, the payable turnover ratio is computed.


Figure 7.3 Operating Cycle of a Business

Accounts receivable turnover: Another element which provides liquidity to a firm, is the collection of receivables. In this regard, the time period taken for the collection of receivables is of great interest in evaluating the working capital. The turnover of receivables is computed by dividing the credit sales by the average receivables outstanding which gives us the velocity of circulation of the receivables. When credit sales figures are not available, we can still compute the turnover using net sales. The assumption here being that almost all the net sales of the company are on credit basis. This assumption is close to reality in most industries and companies.

For Tools \& Tools Ltd., the turnover of receivable could be as follows:

$$
\text { Accounts Receivable Turnover }=\frac{\text { Sales }}{\text { Average Accounts Receivable }}
$$

Tools \& Tools Limited: Average Collection Period Computation

| Accounts Receivable Ratio | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Sales (₹ million) | 300 | $\mathbf{2 8 0}$ |
| Accounts receivable (₹ million) | 32 | 20 |
| Accounts receivable turnover | 9.38 | 14 |
| Average Collection period (number of days) | 38.93 | 26.07 |
| Average Accounts receivable turnover | 11.54 |  |

The meaning of the average accounts receivable turnover of more than 11 times during the year, is that the cycle of credit sales and its collection happened more than eleven times during the year. Since during the year receivables turned over 11.5 times, it takes $365 / 11.5$, that is, on an average, it takes approximately 32 days for collection of the accounts receivable.

$$
\text { Average Collection Period }(\mathrm{ACP})=\frac{\text { Number of Days in the Accounting Period }}{\text { Accounts Receivable Turnover }}
$$

Alternately, we can express accounts receivable as a percentage of the sales and that percentage of the days in the period, is the collection period.

$$
\text { Average Collection Period }=\frac{\text { Accounts Receivable }}{\text { Sales }} \times \text { Days in the Period }
$$

It is not possible to make any value judgment as to a certain number of days of collection period being good or bad. It depends on the normal period of credit and the credit terms given by the company and by how much the actual collection period deviates from the normal.

Inventory turnover Inventories represent resources of the firm invested for the purpose of facilitating operations. Excess inventory represents a wasteful use of the resources. The need for holding inventory will also be influenced by the availability of the goods, time taken for deliveries, seasonal nature of business and a host of other factors, which should all be considered before making any judgment.

Inventory turnover tries to assess the velocity with which inventories are covered to revenue. For Tools \& Tools Limited, the inventory turnover could be worked out as follows:

$$
\text { Inventory Turnover }=\frac{\text { Cost of Goods Sold }}{\text { Average Inventory }}
$$

It can be seen that the inventory turns over just about 1.3 times for Tools \& Tools. This implies that the inventory holding period, based on the average inventory, is 270 days or nine months.

Similar to the receivable collection period, the inventory holding period can be computed by multiplying the ratio of average inventory to the cost of goods sold, with the number of days in the period.

$$
\text { Inventory Holding Period }=\frac{\text { Average Inventory }}{\text { Cost of Goods Sold }} \times 365
$$

Tools \& Tools Limited: Inventory Holding Period Computation

| Inventory Related Ratio | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Cost of Goods sold (₹ million) | 148 | $\mathbf{1 4 0}$ |
| Inventory (₹ million) | 121 | 99 |
| Inventory Turnover | 1.22 | 1.41 |
| Inventory Holding Period (number of days) | 299 | 259 |
| Inventory to Cost of Goods sold (\%) | 81.76 | 70.71 |
| Average Inventory Turnover | 1.35 |  |
| Inventory Holding Period based on Average Inventory (number of days) | 270 |  |

It shows that the holding period of inventory is about nine months on an average. As we have discussed earlier, we cannot make any judgment based on the absolute values. However, we can say that the management's objective should be to turn over the inventory as fast as possible.

The faster the inventory sells, the fewer funds are tied up in inventory. A high turnover might also imply that there is under stocking, shortage of materials, or more sales than planned. Then again, a low turnover would reveal over stocking, slow moving items or there could also be some legitimate reasons such as decreased demand or expected problems like strike, etc. Here also the type of industry is important in assessing inventory turnover.

Accounts payable turnover: Accounts payable is also an important source of finance. Hence, we need to analyse the trade liabilities on the balance sheet to see how long it takes a firm to pay its creditors. We can compute the time taken by a firm, on average, to go from creating a trade payable (creditor) to paying for it in cash, by computing the average payables period. If we assume - (a) all the purchases on credit; and (b) the cost of goods sold to be equal to the purchases then average payables period happens to be:

$$
\text { Average Payables Period (APP) }=\frac{\text { Average Accounts Payable }}{\text { Cost of Goods Sold per day }}
$$

We can also compute the earlier two-steps - compute the accounts payable turnover ${ }^{9}$ and then use the same to compute the average payables period:

| Accounts Payable Turnover $=\frac{\text { Cost of Goods Sold }}{\text { Average Accounts Payable }}$ |
| :---: |
| Average Payables Period (APP) $=\frac{\text { Number of Days in the Accounting Period }}{\text { Accounts Payable Turnover }}$ |

[^40]
## SPOTLGHJ 7.6

## "ACP, APP and Working Capital requirements?"

Generally companies want low ACP and a high APP. Because of the time value of money, the quicker you can collect cash and the longer you hold off paying for your purchases, the better would be for companies in reducing their working capital requirement. Successful firms such as Colgate-Palmolive and Hindustan Unilever keep extreme differences. For example, an APP of 175 days vis-à-vis an ACP of just 2 days for Colgate-Palmolive means an extremely favorable position.

To encourage prompt payment, many companies offer discounts. Like " $2 / 10$ net 45 "; that is, a $2 \%$ discount if the bill is paid in 10 days, rather than the usual credit period of 45 days. Many companies also charge and enforce interest penalties on payment delays and consequent late payments.

Essentially, low receivables collection period and a high payables period leads us to the popular adage in business circles ... 'do business, but with others money' - and Colgate-Palmolive (India) Limited ${ }^{10}$ seems to be following this seriously.

Operating Cycle and Cash Conversion Period: Earlier in Section 2.6, we had remarked that operating cycle of a manufacturer comprises: (a) Using cash to invest in inventory. (b) Generating sales by extending credit, creating trade receivable. (c) Collecting receivables from customers, cash is back. So, operating cycle is the duration of time period to generate cash through the investment of cash. Hence, to measure operating cycle, we need to know:

- Time taken to convert "cash $\rightarrow$ inventory $\rightarrow$ sales $\rightarrow$ accounts receivable" i.e., Inventory Conversion Period (ICP) does capture this period
- Time taken to collect accounts receivables "accounts receivable $\rightarrow$ cash" i.e., Average Collection Period (ACP) does capture this period
Hence,

> Operating Cycle = Inventory Coversion Period + Average Collection Period

This can also be written as:
Operating Cycles (in days) = ICP (in days) + ACP (in days)

For example, if ACP and ICP figures of a company, CPIL, is already computed as 2 days and 48 days, then we can state that has an operating cycle of 50 days.

$$
\text { Operating Cycles Per Year }=\frac{365}{(\mathrm{ICP}+\mathrm{ACP})}
$$

[^41]The Operating Cycles per year in the above case works out to 7.3 . This conveys to us that this firm is able to turnover (convert) its investment in cash back to cash approximately 7.3 times a year. A portion of this operating cycle is funded using credit taken from suppliers (vendors) of CPIL, which is the Average Payables Period (APP). If we put two pieces of information together, i.e., an operating cycle of 69 days and an average payables period of 122 days for the case of CPIL for Year 1 (from table below) - we can see how long CPIL would have excess cash to invest.

| CPIL: Operating Cycles Per Year and Cash Conversion Period (in Days) |  |  |  |
| :--- | ---: | ---: | :---: |
| Cash Conversion Period | Year 4 | Year 3 | Year 2 |
| Average Collection Period (ACP) (in days) | 10 | 11 | 7 |
| Inventory Collection Period (ICP) (in days) | 59 | 65 | 55 |
| Operating Cycle (in days) | 69 | 76 | 62 |
| Average Payables Period (APP) (in days) | 122 | 130 | 157 |
| Operating Cycles Per Year | 5.3 | 4.8 | 5.9 |
| Cash Conversion Period (CCP) (in days) | -53 | -54 | -95 |

## Cash Conversion Period (CCP) = Operating Cycle - Average Payables Period (APP)

This difference between Operating Cycle and Average Payables Period (APP) is popularly known as Cash Conversion Period (CCP). It is also known as Net Operating Cycle. One can also state the CCP in terms of ACP and ICP, as follows:

$$
\text { Cash Coversion Period }(\mathrm{CCP})=(\mathrm{ICP}+\mathrm{ACP})-\mathrm{APP}
$$

Based on the CCP figures generated, one can make the following interpretations:

- In case of positive figure, Cash Conversion Period (CCP) conveys the duration, for which, a firm will need to tie up cash. This is usually the case among most businesses, given poor market powers and no market dictating position. The longer the CCP, the greater is the need for liquidity and working capital funding arrangements, especially using long-term sources.
- In case of negative figure, Cash Conversion Period (CCP) conveys the duration, for which, a firm will have excess cash to invest. This is a rare case - largely possible for firms with large market power, say, Colgate-Palmolive (India) Limited. The more negative is the CCP, the greater will be the scope for the firm to use these funds elsewhere. ${ }^{11}$
The above table also shows the computations of operating cycle and CCP for CPIL. We observe that CPIL's Operating Cycle has gone up from 62 days in Year 2 to 69 days in Year 4 primarily due to an increase in the Inventory Holding Period and Collection Period. The Cash Conversion Period (CCP) has been negative throughout and has been steady at near two months duration. It also results in ensuring other income during the period.


### 7.7.3 Long-term Solvency

In the short-term, the solvency of the firm is measured by the ability of the firm to meet all its current maturing obligations. Similarly, the long-term solvency measures its ability to meet its long-term obligations. There are two approaches for evaluating the long-term solvency. One is in terms of evaluating

[^42]the margin of safety available for lenders, represented by the owners' equity and the other is in terms of the ability of the firm to earn sufficient surpluses to meet all the long-term commitments. ${ }^{12}$

Debt-equity ratios: We have understood the balance sheet as a statement of assets and the claims against these assets. The claims against assets are those of creditors and shareholders. Creditors have a prior claim on the assets of the company and to that extent, the owner's equity forms the extent of margin of safety for the lenders' claims. However, the debt also implies potential for increased benefits to investors/ owners. If a debt is used successfully the returns to shareholders would also increase.

$$
\text { Total Debt to Equity Ratio }=\frac{\text { Current Liabilities }+ \text { Long-term Liabilities }}{\text { Net Worth }}
$$

In case of Tools \& Tools Ltd. total debt to owners' equity is:
Tools \& Tools Limited: Debt-to-Equity Ratio Computation

| Debt-Equity Ratios | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Total Debt (₹ million) | 195 | 160 |
| Shareholders' Equity (₹ million) | 135 | 110 |
| Total Debt to Shareholders' Equity | 1.44 | 1.45 |

This ratio means that for every rupee of shareholders' funds in the company, there is $₹ 1.4$ of lenders' claim. The lower the lenders' claim to the shareholders' claim, the lower are the demands on the firm's earnings for meeting fixed commitments in terms of interest. The other aspect of this is that there is a lesser leverage in the capital structure of the company.

Long-term debt to total capital: This measures the relationship long-term debt bears to the owners' total investment in the company. For Tools \& Tools Ltd., this ratio is:

$$
\text { Long-term Debt to Equity Ratio }=\frac{\text { Long-term Liabilities }}{\text { Net Worth }}
$$

Tools \& Tools Limited: Long-term Debt-to-Equity Ratio Computation

| Long-term Debt to Shareholder's Equity | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Long-term Debt (₹ million) | $\mathbf{9 0}$ | $\mathbf{8 0}$ |
| Shareholders Equity (₹ million) | 135 | 110 |
| Long-term Debt to Shareholder's Equity (\%) | 66.67 | 72.73 |

This ratio means that for every rupee of owners' funds, there is a long-term debt commitment from lenders of ₹ 0.67 only.

Long-term Debt to Fixed Asset This measures the amount of fixed assets available as a backing for long-term debts.

[^43]$$
\text { Long-term Debt to Fixed Asset }=\frac{\text { Long-term Debt }}{\text { Net Fixed Assets }}
$$

For Tools \& Tools Ltd., this ratio is:
Tools \& Tools Limited: Long-Term Debt-to-Fixed Asset Computation

| Long-term Debt to Fixed Asset | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Long-term Debt (₹ million) | 90 | 80 |
| Net Fixed Assets (₹ million) | 94 | 79 |
| Long-term Debt to Net Fixed Assets (\%) | 95.75 | 101 |

$$
\frac{\text { Long-term Debt }}{\text { Net Fixed Asset }}=\frac{90}{94}=0.96
$$

This ratio means that the long-term debt is more than covered by the net fixed assets of the company, during 20X7.

Times Interest Earned: This ratio measures the relationship of earnings before interest and taxes to the fixed interest commitment. The larger is the cover, the greater is the safety of the lender's interest. Alternately, it also shows the risk in case the firm's earnings decrease. It is also known as 'interest coverage ratio.'

$$
\text { Times Interest Earned Ratio }=\frac{\text { Earnings Before Interest and Tax }}{\text { Interest Expense }}
$$

For Tools \& Tools Ltd., the interest cover would be:
Tools \& Tools Limited: Long Term Debt-to-Fixed Asset Computation

| Times Interest Earned | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Earnings before interest and taxes | 67 | 60 |
| Interest expense (₹ Million) | $\mathbf{1 4}$ | 13 |
| Times Interest Earned Ratio | 4.79 | 4.62 |

This means that the interest commitments are covered 4.8 times by the current earnings of the company. Of course, a high interest cover would be a very good signal to a lender regarding the safety of his money.

Times Fixed charges covered: The ratio of times fixed charges covered is computed usually, if the company has other fixed commitments such as lease payments under non-cancelable lease obligations. This ratio is computed as follows:

$$
\text { Times Fixed Charges Covered }=\frac{\text { Earnings before Interest and Fixed Charges }}{\text { Interest and Fixed Charges }}
$$

If information is available, then one should also include items like the scheduled repayment of the loans (a commitment made by the company to its lenders) in the fixed charges noted above. The
interpretation of this ratio is similar to the interest cover and shows the extent of safety provided by the current operating earnings.

Gearing: Gearing is the extent to which the company is in a position to increase the earnings to the shareholders, by having fixed interest bearing borrowings in its capital structure. This could be worked out by disaggregating the earnings on borrowed funds (see the calculations below). The interest paid by Tools \& Tools Ltd. is ₹ 14 million. This works out an effective rate of $(14 / 195) \times 100$, that is, $7.2 \%$ as the interest cost. Thus, to determine the net gain, we subtract the interest cost from the return earned by borrowed funds and the tax paid on the gain on borrowed funds.

Tools \& Tools Limited: Gearing Gains Computation (figures in ₹ million)

|  |  | FY 20X7 |
| :--- | :---: | :---: |
| Profit earned by average borrowed funds (using the earlier computed <br> operating profit margin) | $0.5(195+160) \times 22.33$ | 38.52 |
| Less: Interest cost |  | 14.0 |
| Gain from borrowed funds | $24.52 \times 49.06 \%$ | 12.03 |
| Less: Tax liability on the gain | $(12.49 / 177.5) \times 100$ | $7.04 \%$ |
| Net gain from borrowed funds |  |  |
| The net profit realized as a result of gearing |  |  |

₹ 12.49 million, gained from borrowed funds, goes to increase the return on an average owner's equity, by $11.4 \%$. Thus, the total return on equity could be disaggregated as follows:

Tools \& Tools Limited: Breaking ROE into its Components (figures in ₹ million)

| Earnings on average owners' equity | $(122.5 \times 22.33 \%)$ | 27.35 |
| :--- | :---: | :---: |
| Less: Taxation on the earnings | $(27.35 \times 49.06 \%)$ | 13.42 |
| Net earnings on shareholders' funds | $(13.93 / 122.5) \times 100$ | 13.93 |
| Net earnings on shareholders equity as \% of equity |  | 12.49 |
| Earnings available to shareholders due to borrowing as a result of gearing | 26.42 |  |
| Total earnings available to equity holders | $(12.49 / 122.5) \times 100$ | $10.20 \%$ |
| Earnings due to borrowing as a percentage of owner's equity | $13.93+12.49$ | 26.42 |
| Total earnings available to shareholders | $11.37 \%+10.20 \%$ | $21.57 \%{ }^{@}$ |
| Return on equity |  |  |

${ }^{@}$ Marginal difference due to approximation.
Equity Multiplier: Equity multiplier measures the ability of the owner's equity to command resources and is measured as, total assets / owner's equity. The equity multiplier will show the extent of enhancement in the returns to an equity holder, due to leverage or borrowing.

$$
\text { Equity Multiplier }=\frac{\text { Total Assets }}{\text { Net Worth }}
$$

Equity Multiplier $=\frac{\text { Total Assets }}{\text { Net Worth }}=1+($ Total Debt to Equity Ratio $)$

Since

$$
\begin{aligned}
\frac{\text { Total Assets }}{\text { Net Worth }} & =\frac{\text { Total Debt }+ \text { Net Worth }}{\text { Net Worth }} \\
\text { Equity multiplier } & =\frac{\text { Total Debt }}{\text { Net Worth }} \\
& =1+(\text { Total Debt to Equity Ratio })
\end{aligned}
$$

Tools \& Tools Limited: Equity Multiplier Computation (figures in ₹ million)

|  | $\mathbf{2 0 X 7}$ | 20X6 |
| :--- | :---: | :---: |
| Total Debt (₹ million) | $\mathbf{1 9 5}$ | $\mathbf{1 6 0}$ |
| Shareholders Equity (₹ million) | 135 | 110 |
| Total Assets | 330 | 270 |
| Equity Multiplier (total assets/owners equity) | 2.44 | 2.45 |
| Return on Total Assets (\%) | 8.18 | 8.89 |
| Return on Equity ( ROTA $\times$ Equity Multiplier) (\%) | 20 | 21.8 |

## SPOTLGHT 7.7

## "DuPont Analysis"

Return on Equity (ROE) has been defined as:

$$
\text { Return on Equity }(\text { ROE })=\frac{\text { Net Income }}{\text { Average Net Worth }}
$$

Now this can be written as a combination of the margin on sales ratio, asset efficiency ratio, and a financial leverage ratio. It is derived and computed as shown below:

$$
\begin{aligned}
& \text { Return on Equity }(\text { ROE })=\frac{\text { Net Income }}{\text { Sales }} \times \frac{\text { Sales }}{\text { Total Assets }} \times \frac{\text { Total Assets }}{\text { Average Net Worth }} \\
& \text { Return on Equity }(\text { ROE })=N P M \times \text { Total Asset Turnover } \times \text { Equity Multiplier }
\end{aligned}
$$

NPM stands for Net Profit Margin, Total Asset Turnover stands for Asset Efficiency, and Equity Multiplier stands for Financial Leverage taken by a firm. The DuPont break-up conveys that one can maximize profitability (ROE) by focusing on playing a margin-based game, and/or the asset utilization, and/or the financial leverage game. It helps in identifying and pinpointing the reason behind high or low profitability of a firm vis-à-vis its competitors or across industries or across economies.

Profitability $=$ Margin Game $\times$ Volume Game $\times$ Financial Leverage Game
We illustrate a wide variety of commonly held beliefs using examples below: ${ }^{13}$

- Banking industry compared to other sectors are always forced to play the financial leverage game given the nature of the business, i.e., take deposits and give loans.
Bank's Profitability = Focus on Financial Leverage Game

[^44]- Even in the same sector one can observe the difference in the strategies of various firms. For example, in the automobile sector, BMW and Skoda are margin based players while Maruti Alto, Tata Nano and Hyundai Santro are more of volume based players.

> Skoda's Profitability = Focus on High Margins
> Tata Nano's Profitability = Focus on High Volumes

- Globally, most of the Anglo Saxon companies and locally most of the Marwari companies prefer playing a margin based game. Examples include Bajaj, Blue Dart, Coca-Cola, Colgate, ITC, Raymond, Shell, and Vodafone.
Coca Cola's Profitability = Focus on High Margins
- Globally, most of the East Asian companies and locally most of the Gujarati groups prefer playing a volumebased game, i.e., keep asset utilization high even at the cost of low margins. Examples include Chinese mobiles manufacturers, Haier, Mitsubhishi, Nirma, Suzuki, Reliance Communication, and Taiwanese Chip Manufacturers.
Nirma's Profitability = Focus on High Volumes
- In a commoditized industry, i.e., where branding or differentiation are difficult, the most successful player is a volume based player. Example - Cement (Holcim \& Lafarge), Steel (Arcelor Mittal, Posco, \& Nippon), and Sugar (Balrampur \& Renuka)

Renuka Sugar's Profitability= Focus on High Volumes

- In an industry where branding or differentiation can be maintained the winner is usually the margin based player. Example - Cigarettes (ITC), Cosmetics (Colgate, P\&G, \& Unilever) and Pharmaceutical (GSK \& Pfizer)

> Glaxo Smithklines Profitability = Focus on High Margins

- Companies managed by traditional business families often tend to prefer using financial leverage as a tool to rake up their Return on Equity. Examples - RPG Group vis-à-vis Infosys bias for no financial leverage.


## Let's Check Our Concepts!

## State whether the following statements are True or False:

(e) Using debt is a two-edged sword. When times are good, debt financing can make them very good, but when times are bad, debt financing makes them very bad.
(f) The Du-Pont Analysis is a method that is used to analyze a firm's profitability and return on equity.

### 7.8 RATIO ANALYSIS IN PRACTICE

The ratio analysis in the previous two sections helps us in correlating the figures in a balance sheet, profit and loss account, and also interchangeably. In this section, we'd continue discussion on financial ratios by comparing two peers, namely, CPIL and ML, introduced in Section 7.4 with financial statements shared in Annexure 7.1 on the OLC for four financial years and take some more learnings.

We step into ratio analysis using this data and compare both the players however, our focus herein would largely be ML and some interesting insights using quantitative and qualitative information of both the peers.

### 7.8.1 Short-Term Solvency Position

Table 7.5 provides us all the key financial ratios and numbers related to CPIL and ML. We observe that ML's Net Working Capital has been rising steadily. A growing company will surely need larger and larger net working capital requirement. It conveys that ML's approach towards working capital management is increasingly conservative, i.e., ML has been using more long-term sources to fund its short-term requirements.


To know more on "Are there any Ratios Based on Cash Flow Statement?" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/548

Table 7.5 Comparisons Using Short-Term Solvency Ratios

|  | Colgate-Palmolive (India) Limited |  |  |  | Marico Limited |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short-term Solvency Measures | Year 4 | Year 3 | Year 2 | Year 1 | Year 4 | Year 3 | Year 2 | Year 1 |
| Net Working Capital (in ₹ millions) | 116 | 603 | 840 | 387 | 3,485 | 4,042 | 7,028 | 4,833 |
| Current Ratio | 1.0 | 1.1 | 1.1 | 1.1 | 1.3 | 1.4 | 2.4 | 2.2 |
| Quick Ratio | 0.8 | 0.8 | 0.9 | 0.9 | 0.6 | 0.7 | 1.2 | 1.1 |
| Average Daily Expenses (in ₹ millions) | 72.0 | 60.7 | 50.8 | 42.8 | 109.8 | 96.1 | 73.7 | 63.1 |
| Cash Cover for Daily Expenses (days) | 60 | 51 | 78 | 81 | 24 | 14 | 29 | 18 |
| Quick Assets Cover for Daily Expenses (days) | 84 | 83 | 109 | 112 | 66 | 73 | 84 | 72 |
| Current Assets Cover for Daily Expenses (days) | 110 | 119 | 139 | 138 | 145 | 148 | 166 | 142 |
| Current Liabilities Cover for Daily Expenses (days) | 109 | 109 | 123 | 129 | 113 | 106 | 70 | 66 |

ML's average daily expenses are rising at a higher pace than CPIL's. This conveys that ML has grown at a more aggressive pace than CPIL, especially geographically using inorganic acquisitions. Given the same, we observe that Cash Cover of ML has been constrained by this decision and thus it is consciously maintained at a level of around 20 days during the three year period of Year 1-Year 3. A matter of concern for ML would be the drastic decrease in Current ratio and also the increasing Current Liabilities Cover ratio. Probing further, conveys that ML's other current liabilities \& provisions have risen. Three possible reasons could be - (a) the firm preferring increased vertical integration leading to a more provisions needed to be made; (b) the firm's increased international exposure with businesses ranging from Malaysia to Africa and also an increasing product portfolio might be forcing the increase in temporary liabilities and provisions; and (c) the firm is not able to remove a few unnecessary liabilities (due to its past period activities).

CPIL's current ratio has been near one and quick ratio has been less than one - yet we could conclude that it is having strong short-term solvency position due to three strong reasons - (a) appropriate use of monopoly and monopsony powers in the sellers and buyers markets respectively (i.e., leveraging its high market power for own benefit); (b) high and steady state of cash cover clubbed with high profitability; and (c) low and efficiently managed inventory and other relatively illiquid current assets.

ML's current ratio is unfailingly more than that of CPIL - this in itself conveys that there can be no good or bad ratios even within an industry. An important point to take home from this discussion on current ratio and quick ratio is - financial ratios don't have benchmarks. Benchmarks, if any, should take into consideration the industry position in which a company is in; and also competitive position of a player within the industry. For example, a current ratio of even 4.0 can be considered insufficient in the fast moving consumer goods industry for a small detergents soap manufacturer such as, Doctors Soap Products OR Fena Detergents. A key reason would be the poor market power they would enjoy with both the buyer's and the seller's side - hence, they will not be able to easily get credit from the suppliers. In addition, they would also be forced to keep larger inventory (in proportion to other assets) and give longer credit period to its customers/channel partners. In other words, the relatively poor competitive position of the smaller player with no niche is hurting its short-term solvency position.

## SPOTLTGHT 7.8

## "Interesting Query"

Which one of the two companies is having an aggressive Cash Management Policy?
The low and stable cash cover days of Marico reveals that its cash management has been more aggressive than CPIL's. On the other hand, the cash cover of Colgate Palmolive is reasonably high, which shows its conservative policy with respect to cash.

### 7.8.2 Operating Cycle Efficiency

Table 7.6 conveys a stark contrast in the operating cycles of both the companies. CPIL's average collection period numbers convey a business wherein the company does not give any credit and yet customers walk for its products and demand it (known, as brand pull strategy). On the other hand, ML's average collection period numbers convey a business wherein the company does have a brand, does give credit of around two weeks and get customers for its products (relatively, it is a brand push strategy).

Table 7.6 Comparisons Using Operating Cycle Ratios

|  | Colgate-Palmolive (India) Limited |  |  |  | Marico Limited |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Cycle Measures | Year 4 | Year 3 | Year 2 | Year 1 | Year 4 | Year 3 | Year 2 | Year 1 |
| Average Collection Period (days) | 10 | 11 | 7 | 2 | 16 | 18 | 20 | 21 |
| Inventory Conversion Period (days) | 59 | 65 | 55 | 52 | 112 | 99 | 108 | 117 |
| Average Payables Period (days) | 122 | 130 | 157 | 176 | 59 | 50 | 63 | 81 |
| Operating Cycle (in days) | 69 | 76 | 62 | 54 | 128 | 117 | 128 | 138 |
| Operating Cycles Per Year | 5.3 | 4.8 | 5.9 | 6.8 | 2.9 | 3.1 | 2.9 | 2.7 |
| Cash Conversion Period (CCP) (in days) | -53 | -54 | -95 | -122 | 69 | 67 | 64 | 56 |

CPIL's inventory holding period suggests a grand old work horse at work and still having a drive to improve. Substantial changes over time in inventory conversion period may indicate the desirability of probing into the inventory issue deeper. ML's inventory holding period does convey a few worries. A reason for the sudden decline in this figure could be the company deciding to revamp its loss-making Kaya Skin Clinic business. The slew of new brands acquired and new countries entered would be another reason. Also, there is a possibility of some of its products not moving as per its initial expectations in Year 4 resulting in stacking of unsold inventory.

We always thought that the best way to take advantage of market power is to take advantage at the price level, i.e., in case of buying a product - it would be to buy at a lower price. Hence, CPIL's average payables period might raise a nice inquiry into an alert mind - why should a company delay payments to its regular suppliers (known as trade creditors) by nearly 4-6 months instead of taking a trade-cum-cash discount? A significant reason behind this is the terms of the trade of the raw materials of Colgate. Most of these downstream organic and inorganic chemicals price are linked to the global crude oil prices. Given the crude oil price fluctuations, not many suppliers are (normally) willing to give fixed prices (pre-decided prices) commitments in this sector, especially for a bulk order at a future point. Hence, player of the size and market power of CPIL would use a combination of stretch their payables to the maximum - and also getting the most feasible price bargain from their vendors.

We observe that ML's average payables period has been around 60 days - perhaps this conveys that ML is having a two-month's credit policy with its suppliers. This is not bad, given its relatively smaller size and relatively commoditized raw material required compared to Colgate, i.e., purchasing refined oil or coconut oil in agriculture-led market with large number of buyers and sellers does not give any big bargaining advantage compared to CPIL's globally integrated procurement policy to further increase its bargaining powers.

All the three factors i.e., relatively higher ACP, higher ICP, and lower APP when put together give rise to ML's positive cash conversion period. A positive Cash Conversion Period (CCP) of 69 days in Year 4 conveys that ML needed to fund its cash investment portion of its operating cycle for 69 days. But, what we also observe is that the CCP of ML has risen from 56 days in Year 1 to 69 days in Year 4. The longer the CCP, the greater would be the need for liquidity and working capital funding arrangements for ML, especially using its long-term sources.

### 7.8.3 Long-Term Solvency Position

Table 7.7 provides the required figures and financial ratios for a discussion on long-term solvency position of both the players. We see that CPIL's Total Debt to Equity Ratio differs constantly with its Long-term Debt to Equity Ratio for all the four years. A key reason being CPIL enjoying long periods of credit from suppliers and hence, figures of accounts payable are high, although its long-term debt is negligible. In addition, CPIL also has the ability to taking non-interest bearing liabilities (as deposits) from its channel partners, i.e., distributors. One must also remember that CPIL also is a large company milking attractive profits in a mature phase of life cycle; hence, it is possibly looking forward to sustaining its steady phase as much as possible, rather than targeting any new growth opportunities involving risk.

During the period Year 1-Year 3, almost all the balance sheet based capital structure ratios of ML have progressively decreased. Possibly, it conveys a conscious decision by management to financially de-risk the company. Hence, the total debt-to-equity ratio has decreased from 1.3 in Year 1 to 0.9 in Year 4. During the period Year 3-Year 4, the long-term debt to fixed assets ratio of the company has also fallen - signaling a move away from the earlier management policy of ML, i.e., fixed assets will be funded using long-term debt.

Table 7.7 Comparison using Long-term Solvency Position Ratios

|  | Colgate-Palmolive (India) Limited |  |  |  | Marico Limited |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Long-term Solvency Measures | Year 4 | Year 3 | Year 2 | Year 1 | Year 4 | Year 3 | Year 2 | Year 1 |
| Total Debt to Equity Ratio | 1.7 | 1.6 | 1.7 | 1.7 | 0.9 | 1.3 | 1.4 | 1.3 |
| Long-Term Debt to Equity Ratio | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.4 | 0.8 | 0.7 |
| Long-Term Debt to Fixed Assets Ratio | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.9 | 1.6 | 1.1 |
| Times Interest Earned Ratio | 511.0 | 390.0 | 158.6 | 323.3 | 10.3 | 10.3 | 10.6 | 12.6 |
| Times Fixed Charges Covered Ratio | 8.0 | 8.3 | 7.7 | 8.5 | 2.6 | 2.3 | 2.5 | 2.9 |
| Net Gain from Borrowed Funds (₹ millions) | 4,153 | 3,758 | 3,302 | 1,846 | 2,137 | 2,246 | 1,861 | 607 |
| Equity Multiplier | 2.7 | 2.6 | 2.7 | 2.7 | 1.9 | 2.3 | 2.4 | 2.3 |
| Gearing (\%) | 54.9 | 55.9 | 54.7 | 66.3 | 13.4 | 16.3 | 17.3 | 14.1 |

Note: Net Gain from Borrowed Funds = (Profit earned on average borrowed funds - Interest cost on borrowings); Gearing (\%) = Percentage increase in the earnings to shareholders, by having fixed interest borrowings in its capital structure.

Higher the Times Interest Earned ratio is more is the margin of safety for the lender during bad times. A Times Interest Earned ratio of less than one conveys that a company is not even able to earn to pay its interest costs. A Times Interest Earned ratio of less than two is thought to be a danger signal and hence, even credit rating agencies give such companies debt - a junk credit rating of C or even lower. It is also well known in finance field that companies having a Times Interest Earned ratio of above 15 carry high credibility and hence their debt ratings would easily get the highest credit rating of AAA. Given these facts and the figures in Table 7.7, one can say that CPIL would easily get a credit rating of AAA during all the four years. One can also say the credit rating agencies would have favorably considered an upward revision in the credit rating for ML given that its TIE has been largely consistent during the long period of Year 1-Year 4 and there has been fall in its total debt-to-equity ratios in the most recent year i.e., Year 4 -signaling lower financial risk for future.

The net gain from borrowed funds and the Gearing ratio convey the tremendous advantage gained by CPIL by stretching the accounts payables of its suppliers. The same ratios for ML convey that it is also able to take positive advantage of borrowed funds, though not to the level of CPIL. One can also observe that ML's Year 4 numbers for Gearing and Net Gain from Borrowed Funds have seen a slight fall compared to its earlier years of Year 2-Year 3. One needs to probe into the reasons behind this - in all probability it could be a case of higher interest rates in the economy hurting the company.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) Shareholders' equity turnover shows the management's ability in terms of efficiently utilizing the shareholders' funds, both with respect to efficient operations and in terms of efficient financial management.
(h) Equity multiplier measures the ability of the owner's equity to command resources.

### 7.8.4 Profitability and its Components

The three measures of margin on sales for CPIL and ML are provided in Table 7.8. To a large extent, the high gross margins of both the players (especially for CPIL) are largely due to their brand loyalty and ensuring pricing power (rather than a decrease in their cost of goods sold - given the inflationary environment during the period). Both, the gross and operating profit margin measures of CPIL have been consistent during Year 1-Year 4 however, the fall in net margins (as pointed earlier) is due to higher tax rates and the fall in other income for the company. On the other hand, we observe that the pressure for ML has been due to recent downward fluctuations in its gross margins during Year 2-Year 4. The big difference between the gross margins and operating margins for both the players for all the years is due to the high advertising and marketing costs in the fast moving consumer goods sector.

Table 7.8 Comparison Using Margin on Sales Ratios

|  | Colgate-Palmolive (India) |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Table 7.9 presents the return on investment ratios for both the peers. The ROE figures of both the companies are very impressive compared to an ROE of around $11 \%-12 \%$ of an average Indian company. It possibly conveys the benefits of being large sized player with a slot in a highly profitable industry. Even within the fast moving consumer goods sector both the players have created their own brands and both have niche segments within the broad sector - while Colgate is a bigger global brand with a niche in the toothpastes market, Marico has a few reputed local brands with a niche in the hair care and edible refined oil market. We do observe that ROE of Marico has had a faster down trend during Year 2-Year 4; and would need to be probed further.

Table 7.9 Comparison Using Return on Investment Ratios

|  | Colgate-Palmolive (India) |  |  |  |  |  |  |  |  | Limited | Marico Limited |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measures of Return on Investment | Year 4 | Year 3 | Year 2 | Year 4 | Year 3 | Year 2 |  |  |  |  |  |  |  |
| Return on Operating Assets (ROA) (\%) | 82.8 | 82.2 | 77.8 | 24.8 | 24.7 | 28.9 |  |  |  |  |  |  |  |
| Return on Total Assets (ROTA) (\%) | 40.8 | 41.3 | 42.0 | 12.5 | 13.1 | 15.3 |  |  |  |  |  |  |  |
| Return on Equity (ROE) (\%) | 107.4 | 109.0 | 113.4 | 25.3 | 30.5 | 35.7 |  |  |  |  |  |  |  |

Table 7.10 presents the ratios reflect the asset efficiency of both the players. The ratios convey an improving position of CPIL from Year 2 to Year 4 and a deteriorating position of ML from Year 2 to Year 4. Given that inorganic acquisitions take time to give benefits, one might say that, maybe it is temporary phase for ML. And ML might take some time to consolidate all its recent acquisitions in a year or two and then come back to its better asset efficiency levels. Working capital turnover ratio is supposed to indicate the adequacy or excess of the working capital position in supporting the firm's volume of trade. This indicator for the both the firms (in Table 7.10) have improved during Year 2-Year 4; it does give a signal that the firms are turning over their working capital rapidly.

Table 7.10 Comparison Using Measures of Asset Efficiency Ratios

|  | Colgate-Palmolive (India) Limited |  | Marico Limited |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measures of Efficiency of Use of Assets | Year 4 | Year 3 | Year 2 | Year 4 | Year 3 | Year 2 |
| Total Asset Turnover | 2.6 | 2.5 | 2.3 | 1.5 | 1.6 | 1.7 |
| Operating Asset Turnover | 4.3 | 4.1 | 4.1 | 2.0 | 2.4 | 2.3 |
| Working Capital Turnover | 88.0 | 37.3 | 36.2 | 12.2 | 7.2 | 5.3 |
| Shareholder Equity Turnover | 6.8 | 6.6 | 6.3 | 2.9 | 3.8 | 3.9 |

Note: Two new ratios are included: Shareholder Equity Turnover $=($ Sales $\div$ Average Net Worth $)$; Working Capital Turnover $=($ Sales $\div$ Average Working Capital). ${ }^{14}$

Combining Tables 7.7, 7.8, 7.9, and 7.10 and making use of DuPont Analysis, one can say that ML's Return on Equity decreased from $36 \%$ in Year 2 to $25 \%$ in Year 4 mainly due to a decrease in its total asset turnover from 1.7 times to 1.5 times in the respective periods. It is also observed that its reduction in financial leverage in Year 4 (reflected by the equity multiplier reduction) also contributed to the fall in ROE for Year 4. While the net margins fall from $9.2 \%$ in Year 2 to $8.6 \%$ in Year 4 would have also have marginally hurt its ROE. It also possibly conveys that ML is in the midst of shifting itself slightly from a volume based player to an increasingly focused margins based player.

Making use of DuPont Analysis, one can say that CPIL's return on equity decreased marginally from $113 \%$ in Year 2 to $107 \%$ in Year 4 due to a decrease in its net profit margins from $18 \%$ to $16 \%$. Even though there were two other factors which were moving in a direction opposite to the above trend, i.e., favoring an increase in ROE, namely, (a) the increase in its total asset turnover from 2.3 times in Year 2 to 2.6 times in Year 4; and (b) the increase in finance leverage due an increase in equity multiplier from 2.6 in Year 3 to 2.7 in Year 4. Thus, we observe that, in case of CPIL, profit margins have a stronger effect that the other two DuPont components.

Thus, we observe that the DuPont decomposition analysis allows one to take a closer look at the factors that are driven by a company's management - consciously or unconsciously. For example, we often observe that while equity multiplier is a wonderful 'financial leverage' tool during good times, i.e., when a firm is able to earn a net positive return over and above their cost of 'leverage' - resulting in an increase in its ROE. Conversely, it can be the biggest spoilsport during bad times, i.e., when a firm is not able to earn a return above its cost of 'leverage' - resulting in magnifying the problem faced by the organization. A frequent case in point often observed for bankrupt firms is that their decomposition analysis figures before bankruptcy would reveal a very high 'equity multiplier' - resulting in magnifying their return on equity on the wrong side, i.e., towards more losses.

Table 7.11 presents the Earnings Per Share (EPS) and Dividends Per Share ratios of both the companies. A few interesting observations are in place. We see that both the players EPS had increased during the period. We observe that DPS for CPIL has been consistently increasing during Year 1-Year 4 resulting in instant cash rewards to the shareholders. CPIL's management seems to be following a constant dividend policy. In fact, CPIL shared nearly three-quarters of its earnings with shareholders during Year 2-Year 4; reinvesting a meager $25 \%$ back inside the company. Conversely, we see that DPS for ML has pretty low during Year 1-Year 3 and has further gone down in Year 4. In fact, ML has been reinvesting nearly $85-90 \%$ of their profits back into the firm - reflecting their aggressive bet on the future of the organization's

[^45]business. It has been traditionally observed that growth oriented business group firms such as Marico have a very conservative dividend policy compared to multinational affiliates and hence, the figures of dividend payout ratio in Table 7.11 are an affirmation of the same. In fact, one can also see a steady increase in the rate of ploughing back earnings and a decrease in the dividend payout ratio for the period Year 1-Year 4.

Table 7.11 Comparison Using Return per Share of Equity Ratios

|  | Colgate-Palmolive <br> (India) Limited |  |  |  | Marico Limited |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



To know more on "Limitations of Ratio Analysis" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/549

### 7.9 USING FINANCIAL STATEMENT INFORMATION



## Analyze the financial statements for effective decisionmaking

companies and so on.
The financial statement information can also be used as an important tool for internal management. It gives a basis for a comparative evaluation across companies. The top management can use it for a performance evaluation of the executives based on the asset utilization and profitability achieved by them.

It could be used as an important tool for supporting planning for the future. It is possible for companies to survey the performance of competitors and identify benchmarks for targeting performance. It is possible for us to identify a standard of achievable performance, based on the best performance parameters among competitors, in different areas.

Many companies use financial analysis of other competing firms for tracking the 'time-trend' behavior of the industry. ${ }^{15}$ It is also a usual practice to identify a peer group among the companies and keep monitoring and comparing performance with this peer group.

[^46]
# Let's Check Our Concepts! 

## State whether the following statements are True or False:

(i) Published industry average ratios provide ratios that are classified by industry and firm size.
(j) Free cash flows from an asset perspective, represent the after-tax cash flows generated from financing the business, less the firm's investment in assets.

### 7.9.1 Hidden Assumptions

Among all this discussion, we should not forget that when comparing two or more firms and commenting on their relative performance on any selected parameter (including profitability and solvency position), we are implicitly making many assumptions, such as:
(a) We assume that all the firms have similar accounting policies and practices (such as the procedures and methods adopted for depreciation allocation, estimating working life of assets, inventory valuation).
(b) We also implicitly assume that all the firms did not have any significant change in accounting policy (such as a change in the inventory valuation policy or amortization policy for intangible assets).
(c) We also unconditionally take for granted that the processes of generating the accounting numbers are reliable across the firms.
(d) Financial ratios are primarily used for comparison (instead of absolute values) in order to facilitate adjustments for size. However, while doing this, we are also assuming that ratios possess the appropriate statistical properties for handling and summarizing data.
In reality, a large number of such assumptions might be violated, ${ }^{16}$ even while making comparisons of a single firm over many years. Hence, care must be taken in terms of making any significant conclusions. Also, while making use of financial statements, one should carefully read the notes of accounts for any significant comments, such as changes on accounting policy or any significant provisions or contingent liabilities that may arise. Lastly, one must also realize the importance of a large number of qualitative factors, such as differing economic and cultural environments, while doing a financial analysis of firms across industries, geographies, and time periods.

One of the common places in which these hidden assumptions are all usually violated and limitations of financial ratio can come out is while using financial ratios online. For example, most of the websites often make use of providing industry average figures - but we never know what are the companies in the same, are they an appropriate sample set for us for comparison and conclusion. This assessment also presupposes the availability, on a comprehensive style, of various comparable ratios for each industry group over a period of time using comparable accounting numbers (having similar policies, practices and procedures). If, however, as is likely, such information is not complied and available, the utility of ratio analysis


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[^47]
### 7.9.2 Conceptual Diversity

Yet another factor which influences the usefulness of ratios is that there is difference of opinion regarding the various concepts used to compute the ratios. There is always room for diversity of opinion as to what constitutes shareholders' equity, debt assets, profit, and so on. Different firms may use these terms in different senses or the same firm may use them to mean different things at different times. Similarly, different books may give a different way of computing a ratio. We suggest a reader to use his discretion and then stick to one definition (instead of shifting from one definition to another). For example, some books suggest inclusion of preference shares in shareholders funds while computing the debt-to-equity ratio while others might suggest inclusion of preference shares in debt while computing debt-to-equity ratio. Our suggestion in this case would be to take a look at the purpose of the computation. If the computation is for the purpose of lenders perspective (say, to give a new loan), then one could treat it as a part of total shareholders funds, whereas if the computation was for the purpose of common equity shareholder (say, to evaluate a dividend decision by the common equity shareholders), then one could do well by including the preference shares as part of debt.

Dependence on a single ratio for a particular purpose may not be a conclusive indicator. For instance, the current ratio alone is not a adequate measure of short term financial strength; it should be supplemented by acid test ratio and other short-term solvency indicators to have a real insight into the liquidity aspect.

## SUMMARY

In this chapter, our attempt had been to look at financial statements from the perspective of using their information for supporting managerial decision-making. Our effort here was to clarify the ideas of financial statement analysis, to enable the reader to construct useful and meaningful relationships among accounting numbers. We converted the financial statements into common size statements and index based statements; and used than to see the temporal differences.

We also went through the process of computing the financial ratios in the areas of concern, namely, profitability and solvency. Profitability ratios are designed for the evaluation of the firm's operational performance and overall returns to the investors. Short-term solvency ratios are used to indicate the firm's ability to meet its short-term obligations and hence short-term risks. Long-term solvency ratios are used to indicate the firm's ability to meet its long-term obligations and hence look at the long-term risks. Operating cycle ratios go with the objective of indicating various components of operational cycle efficiency.

We would like to emphasise that a mere computation of these common size statements; index based statements and the financial ratios may not mean anything unless one starts understanding and interpreting these financial numbers in the context of the firm's operating environment. In other words, one should also take into account the business in which a firm is in and its competitive condition while making conclusions. ${ }^{17}$ Also, financial ratios and other analytical tools are like small pieces in a puzzle. One should never conclude anything extreme using just one piece (say, a single financial ratio) of the puzzle and one should take into account the limitations and hidden assumptions of financial ratios into account while

[^48]making extreme statements/suggestions. ${ }^{18}$ We conclude this chapter by indicating the possibility of using this information for varied managerial contexts and purposes, by using it as benchmarks and trends.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Asset Efficiency
- Common Size Statements
- Comparative Financial Statement
- Financial Ratios
- Financial Statement Analysis
- Financial Statements
- Gearing
- Index-based Statements
- Long-term Liquidity
- Long-term Solvency
- Margin-based Ratios
- Operational Efficiency
- Profitability
- Short-term Liquidity
- Solvency Ratios


## SOLVED PROBLEMS

## Solved Problem 7.1

## Ratio Analysis of VINYL Chemicals Limited

Vinyl Chemicals (India) Limited is a part of the Vinyl group of companies. It is well known for its Fevicol brand name and its flagship company, Pidilite Industries Limited. The principal activity of the company is to manufacture VINYL Acetate Monomer. The company is also engaged in trading of chemicals and the production of processed air.

Following are the balance sheets and the profit and loss accounts of VINYL Chemicals for two years. Please give your comments on the solvency and profitability position of the company, for the financial year (FY) 20X6 (compared to FY 20X5).

VINYL Chemicals Limited Balance Sheet on 31 March

| PARTICULARS | All figures in ₹ million |  |
| :--- | :---: | :---: |
| Assets Side | FY 20X6 (12m) | FY 20X5 (12m) |
| Cash \& Bank Balances | 1.01 | 1.00 |
| Accounts Receivable | 16.75 | 13.01 |
| Loans and Advances | 3.76 | 3.44 |

[^49]| Inventories | 11.53 | 11.98 |
| :--- | ---: | ---: |
| Current Assets | 33.05 | 29.43 |
| Fixed Assets | 37.22 | 32.43 |
| Investments | 3.42 | 4.41 |
| Total Assets | $\mathbf{7 3 . 6 9}$ | $\mathbf{6 6 . 2 7}$ |
| Liabilities Side |  |  |
| Current Liabilities \& Provisions | 8.18 | 8.63 |
| Long-term Liabilities | 12.32 | 8.08 |
| Net Worth (Total Shareholders' funds) | 53.18 | 49.55 |
| No. of Equity Shares of ₹10 par value | 1.83 | $\mathbf{1 . 8 3}$ |
| Total Liabilities | $\mathbf{7 3 . 6 8}$ | $\mathbf{6 6 . 2 6}$ |

VINYL CHEMICALS (INDIA) LIMITED
Profit \& Loss Account on 31 March

|  |  | (All figures in ₹ million) |
| :--- | :---: | :---: |
| PARTICULARS | FY 20X6 (12m) | FY 20X5 (12m) |
| Total Sales | 92.46 | 88.18 |
| Other Income | 3.18 | 1.11 |
| Operational Expenditure | 84.64 | 87.62 |
| Gross Profit | 10.62 | 1.03 |
| Interest | 0.82 | 0.58 |
| Depreciation | 2.53 | 2.42 |
| Profit Before Tax | 7.27 | -1.97 |
| Tax | 1.62 | 0.00 |
| Profit After Tax | 5.65 | -1.97 |
| Dividend to Shareholders | 1.83 | 0.00 |

## Solution

We start the process by computing some key financial ratios, based on which we can make the two-year comparisons and then comment:

| VINYL Chemicals: Financial Ratios | FY 20X6 |  | FY 20X5 |  |
| :---: | :--- | :--- | ---: | ---: |
| Profitability | Margin on sales | Gross Profit Margin (in \%) | 11.49 | 1.17 |
|  |  | Profit before tax (in \%) | 7.86 | -2.23 |
|  | Return on <br> Investment | Net Income to Total Assets (in \%) | 7.67 | -2.97 |
|  | Return on Equity (in \%) | 10.62 | -3.98 |  |
|  | Efficiency | Total Asset Turnover | 1.32 |  |
|  |  | Working Capital Turnover | 4.05 |  |
|  | Return per share | Earnings per share (in ₹) | 3.09 | -1.08 |


| Solvency | Short term | Net Working Capital (in ₹ millions) | 24.87 | 20.80 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Current Ratio | 4.04 | 3.41 |
|  |  | Quick Ratio | 2.63 | 2.02 |
|  |  | Accounts Receivable Turnover | 6.21 |  |
|  |  | Collection Period (in days) | 58.74 |  |
|  |  | Inventory Turnover | 7.20 |  |
|  |  | Conversion Period (in days) | 50.69 |  |
|  | Long term | Total-debt to Total Capital | 0.39 | 0.34 |
|  |  | Long-term Debt to Total Capital | 0.23 | 0.16 |
|  |  | Interest Cover | 9.87 | -2.39 |

On the basis of the above ratios, a few insights could be clearly derived:

1. We see that VINYL Chemicals has done a lot better in FY20X6 as compared to the previous year, as far as profitability is concerned. The Gross Profit margin has increased and is in fact, now at a very healthy $11.5 \%$. This implies that the company is managing its direct expenses well, along with an increase in sales. There has also been an increase in other incomes. Profit before tax has also improved, indicating better management.
2. Return on investment has improved. In fact, the company, in FY20X6, has done relatively well, since an ROE of $10 \%$ is quite healthy compared to negative numbers in the previous year. However, one should compare it with other industry players and see if there is further scope for improvement.
3. On the efficiency front, we cannot comment about the relative positions. However, we can say that the total assets turnover is quite adequate, and the working capital turnover is very healthy.
4. Earnings per share, however, are relatively low. However, given that the company ran a loss in the previous year, there has been considerable improvement, and the shareholders have cause to be happier.
5. While we can conclude that the profitability of the company has improved considerably, one needs to wait for some more data to state that this is a case of a turnaround. Interested readers should go a step further and find the main reason behind the turnaround - it could be a decrease in costs, or it could be an increase in the unit sale price of its products, or it could be an increase in its unit sales volumes.
6. On the solvency front, in the short run, all the figures seem to be very healthy and improving. Hence, the suppliers and working capital financers should be more comfortable in giving credit to VINYL Chemicals. However, from the shareholders and management perspective, the figures should be probed further. Questions such as - Are the high ratios an industry wide phenomenal or, is it specific to the company? Some of the wrong reasons for keeping high current ratios could be idle cash, inefficient collection process or inventories that are too large. Thus, the company should look at improving its current asset management.
7. We see that the average collections period is 58 days and the average inventory conversion period is 50 days. In other words, we observe that it takes 108 days to convert one rupee invested in raw material, to become a sale and come back as cash. There could be scope for improvement in the collection period and the conversion period. For example, this may be done with stricter credit terms.
8. As far as the long-term solvency position is concerned, the company's debt position has not changed much and hence, the lenders should be satisfied. The most satisfying signal comes from the interest cover ratio turning from -2.4 to more than 9.9 , indicating the high comfort ability of VINYL Chemicals for making its interest payments.

## Solved Problem 7.2

## Index-based Analysis of SJVN

The SJVN Ltd (formerly Satluj Jal Vidyut Nigam Limited) was incorporated in 1988 as a joint venture of the Central Government and the local State Government to execute, operate and maintain Hydroelectric power projects. The 1,500 MW Nathpa Jhakri Hydro-Electric Power Station was the first project undertaken by SJVN for execution. It is presently implementing 10 hydroelectric projects in the states of Himachal Pradesh, Uttrakhand, Nepal and Bhutan. SJVN is now also venturing in the field of Thermal and Wind Power Generation also. The capacity addition under execution by SJVN during the next five years is expected to be $4,952 \mathrm{MW}$. We share below the last four years index based numbers of the company. You are required to analyze the same and arrive at a few conclusions:

Index-based Analysis

| Index-based Analysis | SJVN Limited |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Financial Year $\rightarrow$ | Year 4 (12m) | Year 3 (12m) | Year 2 (12m) | Year 1 (12m) |
| Indexed Balance Sheet: Assets Side |  |  |  |  |
| Cash \& Bank Balances | 157 | 123 | 134 | 100 |
| Accounts Receivable | 190 | 305 | 137 | 100 |
| Loans and Advances | 79 | 56 | 97 | 100 |
| Inventories | 50 | 50 | 33 | 100 |
| Current Assets | 135 | 116 | 121 | 100 |
| Fixed Assets | 111 | 104 | 101 | 100 |
| Other Assets | 1,600 | 1,500 | 350 | 100 |
| Total Assets | 120 | 110 | 107 | 100 |
| Indexed Balance Sheet: Liabilities Side |  |  |  |  |
| Accounts Payable | 10 | 7 | 93 | 100 |
| Other Current Liabilities \& Provisions | 122 | 116 | 109 | 100 |
| Current Liabilities | 96 | 90 | 106 | 100 |
| Long-term Liabilities | 114 | 98 | 103 | 100 |
| Net Worth | 127 | 118 | 108 | 100 |
| Total Liabilities | 120 | 110 | 107 | 100 |
| No of Equity Shares | 101 | 101 | 101 | 100 |
| Indexed Profit and Loss Statement |  |  |  |  |
| Total Sales | 95 | 109 | 102 | 100 |
| Other Income | 164 | 150 | 100 | 100 |
| Cost of goods sold (includes contract manf. costs) | 128 | 139 | 111 | 100 |
| Gross Profit | 97 | 109 | 101 | 100 |
| Operating/ Other expenses | - | 9 | -9 | 100 |
| PBDIT | 104 | 116 | 109 | 100 |
| Interest | 29 | 47 | 94 | 100 |
| Depreciation \& Amortization | 105 | 105 | 102 | 100 |
| Profit before Tax | 116 | 132 | 114 | 100 |
| Tax | 260 | 560 | 500 | 100 |
| Profit after Tax | 108 | 110 | 94 | 100 |
| Dividend to Shareholders | 121 | 118 | 100 | 100 |

## Solution

We make critical comments below after taking into account the business environment for both the company as detailed above. Easily accessible qualitative inputs about SJVN Limited have also been taken into account.

- The trend of Sales figures suggests that the firm has had no new concrete capacity addition in the recent past. The Sales figures also reflect the nature-dependent business model, i.e., if the rains are good - then water flow will be high resulting in higher generation of hydel power. We observe that Year 4 has not been a great year for the company - in terms of capacity utilization (compared to the earlier years). It also reflects no change in the selling price (of electricity generated) on the upper side.
- The trends of the Fixed Assets in SJVN suggest that the firm has surely spent some funds in Year 4 towards new projects - however SJVN projects will start generating revenue only when fully completed.
- The decrease in interest costs clubbed with the stability in the liabilities suggests that the firm has moved its high cost short-term liabilities towards low interest bearing long-term liabilities.
- SJVN's Accounts Receivable figures generate a cause of concern. These figures indicate that the firm is unable to collect its dues from its adamant customers, i.e., local state electricity boards easily. This might hurt the company's expansion plans from both the cost-perspective and timeliness of execution perspective.


## Solved Problem 7.3

## Common-sized Statement Analysis of Four Companies

This exercise is based on the fact that financial characteristics vary from company to company, largely depending on their industry of operation. We provide below the common sized balance sheets and income statements of four different companies, for the financial year ending 2013, namely, Lawreshwar Polymers, ${ }^{19}$ Power Trading Corporation, ${ }^{20}$ SJVN,,${ }^{21}$ and Vishnu Chemicals. ${ }^{22}$ A short-description of each of the four firms is given below:

- Lawreshwar Polymers is a small footwear firm promoted by a traditional business family.
- Power Trading Corporation is promoted by the Federal Government as a Public-Private Partnership, whose primary focus is to develop a commercially vibrant power market in the country.
- SJVN is a hydro-electric power company promoted by the Federal Government.
- Vishnu Chemicals is promoted by a private entrepreneur whose primary focus is manufacturing of commodity chemicals.
We have named them in an alphabetical order of P to S below. You need to find the right firms to the above four firm (i.e., match the following).

[^50]
## Common Sized Analysis

| Firm $\rightarrow$ | P | Q | R | S |
| :---: | :---: | :---: | :---: | :---: |
| Common Sized Balance Sheets: Assets Side |  |  |  |  |
| Cash \& Bank Balances | 19 | 2 | 8 | 1 |
| Accounts Receivable | 3 | 10 | 36 | 31 |
| Loans and Advances | 4 | 6 | 4 | 9 |
| Inventories | 0 | 19 | 0 | 23 |
| Current Assets | 27 | 38 | 48 | 64 |
| Fixed Assets | 71 | 58 | 1 | 23 |
| Other Assets | 3 | 4 | 51 | 13 |
| Total Assets | 100 | 100 | 100 | 100 |
| Common Sized Balance Sheets: Liabilities Side |  |  |  |  |
| Accounts Payable | 0 | 18 | 18 | 14 |
| Other Current Liabilities and Provisions | 9 | 37 | 13 | 31 |
| Long-term Liabilities | 21 | 19 | 24 | 3 |
| Net Worth | 61 | 26 | 44 | 53 |
| Total Liabilities | 100 | 100 | 100 | 100 |
| Common Sized Profit \& Loss Statement |  |  |  |  |
| Total Sales | 100 | 100 | 100 | 100 |
| Other Income | 14 | 0 | 0 | 1 |
| Cost of Goods Sold | 1 | 46 | 90 | 72 |
| Gross Profit | 99 | 55 | 10 | 29 |
| Operating/Other Expenses | 13 | 38 | 6 | 21 |
| PBDIT | 100 | 17 | 4 | 8 |
| Interest | 3 | 11 | 1 | 3 |
| Depreciation and Amortization | 27 | 4 | 0 | 2 |
| Tax | 63 | 1 | 1 | 1 |
| Profit After Tax | 27 | 1 | 2 | 2 |

## Solution

The four stated firms will surely have a widely different model from each other. We use the difference in the same and work out a solution. A few key differences are mentioned in the remarks column below:

| Company | Matching Firm | Remarks |
| :---: | :--- | :--- |
| P | SJVN | SJVN is a hydro-electricity generation firm and so, their only and largest investment <br> would be in the hydel power project. Thus, it will be a company with balance sheet <br> having a large proportion of fixed assets and near zero inventory levels. These type of <br> companies' income statements will have very low cost of goods sold (as nature gives <br> them the water flow). |


| Q | Vishnu Chemicals | Vishnu Chemicals being a commodity chemicals manufacturer will have some factories <br> and hence, high fixed assets. It will also need to keep some chemicals as raw materials, <br> work-in-progress, and finished goods inventory - thus, the balance sheet will have <br> some inventory. Normally, such firms have a tendency to price their products with gross <br> margins ranging about 30-70\% levels. |
| :---: | :--- | :--- |
| R | Power Trading <br> Corporation | Power Trading Corporation's nature of business itself reflects no need for large fixed <br> assets. Further to promote exchanges among various power companies, they would <br> need to invest in them - thus, such firms will have large long-term investments. Surely, <br> their revenue source would be the brokerages and commissions earned - and thus its <br> cost of goods sold is going to be one of the highest in the lot. |
| S | Lawreshwar <br> Polymers | Lawreshwar Polymers is going to face the maximum competition - given the nature <br> of business with low entry barriers. Thus, the firm will need to give high credit to its <br> customers and spend a lot of money on the working capital purposes. The gross margins <br> for such businesses normally are normally in the range of 20-40\%. |

## Solved Problem 7.4

## Pioneer Distilleries Limited

Pioneer Distilleries Limited ${ }^{23}$ is a small sized company manufacturing Industrial variants of Industrial Alchohol (Ethanol) and Carbondioxide from Molasses and Husk. The plant is located in the Dharmabad Taluk of Maharastra and its corporate office is in Hyderabad. The company is publicly listed on the Bombay Stock Exchange (BSE). We present below the financial statements of the company for the last 4 years. ${ }^{24}$ You are required to make its financial analysis?

| Pioneer Distilleries Limited |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (all figures in ₹ million) |  |  |  |
| BALANCE SHEET |  |  |  |  |
| Assets Side | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) | Accounting <br> Period 1 (18m) |
| Cash \& Bank Balances | 5.1 | 3.4 | 2.9 | 1.3 |
| Accounts Receivable | 1.6 | 4.5 | 1.5 | 2.2 |
| Loans and Advances | 69.6 | 82.2 | 39.9 | 40.1 |
| Inventories | 71 | 62 | 30.8 | 20.9 |
| Current Assets | 147.3 | 152.1 | 75.1 | 64.5 |
| Fixed Assets | 431.1 | 354.7 | 309.2 | 331.3 |
| Other Assets | 6.3 | 2.1 | 2.2 | 3.1 |
| Total Assets | 584.7 | 508.9 | 386.5 | 398.9 |

[^51]| Liabilities Side | Accounting <br> Period 4 (12m) | Accounting <br> Period 3 (12m) | Accounting <br> Period 2 (18m) | Accounting <br> Period 1 (18m) |
| :--- | :---: | :---: | :---: | :---: |
| Accounts Payable | 22.9 | 13.3 | 2.4 | 6.1 |
| Other Current Liabilities | 4.8 | 4.1 | 8.3 | 5.1 |
| Long-term Liabilities | 454.8 | 402.8 | 314.4 | 367.9 |
| Net Worth | 102.3 | 88.8 | 61.3 | 19.9 |
| Total Liabilities | 584.8 | 509 | $\mathbf{3 8 6 . 4}$ | $\mathbf{3 9 9}$ |
| No. of Equity Shares | 9.99 | 9.94 | 9.25 | $\mathbf{9 . 2 5}$ |
| Average Share Price ${ }^{25}$ | 25.00 | 14.50 | 10.50 | 9.00 |


|  | Pioneer Distilleries Limited (all figures in ₹ million) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| INCOME STATEMENT | Accounting <br> Period $\mathbf{4} \mathbf{( 1 2 m )}$ | Accounting <br> Period 3 (12m) | Accounting <br> Period 2 (18m) | Accounting <br> Period 1 (18m) |
| Total Sales | $\mathbf{4 1 6 . 5}$ | $\mathbf{4 6 0 . 1}$ | $\mathbf{2 9 1 . 6}$ | $\mathbf{2 6 1 . 2}$ |
| Other Income | 0.3 | 0.2 | 0.4 | 1.4 |
| Cost of Goods Sold (RM + Direct Exp.) | 328 | 388 | 233 | 210 |
| Gross Profit | 89 | 72 | 59 | 53 |
| Operating/Other Expenses | 32 | 32 | 40 | 37 |
| PBDIT | $\mathbf{5 7}$ | $\mathbf{4 0}$ | $\mathbf{1 9}$ | $\mathbf{1 6}$ |
| Interest | 19 | 5 | 44 | 49 |
| Depreciation | 22 | 19 | 28 | 27 |
| Tax | 3 | 7 | 0 | 0 |
| Profit After Tax | $\mathbf{1 4}$ | $\mathbf{9}$ | $\mathbf{- 5 3}$ | $\mathbf{- 6 0}$ |
| Dividend to Shareholders | 0 | 0 | 0 | 0 |

## Solution

A four-period analysis of a company gives much richer insights in our case this becomes a six-year analysis. ${ }^{26}$ The process starts by making its common size statements and index-based statements. We present its common sized statements for the past four years below.

| Pioneer Distilleries Limited: Common Sized Statements (all figures in ₹ million) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| BALANCE SHEET |  |  |  |  |
| Assets Side | Accounting <br> Period $\mathbf{4}(\mathbf{1 2 m})$ | Accounting <br> Period 3 (12m) | Accounting <br> Period 2 (18m) | Accounting <br> Period 1 (18m) |
| Cash and Bank Balances | 0.90 | 0.70 | 0.80 | 0.30 |
| Accounts Receivable | 0.30 | 0.90 | 0.40 | 0.60 |
| Loans and Advances | 11.90 | 16.20 | 10.30 | 10.10 |

[^52]| Inventories | 12.10 | 12.20 | 8.00 | 5.20 |
| :---: | :---: | :---: | :---: | :---: |
| Current Assets | 25.20 | 29.90 | 19.40 | 16.20 |
| Fixed Assets | 73.70 | 69.70 | 80.00 | 83.10 |
| Other Assets (includes investments) | 1.10 | 0.40 | 0.60 | 0.80 |
| Total Assets | 100.00 | 100.00 | 100.00 | 100.00 |
| Liabilities Side | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) | Accounting Period 1 (18m) |
| Accounts Payable | 3.90 | 2.60 | 0.60 | 1.50 |
| Other Current Liabilities | 0.80 | 0.80 | 2.10 | 1.30 |
| Long-term Liabilities | 77.80 | 79.10 | 81.40 | 92.20 |
| Net Worth (Total Shareholders' Funds) | 17.50 | 17.40 | 15.90 | 5.00 |
| Total Liabilities | 100.00 | 100.00 | 100.00 | 100.00 |
| INCOME STATEMIENT | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) | Accounting Period 1 (18m) |
| Total Sales | 100.00 | 100.00 | 100.00 | 100.0 |
| Other Income | 0.10 | 0.00 | 0.10 | 0.50 |
| Cost of Goods Sold <br> (RM + Other Direct Expenses) | 78.80 | 84.40 | 79.90 | 80.20 |
| Gross Profit | 21.30 | 15.70 | 20.20 | 20.30 |
| Operating/Other Expenses | 7.70 | 6.90 | 13.70 | 14.10 |
| PBDIT | 13.60 | 8.80 | 6.50 | 6.30 |
| Interest | 4.50 | 1.00 | 15.10 | 18.70 |
| Depreciation | 5.20 | 4.10 | 9.50 | 10.50 |
| Tax | 0.70 | 1.60 | 0.00 | 0.00 |
| Profit After Tax | 3.20 | 2.00 | -18.10 | -22.90 |
| Dividend to Shareholders | - | - | - | - |

The common sized figures clearly convey a turnaround story. The industry looks to be relatively capital intensive. The company has been largely funded by long-term liabilities. This could either mean severe erosion of net worth (shareholders' funds) in the past or extreme reliance on debt-based risky funding pattern. The income statement numbers convey that it should be the first case. They convey steadily improving margins and a turnaround in the income numbers. From its asset-side, its increasing inventory level is a minor cause of concern. We now turn attention towards the index based numbers of the company for further insights (presented below).

|  | Pioneer Distilleries Limited: Index-based Statements |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Assets Side | Accounting <br> Period 4 (12m) | Accounting <br> Period 3 (12m) | Accounting <br> Period 2 (18m) | Accounting <br> Period 1 (18m) |
| Cash and Bank Balances | 392 | 262 | 223 | 100 |
| Accounts Receivable | 73 | 205 | 68 | 100 |
| Loans and Advances | 174 | 205 | 100 | 100 |
| Inventories | 340 | 297 | 147 | 100 |


| Current Assets | 228 | 236 | 116 | 100 |
| :---: | :---: | :---: | :---: | :---: |
| Fixed Assets | 130 | 107 | 93 | 100 |
| Other Assets (includes investments) | 203 | 68 | 71 | 100 |
| Total Assets | 147 | 128 | 97 | 100 |
| Liabilities Side | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) | Accounting Period 1 (18m) |
| Accounts Payable | 375 | 218 | 39 | 100 |
| Other Current Liabilities | 94 | 80 | 163 | 100 |
| Long-term Liabilities | 124 | 109 | 85 | 100 |
| Net Worth | 514 | 446 | 308 | 100 |
| Total Liabilities | 147 | 128 | 97 | 100 |
| No. of Equity Shares | 108 | 107 | 100 | 100 |
|  | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) | Accounting Period 1 (18m) |
| Total Sales | 159 | 176 | 112 | 100 |
| Other Income | 21 | 14 | 29 | 100 |
| Cost of Goods Sold <br> (RM + Other Direct Expenses) | 157 | 185 | 111 | 100 |
| Gross Profit | 167 | 136 | 111 | 100 |
| Operating/Other Expenses | 87 | 87 | 109 | 100 |
| PBDIT | 346 | 246 | 115 | 100 |
| Interest | 38 | 10 | 90 | 100 |
| Depreciation | 79 | 69 | 101 | 100 |
| Profit After Tax | -23 | -16 | 88 | 100 |

The index-based figures using the first year as the base year unmistakably convey that in the last four financial periods the company's asset base has increased by only $47 \%$. But within the balance sheet, some of the items seem to have gone through a massive change. By combining the change in number of equity shares with the net worth one can clearly state that this company has issued a small amount of new equity shares in the last two years at a share premium. While increase in cash balance is a good signal for a company having gone through losses, the increasing inventories and accounts payable are matters needing more probes. For example, both the items may have gone up due to growing business, alternatively, one can also think of both the items going up due to lack of cash and business with the company. Given the increase in cash, we would be biased towards accepting the first argument.

The index-based income statement numbers convey that Pioneer Distilleries has turned around largely due to decrease in its operating expenses, interest costs, and depreciation. A negative profit after tax in Accounting Period 3 and Accounting Period 4 is due to the turnaround (since the base year of Accounting Period 1 was a loss making year). The sales and cost of goods sold have simultaneously gone up by around $60 \%$. We now turn to the analysis of the financial ratios of the company. The ratios are presented next.

|  | Pioncer Distilleries Limited |  |  | Accounting Period 1 (18m) |
| :---: | :---: | :---: | :---: | :---: |
|  | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) |  |
| Short-term Solvency |  |  |  |  |
| Net Working Capital (₹ in million) | 119.60 | 134.70 | 64.40 | 53.30 |
| Current Ratio | 5.30 | 8.70 | 7.00 | 5.80 |
| Quick Ratio | 2.80 | 5.20 | 4.10 | 3.90 |
| Average Daily Expenses ( $₹$ in million) | 0.90 | 1.10 | 0.70 | 0.60 |
| Cash Cover for Daily Expenses (days) | 5.50 | 3.00 | 4.30 | 2.20 |
| Quick Assets Cover for Daily Expenses (days) | 81.60 | 80.50 | 65.90 | 72.70 |
| Current Assets Cover for Daily Expenses (days) | 157.40 | 135.90 | 111.70 | 107.60 |
| Current Liabilities Cover for Daily Expenses (days) | 29.60 | 15.50 | 15.90 | 18.70 |
| Accounts Receivable Turnover | 136.60 | 153.40 | 157.60 | 118.70 |
| Average Collection Period (days) | 2.70 | 2.40 | 2.30 | 3.10 |
| Inventory Turnover | 4.90 | 8.40 | 9.00 | 10.00 |
| Inventory Conversion Period (days) | 74.00 | 43.60 | 40.50 | 36.40 |
| Average Payables Period (days) | 20.10 | 7.40 | 6.70 | 10.60 |
| Long-term Solvency |  |  |  |  |
| Total Debt to Total Capital | 4.70 | 4.70 | 5.30 | 19.10 |
| Long-term Debt to Total Capital | 4.40 | 4.50 | 5.10 | 18.50 |
| Long-term Debt to Fixed Assets | 1.10 | 1.10 | 1.00 | 1.10 |
| Interest Cover | 1.90 | 4.50 | -0.20 | -0.20 |
| Times Fixed Charges Covered | 0.50 | 0.50 | -0.10 | -0.10 |
| Net Gain from Borrowed Funds (₹ million) | 58.70 | 42.70 | 14.90 | 18.30 |
| Equity Multiplier | 5.70 | 5.70 | 6.30 | 20.00 |
| Financial Ratios | Pione | Distilleries L | mited |  |
| Profitability Ratios | Accounting Period 4 (12m) | Accounting Period 3 (12m) | Accounting Period 2 (18m) | Period 1 (18m) |
| Margin on Sales |  |  |  |  |
| Gross Profit Margin (\%) | 21.20 | 15.60 | 20.10 | 19.80 |
| Operating Profit Margin (\%) | 8.40 | 4.60 | -3.20 | -4.70 |
| Net Profit Margin (\%) | 3.20 | 2.00 | -18.10 | -22.90 |
| Return on Investment |  |  |  |  |
| Operating Profit to Operating Assets (\%) | 6.40 | 4.80 | -2.40 | -3.10 |
| Net Income to Total Assets (\%) | 2.50 | 2.10 | -13.40 | -15.00 |
| Return on Equity (\%) | 14.10 | 12.50 | -130.00 | -301.00 |


| Efficiency of Use of Assets |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Total Asset Turnover | 0.80 | 1.00 | 0.70 | 0.70 |
| Operating Asset Turnover | 0.80 | 1.00 | 0.70 | 0.70 |
| Working Capital Turnover | 3.30 | 4.60 | 5.00 | 4.90 |
| Shareholder's Equity Turnover | 4.40 | 6.10 | 7.20 | 13.10 |
| Return per Share of Equity |  |  |  |  |
| Earnings per Share | 1.40 | 0.90 | -5.70 | -6.50 |
| Dividends per Share (including Dividend Tax) | - | - | - | - |
| Other Ratios |  |  |  |  |
| Book Value per Share | 10.20 | 8.90 | 6.60 | 2.20 |
| Dividend Payout Ratio (\%) | - | - | - | - |
| Price-to-Book Value | 2.40 | 1.60 | 1.60 | 4.20 |
| Price-to-Earnings | 18.50 | 15.30 | -1.80 | -1.40 |
| Dividend Yield | - | - | - | - |
| Gearing (\%) | 12.20 | 10.20 | 4.60 | 4.80 |

A peak at the short-term solvency ratios conveys that the company's short-term solvency position is reaching a stable position from the volatile times of Accounting Period 1-2. The coverage of operating expenses has improved considerably. The increase in the inventory holding period is a cause of concern. The long-term solvency ratios surely convey a uncomfortable picture for the long-term lenders. The one figure which conveys a bright spot among them is the "net gain from borrowed funds". This figure is not only positive but also growing - in other words, conveying that the benefits to the company out of its debts are slowly and steadily improving. The asset utilization ratios specifically the working capital turnover ratios convey that Accounting Period 4 has not been as good as Accounting Period 3.

We turn the attention to the profitability ratios. Among them, the margin on sales ratio conveys that the business of industrial alcohol has gross margins of around $16-19 \%$. They are the clearest indication of a turnaround story, especially at the operating level. The returns on investment ratios verify the above picture, the best being the improvement in the 'operating profit to operating assets'.

The capital market-based ratios convey a picture that the capital markets have already read the turnaround story and this has led to an increase in its share price. In Accounting Period 4, the capital market is willing to pay around 2.4 times what the owners own on books of the company. Certainly, indicating shareholder value creation (especially for the initial investors). The $\mathrm{P} / \mathrm{E}$ ratio conveys that the financial markets are valuing the company around 18 times its current earnings; surely, a signal of confidence in future (compared to Accounting Period 3).

## EXERCISES

## Multiple Choice Questions

1. Which profit margin measures the overall operating efficiency of the firm?

LO 4 EASY
(a) Gross Profit Margin
(b) Net Profit Margin
(c) Operating Profit Margin
(d) None of the above
2. An increase in the average collection period could have been caused by:

LO 4 MEDIUM
(a) Few big customers quickly paying off their accounts
(b) Management carefully enforcing its collection policies
(c) Management shortening its credit terms to customers
(d) None of the above
3. The short-term solvency ratios examine how quickly a firm's assets can be converted into cash. The quick ratio is computed by what formula?

LO 4 EASY
(a) Current assets/Current liabilities
(b) (Current assets - Stock)/Current liabilities
(c) (Current assets - debtors)/Current liabilities
(d) (Current assets - accounts receivable)/(Current liabilities - cash)
4. Which of the following is NOT included in the calculation of the quick ratio?

LO 4 MEDIUM
(a) Accounts receivable
(b) Fixed assets
(c) Accounts payable
(d) Cash
5. A firm might also want to know how rapidly it is turning over its inventories during the year so as to gain some insight about the liquidity of inventories. What is the formula for calculating the inventory turnover ratio?

LO 4 MEDIUM
(a) Total annual sales/Inventory
(b) Credit sales/Inventory
(c) Cost of goods sold/Inventory
(d) None of the above

## True or False

1. Financial ratios are the principal tools of financial analysis because they standardize financial information so that comparisons can be made between firms of varying sizes.

LO 1 EASY
2. The Banks and Financial Institutions would have high Equity Multiplier.

LO 4 EASY
3. Liquidity of a company is of a major concern for long-term creditors and the management.

LO 2,3,4 MEDIUM
4. A combination of the margin on sales ratio, efficiency ratio, and long-term solvency ratio is popularly known as the DuPont analysis.

LO 4,5 MEDIUM
5. A company with shorter operating cycle has better liquidity position.

## Discussion Questions

1. Discuss the utility of ratios from various stakeholders' perspectives. Also identify the three key financial ratios from each stakeholder's perspective?

LO 4 MEDIUM
2. What are the financial numbers and ratios to be used and computed to find out "Gearing" of a company? What does "Gearing" of a company convey to us? Is positive gearing a good figure? Can we say that higher the gearing of a company the better it is for all stakeholders?

LO 4 DIFFICULT
3. Should one make use of Contingent Liabilities in financial analysis? If yes, how can one make use of them?
4. Discuss and inter-connect these ratios; Dividend per share, Earning per share and Dividend Payout Ratio?

LO 4,5 DIFFICULT
5. What are the significant assumptions we make while comparing financial ratios of various companies in the same industries? Discuss the implications of the above assumptions for a user of financial ratios.

LO 5 DIFFICULT

## Numerical Problems

1. Awadh Textiles Limited

LO 4 MEDIUM
Use the data in the following table of financial ratios for Awadh Textiles Limited and answer the following four questions:

Awadh Textiles Limited, Financial Ratios (2015-2016)

| Top of Form <br> Ratio | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | Industry <br> Average |
| :--- | :---: | :---: | :---: |
| Firm liquidity |  |  |  |
| Current ratio | 2 | 2 | 2 |
| Acid-test ratio | 1 | 2 | 1 |
| Accounts receivable turnover | 9 | 5 | 5 |
| Inventory turnover | 78 days | 77 days | 75 days |
| Average collection period | $19 \%$ | $21 \%$ | $10 \%$ |
| Operating profitability | $17 \%$ | $17 \%$ | $8 \%$ |
| Operating income ROI | 1 | 1 | 1 |
| Operating profit margin | 3 | 4 | 4 |
| Total asset turnover | $46.00 \%$ | $45.00 \%$ | $58 \%$ |
| Fixed assets turnover | 15 | 16 | 4 |
| Financing decisions |  |  |  |
| Debt ratio | $21 \%$ | $23 \%$ | $12 \%$ |
| Times interest earned |  |  |  |
| Return on equity |  |  |  |
| Return on equity |  |  |  |

(i) How liquid is Awadh Textiles Limited?
(ii) Is Awadh Textiles generating adequate operating profits on the firm's assets?
(iii) How is Awadh Textiles Limited financing its assets?
(iv) Are the equity shareholders receiving a good return on their investment?
2. Mukta Arts Limited

LO 4,5 MEDIUM
Mukta Arts is a firm started by the well-known film director Mr. Subhas Ghai. The following data has been taken from the company's website:

Mukta Arts Limited: Financial Results (all figures in ₹ lakh)

| PARTICULARS | Quarter ended |  |
| :---: | :---: | :---: |
|  | March Ending Current year | March Ending Previous Year |
| Net Sales / Income from Operations | 654 | 154 |
| Other Income | 271 | 652 |
| Total Income | 925 | 806 |
| Total Expenditure |  |  |
| a) Cost of Production/Distribn./Software/Worldrights | 1,322 | - |
| b) Administrative and Office Expenses | 128 | 158 |
| c) Other Expenditure |  |  |
| Total | 1,450 | 158 |
| Profit before Interest \& Depreciation | (525) | 647 |
| Interest and Financial Charges | 1 | 1 |
| Depreciation | 89 | 76 |
| Profit before Tax | (616) | 570 |

The above results were declared on June 30 of the latest year. Along with the above results, the company also attached the following notes:

- The accounting period has been extended upto March 31, latest year (fifteen months) and in future, the company will follow the financial year (that is, April-March) as its accounting year.
- The film "Ek Aur Ek Gyarah" was released worldwide, on March 28 of the Latest Year. The entire cost of production ₹ $1,248.45$ lakh, is charged to revenue in the current quarter and business income ₹ 539.13 up to March 31 of latest year, is only accounted for.
- The film 'Joggers Park' is almost complete. The music has already been launched and the film will be released theatrically, in August of this latest year.
- The board of directors have recommended dividend at the rate of $40 \%$ (₹2 per share).

In an interview in a pink paper in April month of the latest year, Subhash Ghai had this to say 'The company had not had a run-away success in the last few films ... however, Mukta Arts is confident of ending with a profit on its latest release, 'Ek Aur Ek Gyarah'. We have earned ₹ 2 crore from its music sales and we are hoping to recover more than ₹ 50 crore from its theatrical release,' a spokesperson for the company said. Mukta Arts is also banking on the holiday season for extending the theatrical window for the film.
Based on the above data and discussion, answer the following questions:

1. At the end of the March, latest years accounting period, the film, 'Ek Aur Ek Gyarah' related rights will be part of $\qquad$ in Mukta Arts' balance sheet.
(a) Work in Progress and Finished Goods Inventory
(b) Other Current Assets (except inventory)
(c) Fixed Assets
(d) None of the above
2. The expensing of the film production costs before earning revenue, is not in sync with the
(a) Matching concept
(b) Accrual concept
(c) Historical concept
(d) None of the above
3. Given the huge losses, the announcement of a $40 \%$ dividend by the company amounts to
(a) Contradicting the GAAP
(b) Not following the laws of the land, especially the Companies Act
(c) Using its past reserves to make dividend payments
(d) None of the above
4. The par value of each equity share of Mukta Arts is possibly:
(a) ₹ 5
(b) ₹ 10
(c) ₹ 50
(d) None of the above
5. If Mukta Arts were to diversify into producing news clips for the 'AajTak' TV Channel and hold rights over the same, the new clips will be part of $\qquad$ in its balance sheet.
(a) Work in progress and Finished goods inventory
(b) Other Current Assets (except inventory)
(c) Fixed Assets
(d) None of the above

## 3. Rajnikanth Fans Limited

## LO 4 DIFFICULT

From the following particulars, prepare the balance sheet of Rajnikant Fans Limited as on $31^{\text {st }}$ March, current year:
Current ratio is 2 ; Working capital is ₹ $40,00,000$; Capital block to current asset is $3: 2$; Fixed asset to turnover is $1: 3$; Sales cash/credit is $1: 2$; Debentures/Share capital is $1: 2$; Stock velocity is 2 months; Creditors velocity is 2 months; Debtors velocity is 2 months; Gross profit ratio is $25 \%$ to sales; Capital block consists of Net profit is $10 \%$ of turnover and Reserve is $2.5 \%$ of turnover.
4. Indian Steel Industry

LO 4 DIFFICULT
Using published data, we provide select financial ratios of eight Indian steel players listed in the Bombay Stock Exchange (BSE).

Table: Selected Ratios of Players in Indian Steel Industry

| Company $\rightarrow$ <br> Selected Ratios $\downarrow$ | Aditya Ispat | Bhusan Steel | Ispat Industries | Jindal Steel | $\begin{aligned} & \text { JSW } \\ & \text { Steel } \end{aligned}$ | Lloyd Steel | Steel Authority of India (SAIL) | Tata <br> Stee |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short-term solvency ratios <br> - Current ratio <br> - Quick ratio | $\begin{array}{r} 10.58 \\ 7.55 \end{array}$ | $\begin{aligned} & 1.87 \\ & 1.07 \end{aligned}$ | $\begin{aligned} & 1.58 \\ & 0.80 \end{aligned}$ | $\begin{array}{r} 1.13 \\ 0.72 \end{array}$ | $\begin{aligned} & 0.75 \\ & 0.44 \end{aligned}$ | $\begin{aligned} & 0.81 \\ & 0.41 \end{aligned}$ | $\begin{aligned} & 1.59 \\ & 1.01 \end{aligned}$ | $\begin{array}{r} 1.74 \\ 1.46 \end{array}$ |
| Long-term solvency ratios <br> - Debt-equity ratio <br> - Times interest earned ratio | $\begin{array}{r} 0.20 \\ 10.42 \end{array}$ | $\begin{gathered} 2.67 \\ 7.53 \end{gathered}$ | $\begin{array}{r} 14.87 \\ 1.48 \end{array}$ | $\begin{array}{r} 1.41 \\ 8.35 \end{array}$ | $\begin{aligned} & 0.84 \\ & 6.99 \end{aligned}$ | $\begin{array}{r} \text { NA } \\ 2.08 \end{array}$ | $\begin{array}{r} 0.24 \\ 33.12 \end{array}$ | $\begin{array}{r} 0.69 \\ 29.18 \end{array}$ |
| Turnover ratios <br> - Inventory turnover ratio <br> - Fixed assets turnover ratio | $\begin{aligned} & 5.86 \\ & 3.17 \end{aligned}$ | $\begin{array}{r} 5.84 \\ 1.42 \end{array}$ | $\begin{array}{r} 10.72 \\ 0.57 \end{array}$ | $\begin{aligned} & 6.99 \\ & 0.71 \end{aligned}$ | $\begin{array}{r} 11.04 \\ 0.81 \end{array}$ | $\begin{aligned} & 8.08 \\ & 0.78 \end{aligned}$ | $\begin{aligned} & 7.50 \\ & 1.16 \end{aligned}$ | $\begin{array}{r} 8.47 \\ 1.09 \end{array}$ |
| Profitability ratios <br> - Profit margin (\%) <br> - Return on Equity (ROE) (\%) | $\begin{aligned} & 0.86 \\ & 1.24 \end{aligned}$ | $\begin{array}{r} 8.14 \\ 25.79 \end{array}$ | $\begin{aligned} & -0.12 \\ & -1.50 \end{aligned}$ | $\begin{aligned} & 19.75 \\ & 28.20 \end{aligned}$ | $\begin{aligned} & 14.98 \\ & 24.79 \end{aligned}$ | $\begin{array}{r} -3.83 \\ \text { NA } \end{array}$ | $\begin{array}{r} 17.38 \\ 36.09 \end{array}$ | $\begin{aligned} & 23.42 \\ & 30.71 \end{aligned}$ |
| Market value ratio <br> - Price-earnings ratio | 172.9 | 10.8 | -435.7 | 50.7 | 11.0 | -3.9 | 12.0 | 11.1 |

[^53]Based on the ratios, answer the following:

1. Identify the company that is having the highest asset utilization ratio.
2. What is the reason for the wide range of price-earnings ratios.
3. Identify the company with the highest equity multiplier.
4. Nice Puzzle

LO 5 DIFFICULT
In the current financial year, a company was having an average collectibles period of 630 days and an inventory conversion period of 900 days. Its sales for the year stood at 700 and cost of goods sold stood at 720 . The balance sheet for the Current Year showed the accounts receivables to be 1500 and inventory to be 1000 .
Based on the above, answer the following:

1. The company would probably be from $\qquad$ industry.
(a) Agriculture Processing
(b) Mineral Water
(c) Ship Building Industry
(d) Airline Industry
2. One can say that:
(a) In the Current Year, the company changed its credit policies (with customers) and inventory policies
(b) Manipulated its accounts
(c) Both (a) and (b)
(d) Can't say
3. Given the above information, we can say that for Previous Year:
(a) Receivables was less than Current Year; Inventory was less than Current Year
(b) Receivables was more than Current Year; Inventory was more than Current Year
(c) Receivables was less than Current Year; Inventory was more than Current Year
(d) Receivables was more than Current Year; Inventory was less than Current Year
(e) Can’t say

## MINI CASES

## Case 7.1 Common Size Statements of a Bank and its Customer

This case is an extension of Mini Case 2.3 in Chapter 2 titled "A Bank and a Manufacturer", wherein you are provided with the abridged balance sheets of two well-known companies, namely, Bank of India Limited ${ }^{27}$ and Reliance Industries $\operatorname{Ltd}^{28}$. Using common size 'balance sheet' statements, explain the differences in the nature of assets, liabilities, and owner's equity.

[^54]
## Case 7.2 Ratio Analysis of Four Different Companies

LO 4 MEDIUM

This case is a comprehensive case of four publicly listed limited companies discussed earlier in the book, namely, Infosys Technologies, ${ }^{29}$ Raymond, ${ }^{30}$ Blue Dart Express, ${ }^{31}$ and Colgate-Palmolive India. ${ }^{32}$ We provided you with their balance sheets in Mini Case 2.4 of Chapter 2 and we provided you with their respective profit and loss accounts in Mini Case 3.3 in Chapter 3.

Compute the financial ratios of these four companies. Prepare a comparative profile of the companies with respect to their profitability and solvency position. Explain the similarities and dissimilarities, if any. Also comment on any significant changes in the individual ratios in the last one year.

## Case 7.3 'Ek Daku and Ek Hasina'

## LO 4,5 DIFFICULT

Daku Mangal Singh announced his Swayamvar (also known as marriage match selection process). Shweta always wanted to spend time with a Daku. Like some of us, Mangal was weak in finance and thought that a core competence in Financial Accounting and Analysis for his future partner is a must (applying the funda of having complementary competencies in case of a mergers and acquisitions).

So, in a recent dance party, Daku Mangal Singh announced in his Durbar that he was giving a case to pick up his partner. Daku Mangal Singh further stated that this case is based on the fact that financial characteristics vary from company to company, largely depending on their industry of operation. He also stated his wish of his partners being comfortable with using other formats of presentation of financial data. So, Mangal provided important ratios and common sized balance sheets of eight well-known companies, for the financial year ending 2002. ${ }^{33}$ We have named them in an alphabetical order of A to H and stated that the one who is successful in finding the right firms (i.e., match the following) would be his partner.

| Companies--> | A | B | C | D | E | F | G | H |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| SOURCES OF FUNDS |  |  |  |  |  |  |  |  |
| Owner's Fund | 2.73 | 1.59 | 6.69 | 9.93 | 4.77 | 6.70 | 0.93 | 6.76 |
| Equity Share Capital | 50.99 | 98.41 | 86.04 | 90.06 | 82.27 | 44.95 | 90.13 | 33.55 |
| Reserves \& Surplus |  |  |  |  |  |  |  |  |
| Loan Funds | 43.55 | 0.00 | 2.95 | 0.00 | 9.74 | 28.18 | 5.48 | 43.69 |
| Secured Loans | 2.74 | 0.00 | 4.32 | 0.00 | 3.22 | 20.18 | 3.47 | 16.00 |
| Unsecured Loans | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Total |  |  |  |  |  |  |  |  |
| USES OF FUNDS |  |  |  |  |  |  |  |  |
| Fixed Assets | 52.35 | 46.18 | 53.00 | 101.68 | 61.48 | 120.88 | 3.04 | 131.46 |
| Gross Block | 17.58 | 18.89 | 18.16 | 52.72 | 39.05 | 50.95 | 0.45 | 43.75 |
| Less : Accumulated Depreciation | 34.78 | 27.28 | 34.83 | 48.96 | 22.42 | 69.93 | 2.59 | 87.71 |
| Net Block | 4.79 | 7.24 | 0.54 | 0.00 | 1.59 | 2.95 | 0.23 | 4.92 |
| Capital Work-in-progress |  |  |  |  |  |  |  |  |

[^55]| Investments \& Other Assets | 32.70 | 2.14 | 29.30 | 0.00 | 4.98 | 24.93 | 79.89 | 9.84 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Net Current Assets |  |  |  |  |  |  |  |  |
| Current Assets, Loans \& Advances | 43.90 | 85.42 | 76.86 | 143.88 | 173.61 | 59.76 | 23.28 | 34.57 |
| Less : Current Liabilities \& Provisions | 16.17 | 22.08 | 41.54 | 92.85 | 102.60 | 57.57 | 5.99 | 37.04 |
| Total Net Current Assets | 27.73 | 63.34 | 35.32 | 51.04 | 71.01 | 2.19 | 17.29 | -2.47 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Select Financial Ratios |  |  |  |  |  |  |  |  |
| PROFITABILITY RATIOS |  |  |  |  |  |  |  |  |
| Operating Margin (\%) | 15.90 | 39.88 | 14.35 | 26.11 | 9.12 | 7.73 | 31.69 | 15.89 |
| Net Profit Margin (\%) | 13.20 | 30.41 | 12.11 | 18.34 | 6.60 | -0.85 | 16.51 | 4.58 |
| Return on Net Worth (\%) | -0.62 | 38.20 | 11.84 | 32.20 | 8.72 | -4.16 | 2.41 | 11.40 |
| Return on Capital Employed (\%) | 4.66 | 44.74 | 14.65 | 43.70 | 13.14 | 5.10 | 4.56 | 17.67 |
| LEVERAGE RATIOS |  |  |  |  |  |  |  |  |
| Long Term Debt / Equity | 0.81 | 0.00 | 0.03 | 0.00 | 0.18 | 0.79 | 0.04 | 0.68 |
| Total Debt/Equity | 0.86 | 0.00 | 0.07 | 0.00 | 0.14 | 0.93 | 0.09 | 1.48 |
| LIQUIDITY RATIOS |  |  |  |  |  |  |  |  |
| Current Ratio | 2.72 | 3.87 | 1.85 | 1.55 | 1.69 | 1.04 | 3.90 | 0.93 |
| Quick Ratio | 2.60 | 3.87 | 1.21 | 1.33 | 1.26 | 0.64 | 3.37 | 0.61 |
| ACTIVITY RATIOS |  |  |  |  |  |  |  |  |
| Inventory Turnover Ratio | 83.27 | n.a. | 5.09 | 16.63 | 3.97 | 9.90 | 2.99 | 18.30 |
| Fixed Assets Turnover Ratio | 0.68 | 2.71 | 2.36 | 1.85 | 2.18 | 1.27 | 2.99 | 0.84 |
| n.a. indicates not applicable |  |  |  |  |  |  |  |  |

Mangal Singh stated that these eight companies were chosen to represent variety of non-diversified industry players, namely, Associated Cement Corporation (ACC) from the cement sector, Bharat Heavy Electricals Limited (BHEL) from the heavy engineering sector, Indian Hotels from the hotel sector, Infosys Technologies from the IT-software sector, Procter \& Gamble (P\&G) India from the fast moving consumer goods sector, Ranbaxy Laboratories from the pharmaceutical sector, Tata Motors from the automobiles sector, and Zee Telefilms Limited from the television entertainment sector.

Shweta was present in the Durbar and she did not want to be sweating and being single lifelong - so she was hazaar (very) enthusiastic about it and hence, decided to participate in the test. She sought the help of all the finance-studs in the class.

Please help Shweta in solving the case and finding the companies A to H involved in the table. Please give your answers below with reasoning for the same (at least a sentence). For example, a reason such as a Company X is 'Bank of Baroda' as it has large interest charges' and 'low fixed assets' are compulsory.

## Case 7.4 Drivers of Financial Structure

One fine day, Ram was roaming around areas near Bani Park, a posh market area of Jaipur. To his surprise, he found multiple Ram(s).

Ram remembered his childhood tragedy ... when his parents, his brothers and all other family members were performing a traditional ceremony in Haridwar Kumbh Ka Mela mass pilgrimage in which people gather in millions to bathe in a sacred river. And suddenly Dacoits came and took all his brothers with them. Ram escaped (from being captured) by clinging on to his mother.

Now, all these Rams i.e., his brothers and blood relations were doing small businesses in and around Bani Park. They all had businesses having asset-size of maximum ₹ 100,000 . Ram went and discussed with them the position statement of their businesses. He was able to make the following common size statements of these enterprises.

|  | Firm $\rightarrow$ | A | B | C | D | E | F | G | H |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\downarrow$ Balance Sheet Items |  |  |  |  |  |  |  |  |  |
| Cash | $10 \%$ | $15 \%$ | $10 \%$ | $3 \%$ | $5 \%$ | $10 \%$ | $10 \%$ | $15 \%$ |  |
| Receivables | $10 \%$ | $0 \%$ | $85 \%$ | $20 \%$ | $0 \%$ | $15 \%$ | $10 \%$ | $0 \%$ |  |
| Inventory | $60 \%$ | $70 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $25 \%$ | $0 \%$ |  |
| Fixed Assets | $20 \%$ | $15 \%$ | $13 \%$ | $75 \%$ | $95 \%$ | $70 \%$ | $55 \%$ | $70 \%$ |  |
| Other Assets | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $0 \%$ | $15 \%$ |  |
| Unearned Revenue | $0 \%$ | $0 \%$ | $0 \%$ | $20 \%$ | $0 \%$ | $40 \%$ | $0 \%$ | $85 \%$ |  |
| Provisions | $15 \%$ | $10 \%$ | $5 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $0 \%$ | $0 \%$ |  |
| Other Current Liabilities | $40 \%$ | $75 \%$ | $0 \%$ | $5 \%$ | $30 \%$ | $15 \%$ | $50 \%$ | $0 \%$ |  |
| Long Term Liabilities | $0 \%$ | $0 \%$ | $15 \%$ | $65 \%$ | $50 \%$ | $0 \%$ | $20 \%$ | $0 \%$ |  |
| Owners Equity | $45 \%$ | $15 \%$ | $80 \%$ | $10 \%$ | $20 \%$ | $40 \%$ | $30 \%$ | $15 \%$ |  |

Unfortunately, Ram forgot to write the business names. Now, please help Ram in identifying the above common sized statements with the following businesses.

| Company | FIRM NAME |
| :---: | :--- |
| A | Ram Jhulewala ${ }^{34}$ |
| B | Ram Rasoiwala $^{35}$ |
| C | Ram Bhelpuriwala $^{36}$ |
| D | Ram Gubbarewala $^{37}$ |
| E | Ram Tutionwala $^{38}$ |
| F | Ram Vanwala $^{39}$ |
| G | Ram Cycle-Mechanic $^{40}$ |
| H | Ram Library-Wala |

[^56]Ram also had access to some common size income statements.

|  | Firm $\rightarrow$ | A | B | C | D | E | F | G |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | H

Unfortunately, Ram forgot to write the business names. Now, please help Ram in identifying the above common sized income statements with the following businesses.

| Company | Firm Name |
| :---: | :--- |
| A | Ram Panwala ${ }^{42}$ |
| B | Ram Raddiwala ${ }^{43}$ |
| C | Ram Saloonwala ${ }^{44}$ |
| D | Ram Dalal ${ }^{45}$ |
| E | Ram Doodhwala ${ }^{46}$ |
| F | Ram Chakkiwala ${ }^{47}$ |
| G | Ram Rickshaw-wala ${ }^{48}$ |
| H | Ram Dosa-wala ${ }^{49}$ |

## Case 7.5 Indian Paper Industry Over 25 Years

LO 4,5 DIFFICULT

Annexure 7.3 on the OLC contains an introduction on the Indian Paper Industry along with graphical trends on few ratios with a focus on three specific industry players in the same. This case is a continuation of that discussion. In the same annexure 7.3 27-year graphs of some more key financial ratios of the overall industry and also, of three paper players, namely, Andhra Pradesh Paper Mills, Rohit Paper Mills and Seshasayee Paper Mills are shared, namely, Debt to Equity Ratio; Networth Turnover Ratio; Return on Equity (ROE); Price-Earnings (P/E) Ratio; Dividend Payout Ratio; Quick Ratio; Times Interest Covered

[^57]Ratio; and Average Collection Period. Based on these graphs, you are required to make comments on the following issues:

1. How have these ratios changed over time for the industry and also for the three firms being studied?
2. What could be the possible reasons behind these trends and fluctuations of these players and the industry averages?
3. What can be concluded about the financial position of the industry?
4. How has the capital structure of the industry and these players changed in the last two-plus decades? What could be the possible reasons for this change?

## Case 7.6 Avantika's DuPont Love

LO 4 EASY

For Avantika, what started as puppy love actually turned into an everlasting bond with DuPont Decomposition Analysis? Like two lovebirds, Avantika was dating financial ratios for almost a decade. In the table below - Avantika has provided you with four ratios related to Profitability Analysis i.e., the ratios enabling DuPont Decomposition analysis for four companies, namely, Anik Industries ${ }^{50}$ (Milk Processing and Other diverse sectors), Gayatri Bioorganics ${ }^{51}$ (Starch Manufacturer), Lawreshwar Polymers ${ }^{52}$ (Footwear Manufacturer) and Mukand Engineering ${ }^{53}$ (Construction Engineering) for four recent years.

Dupont Ratios for Four Companies for Four Years

| Financial Ratio(s) | Year 4 (12m) | Year 3 (12m) | Year 2 (12m) | $\begin{aligned} & \text { Year } 1 \\ & (12 \mathrm{~m}) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Anik Industries Limited |  |  |  |  |
| Total Asset Turnover (captures Asset Utilization of the entity) | ? | 1.8 | 1.5 | 1.4 |
| Equity Multiplier (captures Financial Leverage of the entity) | 3.5 | 4.4 | 3.8 | ? |
| Net Profit Margin (\%) <br> (captures the entity's Cost-Price difference) | 0.9 | 0.8 | 0.8 | 0.9 |
| Return on Equity (\%) (captures the overall performance) | 4.7 | ? | 4.7 | 5.3 |
| Gayatri Bioorganics Limited |  |  |  |  |
| Total Asset Turnover (captures Asset Utilization of the entity) | 1.4 | 1.3 | 1.2 | 1.1 |
| Equity Multiplier (captures Financial Leverage of the entity) | 3.3 | 3.0 | ? | 1.6 |
| Net Profit Margin (\%) <br> (captures the entity's Cost-Price difference) | 0.6 | ? | 3.4 | 2.4 |
| Return on Equity (\%) (captures the overall performance) | ? | -7.7 | 8.0 | 4.3 |

[^58]|  | Lawreshwar Polymers Limited |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total Asset Turnover <br> (captures Asset Utilization of the entity) | 1.2 | 1.1 | $?$ | 0.7 |  |
| Equity Multiplier <br> (captures Financial Leverage of the entity) | 1.9 | 1.8 | 1.6 | $?$ |  |
| Net Profit Margin (\%) <br> (captures the entity's Cost-Price difference) | 2.0 | $?$ | 4.2 | 2.3 |  |
| Return on Equity (\%) <br> (captures the overall performance) | 4.6 | 4.2 | 5.5 | 2.7 |  |
|  | Mukand Engineers Limited |  |  |  |  |
| Total Asset Turnover <br> (captures Asset Utilization of the entity) | 0.6 | 0.5 | 0.5 | 0.9 |  |
| Equity Multiplier <br> (captures Financial Leverage of the entity) | 2.4 | $?$ | 2.9 | 3.0 |  |
| Net Profit Margin (\%) <br> (captures the entity's Cost-Price difference) | 4.7 | 5.1 | $?$ | 6.5 |  |
| Return on Equity (\%) <br> (captures the overall performance) | 6.3 | 6.0 | 12.6 | $?$ |  |



## Case Questions

(a) A few numbers up there are missing. You are required to fill the same.
(b) As you can observe - all the four companies have their own problem area. You are required to identify the same? Discuss your reasoning for the same.

## Case 7.7 Long-Run Analysis of Two Textile Players

Arvind ${ }^{54}$ and Raymond ${ }^{55}$ are two companies which are in the same business of manufacturing of textiles. Arvind, part of the Lalbhai group, was founded in 1931; with its headquarters located in Ahmedabad. Raymonds, part of the Vijayapath Singhania group, was founded in 1952; with its headquarters located in Mumbai.

We have recently collected financial data of the above two companies and reproducing the same for seven continuous years. You are required to compute their ratios and analyze the two companies, compare, and make a few critical comments about the industry and the two individual players. Readers may like to download the excel sheet of the figures to make computations.

[^59]Financial Numbers of Arvind Limited (all figures in ₹ crore)

| Balance Sheet: Assets Side |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Year 7 <br> (12m) | Year 6 <br> (12m) | Year 5 <br> (12m) | Year 4 <br> (12m) | Year 3 <br> (12m) | Year 2 (12m) | Year 1 <br> (12m) |
| Cash \& Bank Balances | 186 | 71 | 59 | 60 | 40 | 23 | 28 |
| Accounts Receivable | 755 | 642 | 501 | 426 | 282 | 284 | 207 |
| Loans and Advances | 910 | 744 | 481 | 390 | 433 | 503 | 429 |
| Inventories | 1,413 | 1,126 | 1,239 | 801 | 733 | 728 | 758 |
| Current Assets | 3,264 | 2,583 | 2,280 | 1,677 | 1,488 | 1,538 | 1,422 |
| Fixed Assets | 2,802 | 2,806 | 2,685 | 2,489 | 2,474 | 2,506 | 2,475 |
| Other Assets | 68 | 42 | 44 | 43 | 25 | 26 | 18 |
| Total Assets | 6,134 | 5,431 | 5,009 | 4,209 | 3,987 | 4,070 | 3,915 |
| Balance Sheet: Liabilities Side |  |  |  |  |  |  |  |
| Accounts Payable | 970 | 765 | 672 | 526 | 314 | 262 | 264 |
| Other Current Liabilities and Provision | 702 | 651 | 392 | 170 | 259 | 194 | 142 |
| Long-term Liabilities | 2,207 | 1,983 | 2,249 | 2,230 | 2,346 | 2,229 | 2,190 |
| Net Worth | 2,254 | 2,032 | 1,695 | 1,283 | 1,067 | 1,386 | 1,318 |
| Total Liabilities | 6,133 | 5,431 | 5,008 | 4,209 | 3,986 | 4,071 | 3,914 |
| No. of Equity Shares | 25.80 | 25.46 | 25.44 | 23.20 | 21.90 | 21.90 | 20.93 |
| Income Statement |  |  |  |  |  |  |  |
| Total Sales | 5,292 | 4,925 | 4,089 | 3,280 | 2,745 | 2,655 | 2,182 |
| Other Income | 81 | 485 | 37 | 21 | 51 | 21 | 113 |
| Cost of Goods Sold | 3,530 | 3,370 | 1,869 | 1,489 | 1,057 | 1,000 | 703 |
| Gross Profit | 1,843 | 2,040 | 2,257 | 1,812 | 1,739 | 1,676 | 1,592 |
| Operating \& Other Expenses | 1,075 | 953 | 1,665 | 1,380 | 1,390 | 1,318 | 1,115 |
| PBDIT | 768 | 1,087 | 591 | 432 | 350 | 358 | 478 |
| Interest | 315 | 309 | 245 | 212 | 291 | 157 | 171 |
| Depreciation \& Amortization | 204 | 161 | 172 | 173 | 161 | 175 | 179 |
| Tax and Deductions | 1 | 426 | 9 | -6 | 7 | 7 | 3 |
| Profit After Tax | 248 | 191 | 165 | 53 | -109 | 19 | 125 |
| Dividend to Shareholders | 50 | 30 | 0 | 1 | 2 | 3 | 4 |

Financial Numbers of Raymond Limited (all figures in ₹ crore)

| Balance Sheet: Assets Side |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Year 7 <br> (12m) | Year 6 (12m) | Year 5 (12m) | Year 4 (12m) | Year 3 (12m) | Year 2 (12m) | Year 1 (12m) |
| Cash and Bank Balances | 38 | 30 | 48 | 71 | 84 | 58 | 58 |
| Accounts Receivable | 738 | 546 | 509 | 451 | 459 | 464 | 412 |
| Loans and Advances | 454 | 386 | 346 | 314 | 347 | 368 | 278 |


| Inventories | 948 | 839 | 765 | 562 | 595 | 666 | 571 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Current Assets | 2,178 | 1,801 | 1,668 | 1,398 | 1,485 | 1,556 | 1,319 |
| Fixed Assets | 1,481 | 1,305 | 1,412 | 1,479 | 1,599 | 1,436 | 1,483 |
| Other Assets | 524 | 512 | 529 | 630 | 630 | 637 | 581 |
| Total Assets | $\mathbf{4 , 1 8 3}$ | $\mathbf{3 , 6 1 8}$ | $\mathbf{3 , 6 0 9}$ | $\mathbf{3 , 5 0 7}$ | $\mathbf{3 , 7 1 4}$ | $\mathbf{3 , 6 2 9}$ | $\mathbf{3 , 3 8 3}$ |
|  | Balance Sheet: Liabilities Side |  |  |  |  |  |  |
| Accounts Payable | 736 | 587 | 441 | 356 | 370 | 331 | 316 |
| Other Current Liabilities and Provision | 671 | 574 | 307 | 255 | 270 | 245 | 238 |
| Long-term Liabilities | 1,427 | 810 | 1,641 | 1,721 | 1,861 | 1,606 | 1,393 |
| Net Worth | 1,349 | 1,647 | 1,220 | 1,176 | 1,217 | 1,447 | 1,435 |
| Total Liabilities | $\mathbf{4 , 1 8 3}$ | $\mathbf{3 , 6 1 8}$ | $\mathbf{3 , 6 0 9}$ | $\mathbf{3 , 5 0 8}$ | $\mathbf{3 , 7 1 8}$ | $\mathbf{3 , 6 2 9}$ | $\mathbf{3 , 3 8 2}$ |
| No. of Equity Shares | 6,14 | 6.14 | 6.14 | 6.14 | 6.14 | 6.14 | 6.14 |
|  | $\mathbf{I n c o m e}$ Statement |  |  |  |  |  |  |
| Total Sales | $\mathbf{4 , 0 7 4}$ | $\mathbf{3 , 1 3 6}$ | $\mathbf{3 , 0 3 6}$ | $\mathbf{2 , 5 0 8}$ | $\mathbf{2 , 5 5 9}$ | $\mathbf{2 , 3 9 6}$ | $\mathbf{2 , 0 4 1}$ |
| Other Income and Extraordinary Items | 45 | 580 | -131 | 27 | -142 | 152 | 142 |
| Cost of Goods Sold | 1,950 | 1,610 | 1,552 | 1,315 | 1,308 | 1,276 | 1,034 |
| Gross Profit | 2,169 | 2,106 | 1,353 | 1,220 | 1,109 | 1,272 | 1,149 |
| Operating and Other Expenses | 1,075 | 1,604 | 1,075 | 963 | 1,061 | 967 | 782 |
| PBDIT | $\mathbf{4 1 7}$ | 502 | $\mathbf{2 7 9}$ | $\mathbf{2 6 7}$ | 50 | $\mathbf{3 0 5}$ | $\mathbf{3 8 7}$ |
| Interest | 191 | 143 | 124 | 129 | 133 | 97 | 69 |
| Depreciation and Amortization | 189 | 166 | 161 | 177 | 167 | 169 | 124 |
| Tax and Deductions | -20 | 50 | -55 | 5 | $\mathbf{- 2 4}$ | 25 | 55 |
| Profit after Tax | $\mathbf{5 7}$ | $\mathbf{1 4 3}$ | $\mathbf{4 9}$ | $\mathbf{- 4 4}$ | $\mathbf{- 2 2 6}$ | $\mathbf{1 4}$ | $\mathbf{1 3 9}$ |
| Dividend to Shareholders | 7 | 18 | 7 | 0 | 0 | 18 | 36 |

## INTERNET ASSIGNMENTS

## Assignment 7.1 Financial Statement Analysis

On the website of this book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online website.

Your seventh assignment would answer the following two questions:

- Please compute the following three short-term solvency ratios - (i) Cash Cover for Daily Expenses;
(ii) Current Assets Cover for Daily Expenses; and (iii) Current Liabilities Cover for Daily Expenses ... for the last two years. Please comment (within 100 words).
- Please compute the following two long-term solvency ratios - (i) Times Interest Covered; and (ii) Gearing ... for the last two years. Please comment (within 100 words).
- Please compute the Du-Pont component ratios (as illustrated in the class) ... for the last two years. Please comment (within 100 words).


## Answers

## Answers to the "Let's Check Our Concepts!"

(a) False
(b) False
(c) True
(d) False
(e) True
(f) True
(g) True
(h) True
(i) False
(j) False

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 7.1: Summarized Financial Statements of Colgate Palmolive
- Annexure 7.2: Additional Reading Material
- Annexure 7.3: Solved Illustration
- Annexure 7.4: Auxiliary Test Material
- Annexure 7.5: Sample Assignment Reports

Accounting Issues for Larger Entities

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Know the income statement and balance sheet treatment for non-current assets and inventory
LO 2 Understand the accounting policies for treatment of debentures and non-current investments
LO 3 Determine the Negotiable Instruments and their accounting practices
LO 4 Explain the importance of Bank Reconciliation Statements
LO 5 Summarize the income statement of a Manufacturing concern

Accounting Services Outsourcing Market Is In Trillions!
In 2011, a report by the global consulting and research firm Everest Group had predicted that India's global business process outsourcing (BPO) in the accounting-cum-financial services market has the potential to grow beyond ₹ 11.5 lakh crores, i.e., above one trillion rupees.

In 2016, the question that comes to human mind is - over the past five years, did the actual business scenario for accounting outsourcing playout in such a way? Incredible as it may sound. Nevertheless, the answer is a firm YES! "India continues to play an (increasingly) key role in the financial services BPO space and offers attractive arbitrage opportunities compared to onshore locations in the U.S., U.K. and Europe," said Everest Group partner Vikash Jain.

Organizations are increasingly looking to outsource their accounting requirements for a number of reasons such as: cost reduction, regulatory compliance, industry consolidation, reduction of environment complexity, and access to new technology and management processes. Lately, the reason for this quantum leap in the growth of financial and accounting services is the fact that small and medium-sized enterprises are grabbing the advantages from outsourcing that big entities are (already) enjoying. For example, small-sized CPAs and law firms including advocates located in the west have started outsourcing their accounting books maintenance and tax filing jobs to the Indian hands (for example, KCSPL in Pune).

Even individuals in the U.S.A. and such places are filing their tax filings using the services of the small sized business process outsourcing accounting outfits located in cities such as Hyderabad and Pune. To compete and succeed across the long-term in this ever-changing global environment, many visionary executive leaders have chosen to outsource part or all of their in-house functions. This enables the company to focus on core competencies in line with their mission and not expend management's resources on internal finance, information technology, etc. Outsourcing gives your company access to a higher level of expertise than you normally could afford, especially in the field of accounting services.

This accounting outsourcing journey throws big questions to the 'updated' financial accountant in you, such as:

- How (and what) will be depreciation and inventory norms adopted by these Indian accountants located miles away?
- How and who will perform the bank reconciliation statement finalization? And, who will check on the compliance of investment items treatment with their accounting policies?
- Will the implementation of IFRS across the globe help these accounting outsourcing entities? Is it possible for these outsourcing entities to pursue clients across the globe (instead to sticking to one country)?
- Are there any minimal requirements for these BPO entities, especially the ones engaged in tax filing?
The queries raised above makes us aware of the need to know on the accounting policies and practices, both national and international context. Our discussion in this chapter provides a few pointers to the above questions.
Source: India's financial services business process outsourcing market may reach $\$ 250$ billion, Guidon Performance Solutions, Dated 26 April 2011 and An interview with Advisor, KCSPL, Pune, Ms Ananya Chakraborty on 01-01-2016.

What do accountants suffer from that ordinary people don't? Think about it. It is 'Depreciation' (not depression). Jokes apart, we have journeyed to this point using illustrations and examples that were straight, uncomplicated and from small-sized firms. This chapter looks at the aspects and challenges faced by entities as their complexity of financial transactions increases their size by way of number of transactions increases and such, to capture the underlying concepts and technical way out. These accounting finer points will have implications for the specialists and managers in us while pouring through financial statements in terms of ensuring better understanding and interpretation. The purpose of this chapter is to make you aware of frequently occuring complexities that we come across while preparing the accounting reports of modern day larger organizations.

We start with looking at the process of cost allocation and book treatment of tangible fixed assets, non-tangible fixed assets by way of depreciation and amortization.

### 8.1 DEPRECIATION AND AMORTIZATION ACCOUNTING

> Know the income statement and balance sheet treatment for noncurrent assets and inventory

The revenue generation process of any business reduces the value of its long-term assets. Depreciation is the reduction in the value of fixed assets on account of wear and tear, exhausting or being outdated. Specifically, such cost allocation for non-current tangible fixed assets is known as depreciation; and in case of non-current intangible fixed assets, it is known as amortization. According to Spicer and Pegler, depreciation may be defined as 'the measure of the exhaustion of the effective life of an asset from any cause during a given period.' For the purpose of this section, while we'd keep using the term depreciation, yet our intent is on both tangible and intangible non-current fixed assets.

Ind-AS 16 on Property, Plant and Equipment, issued by the Institute of Chartered Accountants of India (ICAI), defines depreciation as 'the systematic allocation of the depreciable amount of an asset over its useful life'. (Useful life being described as the period over which an asset is expected to be available for use by an entity; or the number of production (or similar) units expected to be obtained from the asset by an entity.) This also means that fixed assets with an indefinite life are not depreciated. For example, land is not depreciated because its life is indefinite, whereas, a leasehold land is depreciated over the period of the lease period.

Let us capture the essential features of depreciation:

1. Only fixed assets with definite life are considered for depreciation. This is because reductions in the value of current assets are taken care of by valuing them at the lower of cost or market price in the balance sheet.
2. It is a charge against the business profit for the reason that purchase of a fixed asset is nothing more than a prepaid expense for the business. For example, if plant and machinery worth ₹ 5 million is purchased for production in a business, it will save the rent expense for borrowing the machinery till its useful life. Later on, to maintain production, one has to either buy new machinery or rent one. Thus, the reduction in the value of the machine every year, is the charge against the profit for that year and is similar to the rent that would have been payable if the machine had not been purchased.
3. Depreciation expense is a non-cash charge. Given that the non-current fixed assets are prepaid thus, like prepaid insurance, the depreciation expense will be non-cash.

### 8.1.1 Accounting for Depreciation and Amortization

Generally, accounting for depreciation and amortization is done in one of the following ways:
(a) Charging the amount by reducing the respective fixed asset; or
(b) Maintaining a provision for depreciation account.

Under the first method, the amount of depreciation is shown as a reduction from the fixed asset. It means that in the balance sheet, the fixed assets are shown at their opening value less depreciation for the year (also known as written down value). Under the other method, a separate account called the 'provision for depreciation account' is opened and its balance is shown under the liabilities side of the balance sheet, without any reduction in the value of asset.

## Illustration 8.1

 becoming nil. Let us see the accounting of its depreciation under both the methods above:

Assuming uniform cost allocation over the useful life would result in depreciation per annum coming to ₹ 10,000 ( $\mathcal{F}_{1,00,000}$ divided by the number of years). So, the journal entry for year 1 , under the first method, shall be:

| Depreciation Account | (Debit) | 10,000 |  |
| :---: | :---: | :---: | :---: |
| Hut Account | (Credit) |  | 10,000 |
| (Being reduction in the value of hut on account of depreciation) |  |  |  |
| Profit and loss Account | (Debit) | 10,000 |  |
| Depreciation Account | (Credit) |  | 10,000 |

(Being depreciation expense to be charged to the profit and loss account)
In this case, the Hut account in the balance sheet shall be shown at ₹ 90,000 at the end of the first year, ₹ 80,000 at the end of the second year and so on.

Under the other method of accounting, the journal entries will be the same, except with the slight difference that instead of crediting the hut account, we will credit the 'provision for depreciation account'. As a result, our entry becomes:

| Depreciation Account | (Debit) | 10,000 |  |
| :--- | ---: | :--- | ---: |
| Provision for Depreciation Account | (Credit) |  | 10,000 |
| (Being provision made for depreciation for the year) |  |  |  |
| Profit and loss Account | (Debit) | 10,000 |  |
| Depreciation Account | (Credit) |  | 10,000 |

(Being depreciation expense to be charged to the profit and loss account)
Here, the Hut account in the balance sheet will stand at $\mathrm{F}_{1,00,000 \text {, for all the } 10 \text { years. On the other hand, the }}$ provision for depreciation account shall increase by ₹ 10,000 every year. This second method is the more popular one and the provision for depreciation account is more commonly known as the 'accumulated depreciation' account.

## SPOTLGTir 8.1

## "Contra Account"

Accounting heads such as 'provision for depreciation', 'accumulated depreciation', 'provision for doubtful debts', and 'provision for bad receivables' are known as contra accounts. So, a contra account is an account which offsets another account. It is a general ledger account which is intended to have its balance be the opposite of the normal balance for that specific account grouping. For instance, a contra asset account is intended to have a credit balance instead of the debit balance normally found in an asset account.

All the amount mentioned examples are contra-asset account, wherein a credit balance offsets the debit balance of the corresponding asset. A contra-liability account has a debit balance and offsets the credit balance of the corresponding liability. 'Discount on trade payables' or 'discount on bills payable' can be good examples of contra-liability accounts.

In the Milind Kaapi case discussed in Illustration 8.1, at the end of the first year, while the depreciation expense will be reported in the income statement, the Hut account will be shown in the balance sheet as follows:

| Gross Fixed Assets (Hut) | $₹_{100,000}$ |
| :--- | ---: |
| Less: Provision for depreciation | 10,000 |
| Net Fixed Asset (Hut) | ₹ 90,000 |

Readers can observe that the 'provision for depreciation' account above is behaving as a contra-asset account by reducing the value of the non-current tangible asset.

Assuming further, that the hut is sold for ₹ 60,000 at the end of 5 years, there will be a profit of $\mathrm{F}_{10,000 \text { on }}$ account of the sale of the hut. The accounting entries under both the methods would be as follows:

## Using First Method

| Cash Account | (Debit) | 60,000 |
| :--- | ---: | ---: |
| Hut Account | (Credit) |  |
| (Being sale of hut for ₹60,000) |  | 60,000 |

We know that the written down value of the hut, after reducing ₹ 10,000 every year, for five years comes to $₹_{50,000}$ and we have credited the hut account for ₹ 60,000 which means that there is a profit of $₹_{10,000(60,000}$ - 50,000), which should be credited to the profit and loss account.

(Sale of hut for ₹ 60,000 and profit being ₹ 10,000 transferred to profit and loss account)

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) Fixed assets with an indefinite life are not depreciated.
(b) Depreciation is the reduction in the value of current asset on account of wear and tear, exhausting or being outdated.

### 8.1.2 Methods of Depreciation

As discussed in Chapter 3, there are various methods of calculating the depreciation. A few commonly used methods are as follows:
(a) Straight line method
(b) Written down value method
(c) Sum of years digits method
(d) Depletion method and
(e) Units of production method

We will have a discussion on them for the purpose of the creation of accounting records.
(a) Straight Line Method Under this method, the depreciation is charged evenly every year, throughout the useful life of the fixed asset. This method is also known as the fixed installment method. The amount of depreciation every year, is calculated by the following formula

Total cost of the fixed asset - Estimated salvage value
Expected useful life of the asset (in years)

## Illustration 8.2

A machinery was purchased for ₹ 80,000 and it is also known that the freight and installation charges were $₹_{15,000}$ and $₹_{5,000}$, respectively. The life of the machinery was estimated at 10 years, after which its scrap value is estimated at $₹ 10,000$. In such a case, the yearly depreciation is calculated as follows:

Remember that deprecation is done after including all the capitalised expenditures (such as unpacking, installing, taxes, insurance, and duties), along with the cost of the machinery. Hence, the depreciable basis for the machinery would includes the transportation and installation expenses above and the depreciation per year as per the above formula, comes to

$$
\frac{1,00,000-10,000}{10} \text { or ₹ } 9,000
$$

This method of depreciation is most suitable in the case of assets which expire with the expiry of accounting periods. Goodwill, patents, and leasehold property are examples of accounts wherein straight line depreciation is used.
(b) Written Down Value Method (also known as Diminishing balance method) Under this method, depreciation is charged every year on the remaining book value of the asset at the beginning of the year. The remaining book value means the original cost of the asset as reduced by depreciation every year. Thus, the amount of depreciation will go on decreasing as the age of the equipment goes on rising.

## Illustration 8.3

Prabhakar purchases furniture for ₹ 20,000 and the applicable rate of depreciation is 10 percent, written down value method.

First calculate the book value and depreciation for every year in the following way.

| Less: | Purchase value of furniture | 20,000 |
| :--- | :--- | ---: |
|  | Depreciation for year 1 at $10 \%$ | $\frac{2,000}{18,000}$ |
|  | Book value at the end of year 1 | $\underline{1,800}$ |
| Less: | Depreciation for year 2 at $10 \%$ | 16,200 |
|  | Book value at the end of year 2 | $\underline{1,620}$ |
|  | Depreciation for year 3 at $10 \%$ | $\underline{14,580}$ |

This method of providing depreciation is beneficial, especially for products which become obsolete with time (such as computers). One of the frequently mentioned reasons is that the increased cost of repairs and maintenance for subsequent years is compensated by the reduced depreciation.

The furniture would appear in the balance sheet as follows:

| Fixed Assets: | Year 1 | Year 2 | Year 3 |
| :--- | ---: | ---: | ---: |
| Furniture |  |  |  |
| Gross Block | ₹20,000 | ₹20,000 | ₹20,000 |
| Less: Accumulated Depreciation | 2,000 | 3,800 | 5,420 |
| Net Block |  | 18,000 | 16,200 |

(c) Sum of years digits method This method is similar to the diminishing balance method in the sense that the depreciation goes on reducing in every subsequent year. However, the method of calculating the depreciation is different and is calculated using the following formula:

$$
\frac{\text { Current life of the asset }}{\text { Sum of digits of the life of asset in years }} \times \text { Cost of asset }
$$

For example, if an asset having an effective life of 5 years, is purchased for $₹ 55,000$, and the salvage value is $₹ 5,000$. The depreciation for each year is calculated as follows:

Depreciable Value of machine $=55,000-5,000=₹ 50,000$
Year $1 \quad \frac{5}{1+2+3+4+5} \times 50,000$ or $\frac{5}{15} \times 50,000=₹ 16,667$
Year $2 \quad \frac{4}{15} \times 50,000=$ ₹ $13,333.33$
Year $3 \quad \frac{3}{15} \times 50,000=₹ 10,000.00$
Year $4 \quad \frac{2}{15} \times 50,000=₹ 6,666.67$
Year $5 \quad \frac{1}{15} \times 50,000=₹ 3,333.33$

The furniture would appear in the balance sheet as follows:

|  | Year 1 | Year 2 | Year 3 |
| :--- | ---: | :---: | :---: |
| Fixed Assets |  |  |  |
| Gross Block | ₹50,000 | ₹50,000 | ₹50,000 |
| Less: Accumulated Depreciation | 16,667 | 30,000 | 40,000 |
| Net Block |  | 33,333 | 20,000 |

(d) Depletion Method In this method, the depreciation is based on the output from the asset. This method is suitable in cases of depreciating assets, such as mines, quarries, and oil exploration, where the depreciation is based upon the pace of extraction of the deposits. In this method, the depreciation is computed by multiplying the units of output (or deposit) with the rate of depletion of the resources.

For example, if a mine for excavation with estimated minerals of 50,000 tonnes, is purchased for $₹ 1,00,000$, the rate of the mineral resource will be ₹ 2 per tonne of output ( $₹ 1,00,000 / 50,000$ tonnes). So, if the output in year 1 is 10,000 tonnes, the depreciation to be charged for that year would be ₹ 20,000 .
(e) Units of Production Method This method is similar to depletion method where depreciation is charged on the basis of the number of units produced during the accounting period as against the capacity of production. Thus in the year in which there is more production, depreciation charged will be higher and vice-versa.

## SPOTLTGH 8.2

## "Tax Depreciation system in the USA"

Readers interested in the international context might note that the Modified Accelerated Cost Recovery System (MACRS) is a popular depreciation method in the USA. It is a tax depreciation system in the USA similar to the written down value method in India. Under this system, the capitalized cost basis of tangible non-current assets are recovered over a specified life by annual deductions using a detailed table of cost allocation by the classes of assets released by the US tax authorities.

## Practice of Block Depreciation

Under this method, all identical assets, having a similar expected life, are grouped as a single block. The depreciation is calculated on the block as a whole and not on the individual assets. The rate of depreciation is calculated on the expected lives and the salvage values of the assets of that group.

Profit (or loss) on sale of asset is not computed until the block has no asset in it. In other words, the sale of an individual asset from the block does not result in any gain or loss on account of the sale. The concept of provision for depreciation is followed under this method. This method finds favor with tax authorities as there is no need to maintain item-wise records for a block of assets having the same depreciation rate.

## Illustration 8.4

A company purchases five machines for $₹_{10,000}$ each, having an average life of 5 years, with a salvage value of $₹ 2,000$ each. At the end of year 2 , one machine was sold for $₹_{4}, 000$ and another purchased for ₹ 8,000 , having a zero salvage value.
We calculate the rate of depreciation using the straight line depreciation method, in the following way:

| Purchase value | $(5 \times 10,000)$ | $₹_{50,000}$ |
| :--- | ---: | ---: |
| Less: Salvage value | $(5 \times 2,000)$ | $₹_{10,000}$ |
| Useful life |  | $₹_{40,000}$ |
| Depreciation per annum |  | ₹ $^{2} 8,000$ |
| Rate of depreciation $\frac{8,000}{50,000} \times 100$ |  | $16 \%$ |

The relevant journal entries can be stated as follows:

| Year 1 | Machinery Account | (Debit) | 50,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank Account | (Credit) |  | 50,000 |
|  | (Being machinery purchased) |  |  |  |
|  | Depreciation Account | (Debit) | 8,000 |  |
|  | Provision for Depreciation | (Credit) |  | 8,000 |
|  | (Being depreciation on the block charged at 16\%) |  |  |  |
| Year 2 | Depreciation Account | (Debit) | 8,000 |  |
|  | Provision for depreciation | (Credit) |  | 8,000 |
|  | (Being depreciation on the block charged for the $2^{\text {nd }}$ year at 16\%) |  |  |  |
|  | Bank Account | (Debit) | 4,000 |  |
|  | Provision for Depreciation | (Debit) | 6,000 |  |
|  | Machinery Account | (Credit) |  | 10,000 |
|  | (Being machinery sold for ₹ 4,000 and difference between Cost and Sale Value transferred to provision for Depreciation Account) |  |  |  |
|  | Machinery Account | (Debit) | 8,000 |  |
|  | Bank Account | (Credit) |  | 8,000 |
|  | (Being machinery purchased) |  |  |  |
| Year 3 | Depreciation Account | (Debit) | 8,000 |  |
|  | Provision for depreciation Account | (Credit) |  | 8,000 |
|  | (Depreciation on block consisting of 4 machines purchased at $₹_{10,000}$ each and 1 machine purchased at 8,000 at 20\%) |  |  |  |

Please note that the depreciation on the block in year 3, was calculated as follows:

| Remaining machines in the block (excluding new purchased) | 4 |
| :--- | ---: |
| Value of 4 machines after reducing scrap value | 32,000 |
| Machinery purchased at the end of year 2 | $\underline{8,000}$ |
| Value of Block | $\underline{40,000}$ |
| Depreciation @ $20 \%$ | $\underline{0,000}$ |

Often, some people have this misconception that when depreciation is provided for, funds are being separated to enable the automatic replacement of the asset. But, as we can observe, provision for depreciation will only enable the enterprise to reduce the net profit and make it more realistic. Unless the amount provided as depreciation is invested outside, such amount will only reflect in an increase in the value of some other asset of the business.

The method of depreciation selected has to be applied consistently. Whenever there is a change in the depreciation policy, it affects not only the amount of current depreciation, but it will also affect the accumulated depreciation, and hence, there is a need to rewrite the past figures of the various items.

A change in depreciation method is done in one of the following conditions: (a) For compliance of statute; (b) For compliance of accounting standards; or (c) For more appropriate presentation of the financial statement. When a change in depreciation method is done, the new depreciation expense should be recomputed applying the new method from the date of its acquisition (or installation) till the date of change of method. Difference between the total depreciation under the new method and accumulated depreciation under the old method till the date of change may result in surplus/deficiency. Such resultant surplus would be credited to profit and loss account under the head "Depreciation written back". Such resultant deficiency is also charged to profit and loss account.

A change of depreciation method should also be treated as change in accounting policy and its effect should be quantified and disclosed. The following illustration should help in understanding this concept.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(c) Goodwill, patents, and leasehold property are examples of accounts wherein straight line depreciation is used.
(d) Depletion method is suitable in cases of depreciating assets, such as mines, quarries, and oil exploration.

## Illustration 8.5

Dijjer Steel Co. purchases machinery with a life of five years, for ₹ 100 crore. It is estimated that the machinery will have zero scrap value. The asset was depreciated at $40 \%$, using the written down value method. After two years, the company decides to change its depreciation method from the written down value method, to the straight line depreciation method. You are required to write the journal entries for the first three years. You are also required to discuss the implications of this change on the books of the company.

To enable a good discussion, we provide a table below, stating the depreciation expense for the first three years, using the various methods of depreciation.

|  | Straight Line Method |  | Written Down Value Method |  | Sum of Years Digit Method |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Depreciation Expense | Remaining Book Value | Depreciation Expense | Remaining Book Value | Depreciation Expense | Remaining Book Value |
| Year 1 | 20.0 | 80.0 | 40.0 | 60.0 | 33.3 | 66.7 |
| Year 2 | 20.0 | 60.0 | 24.0 | 36.0 | 26.7 | 40.0 |
| Year 3 | 20.0 | 40.0 | 14.4 | 21.6 | 20.0 | 20.0 |
| Year 4 | 20.0 | 20.0 | 8.6 | 13.0 | 13.3 | 6.7 |

As can be observed from the above table, if there is a change in the depreciation policy, from using the written down value method to the straight line method, there are implications on even the remaining book value of the asset (since excess provision has been made in the past). Hence, we will have to write back the excess provision in our journal entries:

| Year 1 | Depreciation Expense | (Debit) | 40 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Provision for Depreciation | (Credit) |  | 40 |
|  | (Being depreciation provided on the new machinery at $40 \%$ Written Down Value Method) |  |  |  |
| Year 2 | Depreciation Expense | (Debit) | 24 |  |
|  | Provision for Depreciation | (Credit) |  | 24 |
|  | (Being depreciation provided on the new machinery at $40 \%$ Written Down Value Method) |  |  |  |
| Year 3 | Depreciation Expense | (Debit) | 20 |  |
|  | Provision for Depreciation | (Credit) |  | 20 |
|  | (Being depreciation provided on the new machinery using Straight Line Method) |  |  |  |
| Year 3 | Provision for depreciation, straight line | (Debit) | 24 |  |
|  | Excess Provision, written back | (Credit) |  | 24 |
|  | (To record the excess accumulated depreciation consequent to change in depreciation method from WDV to SLM for machinery (64-40) |  |  |  |

Please note that this excess provision, which is being written back, will be a part of the profit and loss account and would be having an effect which would be opposite to the depreciation expense, that is, it would be increasing the firm's profit. It can also be observed that if there were to be no change in the depreciation policy (both method as well as estimate), the depreciation expense for Year 3 would have been $₹_{14.4}$ crore. As a result of the change, the total depreciation expense increased by ₹5. 6 crore (i.e. $20-14.4$ ). This would off course, result in a decrease of the profits of Dijjer Steel in Year 3. But, overall, the method change had the effect of increasing the net profit by ₹ 18.4 crore, taking into account the write-back of the excess provision of $₹ 24$ crore.

In order to enable the users of accounting information to have a better picture of the accounting policies and to enable them to compare the financial statements of different enterprises, having different policies, such changes in accounting policies must be disclosed. Hence, Dijjer Steel must disclose the fact of the accounting method change, the financial effect of the change and the reasons for the change.

If, due to certain reasons, the company were to change the depreciation policy at the end of year three, from the straight-line method to the sum-of-the-years digit method, then one can observe the implications from the initial table prepared. The journal entries would be as follows:

| Year 4 | Depreciation Expense | (Debit) | 13.3 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Provision for Depreciation | (Credit) |  | 13.3 |
|  | (Being depreciation provided on the new machinery using sum <br> of the year digit method) |  |  |  |
| Year 4 | Depreciation expense (additional) | (Debit) | 13.3 |  |
|  | Provision for Depreciation | (Credit) |  |  |
| (To record the shortfall in the accumulated depreciation <br> consequent to change in depreciation method from SLM to <br> SYDM for machinery (93.3-80) |  |  |  |  |

Imagine a scenario wherein, after four years of usage of the machinery, Dijjer Steel Co. has an offer from a foreign party to buy the machinery for ₹ 70 crore. In such a case, some of the readers would be questioning the provision for depreciation. These readers should remember that long-term assets are not for trading, and hence, it is necessary to charge depreciation regardless of changes in the market value of an asset, because depreciation is meant to allocate the cost of acquisition of an asset.

The straight-line method charges equal depreciation over the life of the asset. But the accelerated depreciation methods, that is, the written down value and the sum-of-years depreciation methods, charge a higher depreciation in the early years and a lower depreciation in the later years. These issues do influence the choice of depreciation method to be used by a business entity. For example, a new business entity, which wants to report low profits, would be interested in using the accelerated depreciation method.

The choice of depreciation method being used for reporting purposes is also dependent on other issues, such as:

- The straight-line method is easy to understand.
- Straight-line depreciation enables firms to report higher profits in the early years of new projects.
- Taxation policies also influence the depreciation method.
- Management remuneration packages having profit-linked bonuses may influence the selection of a depreciation method.


## Illustration 8.6

Let us take you through another example. Vijay Foils Limited had two machines as fixed assets purchased at same price, having similar salvage value and useful life. Each machine was having depreciation under a different method and their depreciation amounts for the first few years are mentioned as under -

|  | Machine A | Machine B |
| :--- | :---: | :---: |
| First Year | SLM | WDV |
| Second Year | 3.90 | 10.69 |


| Third Year | 3.90 | 5.84 |
| :--- | ---: | ---: |
| Fourth Year | 3.90 | 4.32 |
| Year | $\frac{15.60}{3.90}$ | $\frac{28.75}{3.19}$ |

## Questions

(a) If machine B followed WDV for first four years and decides to switch over to SLM, what would be the amount of resultant surplus/deficiency?
(b) If machine A followed SLM for first four years and decides to switch over to WDV, what would be amount of resultant surplus/deficiency?

## Solution

As per our discussion, when a change in method of depreciation is made, depreciation should be recalculated in accordance with the new method from the date of asset coming into use. The deficiency or surplus arising from retrospective recompilation of depreciation in accordance with the new method should be adjusted in the accounts in the year in which the method of depreciation is changed. In case the change in the method results in deficiency in depreciation in respect of past year, the deficiency should be charged in the statement of profit and loss. In case the change in the method results in surplus, the surplus should be credited to statement of profit and loss.
(a) In machine B's case a Surplus of ₹ 13.15 will be written back to the profit and loss account
(b) In machine A's case a Deficiency of ₹ 13.15 should be charged to the profit and loss account.

Such a change should be treated as change in accounting policy and its effect should be quantified and disclosed.

## SPOTLTGHT 8.3

## Ind-AS 16 - Property, Plant, and Equipment

As per Ind-AS 16, the depreciable amount of an asset shall be allocated on a systematic basis over its useful life. The residual value and the useful life should be revised at least once in each financial year, and if expectations differ from previous estimates, the change shall be accounted as a change in accounting estimate in accordance with Ind-AS 8.

Factors that are considered for determining the useful life of assets are:
(a) Expected usage of the asset. Usage is assessed by reference to the asset's expected capacity or physical output.
(b) Expected physical wear and tear, which depends on the operational factors.
(c) Technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset.
(d) Legal or similar limits on the use of assets, such as the expiry dates of related leases.

Useful life of an asset may be shorter than the economic life of the asset. The important distinction is that as per Ind-AS, depreciation is charged on an asset when the asset is available for use, i.e., when it is in the location and condition necessary for it to be capable of operating smoothly. Also, depreciation does not cease, when the asset becomes idle or is retired from active use unless the asset is fully depreciated.

```
Source - Ind-AS issued by ICAI
```


### 8.2 ACCOUNTING OF INVENTORIES

Inventory is that the part of goods purchased or manufactured that remain unconsumed or unsold. The term 'inventory' includes the stock of (a) Raw materials; (b) Work-in-progress; (c) Finished goods; (d) Stores, Spares, and Accessories. For a manufacturing concern, inventory may consist of all the types mentioned above, but for a trading concern, often inventory consists of finished goods only. We provide below, an example of an integrated steel manufacturing unit, vis-à-vis a trading firm in steel products.

Table 8.1 Types of Inventory - Example

| Integrated Steel Manufacturing Firm | Steel Trading Firm |
| :--- | :--- |
| - Raw Material Inventory - Iron Ore, <br> Limestone, and Coal | Finished Inventory - Steel and Steell <br> Products kept in Warehouses |
| - Work-in-Progress Inventory - Molten Metal <br> and Steel Slabs |  |
| - Finished Good Inventory - Cold Rolled <br> Steel in Stockyards |  |
| - Stores and Spares Inventory - Stationary, |  |
| Bearings, and Grease in Stores |  |



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By now, we have realized that inventory valuation and income measurement are inter-related. If the inventory is not correctly valued, it will result in a wrong measurement of the income and it will also result in a position statement which is not true and fair. For the ascertainment of income, it is only the cost of goods sold that should be charged against the revenue. This is because not all the goods purchased (or produced) during the year are sold. The following equation expresses how a company's cost of goods sold is determined:

Cost of Goods Sold = Beginning Inventory (at the start of the accounting period) + Purchases (during the accounting period) - Ending Inventory (at the end of the accounting period)

In other words, you take what you have in the beginning, add what you purchases. This results in all the costs of goods available for sale. From this you can subtract what you've at the end, and the result is what you have sold. Hence, the gross income of a firm can be stated as follows:

- Gross Profit $=$ Sales - Cost of Goods Sold $=$ Sales $-($ Beginning Inventory + Purchases - Ending Inventory)
Every year, the unsold inventory will be carried forward to the next year and charged against the revenue of the next year, and hence, the accounting equation discussed above can be re-written as:
- Gross Profit $=$ Sales - Cost of Goods Sold $=$ Sales $-($ Ending Inventory of Last Accounting Period + Purchases - Ending Inventory of Present Accounting Period)
It can be also be observed that for a start-up firm, the beginning inventory (or previous accounting period's ending inventory) will be zero and so, the gross profit equation will get simplified to
- Gross Profit $=$ Sales - Cost of Goods Sold $=$ Sales $-($ Purchases - Ending Inventory $)$

In any economy, prices of goods fluctuate, and hence, there can be a situation where the market price of a product/goods becomes lower than its procurement price. This situation often arises in cases of cyclical/seasonal commodities with highly volatile prices due to demand-supply gaps and mismatch, such as coffee, onions, potatoes, rubber, and castor oil. In order to avoid situations of incorrect valuation, accountants in such situations adopt the policy of valuing inventory at the 'lower of cost or market price'. While this principle, based on the concept of conservatism, requires providing for all anticipated losses, it ensures that the gains are not taken into account while computing the income.

In the above paragraph the market price does not mean the actual market prices paid by the buyer of the inventory, but it indicates the inventory's 'net realizable value' for the buyer. In other words, all costs which are to be incurred while selling (such as transportation and taxes) are to be deducted to compute the 'net realizable value'.

## SPOTLTGHT 8.4

## "How is Inventory Cost Computed?"

## Raw Material Cost:

Invoice Price less Trade Discounts
Add: Direct Cost (for example, frieght inwards, taxes, etc)
Work-in-Progress and Finished Goods Cost:
Raw Material Cost
Add: Cost of Labour used to convert Raw Material to Finished Goods
Add: Overhead Costs in production process and related items such as getting regulatory approval costs incurred or to be incurred in relation to the product

## Illustration 8.7

Govind started the business of vending milk in the city of Indore and he was in his second week of business. Govind followed a weekly accounting period. He has been procuring milk at a steady rate of $\mathrm{F}_{10}$ per liter from the nearby small farmers (they used to come and supply it to him). He used to sell this milk to the local community at a rate of $₹ 20$ per liter. At the end of the first week, he had an ending inventory of 10 litres. During the second week, he purchased 100 liters of milk and at the end of the second week, he found the stock of milk to be only 1 liter. Compute the gross profit of Govind's business and present it in as many possible ways as possible.

Based on the above information and using the equations given in the previous page, one can make out that Govind had sold a total of 109 liters of milk in the second week.

| Beginning inventory of second week was | $₹_{100}$ (being 10 liters @ $₹_{10}$ per liter) |
| :--- | :--- |
| Purchases in second week was | $₹_{1,000}$ (being 100 liters @ ₹ 10 per liter) |
| Ending inventory of second week was | $₹_{10}$ (being 1 liter @ $₹_{10}$ per liter) |
| Cost of Goods Sold of second week would be | $₹_{1,090}$ (being 109 liters @ $₹_{10}$ per liter) |
| Sales of second week would be | $₹_{2,180}$ (being 109 liters @ ₹ 20 per liter) |

We can write the above data in the following equation:

| Beginning Inventory + Purchases | $=$ | Closing Inventory | + Cost of Goods Sold |
| :---: | :---: | :---: | :---: |
| $₹_{100}$ | $₹_{1,000}$ | $=$ | $₹_{10}$ |

Based on the above discussion, the income statement can be presented in the following different forms: Simplest form:

Govind Dairy: Income Statement

| Sales | $₹_{2,180}$ |
| :--- | :--- |
| Expenses |  |
| Less Cost of Goods Sold | $₹_{1,090}$ |
| Gross Profit | $₹_{1,090}$ |

This form of presentation is used by firms such as Hindustan Unilever and Blue Dart Express.
Presenting the change in inventory stocks as part of Sales:
Govind Dairy: Income Statement

| Sales | $₹_{2,180}$ |
| :--- | ---: |
| Add Increase/(Decrease) in Stocks | (₹90) |
| Adjusted Sales | $₹_{2,090}$ |
| Expenses |  |
| Less Purchases | $₹_{1,000}$ |
| Gross Profit | $₹_{1,090}$ |

This form of presentation is used by some European and rarely by Indian firms. There are also firms which present the change in the inventory position as part of the expenses:

Govind Dairy: Income Statement

| Sales | ₹ 2,180 |
| :--- | ---: |
| Expenses: |  |
| Less Purchases | $₹_{1,000}$ |
| Less (Increase)/Decrease in Stocks | $₹_{90}$ |
| Gross Profit | $₹_{1,090}$ |

This form of presentation is most popular in India. For instance, Raymond, Marico and Television Eighteen make use of the same. This is also the format prescribed under Schedule III of the Companies Act, 2013.

Given their varying prices, the basic concern in the accounting of inventories is their valuation. If we use the historical acquisition cost, then the inventory might have been purchased at different times, and it would have different values (at different prices) associated with them. If the price of milk was to fluctuate due to the market conditions, then it would have become difficult for Govind to compute the beginning and closing inventory valuation. Even while valuing inventory at cost, the accountant has a choice of different methods to choose from. Some of them are as follows:
(a) First-in First-out
(b) Weighted average cost
(c) Specific Identification
(d) Last-in First-out

Table 8.2 Actual Inventory Movement Examples

| First-in First-out Process | Pharmaceutical Products Movement in a Medical Shop |
| :--- | :--- |
| Weighted Average Process | Movement of Gold in a Jeweler Unit |
| Specific Identification Process | Movement of Diamond in a Jeweler's Shop |
| Last-in Last-out Process | Movement of Sulphur from a Warehouse |

Though depending on the business situation, actual inventory movement would replicate one of the above, in reality, accountants rarely use the physical movement of inventory to decide on the inventory methodology. The reasons include the difficulty in computing and tracking inventory, among others. Hence, accountants make assumptions about the flow of costs, rather than the flow of units.

Out of the methods listed above, the first three methods are recommended to be followed by the Indian Accounting Standard 2 on 'Inventories'. But, there are a few cases wherein the Indian Accounting Standard 2 is not mandatory, and hence, in such cases, any of the above method can be followed. We now go through a illustration to understand the above.

### 8.2.1 First-in First-out Method

This method of valuation is based on the actual cost. Here, the goods received first are issued or sold first. Therefore, the closing stock consists of goods or materials purchased most recently.

## Illustration 8.8

For the year ending on March 31, 20X6, Taro Ltd. purchased the following:

| $20-04-X_{5}$ | 1,000 units at 10/- per unit |
| :--- | :--- |
| $04-06-X_{5}$ | 1,000 units at 12/- per unit |
| $02-12-\mathrm{X}_{5}$ | 500 units at 8/- per unit |

Sales during the same year were of 1,000 units on 01-02-X6. Calculate the value of inventory for taking to the balance sheet as at 31-03-X6, based upon the First-in First-out method.

## Solution

Under the first-in first-out (FIFO) method of inventory valuation, the oldest lot received is issued first. In other words, the closing stock consists of materials purchased most recently. Accordingly, in the above case, the sale of 1,000 units is presumed to be made out of the purchases made on $20-04-\mathrm{X}_{5}$ and so, the stock value on 31-03-11 is $₹ 16,000$ [ $=(1,000$ units $\times 12$ per unit $)+(500$ units $\times 8$ per unit $)]$.

### 8.2.2 Weighted Average Cost

This method of inventory valuation follows the batch or block valuation concept. Here, the purchase price is merged to get an average price of the product. The closing stock does not consist of any specific batch of goods, but consists of the average price paid for all the purchases during the period.

Under this method, the average price of the stock changes with every fresh purchase; so, in an organization where purchases are very frequent, valuation of inventory becomes a complex process.

If we have to calculate the value of the stock applying the weighted average cost in Illustration 8.8, then it would be done as follows:

Solution

| Date | Transaction | Units | Price <br> $₹$ | Amount <br> $₹$ | Closing Stock |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Units | Price <br> $₹$ | Amount <br> $₹$ |  |
|  |  |  |  |  |  |  | 10 | 10,000 |
| $20-04-\mathrm{X} 5$ | Purchase | 1,000 | 10 | 10,000 | 1,000 | 10 | 11 | 22,000 |
| $04-06-\mathrm{X} 5$ | Purchase | 1,000 | 12 | 12,000 | 2,000 | 11 |  |  |
| $02-12-\mathrm{X} 5$ | Purchase | 500 | 8 | 4,000 | 2,500 | 10.40 | 26,000 |  |
| $01-02-\mathrm{X} 6$ | Sale | 1,000 | 10.40 | 10,400 | 1,500 | 10.40 | 15,600 |  |

### 8.2.3 Specific Identification Method

Specific identification of cost means that specific costs are applied to identify items of inventory being consumed. The total of various costs of the remaining stock identified constitutes the value of the inventory. This method of valuation is helpful in organizations handling a small number of items. In this technology-laden generation, enterprise resource planning (ERP) system or such inventory management software often utilizes barcode, radio-frequency identification (RFID), and/or wireless tracking technology enabling use of this method.

Considering the information in Illustration 8.8, if it has been given that the sale of 1,000 units was made out of the purchases on $02-12-\mathrm{X} 5$, and the remaining from the purchased lot dated $20-04-\mathrm{X} 5$, then the value of inventory using the specific identification method would be:

| 500 | units of purchases made on 20-04-X5 (₹10 per unit) | 5,000 |
| ---: | :--- | ---: | ---: |
| 1,000 | units of purchases made on 04-06-X5 (₹12 per unit) | $\underline{12,000}$ |
| 1,500 | units | $\underline{Y}, 000$ |

Thus, the closing stock will be 1,500 units and the total value of the inventory will be ₹ 17,000 .

### 8.2.4 Last-in First-out (LIFO)

This method also, like FIFO, is based upon the actual cost of the material, with a difference that the goods purchased most recently are assumed to be sold first. In other words, the valuation of stock is based upon the price of the materials purchased earliest.

In above example, using the LIFO method, the sales will consist of 500 units purchased on 02-12-X5 and 500 units purchased on 04-04-X5. The closing stock consists of:

$$
\begin{array}{rlr}
1,000 & \text { units purchased on 20-04-X5(at ₹ } 10 \text { per units) } & \text { ₹ } 10,000 \\
500 & \text { units purchased on 04-06-X5 (at ₹12 per units) } & ₹ 6,000 \\
\cline { 1 - 2 } 1,500 & \text { units Total value } & \text { ₹ } 16,000 \\
\hline
\end{array}
$$

## Illustration 8.9

A perfume merchandising company is facing a scenario of rising prices. The beginning balance of inventory is zero. The following table gives you data the of the company's purchases during the last year (it includes price per bottle of perfume and also details of the time and number of purchases and sales made).

| Year | Bottle Price (in ₹) | Purchase Bottles | Sales Bottles |
| :--- | :---: | :---: | :---: |
| April $20 X_{5}$ | 2 | 200 | 100 |
| June $20 X_{5}$ | 4 | 200 | 100 |
| August $20 X_{5}$ | 6 | 200 | 150 |
| October $20 X_{5}$ | 8 | 200 | 150 |
| December $20 X_{5}$ | 10 | 200 | 400 |

You are required to tabulate the differences in the value of inventory under the LIFO and FIFO methods, in the above scenario.

| Year | Bottle <br> Price <br> (in ₹) | Purchase Bottles | Purchase <br> Amount (in ₹) | Sales Bottles | LIFO Cost of Goods Sold (in ₹) | LIFO <br> Ending Inventory | FIFO Cost of Goods Sold (in ₹) | FIFO <br> Ending Inventory | $\begin{aligned} & \text { FIFO - LIFO } \\ & \text { Ending } \\ & \text { Inventory } \\ & \text { (in ₹) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| April 20X5 | 2 | 200 | 400 | 100 | 200 | 200 | 200 | 200 | 0 |
| Cumulative |  | 200 |  | 100 |  | $\begin{gathered} 100 \\ \text { Bottles } \end{gathered}$ |  | Bottles |  |
| June 20X5 | 4 | 200 | 800 | 100 | 400 | 600 | 200 | 800 | 200 |
| Cumulative |  | 400 |  | 200 |  | Bottles |  | 200 <br> Bottles |  |
| August 20X5 | 6 | 200 | 1,200 | 150 | 900 | 900 | 600 | 1,400 | 500 |
| Cumulative |  | 600 |  | 350 |  | $\begin{gathered} 250 \\ \text { Bottles } \end{gathered}$ |  | $\begin{gathered} 250 \\ \text { Bottles } \end{gathered}$ |  |
| October 20X5 | 8 | 200 | 1,600 | 150 | 1,200 | 1,300 | 800 | 2,200 | 900 |
| Cumulative |  | 800 |  | 500 |  | $\begin{gathered} 300 \\ \text { Bottles } \end{gathered}$ |  | $\begin{gathered} 300 \\ \text { Bottles } \end{gathered}$ |  |
| $\begin{aligned} & \hline \text { December } \\ & 20 X_{5} \\ & \hline \end{aligned}$ | 10 | 200 | 2,000 | 400 | 3,100 | 200 | 3,200 | 1,000 | 800 |
| Cumulative |  | 1,000 |  | 900 |  | $\begin{gathered} 100 \\ \text { Bottles } \end{gathered}$ |  | 100 Bottles |  |

From the last column of the above table, one can easily make out that this difference between the ending inventories under LIFO and FIFO is due to the rising perfume prices. This would result in the FIFO method showing a higher ending inventory and a lower cost of goods sold. Consequently, the FIFO method would show a higher profit than the LIFO method.

One can also see that in scenarios of falling prices, LIFO and weighted average methods would show higher profit than the FIFO method. Therefore, we can see that the accounting policy adopted in relation to inventory valuation can, to a large extent, influence income determination. As a result, some amount of manipulation in the profits is possible by switching over from one method of valuation to another. In order to prevent such manipulations, Company Law requires that a particular method accepted should be consistently applied.

## SPOTLTGH゙ 8.5

## Interesting queries on Goods in Hand and Goods in Other's Place

Question I: If a title of ownership has been transferred but the goods are still in Seller's premises, then, is it an inventory for Seller or the Buyer?
Answer: Buyer
Question II: In the case of a consignment sale, the ownership title of the consigned good(s) remains with the consignor until the consignee sells it - so will the consigned goods be part of inventories for Consignor or Consignee? Answer: Consignor
Question III: Why Closing Stock is taken on the credit side of the Trading and Profit and Loss A/c?
Answer: To reduce the purchases by showing the stock on the credit side (as purchases are booked on the debit side).

Good inventory practices would exclude the following items while computing the cost of inventories:

1. Abnormal amounts of wasted materials, labour, other production costs
2. Storage cost
3. Administrative overhead


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http://qrcode.flipick.com/index. php/552
4. Selling and distribution cost
5. Interest and borrowing cost

## Illustration 8.10

In a production process of Nutan Organics Limited, normal waste is $5 \%$ of input. A material of 5,000 MT of input was put in process and this resulted in wastage of 300 MT . The cost per MT of input is ₹ 1000 . The entire quantity of waste was on stock at the year end. If waste had no realizable value, what is the cost per unit?

## Solution

As per good inventory valuation practices, abnormal amounts of waste materials, labor or other production costs are to be excluded from cost of inventories and such costs are recognized as expenses in the period in which they are incurred. In this case, normal waste is 250 MT ( $5 \%$ of 5,000 ) and abnormal waste is 50 MT .

The cost of 250 MT will be included in determining the cost of inventories (i.e., finished goods inventory) at the year end. The cost per unit of the produce is $5000 \times 1000 / 4750=1052.63$.

Considering the above two factors, the cost of abnormal waste for Nutan Organics Limited would amount to $₹_{52,631.50}$ (being $50 \mathrm{MT} \times ₹_{1052.63}$ ). This amount will be charged to profit and loss account.

Table 8.3 Recording Goods in Transit in the books of accounts
Bloomberg Media has received a bill of ₹ $1,00,000$ on $30 / 03 / 11$. But as on $31 / 03 / 11$, they received goods worth ₹ 50,000 only the balance goods were in transit? What is the correct method of accounting for Goods in Transit?
Alternative 1:- To record

| Purchase A/c | $₹ 50,000$ |  |
| :--- | :--- | :--- |
| Goods in transit A/c | $₹ 50,000$ |  |
| To Vendor A/c |  |  |
| OR |  |  |
| Alternative 2:- To record | ₹ $1,00,000$ |  |
| Purchase A/c |  | $₹ 1,00,000$ |
| To Vendor A/c |  |  |

## SPOTLTGHT 8.6

## Indian Accounting Standard 2: Inventories

The Indian Accounting Standard 2 issued by the Institute of Chartered Accountants of India applies to all inventories except for which separate accounting standards have been issued. Inventories are assets which are:
(a) Held for sale in the ordinary course of business
(b) In the process of production for such sale
(c) In the form of materials or supplies to be consumed in the production process or in the rendering of services It states that inventory should be valued at cost or net realizable value (NRV) whichever is low. Where, NRV is the estimated selling price in the ordinary course of business less the estimated costs necessary to make the sale. Inventory should be written down to NRV item by item basis. However, items of similar nature may be grouped.

The cost of inventory should comprise of all costs of purchases, costs of conversion and other costs incurred in bringing the inventories to its present location and condition, say, import duties and taxes (other than those subsequently recoverable by the entity from taxing authorities), transport, handling and other costs directly attributable to the acquisition of finished goods, materials and services. Trade discounts, rebates and other similar items are deducted in determining the costs of such purchase. Following are the examples of costs that should be specifically excluded:
(a) Abnormal amounts of wasted materials, labor or other production costs
(b) Storage costs, unless those are necessary in the production process before a further production stage
(c) Administrative overheads that do not contribute to bringing inventories to their present location and condition
(d) Selling costs

So, only the costs incurred to bring the inventory to the present location and condition are included, others are excluded.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(e) Gross Profit = Sales + Cost of Goods Sold = Sales - (Purchases - Ending Inventory)
(f) In scenarios of falling prices for Raw Materials, the FIFO method would show a higher profit than the LIFO method.

### 8.3 ACCOUNTING FOR DEBENTURES



> Understand the accounting policies for treatment of debentures and noncurrent investments

A debenture is a document certifying a debt or acknowledging it. In simple language, debentures are large loans, split into standard, small-sized instruments, to enable companies to raise money from multiple investors. Debentures can be both secured and unsecured. We have discussed the meaning, nature and types of debentures in Section 6.3. Here, we will look into the accounting aspects of debenture issue and redemption.

We know that whenever a company is in need of long term funds, it issues debentures. The debenture certificates contain the terms of repayment of the principle amount and the interest thereon. Accounting for debentures can be easily understood by dividing it into the following four stages:
(a) Issue of debentures
(b) Interest-Payments
(c) Writing off discount on issue of debentures
(d) Redemption of debentures.

### 8.3.1 Issue of Debentures

The issue of debentures is similar to the issue of shares and, therefore, the accounting entries for recording the issues of debentures are the same, except that a Debenture Account is opened in place of a share capital account. There is no restriction on the amount of discount that can be allowed on the issue of debentures. By the way, a private limited company can issue debentures, but it cannot issue any invitation to the public to subscribe to it. The debentures can be issued for
(i) Cash,
(ii) Consideration other than cash, or
(iii) As Collateral Security.

For issue of debentures for cash we pass the same journal entry, that is,

| Bank or Cash Account | (Debit) |
| :--- | :---: |
| Debentures Account | (Credit) |
| (Being ....debentures issued for cash) |  |

If the issue of debentures consists of application, allotment and calls, the entries for due and receipt are passed accordingly.

Sometimes, the company purchases some fixed asset and issues its debentures as consideration, instead of paying cash. In this case, instead of receiving cash, we receive the fixed asset. Let us understand this with the following illustration.

## Illustration 8.11

Vidur Industries Ltd. purchased land and building from PK Software Ltd., having a book value of ₹ $1,50,000$. It was agreed that the purchase consideration will be paid by way of issuing debentures of ₹ 100 face value, each carrying a coupon rate of 12 percent and redeemable after five years. On maturity, an investor owning the debentures will be paid the face value of the debenture. Pass the necessary journal entries, assuming that the debentures were issued at:
(i) Par
(ii) Discount of $10 \%$
(iii) Premium of $10 \%$

The journal entries will be as follows:

| Land and Building Account | (Debit) | $\mathbf{1 , 5 0 , 0 0 0}$ |  |
| :--- | :--- | :--- | :--- |
| PK Software Ltd. Account | (Credit) |  | $\mathbf{1 , 5 0 , 0 0 0}$ |
| (Being assets purchased from PK Software Ltd.) |  |  |  |

(i) Debentures issued at Par:

| PK Software Ltd. Account | (Debit) | $\mathbf{1 , 5 0 , 0 0 0}$ |  |
| :--- | :--- | :--- | :--- |
| $12 \%$ Debentures Account | (Credit) |  | $\mathbf{1 , 5 0 , 0 0 0}$ |
| (Being issue of debentures at par) |  |  |  |

(ii) Debentures issued at Discount :

| PK Software Ltd. Account | (Debit) | $1,50,000$ |  |
| :--- | :--- | ---: | ---: |
| Discount on Debentures Account | (Debit) | 16,700 |  |
| $12 \%$ Debentures Account | (Credit) |  | $1,66,700$ |
| (Being issue of debentures of ₹ $_{100}$ each at a discount of 10\%) |  |  |  |

* The number of debentures to be issued has been calculated as follows

$$
\frac{1,50,000}{90}=1,666.67 \text { or } 1,667 \text { Debentures }
$$

(iii) Debentures issued at Premium:

| PK Software Ltd. Account | (Debit) | $1,50,000$ |  |
| :--- | :--- | ---: | ---: |
| $12 \%$ Debentures Account | (Credit) | $1,36,400$ |  |
| Premium on Debentures Account | (Credit) | 13,600 |  |
| (Being issue of 1,364 debentures of ₹ 100 each for ₹ 110 ) |  |  |  |

### 8.3.2 Interest on Debentures

* The number of debentures to be issued has been calculated as follows:

$$
\frac{1,50,000}{110}=1,363.63 \text { or } 1,364 \text { Debentures }
$$

Earlier, we have seen that dividend to equity shareholders is paid only when the company has earned profit during the period. But in the case of interest on debentures, it is required to be paid whether the company earns a net profit or not. Generally, the interest is paid on a half-yearly basis, at the rate agreed upon at the time of the issue of debentures. The Income Tax Act of India may require the deduction of tax (at source) from the total interest at the prescribed rates and its deposit with the Government, on behalf of the debenture holders.

## Illustration 8.12

A company issues $50,000,8 \%$ debentures of face value $₹_{100}$ each, on January $1,20 X_{5}$. The interest is payable half yearly, on June 30 and December 31 every year. The income tax rate for tax deduction is $10 \%$. Pass journal entries for the first year.

## Solution

| 01-01-X5 | Bank A/c | (Debit) | 50,00,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 8\% Debentures Account | (Credit) |  | 50,00,000 |
| (Being amount received on account of issue of 50,000 debentures) |  |  |  |  |
| $30-06-X_{5}$ | Interest on Debentures Account | (Debit) | 2,00,000 |  |
|  | Tax deducted at Source Account | (Credit) |  | 20,000 |
|  | Debenture Holders Account | (Credit) |  | 1,80,000 |
| (Being half yearly interest due at 8\% p.a. and tax at 10\% there on) |  |  |  |  |
|  | Debenture Holders Account | (Debit) | 1,80,000 |  |
|  | Tax deducted at Source Account | (Debit) | 20,000 |  |
|  | Bank Account | (Credit) |  | 2,00,000 |
| (Being interest and tax thereon paid at applicable dates) |  |  |  |  |
| $31-12-X_{5}$ | Interest on Debentures | (Debit) | 2,00,000 |  |
|  | Tax deducted at Source Account | (Credit) |  | 20,000 |
|  | Debenture Holders Account | (Credit) |  | 1,80,000 |
| (Being second half yearly interest due and tax thereon) |  |  |  |  |
|  | Debenture Holders Account | (Debit) | 1,80,000 |  |
|  | Tax deducted at source Account | (Debit) | 20,000 |  |
|  | Bank Account | (Credit) |  | 2,00,000 |
|  | (Being interest and tax thereon p |  |  |  |

These are the journal entries that are required to be passed whenever the interest is due on debentures. In the given illustration, it is assumed that the interest is paid when it becomes due, but if the due date and the date of actual payment are different, the entry for payment is passed on the date on which it is actually paid.

We know that the interest on debentures is an allowable expenditure for the company. Therefore, at the end of each accounting year, the amount paid on account of debenture interest is debited to the profit and loss account of that year. Suppose, in the last illustration, the company closes its account on December 31 of every year, the following entry will be passed on 31-12- $X_{5}$.

| Profit and Loss Account | (Debit) | $4,00,000$ |
| :--- | :--- | :--- | :--- |
| Interest Expense on Debentures account | (Credit) |  |
| (Being amount of interest on debentures for the year transferred to profit and loss account for the period) |  |  |

### 8.3.3 Redemption of Debentures

Redemption of debentures means repayment of money that was taken by the company while issuing the debentures. Redemption of debentures can be either at par or at premium. Quite understandably, they are not redeemed at a discount because no one would like to get their portion of debentures redeemed at a price lesser than what they had paid at the time of the issue of the debentures.

For redemption of debentures at par, the entry, which was passed at the time of the issue, shall be reversed. In case of debentures issued at a premium or at a discount, the redemption entry is passed simply by debiting the debentures account and crediting the bank account.

If the redemption of debentures is to be made at a premium, there is a capital loss to the company, which is known at the time of the issue. Hence, the loss on the issue of the debentures is required to be written off during the lifetime of the debentures. For example, if a debenture of $₹ 100$ is to be redeemed at $₹ 110$, the following entry is passed at the time of issue of the debentures:

| Bank Account | (Debit) | 100 |  |
| :--- | :---: | :---: | :---: |
| Loss on issue of Debentures Account | (Debit) | 10 |  |
| Debentures Account | (Credit) |  | 100 |
| Premium on redemption of Debentures Account | (Credit) | 10 |  |

We pass the above entry at the time of the issue of debentures, as we know the amount of redemption when the issue of debentures is made. The balance sheet of the company, after the issue of debentures, will be as follows:

> Balance Sheet
> As at the year end ...

| Assets | Amount (₹) | Liabilities | Amount (₹) |
| :--- | :---: | :--- | ---: |
| Bank Account | 100 | Debentures Account | 100 |
| Miscellaneous expenditure to the extent <br> not written off (loss on issue of debentures) | 10 | Premium on redemption of <br> debentures | 10 |
|  | 110 |  | 110 |

The balance of 'Loss on issue of debentures account' shall be reduced every year by the amount written off during the year and the balance of 'Premium on redemption of debentures' will remain till the debentures are repaid.

If the debentures are issued at a discount and are redeemable at a premium, there is a double loss for the company. Both are added together, as they are capital losses for the company. For example, if a debenture of $₹ 100$, is issued at $₹ 90$ and is redeemable on maturity at $₹ 105$, the following entries are passed at the time of issue.

| Bank Account | (Debit) | 90 |  |
| :--- | :--- | :--- | :--- |
| Loss on Issue of Debentures | (Debit) | 15 |  |
| Debentures Account | (Credit) |  | 100 |
| Premium on Redemption of Debentures | (Credit) | 5 |  |

On redemption, the following entry is passed:

| Debentures Account | (Debit) | 100 |  |
| :--- | :--- | ---: | :--- |
| Premium on Redemption of Debentures | (Debit) | 5 |  |
| Bank Account | (Credit) |  | 105 |

## Illustration 8.13

For each of the following cases, post the journal entries and show the related items in the balance sheet:
(a) Zulaiha Dresses Ltd. issued 100, $12 \%$ secured debentures of $\mathrm{F}_{100}$ each, at par, and redeemable at par.
(b) Bunty Jeans Ltd. issued $100,12 \%$ secured debentures of ₹ 100 each, at ₹ 90 each, and redeemable at par.
(c) Chotu Pants Ltd. issued $100,12 \%$ secured debentures of $₹_{100}$ each, at $₹_{110}$ each and redeemable at par.
(d) Dhano Haryana Ltd issued $100,12 \%$ secured debentures of $₹_{100}$ each, at ₹ 100 each and redeemable at $₹_{110}$.
(e) Poppat and Kachra Ltd issued $100,12 \%$ secured debentures of $₹_{100}$ each, at ₹ 90 and redeemable at ₹ 110 .

## Solution

(a) On Issue

| Bank Account | (Debit) | 10,000 |  |
| :--- | :---: | :---: | :---: |
| $12 \%$ Debentures Account | (Credit) |  | 10,000 |
| (Being 100 debentures of ₹100 each issued at Par) |  |  |  |

Zulaiha Dresses Limited BALANCE SHEET AS AT ..............

| Assets | Amount (₹) | Liabilities | Amount $(₹)$ |
| :--- | :---: | :--- | :---: |
| Cash at Bank | 10,000 | Secured Loans <br> $100,12 \%$ Debentures of ₹ 100 each | 10,000 |
|  | 10,000 |  | 10,000 |

On Redemption

| $12 \%$ Debentures Account | (Debit) | 10,000 |
| :--- | ---: | ---: |
| Bank | (Credit) |  |
| (Being debentures redeemed at Par) |  | 10,000 |

(b) On Issue

| Bank Account | (Debit) | 9,000 |  |
| :--- | :---: | :---: | :---: |
| Discount on Issue of Debentures | (Debit) | 1,000 |  |
| $12 \%$ Debentures Account | (Credit) |  | 10,000 |

Bunty Jeans Limited BALANCE SHEET AS AT ..............

| Assets | Amount (₹) | Liabilities | Amount (₹) |
| :--- | :---: | :--- | :---: |
| Cash at Bank <br> Misc. Expenditure to the extent <br> not written off (Discount on issue <br> of debentures) | $\mathbf{9 , 0 0 0}$ | Secured Loans 100, 12\% <br> Debentures of ₹ 100 each | 10,000 |
|  | $\overline{10,000}$ |  | $\overline{10,000}$ |

On Redemption

| $12 \%$ Debentures Account | (Debit) | 10,000 |  |
| :--- | :--- | :--- | :--- |
| Bank | (Credit) |  | 10,000 |
| (Being debentures redeemed at Par) |  |  |  |

(c) On Issue

| Bank Account | (Debit) | 11,000 |
| :--- | :--- | ---: |
| $12 \%$ Debentures Account | (Credit) | 10,000 |
| Premium on Debentures | (Credit) | 1,000 |
| (Being issue of $100,12 \%$ Debentures of $₹ 100$ each at 110 per debenture) |  |  |

Chotu Pants Limited
BALANCE SHEET AS AT

| Assets | Amount (₹) | Liabilities | Amount (₹) |
| :--- | :---: | :--- | ---: |
| Cash at Bank | 11,000 | Secured Loans |  |
|  |  | $100,12 \%$ Debentures of ₹ 100 each | 10,000 |
|  |  | Premium on Debentures | 1,000 |
|  | $\underline{11,000}$ |  | $\overline{11,000}$ |

On redemption

| $12 \%$ Debentures Account | (Debit) | 10,000 |  |
| :--- | :--- | :--- | :--- |
| Bank | (Credit) | 10,000 |  |
| (Being debentures redeemed at Par) |  |  |  |

(d) On Issue

| Bank Account | (Debit) | 10,000 |  |
| :--- | :--- | ---: | :--- |
| Loss on Issue of Debentures Account | (Debit) | 1,000 |  |
| $12 \%$ Debentures | (Credit) |  | 10,000 |
| Premium on redemption of Debentures | (Credit) | 1,000 |  |
| (Being issue of 100 Debentures at par but redeemable at premium) |  |  |  |

Dhano Haryana Limited
BALANCE SHEETAS AT .

| Assets | Amount (₹) | Liabilities | Amount (₹) |
| :--- | :---: | :--- | ---: |
| Cash at Bank | 10,000 | Secured Loans |  |
| Misc. Expenditure to the extent not | 1,000 | $100,12 \%$ Debentures of ₹ 100 each <br> written off (loss on issue of debenture) |  |
|  | Premium on redemption of <br> debentures | 10,000 |  |
|  | $\underline{11,000}$ |  | $\overline{11,000}$ |

On redemption on

| $12 \%$ Debentures Account | (Debit) | 10,000 |  |
| :--- | :--- | :---: | :--- |
| Premium on redemption of Debentures Account | (Debit) | 1,000 |  |
| Bank Account | (Credit) |  | 11,000 |

(e) On Issue

| Bank Account | (Debit) | 9,000 |  |
| :--- | :--- | :--- | :--- |
| Loss on Issue of Debentures Account | (Debit) | 2,000 |  |
| $12 \%$ Debentures Account | (Credit) | 10,000 |  |
| Premium on redemption of Debentures | (Credit) | 1,000 |  |
| (Being issue of 100 debentures at discount and redeemable at premium) |  |  |  |

Poppat and Kachra Limited BALANCE SHEET AS AT .

| Assets | Amount <br> $(₹)$ | Liabilities | Amount <br> $(₹)$ |
| :--- | :---: | :--- | ---: |
| Cash at Bank | 9,000 | Secured Loans |  |
| Misc. Expenditure to the extent not | 2,000 | $100,12 \%$ Debentures of ₹ 100 each | 10,000 |
| written off (loss on issue of debenture) |  | Premium on redemption of debentures | 1,000 |
|  | 11,000 |  | 11,000 |

On redemption on

| $12 \%$ Debentures Account | (Debit) | 10,000 |  |
| :--- | ---: | ---: | :--- |
| Premium on redemption of Debentures Account | (Debit) | 1,000 |  |
| Bank Account | (Credit) |  | 11,000 |

## SPOTLTGH 8.7

## "Debenture Redemption Reserve"

Debenture redemption reserve (DRR) is created to serve the requirements under the Companies Act, 2013 [see Section 71(4)]. DRR is created out of profits which are available for distribution as dividend. A company issuing debentures is required to create DRR equivalent to at least fifty percent of the amount raised through the debenture issue before redemption commences.

For instance, if a company is now raising non-convertible debentures (NCDs) worth ₹ 1,500 crore for, say, 36 months, it will have to set aside ${ }^{7} 750$ crore out of its profits to create DRR. Also, under the new norms, every company shall, each year, invest or deposit, a sum not less than $15 \%$ of the amount of its debentures maturing during the fiscal ending next March. This can be done in the form of deposits in banks or government or corporate bonds. This amount cannot be used for any purpose other than redeeming debentures maturing during the year.

### 8.4 ACCOUNTING FOR INVESTMENTS

Investments may be in the form of different types of securities. Where there is more than one type of investment, it is always better to maintain a separate account for each investment, so that the interest, dividend and the profit or loss on the investment can be ascertained separately.

The journal entries to be passed are based on the same logic that we have discussed till now, that is, for all the purchases, expenses and losses, the investment account should be debited, while for all the sales, incomes or gains, the account should be credited. It is advisable to maintain a separate column in the investment account, for income on investment due to interest and dividend.

Several points should be kept in mind while passing the accounting entries for investments. They include:

## (a) Purchase price

The purchase price always includes the price of the securities and the cost of transfer, that is, brokerage, commission and other charges for acquiring the securities.

## (b) Sale Price

The sale price should be reduced by the cost of transaction that is, brokerage, commission, etc.

## (c) Interest

Generally, the price quoted for debentures and bonds do not include the interest portion. It means that the interest till, the time held by the seller, is to be paid in addition to the price of the debentures or government securities. If the price is given as "Cum-interest", that is, with the interest benefit going to the buyer, then the buyer need not pay anything over the price agreed. In this case, the cost of investment is calculated by deducting the interest from the total consideration. For example, Leena, on August 1, 20X5, purchases ₹ 4000 worth of $12 \%$ debentures at ₹96 (net) per debenture cum-interest. The face value is ₹ 100 per debenture. If the interest is paid by the issuing company half-yearly (that is, on June 30 and December 31 of every year), then it would mean that the interest component is included in ₹ 4,000 . This interest due at $12 \%$ per annum, on ₹ 4000 comes, to ₹ 80 . In other words, the value of the debenture is ₹ 3760 [ $=(96 \times 40)-80]$

## (d) Dividend

The treatment of ex-dividend or cum-dividends is similar to the treatment of interest, which we have seen earlier. For example, Mohini purchases 1,000 shares of ₹ 10 par value, for ₹ 13 per share cum-dividend. If the dividend declared by the company is 20 percent for the year, then ₹ 13 per share includes the amount payable on account of dividend. The dividend on 1,000 shares at 20 percent comes to $₹ 2,000$. Therefore, out of the total amount payable of ₹ 13000 (that is, ₹ 13 per share $\times 1000$ shares), ₹ 2,000 is paid for dividend and the actual price paid for each share would be ₹ 13000 - 2000 or ₹ 11,000 .

### 8.4.1 Bonus Shares

In the case of consistent good current performance by a company and also good foreseeable future, the company may reward its shareholders by issuing bonus equity shares at no cost. So, companies issue bonus shares to their existing shareholders, for which the shareholders are not required to pay anything. These bonus shares are issued by companies by capitalising the reserves of the company.

If Gangaram \& Company, with one crore shares of ₹10 par value, has reserves worth ₹ 100 crore, and it decides to issue bonus shares in the ratio of 1 share for every 2 shares owned, then the company's balance sheet would get modified as follows:

## Gangaram \& Company

| Equity Portion of Balance Sheet before Issuing Bonus Shares: |  |
| :--- | ---: |
| Equity Share Capital (₹10 par value 1 crore shares) | $₹ 10$ crores |
| Reserves and Surplus | $₹ 100$ crores |
| Total Shareholders Funds | $\bar{₹} 110$ crores |

## Gangaram \& Company

| Equity Portion of Balance Sheet after Issuing Bonus Shares: |  |
| :--- | ---: |
| Equity Share Capital (₹10 par value 1.5 crore shares) | $₹ 15$ crores |
| Reserves and Surplus | $₹ 95$ crores |
| Total Shareholders Funds | $\bar{₹} 110$ crores |

One can easily write the journal entry by observing that it is just an adjustment (or transfer) from one account to another, within the shareholder related items.

Now, for an investor getting these bonus shares, will see an increase in his total number of shares. If any shares are sold out of the bonus issue, then the investor has to take the total amount as profit, because the purchase price of the bonus shares was zero.

### 8.4.2 Right Shares

When companies decide to raising additional capital using the issue of shares route, then they have three options - private placement, rights issue and public issue. Private placement is placement of shares of the company with exclusive investors (usually done at a premium). Rights issue is a process whereby the existing shareholders are given an opportunity to invest in more shares (in proportion of their shareholding) of the same company (on payment). The journal entry is similar to the journal entries we passed for the issue of additional securities (through public issue) in Chapter 6. The reason is simple - it is a new issue of securities, whether to the same shareholders or to new investors or to exclusive investors.

If Gangour Sweets Ltd., with 1 crore shares of ₹ 10 par value having reserves worth ₹ 100 crore, decides to make a rights issue in the ratio of 1 share for every 10 shares owned, at a price of ₹ 100 , then the company's liability side of the balance sheet would get modified as follows:

Gangour Sweets Limited

| Equity Portion of Balance Sheet before Issuing Rights Shares: |  |
| :--- | :--- |
| Equity Share Capital (₹10 par value 1 crore shares) | $₹ 10$ crores |
| Reserves and Surplus | $₹ 10$ crores |
| Total Shareholders Funds | ₹20 crores |

## Gangour Sweets Limited

| Equity Portion of Balance Sheet after Issuing Rights Shares: |  |
| :--- | ---: |
| Equity Share Capital (₹10 par value 1.1 crore shares $)$ | $₹ 11$ crores |
| Reserves and Surplus $(10$ crore $+(0.1$ crore $\times 90)$ | $₹ 19$ crores |
| Total Shareholders Funds | $₹ 30$ crores |

In a scenario where a company invests in the shares of another company, an entry is passed for the purchase of the securities, that is, debiting the investment account with amount paid to get the shares on account of right issues.

### 8.4.3 Valuation of Investments

Investments may be current investments or long-term investments. Current investments are those investments that are intended to be held for not more than one year from the date of investment. All other investments are considered long-term.

Current investments are valued at lower of the cost or fair value. Long-term investments are valued at cost. However, where there is a decline in the value of long-term investments, which is not a temporary
decline, then the value after such diminution should be considered. For the benefit of the readers of financial statements, companies are required to provide exhaustive information of each and every security held in their investments.

## Profit or Loss on Transactions

Profit (or loss) on account of sale of investments should be transferred to the profit and loss account for the period, or even a decrease in the market value of the investments should be shown. A few companies also transfer the amount of profit on sale of long-term investments, to the capital reserve account, instead of taking it to the profit and loss account for the year.

## Illustration 8.14

Sawadhee \& Co. held 10\% coupon rate debentures of face value ₹ 1,000 , of Fried Ice Creams Ltd., on April 1, 2010. The total face value of these debentures was $₹ 1,00,000$ (but they had been purchased for ₹ 80,000 ). The market


On August 1, 2010, the company purchased another set of debentures worth ₹ 10,000 , for ₹ 8,000 , ex-interest.

Prepare the Investment account in the books of Sawadhee \& Co., showing the profit or loss on the sale of the investment.
Solution
10\% Debentures in Fried Ice Creams

| Date | Particulars | Nominal Value | Interest | Principal | Date | Particulars | Nominal Value | Interest | Principal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01.04.X6 | To balance b/d | 1,00,000 | * | 80,000 | 31.12.X6 | By Bank | 2,000 | 150 | 1,750 |
| 01.08.X6 | To Bank | 10,000 | 667 | 8,000 | 31.03. $\mathrm{X}_{7}$ | By Bal c/d | 1,08,000 | 10,800* | 86,400 |
| 31.12.X6 | To Profit and Loss A/c (on sales of debentures) |  |  | $150^{+}$ |  |  |  |  |  |
| $31.03 . \mathrm{X}_{7}$ | To Profit and Loss A/c |  | 10,283 |  |  |  |  |  |  |
|  |  | 1,10,000 | 10,950 | 88,150 |  |  | 1,10,000 | 10,950 | 88,150 |

*If the interest is not received on $31^{\text {st }}$ March every year, it should be shown as accrued interest.
$\dagger$ Profit on sale of debentures is calculated on first-in-first out basis in the following way.

Proportionate purchase price for debentures of 2,000 is
Sale price of debentures excluding interest
Net Profit on sale

$$
\begin{aligned}
& 1,600 \\
& 1,750 \\
& 150
\end{aligned}\left(\frac{80,000}{1,00,000} \times 2000\right)
$$

### 8.4.4 Investments and Tax Implications

Usually, accounting for investments also becomes important as there are strong tax implications regarding the same. If a person/entity hold a financial security (say, shares) after purchasing for more than one year and sells, then the gains (or losses) are known to be long-term gains (or losses). On the other hand, if a person/entity hold a financial security for less than one year, then the gains (or losses) from the same are known to be short-term in nature.

Section 45 of the Income Tax Act is the Act which forms the base of charging any income from capital gain to tax. It states that "Any profit or gains arising from the transfer of a capital asset affected in the previous year shall be chargeable to income tax under the head "Capital Gains" and shall be deemed to be the income of the previous year in which the transfer took place. The important aspect remains the date of transfer (which decides whether it is a long-term or a short-term capital


To know more
on "Ind-AS
on Financial Instruments" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/553 gain)." Since, companies having investments, can have a large-portfolio of shares and other securities, and they may also be purchasing the same shares and other securities of the same company on multiple dates in different quantities and hence, keeping the accounting record in a clear fashion is utmost important.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(g) Redemption of debentures means repayment of money that was taken by the company while issuing the debentures.
(h) Rights issue is a process whereby the existing shareholders are given an opportunity to invest in more shares of the same company (on payment).

### 8.5 ACCOUNTING FOR NEGOTIABLE INSTRUMENTS

Determine the negotiable instruments and their accounting practices

A negotiable instrument is a document used in commercial transactions and monetary dealings. Bills of exchange, promissory notes and cheques are all examples of negotiable instruments. These instruments can be 'bearer', instruments i.e., the payment is to be made to the bearer of the instrument or 'order instrument, i.e., the payment is to be made to the person named in the instrument or according to his order). The provision of the Negotiable Instruments Act, 1881, is applicable to all negotiable instruments.

We discuss a few of them below from a financial accounting perspective.

### 8.5.1 Promissory Note

According to Section 4 of the Negotiable Instruments Act, a promissory note is 'an instrument in writing, containing an unconditional undertaking, signed by the maker, to pay a certain sum of money only to or to the order of a certain person or to the bearer of the instrument'. There are two parties in a promissory
note, i.e. the 'maker' and the 'payee'.
Private individuals cannot draw a bearer promissory note. Only the Reserve Bank of India has the power to draw it, vide provisions of Section 31 of the RBI Act.

## Specimen of Promissory Note

₹ 10,000
BHOPAL
Jan. 31, 20X6
$\qquad$ months [or $\qquad$ days] after date, I promise to pay Kannan or order the sum of ₹ Ten Thousand only for value received.

Sohan

In the above promissory note, as it is evident, Sohan is the maker and Kannan is the payee. In other words, Sohan is the debtor and Kannan is the creditor.

### 8.5.2 Bills of Exchange

According to Section 5 of the Negotiable Instruments Act, a bill of exchange is 'an instrument in writing, containing an unconditional order, signed by the maker, directing certain person, to pay a certain sum of money only to, or to the order of a certain person or to the bearer of the instrument'.

In a bill of exchange, there are three parties - the 'maker' or the 'drawer' who is the creditor, the 'drawee', who is liable to pay the money and the 'Payee', who is entitled to get the money. The payee can be the drawer.

Key difference between a bill of exchange and promissory note is that in case of a bill of Exchange, the maker being the creditor, orders the drawee to pay a certain sum of money. In case of a Promissory note, the maker being the debtor, promises to pay a certain sum of money.

## SPOTLTGHT 8.8

## Is Cheque a Bill of Exchange?

Section 6 of the Negotiable Instruments Act defines a cheque as 'a bill of exchange drawn on a specified banker and payable on demand'. Thus, a cheque is similar to a bill of exchange with a difference that it is always drawn on a specific banker and it is always payable on demand. Therefore, we can say that all cheques are bills of exchange, but all bills of exchange are not cheques.

### 8.5.3 Maturity of a Negotiable Instrument

A bill of exchange or a promissory note matures on the date on which it falls due. In case of instruments payable after the expiry of a particular period of time, maturity date is three days after the expiry of such period, but if the instrument is payable on demand, it becomes due immediately upon presentation for payment. In case the maturity date falls on a day which is a national holiday, then the maturity day would be treated as one day earlier than such day. (For example if the maturity date falls on $26^{\text {th }}$ January, $25^{\text {th }}$ January should be considered as maturity date). However in case the maturity date is declared as emergency holiday, then maturity date would be the next day after such emergency holiday.


To know more on "Negotiable Instruments Act and Virtual Currencies" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/554

### 8.5.4 Accounting Entries for Negotiable Instruments

We know that negotiable instruments are transferred by endorsement or mere delivery (in case of bearer instruments), so the person who receives the negotiable instrument has the following alternatives:
(a) Keep the bill of exchange or promissory note till the date of maturity;
(b) Endorse it in favour of one of his creditors; and
(c) Get pre-payment by discounting from his bank.

When the receiver of a bill of exchange keeps it till the date of maturity, he passes the entry through his bills receivable account, while the drawee will pass the entry through his bills payable account. For example, Ashutosh sells goods worth ₹ 10,000 to Santosh, on January 1, 20X5 and receives a bill of exchange duly accepted by Santosh. The bill of exchange gets matured on March 31, 20X5 and Ashutosh receives money on that date. The following entries are passed in the books of Ashutosh:

| 01-01-X5 | Santosh A/c | (Debit) | 10,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Sales Account | (Credit) |  | 10,000 |
| (Being goods sold to Santosh) |  |  |  |  |
|  | Bills Receivable Account | (Debit) | 10,000 |  |
|  | Santosh Account | (Credit) |  | 10,000 |
| (Being bill of exchange duly accepted by Santosh received) |  |  |  |  |
|  |  |  |  |  |
| $31-3-X 5$ | Cash Account | (Debit) | 10,000 |  |
|  | Bills Receivable Account | (Credit) |  | 10,000 |
| (Being payment received on maturity of the bill of exchange) |  |  |  |  |

Similarly Santosh passes the following journal entries in his books:

| $01-01-X 5$ | Purchases Account | (Debit) | 10,000 |  |
| :--- | :--- | :--- | :--- | :--- |
| Ashutosh Account | (Credit) |  | 10,000 |  |
| (Being goods purchased from Ashutosh) |  |  |  |  |
| Ashutosh Account | (Debit) | 10,000 |  |  |
| Bills Payable Account | (Credit) | 10,000 |  |  |
| (Being bill of exchange accepted in favor of Ashutosh) |  |  |  |  |


| $31-3-\mathrm{X} 5$ | Bills Payable Account | (Debit) | 10,000 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Cash | (Credit) | 10,000 |  |
|  | (Being payment of bill made on maturity) |  |  |  |

Till the actual payment on the bill is made in cash it will be shown in the balance sheet of Ashutosh, under the head current assets, as Trade Receivable, while Santosh will show this amount in his balance sheet under the head current liabilities as Trade Payable

When the bill of exchange is endorsed in favor of another creditor, the drawee is not at all concerned with the endorsement, so the entries in his books will be the same as seen earlier. In case of the drawer, the entries relating to the sale of goods and receipt of the bill of exchange will be the same, but the entry on maturity will be changed. For example, in the previous case, if Ashutosh endorses the bill in favor of his creditor, Wasi Ahmed, the following entry is passed:

| Wasi Ahmed Account | (Debit) | 10,000 |
| :--- | :---: | :---: | :---: |
| Bills Receivable Account | (Credit) | 10,000 |
| (Being the bill of exchange endorsed in favor of Wasi Ahmed) |  |  |

Wasi Ahmed would pass the following entry for bill received:

| Bill Receivable Account | (Debit) | 10,000 |
| :--- | :---: | :---: |
| Ashutosh account | (Credit) | 10,000 |
| (Being the bill of exchange received from Ashutosh) |  |  |

Discounting the bill of exchange with a bank means relinquishing the right on the bill of exchange in favor of bank and receiving the payment before the maturity date. Hence, the bank makes the payment after deducting some charges, known as discounting charges. The drawee, again, is not concerned with the act of discounting because it makes no difference for him whether the drawer keeps the bill with himself or gets it discounted from his bankers.

Ashutosh will pass the following entry on getting the bill discounted (Assuming discounting charges as $₹ 100$ ).

| Bank Account | (Debit) | 9,900 |
| :--- | :--- | ---: | :--- |
| Discounting Charges Account | (Debit) | 100 |
| Bills Receivable Account | (Credit) | 10,000 |
| (Being the bill of exchange discounted from the bank for which the bank charged ₹100 as discounting charges) |  |  |

## Illustration 8.15

Kedar Autos Ltd. sells goods to Pranay Brothers on a regular basis, for the month of August $20 \mathrm{X}_{5}$. Kedar Autos Ltd. raised the following invoices in respect of the sales:

| Date | Invoice No. | Amount (₹) |
| :---: | :---: | :---: |
| $05-8-\mathrm{X} 5$ | 0140 | 40,000 |
| $12-8-\mathrm{X} 5$ | 0190 | 10,000 |
| $17-8-\mathrm{X} 5$ | 0210 | 5,000 |
| $22-8-\mathrm{X} 5$ | 0300 | 17,000 |
| $30-8-\mathrm{X} 5$ | 0350 | 22,000 |

Kedar Autos Ltd., draws a bill of exchange for every sale made. The bill is payable at 60 days sight. On the same day, the bank discounts the bills after a deduction at a rate of 2.5 percent per month, as discounting charges.

You are required to pass the Journal entries for the drawing and discounting of the bills of exchange, in the books of Kedar Autos Ltd. Also, prepare the ledger account of Pranay Brothers.

## Solution

| $5-8-X_{5}$ | Bills Receivable Account | (Debit) | 40,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pranay Brothers Account | (Credit) |  | 40,000 |
| (Being Bill of Exchange received against Invoice No. 0140 maturing at 60 days sight) |  |  |  |  |
|  | Bank Account | (Debit) | 38,000 |  |
|  | Discounting Charges Account | (Debit) | 2,000 |  |
|  | Bills Receivable Account | (Credit) |  | 40,000 |
|  | (Being the bill discounted with bank and amount received after discounting charges of $2.5 \%$ per month ) |  |  |  |
| 12-8- $\mathrm{X}_{5}$ | Bills Receivable Account | (Debit) | 10,000 |  |
|  | Pranay Brothers Account | (Credit) |  | 10,000 |
| (Bills of Exchange received against Invoice No. 0190 maturing at 60 days sight) |  |  |  |  |
|  | Bank Account | (Debit) | 9,500 |  |
|  | Discounting Charges Account | (Debit) | 500 |  |
|  | Bills Receivable Account | (Credit) |  | 10,000 |
| (Bills of exchange discounted with bank. Bank charges $2.5 \%$ per month) |  |  |  |  |


| $17-8-X_{5}$ | Bills Receivable Account | (Debit) | 5,000 |
| :--- | :--- | :--- | :--- |
|  | Pranay Brothers Account | (Credit) |  |
| (Being bill of exchange received for sale against Invoice No. 0210) |  |  |  |
| Bank Account | (Debit) | 4,000 |  |
| Discounting Charges Account | (Debit) | 250 |  |
| Bills Receivable Account | (Credit) |  | 5,000 |
| (Being the bill discounted with bank) |  |  |  |


| 22-8- $\mathrm{X}_{5}$ | Bills Receivable Account | (Debit) | 17,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pranay Brothers Account | (Credit) |  | 17,000 |
|  | (Being bill of exchange received against sale vide Invoice No. 0300 maturing at 60 days sight) |  |  |  |
|  | Bank Account | (Debit) | 16,150 |  |
|  | Discounting Charges Account | (Debit) | 850 |  |
|  | Bills Receivable Account | (Credit) |  | 17,000 |
|  | (Being bills discounted with bank and the amount received after discounting charges at $2.5 \%$ per month) |  |  |  |
| 30-8- $\mathrm{X}_{5}$ | Bills Receivable Account | (Debit) | 22,000 |  |
|  | Pranay Brothers Account | (Credit) |  | 22,000 |
|  | (Being bill of exchange received for sale against vide Invoice No. 0350 maturing at 60 days sight) |  |  |  |
|  | Bank Account | (Debit) | 20,900 |  |
|  | Discounting Charges Account | (Debit) | 1,100 |  |
|  | Bills Receivable Account | (Credit) |  | 22,000 |
|  | (Being bill discounted with the bank and the amount received after discounting charges at 2.5\% per month) |  |  |  |

On sale of goods, we know that, Kedar Autos Ltd. will pass the same journal entry with the amount of sale.

| Pranay Brothers Account | (Debit) |
| :--- | :--- |
| Sales Account | (Credit) |
| (Being goods sold to Pranay Brothers vide invoice No. .......) |  |

Accordingly, the ledger account of Pranay Brothers will be as follows:

## Pranay Brothers

| Date | Particulars | Amount <br> $(₹)$ | Date | Particulars | Amount <br> $(₹)$ |
| :--- | :--- | :---: | :--- | :--- | ---: |
| $05-8-X_{5}$ | To Sales (Inv. 0140) | 40,000 | $05-8-X_{5}$ | By Bill Receivable (No.....) | 40,000 |
| $12-8-X_{5}$ | To Sales (Inv.0190) | 10,000 | $12-8-X_{5}$ | By Bill Receivable (No.....) | 10,000 |
| $17-8-X_{5}$ | To Sales (Inv.0210) | 5,000 | $17-8-X_{5}$ | By Bill Receivable (No.....) | 5,000 |
| $22-8-X_{5}$ | To Sales (Inv. 0300) | 17,000 | $22-8-X_{5}$ | By Bill Receivable (No.....) | 17,000 |
| $30-8-X_{5}$ | To Sales (Inv. 0350) | 22,000 | $30-8-X_{5}$ | By Bill Receivable (No.....) | 22,000 |
|  | $\underline{94,000}$ |  |  | $\underline{94,000}$ |  |

# Let's Check Our Concepts! 

## State whether the following statements are True or False:

(i) There are two parties in a promissory note, i.e. the 'maker' and the 'payee'.
(j) Cheques and bills of exchange can be used synonymously.

### 8.6 BANK RECONCILIATION STATEMENT



> Explain the importance of bank reconciliation statements

Every business person or business entity (say, a proprietor, a partner, a company, a society, and even an HUF*) maintains a cash book or a cash ledger account for the year. This ledger account records all the transactions pertaining to the cash and bank for the given accounting year. The bank, with whom the business transactions are dealt, also maintains an account of its customers. The details are sent by the bank to its customers on a regular basis called as a bank statement. On receiving the bank statement, every person is required to verify the entries and the balance reflected in the bank statement with the bank ledger account maintained in its own records.

One of the commonly used tools to check the arithmetical accuracy of the business transactions posted in the ledger accounts is the Bank Reconciliation Statement. It is a statement which compares the cash account entries of the firm with the entries made by the bank in the bank statement. A bank statement is generally prepared at the end of every month.

Before starting with the Bank Reconciliation statement, we should be aware of the two important terms viz., Cash book and Pass book. Cash book is the book maintained by the accountant who records all the cash and bank related transaction pertaining to the organization. The pass book is the book issued by the bank to its customers. It is a copy of the account of customers in the books of accounts of the bank. The bank conveys the information of the customers through the entries in the pass book. If there is any discrepancy in the pass book given by the bank, it is the customer's duty to bring the same to the notice of the bank and get it rectified.

Since the cash book and the pass book are maintained by two different parties (one by the customer and another by the bank) but both pertain to information about same entity, a reconciliation is required to be prepared at regular intervals so that the errors, if any, can be taken care of. We learn about this process through a few examples:

Vinod purchased a new model of "BMW" car for ₹ $85,00,000$ by way of financing from Sagar Financing Services Pvt. Ltd.. The deal was finalized and five postdated cheques of ₹ $10,00,000$ each were issued by Vinod and the balance was paid in cash as down payment to the financing company.

He is aware of the fact that the Negotiable Instruments Act has a provision of imprisonment, if a cheque issued by a person is dishonored. In order to be double sure about the status of his bank account,

[^60]he requests Om Prakash, the branch manager, of the Bank of India for his bank statement for the period ending 30-04-20X6. As per his calculations the balance in his bank account was to be ₹ $10,00,000$. But, he was surprised to see that an amount of ₹ $8,00,000$ was only reflected in the pass book handed over to him by Om Prakash. The statement was as follows:

| Date | Particulars | Deposits | Withdrawal | Balance |
| :--- | :--- | :--- | :--- | :--- |
|  | Opening Balance |  |  | $4,00,000$ |
| $03-04-11$ | March Salary (Chq. 8473326) | $3,00,000$ |  | $7,00,000$ |
| $05-04-11$ | ATM Cash Drawn |  | 50,000 | $6,50,000$ |
| $10-04-11$ | Chq. 185366 to Mr. Lakshman |  | 80,000 | $5,70,000$ |
| $15-04-11$ | Chq. 448962 HDFC Mutual Fund | $1,30,000$ | $7,00,000$ |  |
| $22-04-11$ | Dividend from ITC Ltd. | $1,00,000$ | $8,00,000$ |  |
| $30-04-11$ | Closing Balance |  | $8,00,000$ |  |

On going through the bank account he realizes that a cheque No. 8473892 was deposited on 30 April, towards the salary for the month of April 20X6 for ₹ $3,00,000$ but was not reflected in the bank statement. Also the Cheque No. 185367 issued to his landlord, Jagan, for $₹ 1,00,000$ was not reflected in the statement. On confirmation from the bank he came to know that a local cheque requires two working days to be cleared and the same will be reflected in his account on 02-05-20X6. He also called up his landlord and informed him that the cheque given to him could not be deposited into the bank as the same was misplaced by his daughter Sudha.

As Vinod did not have any formal education in accountancy, he tried out to trace the difference by himself and proceeded in his own way as follows:

| Balance as per own calculations | $10,00,000$ |
| :--- | ---: |
| Less: Cheque already deposited but will be realized only in the next month | $3,00,000$ |
|  | $7,00,000$ |
| Add: Landlord's cheque to be withdrawn in the next month | $1,00,000$ |
| Balance as per pass book | $\mathbf{8 , 0 0 , 0 0 0}$ |

On preparing the statement he was glad that there is nothing to worry as within a day or two his account and the bank statement will reflect the same amount. Thus, the bank statement can be prepared even by the individuals who do not have the knowledge of the double entry bookkeeping. There is no standard format prescribed for the preparation or presentation of the bank reconciliation statement.

In a business, where there are a number of transactions with the banks, there is every possibility that the balance reflected in the cash book does not match with the balance as reflected by the bank statement. The common reasons for the difference in the cash account and the bank book:

1. Transactions that are reflected only in the cash book (but not in the pass book)
2. Transactions that are reflected only in the bank statement (but not in the cash book)

There are some transactions that are entered into the cash ledger of the company but are not reflected in the bank statement because the bank is not aware of the transaction as on the date of reconciliation. The common cases for any business can be:
(a) Cheque deposited into the bank but not credited to the account by the bank. This situation can happen if the accountant receives a cheque, enters the cheque in his books of accounts by debiting the bank account and then sends the same to be deposited into the bank account. By the time the cheque reaches the bank, the bank may close the business for the day and hence, will be reflected in the account only on the following business day.
(b) Cheques issued to the parties but not presented in the bank. This type of situation can happen if a cheque is issued to the party and the bank account is credited by the accountant but for some or the other reason the receiver of the cheque could not present the same in the bank. As a result, the cheque is not reflected in the bank statement.
There is also a possibility that the bank makes a few entries which are not reflected in the books of accounts of the account holder as the account holder is not aware of the transaction debited or credited by the bank. Generally, the following types of differences are found:
(a) Bank Charges or service charges that can be debited by the bank from the account of the customer because of the reasons like return of any instrument, monthly charge in case of loan account, and charges for the issue of cheque book. The customer may not be aware of these types of debits or credits and, therefore, they are not entered in the books of accounts of the customer.
(b) Bank Interest is credited by the bank, automatically, upon the completion of the term (usually every quarter). The customer may not be aware of the said interest because of any reason. This results in no entry in the books of account of the customer.

### 8.6.1 Procedure to prepare a Bank Reconciliation Statement

The thumb rule of preparing a bank reconciliation statement is "Make the accounting entries where they could not be placed". For example, if the bank has deducted any charges which were not in the knowledge of the accountant, the thumb rule says that we need to reduce the amount from our cash or bank ledger so that our balance reconciles with the balance reflected by the bank statement. Similarly, if the bank credits the account directly towards the interest, the thumb rule suggests adding the accounting entry in the balance as per the cash book.

Table 8.4 Impact of the various items in the cash book and the bank book

|  | Cash Book | Bank Book |
| :---: | :---: | :---: |
| 1. Cheques issued but not presented for payment |  |  |
| Whether entry made | YES | NO |
| Impact on Balance | Decreased | No Impact |
| Rectification | Increase the cash balance |  |
| 2. Cheques deposited but not credited by the bank |  |  |
| Whether entry made | YES | NO |
| Impact on Balance | Increased | No Impact |
| Rectification | Decrease the cash balance |  |

(Contd.)


As we know that bank reconciliation statement is prepared to reconcile the balance in the cash book with the balance in the pass book, we have to start with any book balance and arrive at the balance in the other book by making the adjustments. By proceeding in this way the balance in one book can be matched with the balance in the other book.

Table 8.5 Most common format of Bank Reconciliation Statement

| Balance as per cash book | XXX |
| :--- | :---: |
| Add: |  |
| Cheques issued but not presented for payment |  |
| Interest credited by the bank |  |
| Direct deposit by a customer in the bank account |  |
|  | XXX |
| Less: |  |
| Cheques deposited into the bank but not cleared |  |
| Interest and bank charges debited by the bank |  |
| Dishonor of a cheque deposited earlier |  |
| Direct payment made by the bank on behalf of the customer |  |
| Balance as per Pass Book |  |

## Illustration 8.16

The books of Angad Enterprises, Itanagar, Arunachal Pradesh was having a balance of ₹1,50,000 as on 31-03-2011. Before preparing the trial balance of the company, the accountant Victor D'Souza wanted to confirm the balance as per the bank pass book. On observing the pass book Victor came to know that the bank pass book has a balance of $₹ 2,75,000$ in the name of the company. Victor listed the following transactions that were not traced either in the pass book or in the cash book:
(a) Cheque deposited into the bank on $29^{\text {th }}$ March 2011 ₹ 25,000 but not cleared.
(b) Cheque issued to Lokesh Acharya $\mathrm{₹}_{45,000}$ but not presented in the bank.
(c) Cheque for $₹_{50,000}$ in the name of Raja and $\mathrm{F}_{55,000}$ in the name of Sajani were prepared but could not be sent to the parties by $31^{\text {st }}$ March 2011.
(d) The bank charged an amount of ₹ 10,000 towards the processing charges for the preparation on presentation of the project report for the working capital loan.
(e) Mohit, a regular buyer, deposited a sum of ₹ 10,000 into the account of Angad Enterprises but forgot to inform about the same to Victor.
Prepare the bank reconciliation statement on the basis of the above information.
Suggested Solution:

Angad Enterprises, Itanagar, Arunachal Pradesh
Bank Reconciliation Statement as on 31-03-2011

| Balance as per cash book | $\mathbf{1 , 5 0 , 0 0 0}$ |
| :--- | ---: |
| Add: |  |
| Cheques issued but not presented for payment | $\mathbf{4 5 , 0 0 0}$ |
| 1. Given to Lokesh Acharya | 50,000 |
| 2. Issued in the name of Raja | 55,000 |
| 3. Issued in the name of Sajani | $\mathbf{1 0 , 0 0 0}$ |
| Direct deposit by Mohit in the bank account | $\mathbf{3 , 1 0 , 0 0 0}$ |
|  | $\mathbf{2 5 , 0 0 0}$ |
| Less: | $\mathbf{1 0 , 0 0 0}$ |
| Cheques deposited into the bank but not cleared | $\mathbf{2 , 7 5 , 0 0 0}$ |
| Bank processing charges debited by the bank |  |
|  |  |
| Balance as per Pass Book |  |

Illustration 8.17

Shri \& Smt Amitabh Khanna, happily married couple, but every month they sit down to sort out the issues (not personal) related to their bank account. They hold a bank account with Ulhasnagar Bank (A/c No. 36789) in the name of their firm "Rishtey.com", a marriage bureau. Mrs. Khanna, also looks after the accounts.

Today on 01.05 .11 they sit with the reconciled statement of the last month (March'11) to reconcile the bank book and pass book for the month of April'11. But unfortunately, they could not reconcile hence requested you to prepare Bank Reconciliation Statement as on 30.04.11.

Bank Reconciliation Statement as on 31.03.2011

| Particulars | Amount $(\bar{₹})$ |
| :--- | ---: |
| Bank balance as per Bank Ledger | Amount $(\bar{₹})$ |
| Add : Unpresented Cheque | $5,00,460$ |

(Contd.)

| Date | Cheque No. | Party Name |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 24.03 .11 | 566778 | $24 \times 7$ Ltd | 40,000 |  |
| 27.03 .11 | 566781 | Rani Advertisers Ltd | 40,500 |  |
| 29.03 .11 | 566785 | Jhankar (P) Ltd | 40,000 | $1,20,500$ |
|  |  |  |  | $6,20,960$ |
| Less : Uncredited Cheque |  |  |  |  |
| Date | Cheque No. | Party Name | 55,460 |  |
| 29.03 .11 | 223455 | DasGupta \& Family | $5,65,500$ |  |
| Bank Balance as per Bank Statement |  |  |  |  |

In the books of Ulhasnagar Bank Rishtey.com Bank Statement for April'11

| Date | Particulars | Dr | Cr | Balance |
| :---: | :---: | :---: | :---: | :---: |
| 01.04.11 | Balance b/d |  |  | 5,65,500 |
| 03.04.11 | 24×7 Ltd | 40,000 |  | 5,25,500 |
| 03.04.11 | KBC Ltd |  | 7,560 | 5,33,060 |
| 04.04.11 | DasGupta and Family |  | 55,460 | 5,88,520 |
| 05.04.11 | Rani Advertisers Ltd | 40,500 |  | 5,48,020 |
| 07.04.11 | Devdas Ltd |  | 60,500 | 6,08,520 |
| 08.04.11 | By Girish Bhai | 7,500 |  | 6,01,020 |
| 08.04.11 | Phatakewala | 3,500 |  | 5,97,520 |
| 22.04.11 | SC Clg charges | 50 |  | 5,97,470 |
| 22.04.11 | Raj Travels |  | 3,760 | 6,01,230 |
| 24.04.11 | Mamamia |  | 64,660 | 6,65,890 |
| 26.04.11 | MCC charges | 100 |  | 6,65,790 |

In the books of Rishtey.com
Ulhasnagar Bank A/c April'11

| Date | Particulars | Dr | Cr |
| :--- | :--- | ---: | ---: |
| 01.04.11 | To Balance b/d | $5,00,460$ |  |
| 01.04.11 | To KBC Ltd | 7,560 |  |
| 04.04.11 | To Devdas Ltd | 60,500 |  |
| 05.04 .11 | By Girish Bhai |  | 7,500 |
| 05.04 .11 | By Phatakewala | 3,500 |  |
| 08.04 .11 | By Camerawala | 640 |  |


| 10.04.11 | To Mastana Ltd | 5,420 |
| :---: | :---: | :---: |
| 19.04.11 | To Raj Travels | 3,760 |
| 20.04.11 | To Mamamia | 64,660 |
| 22.04.11 | By Rozina L | 76,500 |
| 28.04.11 | By Rocket Bhai | 48,000 |
| 28.04.11 | To Jwala Singh | 20,500 |
| 30.04.11 | By Balance c/d | 5,26,720 |
|  |  | 6,62,860 6,62,860 |

Solution
Bank Reconciliation Statement as on 30.04.2011

| Particulars |  |  | Amount ( $\overline{\text { F }}$ ) | Amount ( $\overline{\text { ( }}$ ) |
| :---: | :---: | :---: | :---: | :---: |
| Bank balance as per Bank Ledger |  |  |  | 5,26,720 |
| Add : Unpresented Cheque |  |  |  |  |
| Date | Cheque No. | Party Name |  |  |
| 29.03.11 | 566785 | Jhankar (P) Ltd | 40,000 |  |
| 08.04.11 |  | Camerawala | 640 |  |
| 22.04.11 |  | Rozina Lakhdawala | 76,500 |  |
| 28.04.11 |  | Rocket Bhai | 48,000 | 1,65,140 |
|  |  |  |  | 6,91,860 |
| Less: Uncredited Cheque |  |  |  |  |
| Date | Cheque No. | Party Name |  |  |
| 10.04.11 |  | Mastana Ltd | 5,420 |  |
| 28.04.11 |  | Jwala Singh | 20,500 | 25,920 |
|  |  |  |  | 6,65,940 |
| Less: Unlinked Debits |  |  |  |  |
| 22.04.11 | SC Clg charg |  | 50 |  |
| 26.04.11 | MCC charges |  | 100 | 150 |
| Bank Balance as per Bank Statement |  |  |  | 6,65,790 |

### 8.6.2 Reconciling Bank Accounts with a Computerized System

If an organization is using a computerized accounting information system such as Tally or QuickBooks in their business, reconciling bank accounts should be much easier compared to keeping these books and notes manually. When you start the software reconciliation process in Tally Software, a screen gets created in which one can add the ending bank statement balance and any bank fees or interest earned.

After we get a screen which lists down all the cheques written since the last reconciliation as well as all deposits, we can put a check mark next to the cheques and deposits that have cleared on the bank statement and then click Reconcile Logo. The software will automatically reconcile the books/accounts
and provides reports that specify any differences. It also provides a reconciliation statement that takes in the beginning balance, the balance after all cleared transactions have been recorded, and a list of all uncleared transactions.

### 8.7 PROFIT AND LOSS ACCOUNT OF A MANUFACTURING CONCERN



> Summarize the income statement of a manufacturing concern

We had promised a discussion on the income statement of manufacturing concerns in Section 3.13 by stating that we will revisit the same in chapter eight. In a manufacturing concern, the profit and loss account can be divided into four parts, viz., the Manufacturing Account, Trading Account, Profit and Loss Account and Profit and Loss Appropriation Account.
A Manufacturing Account gives the cost of goods manufactured by the manufacturer, during the given accounting period (see, Section 3.13.1). It absorbs all the costs that go into production of those goods during the period. These costs then move to the Trading Account. Thus, all the manufacturing expenses that were incurred on raw materials were ascertained and transferred into the Trading Account and ends with the amount of gross profit earned by the business, by matching the cost of the sales with the revenues generated by the business during the period (see Section 3.13.2). A Trading Account discloses not only the profit made by the business by selling the manufactured goods, but also profits generated by the sale of goods purchased directly from others. The gross profit figures moves to the Profit and Loss Account and is used to measure the profit/loss of the firm after deducting the administrative expenses, selling and distribution expenses, finance charges and other non-trading losses, from the amount of gross profit and the non-trading income of the business (see, Sec. 3.13.3). The profit/loss figures generated move to the Profit and Loss Appropriation Account. It reflects how the net profit earned by the firm is utilized by way of distribution of dividends, payment of dividend taxes (if any), buyback of shares, or retained in the business (see, Sec. 3.13.4). Hence, the Profit and Loss Appropriation Account is an income distribution statement, rather than the income statement itself.

Based on the above discussion, one can deduce that the profit and loss account incorporates all the revenue and expense transactions relating to the business operations. It has been observed that the process of business operations is more complex in manufacturing firms and hence, this demands the preparation of this extended version of the profit and loss account. These four accounts with the Profit and Loss Statement can be better explained as follows:

### 8.7.1 Manufacturing Account

The Manufacturing Account gives the cost of goods manufactured by the manufacturer. This is the reason why non-manufacturing organizations do not prepare this account. As a consequence, those companies which are in both, manufacturing and trading, need to prepare a manufacturing account and a trading account.

Production managers and operations side of a firm inside the manufacturing firm are keen to know about this; and get involved to prepare the same to know the cost of manufacturing their product. For example, operations folks inside the Jet Airways would like to be aware of the per-seat cost of MumbaiKolkata flights in various scenarios. The cost of goods manufactured is the total cost of the goods completed or finished during a particular period. It consists of material cost, labor cost and overheads costs. A manufacturing firm will still need a Trading Account and Profit and Loss Account to finalize
the income statement. The only major difference is that, in the Trading Account, the entry for purchases is replaced by the cost of manufacture.

It is obvious that the inventory of a manufacturing company would also be different from that of a merchandise company. A manufacturing company would have inventory as raw material, work-in-progress and finished goods as discussed in Section 8.2.

### 8.7.2 Connecting Cost Sheet with the Manufacturing Account

A manufacturing company also prepares a cost sheet to know the costs incurred at various stages to produce a product during a particular accounting period. These costs from the cost sheet get captured in the various stages of computing the Manufacturing Account (such as, the raw material inventory and work-in-progress inventory) and the Trading Account (such as the finished goods inventory). Figure 8.1 below shows the various division of costs and respective stages.


To know more on "Accounting Guidelines for CSR Expenses" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/555

$\leftarrow$ Direct Materials
$\leftarrow$ Direct Labor
$\leftarrow$ Direct Expenses
$\leftarrow+$ Opening Stock of Raw Material
$\leftarrow(-)$ Closing Stock of Raw Material

Figure 8.1 Divisions of Cost
We look at Table 8.6, showing Cost Sheet format of M/s Rasiklal \& Co., incorporating the information given in above figure.

## Table 8.6 Cost Sheet Format M/s Rasiklal \& Co.

| Particulars | Amount | Amount |
| :---: | :---: | :---: |
| Opening Stock of Raw Material | 5,000 |  |
| Add: Purchase of Raw materials | 60,000 |  |
| Less: Closing Stock of Raw Materials | 15,000 |  |
| Cost of Raw Materials Consumed |  | 50,000 |
| Add: Direct Wages (Labour) | 20,000 |  |
| Prime cost |  | 70,000 |
| Add: Factory/Works Over Heads: |  |  |
| Factory Rent | 5,000 |  |
| Factory Power and Fuel | 10,000 |  |
| Works cost Incurred / Factory Cost incurred |  | 85,000 |
| Add: Opening Stock of WIP | 40,000 |  |
| Less: Closing Stock of WIP | 10,000 |  |
| Works cost Consumed / Factory Cost Consumed |  | 1,15,000 |
| Add: Administration Over Heads |  | 0.00 |
| Total Cost of Production |  | 1,15,000 |
| Add: Opening stock of Finished Goods | 25,000 |  |
| Add: Purchase of Finished Goods | 15,000 |  |
| Less: Closing Stock of Finished Goods | 35,000 |  |
| Cost of Goods Sold |  | 1,20,000 |
| Add: Selling and Distribution Over Heads:- |  |  |
| Cartage Expenses | 15,000 |  |
| Total Cost or Cost of Sales |  | 1,35,000 |
| Profit (balancing figure) |  | 25,000 |
| Sales |  | 1,60,000 |

## Activity 7

Please identify the correct position for each of the following in a manufacturing account:

| Business Type | Direct <br> Material | Direct <br> Labour | Direct <br> Expenses | Factory <br> Overheads |
| :--- | :--- | :--- | :--- | :--- |
| Newspaper: |  |  |  |  |
| 1. Printer's Wages |  |  |  |  |
| 2. Newsprint and Ink |  |  |  |  |


| 3. Paid to writer for story |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- |
| Dairy Farm: |  |  |  |  |
| 4. Milker and Feeder |  |  |  |  |
| 5. Cattle feed |  |  |  |  |
| 6. Repairs to farm infrastructure |  |  |  |  |

## Illustration 8.18

Jogi was a smart entrepreneur. Immediately after his MBA from IMT Ghaziabad, Jogi started his own business, Jogi Ltd. Prepare a manufacturing, trading and profit and loss account for the year March 31, 2016, for Jogi Ltd., from the following information:

All figures in ₹ 'ooo

| Particulars | Amount |
| :--- | ---: |
| Stock as on April 1, 2015 : |  |
| Raw Material at cost | 6,000 |
| Work in Progress at factory cost | 4,000 |
| Finished Goods at factory cost | 8,000 |
| Purchase of raw material | 43,000 |
| Manufacturing Wages | 65,000 |
| Factory Expenses | 18,000 |
| Office \& Administration Expense | 9,000 |
| Depreciation of Plant \& Machinery | 7,000 |
| Factory Power | 5,000 |
| Salespersons Salaries \& Commission | 14,000 |
| Salespersons' Expenses | 4,000 |
| Advertising | 3,000 |
| Rates \& Insurance | 4,000 |
| Light \& Heat | 8,000 |
| Sales | $1,90,000$ |
| Stock as on March 31, 2016 : | $\mathbf{8}, 000$ |
| Raw Material at cost | 5,000 |
| Work in Progress at factory cost | 10,000 |
| Finished Goods at factory cost |  |

Note: Three quarters of rates and insurance and light and heat are to be allocated to the factory and one-quarter to the office.


Manufacturing, trading, profit and loss and appropriation account of Jogi Ltd for the year ended March 31, 2016

| Particulars | Amount | Amount |
| :---: | :---: | :---: |
| Opening Stock of raw material | 6,000 |  |
| Add : Purchase of raw material | 43,000 |  |
|  | 49,000 |  |
| Less: Closing Stock of raw material | 9,000 |  |
| Direct Materials |  | 40,000 |
| Direct Labor |  | $\underline{65,000}$ |
| Prime Cost |  | 1,05,000 |
| Factory Overheads: |  |  |
| Factory Expenses | 18,000 |  |
| Factory Power | 5,000 |  |
| Rates and Insurance | 3,000 |  |
| Light and Heat | 6,000 |  |
| Depreciation of Plant and Machinery | 7,000 | 39,000 |
| Cost of Production |  | 1,44,000 |
| Add : Opening Work in Progress |  | 4,000 |
|  |  | 1,48,000 |
| Less: Closing Work in Progress |  | 5,000 |
| Cost of Production |  | 1,43,000 |
| Add : Opening Finished Goods |  | 8,000 |
|  |  | 1,51,000 |
| Less: Closing Finished Goods |  | 10,000 |
| Cost of Goods Sold |  | 1,41,000 |
| Sales |  | 1,90,000 |
| Gross Profit |  | 49,000 |
| Administrative Expenses: |  |  |
| Office and Administration Expense | 9,000 |  |
| Rates and Insurance | 1,000 |  |
| Light and Heat | 2,000 | 12,000 |
| Selling and Distribution Expenses |  |  |
| Salespersons' Salaries and Commission | 14,000 |  |
| Salespersons' Expenses | 4,000 |  |
| Advertising | 3,000 | 21,000 |
| Net Profit |  | 16,000 |

## SUMMARY

The flow of chapters till this point involved simplistic illustrations focusing on financial accounting of small-sized organization's to capture the underlying concepts and theoretical concerns. Delving further on financial accounting's reality connect involves increasing the maze of issues faced. This process started in this chapter. As the size of the organization increases in terms of its size, the number of transactions, variety of transactions, and such results in increasing the number of practical accounting issues.

Valuation and book treatment of tangible fixed assets, non-tangible fixed assets, non-current investments, and other such assets are one aspect of accounting challenge. We dealt with the same in this chapter by discussing accounting treatment of investment, depreciation and amortization norms. Valuation and book treatment of working capital items including cash, bank balances, inventory, receivables and payables are the other aspects of accounting challenge. We dealt with the same in this chapter by discussing accounting treatment of bills of exchange, promissory notes, inventory, bank books, current investments and such items. We observe that the practical issues that are governing the accountant's world vary to a large extent depending on the specific industry, local company law norms and the socio-cultural context. In addition to that the flexibility built in the accounting norms results in high levels of complexity. Further, the process of writing the records is also guided by past practices and the broad guidelines set by the regulator.

Simple errors or even gaps in human communication can lead to widespread differences in figures. To ensure that the accounting records of a company tally with its bankers, the process of Bank Reconciliation Statement takes an important position in corporate financial accounting. Take the issue of depreciation as another case in point. An item can be depreciated using various methods of depreciation and the relevant accounting records can be presented in multiple ways. There also exists the option of changing the method of depreciation. We also discussed the existing methods and issues in the existing accounting policies and practices to deal with items such as inventories, investments, negotiable instruments, and debentures. These accounting policies and practices have large implications for the readers of the financial statements in terms of understanding and interpretation.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Bank Reconciliation Statement
- Bankers Guarantee (BG)
- Bill of Exchange
- Block Depreciation
- Debenture Redemption Reserve
- Depreciation Method, Depletion
- Depreciation Method, Straight Line
- Depreciation, Sum of the Years Depreciation Method, Units of Production
- Depreciation Method, Written Down Value (WDV)
- Investments, Diminution in Value
- Discounting, Bill
- Inventory Valuation Method, First-In-FirstOut (FIFO)
- Inventory Valuation Method, Last-In-First-

Out (LIFO)

- Inventory Valuation Method, Specific Identification
- Inventory Valuation Method, Weighted Average Cost (WAC)
- Inventory, Cost-basis
- Inventory, Net Realizable Value basis
- Investment, at Cost / Book Value
- Investments, Market Value
- Letter of Credit
- Negotiable Instruments
- Promissory Note
- Salvage Value
- Scrap Value
- Shares, Bonus Issue
- Shares, Rights Issue


## EXERCISES

## Multiple Choice Questions

1. Depreciation is related to

LO 1 EASY
(a) Evaluating the efficiency of an asset
(b) Valuing the asset
(c) Distributing the cost of the asset over its useful life
(d) None of the above
2. In 20X6, an equipment owner sold a front-end loader for $₹ 75,000$. The loader had a book value of $₹ 1,00,000$ and accumulated depreciation of $₹ 70,000$. What is the accounting gain/loss on the sale of the loader?

LO 1 EASY
(a) ₹ 25,000
(b) ₹ 30,000
(c) $₹ 75,000$
(d) ₹ 45,000
3. LIFO method of inventory valuation on cost basis is suitable for items that are

LO 2 MEDIUM
(a) Perishable
(b) Expensive
(c) Non-perishable
(d) None of the above
4. Bheesma Department Store's beginning inventory cost was $₹ 1,40,000$ and it was retailed for $₹ 2,80,000$. Purchases for the period amounted to ₹ $3,90,000$ and were priced to sell at twice that amount. Sales for the period, all at normal retail, were ₹ $6,00,000$. How much is the cost of Bheesma's estimated ending inventory?

LO 2 MEDIUM
(a) ₹ 115,000
(b) ₹ 150,000
(c) ₹ 230,000
(d) ₹ 300,000
5. A debtor, M/s Khiladi has made an online transfer of $₹ 8,500$ in the bank account. In the BRS starting with pass book overdraft

LO 6 DIFFICULT
(a) $₹ 8,500$ will be added to pass book overdraft.
(b) $₹ 8,500$ will be deducted from pass book overdraft
(c) $₹ 1,7000$ will be added to pass book overdraft
(d) This amount will be ignored

## True or False

1. Fixed assets with an indefinite life are not depreciated.

LO 1 EASY
2. All cheques are bills of exchange, but all bills of exchange are not cheques. LO 5 EASY
3. In scenarios of falling prices, the FIFO method would show a higher profit than the LIFO method.

LO 2 MEDIUM
4. Gross Profit $=$ Sales + Cost of Goods Sold $=$ Sales $-($ Purchases - Ending Inventory $)$

LO 2 MEDIUM
5. Management remuneration packages, having profit-linked bonuses, may influence the selection of a depreciation method.

LO 1 DIFFICULT

## Discussion Questions

1. What is the difference between the 'straight-line method of depreciation' and the 'written down value method'? Which method is more appropriate for reporting earnings? LO 1 MEDIUM
2. What is the difference between a 'bill of exchange' and a 'promissory note'? LO 5 MEDIUM
3. Can a leasehold property be depreciated? If yes, which is the appropriate method?

LO 1 DIFFICULT
4. How does the treatment in books differ for short-term investments vis-à-vis long-term investments? Explain.

LO 4 DIFFICULT
5. Refer to the Chapter Opener on the outsourcing potential. Briefly comment on the question related to IFRS-convergence in India and its implications on this potential? If you were part of the regulatory set up - what would you do with respect to IFRS implementation in India? Discuss. LO 2,6,7 DIFFICULT

## Review Questions

1. Pappu \& Gappu Textiles began operations in 2010. At the beginning of the year the company purchased a machinery of $₹ 1,00,000$, with an estimated useful life of 10 years and no residual value. During the year, the company had made an expense of ₹ 20,000 and $₹ 80,00$ as salary and other expenses, respectively. The purchase and sales of inventory are as follows:

| $05-4-10$ | Purchases | 500 Pieces at ₹22 per Piece |
| :--- | :--- | :--- |
| $20-4-10$ | Sales | 300 Pieces at ₹30 per Piece |
| $25-5-10$ | Purchases | 100 Pieces at ₹32 per Piece |
| $28-5-10$ | Sales | 50 Pieces at ₹21 per Piece |
| $30-5-10$ | Sales | 100 Pieces at ₹25 per Piece |
| $31-5-10$ | Purchases | 100 Pieces at ₹23 per Piece |

The management has the choice of accounting methods, but they are unsure how those methods will affect the net income. They have heard of the FIFO and LIFO inventory methods and straight line and written down value depreciation methods.

You are required to prepare two income statements for Pappu \& Gappu Textiles one usng FIFO and straight line methods and the other using the LIFO and written down value methods. Ignore taxes.

LO 2 MEDIUM
2. Manohar Kumar purchases an auto for $₹ 2,00,000$ from Fairdeal Automobiles. After consulting with the experts in the auto field, Manohar decides that the estimated life of the auto is 8 years. After the life period, the auto is estimated to fetch ₹ 20,000 .

## Questions

(a) Calculate the depreciation using Straight Line Method (SLM) and Written Down Value (WDV) method of depreciation taking the rate to be $10 \%$. Pass the journal entries on the basis of both Writing off and provisioning method.
(b) If Manohar decides to sell his auto for ₹ $1,50,000$ after 3 years and purchases a Toyota Innova for $₹ 8,50,000$, what will be the profit or loss from the sale of Auto (in both SLM and WDV methods)?
(c) If Manohar uses SLM for depreciation in the first year and wants to switch over to WDV method after the first year, what will be the impact on the profit? How will the accounting records be written for the company?
3. Champakali Spirit Oil Limited is a bulk distributor of kerosene. For the month of July 2010, his transactions were as follows:

| Date | Position | Liters | Amount/Liter |
| :--- | :--- | :--- | :--- |
| 1-Jul | Opening Stock | $1,00,000$ | 5 |
| 3-Jul | Purchases | $5,00,000$ | 4 |
| 15-Jul | Purchases | $1,00,000$ | 4.5 |
| 20-Jul | Purchases | 50,000 | 6 |
| 28-Jul | Sales |  | $₹ 25,00,000$ |

The CEO of the firm, Chetan Jain had no idea about the valuation of the stock and its impact on the profitability of the business so he asks his friends to help him out. Jamvanth is of the opinion that he should use LIFO method of valuation. Anirudh suggests FIFO method of valuation while Mahendra has a totally different opinion and favors weighted average method. Advise Chetan by showing the impact of the various methods on the profit position.
4. Bank reconciliation problems at Dhandapani Trading House:

LO 6 DIFFICULT Dhandapani Trading House received the bank statement which shows a balance of ₹ 11,467 on June 30. Assume further that the cash balance shown in company's record is ₹ 7,500 . The following differences between the bank statement and company's record were identified by the following items:
(i) A Cheque for ₹ 2,900 deposited on June 30 was yet to be collected on that date
(ii) Cheques issued and recorded by the company, but not yet presented to the bank for payment are as follows:

| Cheque no. | Date | Amount (₹) |
| :---: | :---: | :---: |
| 51009 | $24 / 05$ | 1,800 |
| 51107 | $29 / 05$ | 1,225 |
| 51013 | $25 / 06$ | 705 |
| 51116 | $29 / 06$ | 105 |
| 51118 | $29 / 06$ | 1,775 |

(iii) A debit advice was included with the bank statement for quarterly service charge of ₹195.
(iv) The credit advice was included with the bank statement for interest on term deposit of ₹ 165 .
(v) A credit advice included with the bank statement indicated that the bank had collected a bill receivable for ₹ 1,200 together with interest of ₹ 24 .
(vi) Comparison of the cheque counterfoils with the bank statement showed that cheque number 2112 in the amount of $₹ 7,418.00$, in payment for purchase of merchandise, had been incorrectly recorded in the accounting records as $₹ 7,481.00$
Please make bank reconciliation for Dhandapani Trading House.
5. Inventory, Cost of Goods Sold and Net Income

LO 7 DIFFICULT
A. Fill in the missing data for the retail organization:

| Particulars | First Quarter | Second <br> Quarter | Third <br> Quarter | Fourth <br> Quarter |
| :--- | :---: | :---: | :---: | :---: |
| Sales | 90 |  | 150 |  |
| Gross Margin | 50 | 40 | 50 |  |
| Closing Inventory | 40 |  | 50 |  |
| Opening Inventory | 30 | 70 | 90 | 50 |
| Net Cost of Purchases |  | 20 |  | 20 |
| Operating Income | 50 | 20 | 20 | 40 |
| Operating Expenses |  | 60 |  | 110 |
| Cost of Goods Sold | 120 | 150 | 150 |  |
| Cost of Goods available for Sale |  |  |  |  |

B. Fill in the missing data for the manufacturing organization:

| Particulars | First <br> Quarter | Second <br> Quarter | Third <br> Quarter | Fourth <br> Quarter |
| :--- | :---: | :---: | :---: | :---: |
| Closing Finished Goods Inventory | 60 | 30 | 60 | 60 |
| Cost of Goods Sold | 10 | 30 | 10 |  |
| Operating Income | 80 |  | 100 | 130 |
| Cost of Finished Goods available for Sale | 50 |  | 80 |  |
| Cost of Goods Manufactured | 40 |  | 70 |  |
| Gross Margin | 30 |  | 50 | 60 |
| Operating Expenses |  | 20 | 30 |  |
| Opening Finished Goods Inventory | 100 |  | 140 |  |
| Sales |  |  |  |  |

## MINI CASES

## Case 8.1 Accounting at Amrapalli Hotels Limited

LO 2 EASY

Amrapalli Hotels Limited commenced operations as on April 1, 20X5. Khushi, a recent MBA graduate from Imphal and a shareholder in the company was studying the detailed annual report just received by her for the year ended March 31, 20X7. She observed that the profits before tax for the year have substantially improved to ₹ $95,00,000$. Khushi also took note of the following in the notes to the accounts:

- Amrapalli Hotels Limited has changed the method of inventory valuation from LIFO to FIFO in the current year. The difference in the cost of goods sold due to the change is ₹97,500. Khushi is aware that during the year ending 31.3.20X7, the cost of all materials bought by Amrapalli Hotels Limited was steadily increasing and the inventory stock was also increasing.
- Amrapalli Hotels Limited has written back to the Profit and Loss Account, a provision of ₹99,99,000, which it had made in the previous year for excise penalty. Khushi is also aware that the suit is still pending and it is highly unlikely that it would be decided in favor of the company.
- At Amrapalli Hotels Limited, depreciation has been provided on the written down value method during the current year, while in the previous year, it was provided on the straight-line method. The difference in depreciation expensed due to the change in the method has been calculated as ₹ $99,99,000$.
Khushi decided to rework the profits to make them comparable with the past year profits. Please help Khushi in doing the same.

Please suggest the broad contents of the notes to accounts to be appended to the financial statements to ensure adequate information regarding the above changes.

## Case 8.2 Fixed Assets and Depreciation Practices by Ambuja Cements Limited

## LO 1 MEDIUM

Set up in 1986, Ambuja Cements Limited (Ambuja) had aggressively pursued growth to increase its size ten-fold in one decade. The total cement capacity of the company is 18.5 million tonnes. Its plants became the most efficient in the world with environment protection measures that were on par with the finest in the developed world.

The company's most distinctive attribute, however, was its approach to the business. Ambuja followed a unique homegrown philosophy of giving people the authority to set their own targets, and the freedom to achieve their goals. This simple vision created an environment where there were no limits to excellence, no limits to efficiency and had proved to be a powerful engine for Ambuja. As a result, Ambuja became the most profitable cement company in India, and one of the lowest cost cement producers in the world.

Following are excerpts from their annual report of December 2010. These relate to a change in the depreciation policy and practices adopted by the company:

Schedule 'E'-Fixed Assets

|  |  |  |  |  |  |  |  |  |  | Rs in Crores |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Gross Block (at Cost) |  |  |  | Depreciation/Amortisation |  |  |  | Net Block |  |
|  | $\begin{gathered} \text { As at } \\ \mathbf{0 1 . 0 1 . 2 0 1 0} \end{gathered}$ | Additions | Deductions/ Transfers | $\begin{gathered} \text { As at } \\ \text { 31.12.2010 } \end{gathered}$ | $\begin{gathered} \text { Upto } \\ 01.01 .2010 \end{gathered}$ | For the year (g) | Deductions/ Transfers | $\begin{gathered} \text { Upto } \\ \text { 31.12.2010 } \end{gathered}$ | $\begin{gathered} \text { As at } \\ \text { 31.12.2010 } \end{gathered}$ | $\begin{gathered} \text { As at } \\ 01.01 .2010 \end{gathered}$ |
| Tangible Assets: |  |  |  |  |  |  |  |  |  |  |
| Freehold Land | 308.71 | 100.80 | 0.15 | 409.36 | - | - | - | - | 409.36 | 308.71 |
| Leasehold Land | 76.81 | 13.96 | - | 90.77 | 7.64 | 2.07 | - | 9.71 | 81.06 | 69.17 |
| Buildings, Roads and Water Works (a) | 811.12 | 348.95 | 2.31 | 1,157.76 | 141.11 | 26.78 | 0.61 | 167.28 | 990.48 | 670.01 |
| Marine Structures (b) | 95.58 | - | - | 95.58 | 48.27 | 3.82 | - | 52.09 | 43.49 | 47.31 |
| Plant and Machinery <br> (c) | 4,092.45 | 1,837.25 | 13.99 | 5,915.71 | 2,184.51 | 284.77 | 9.46 | 2,459.82 | 3,455.89 | 1,907.94 |
| Electrical Instalations | 373.93 | 212.91 | 0.56 | 586.28 | 165.85 | 26.00 | 0.52 | 191.33 | 394.95 | 208.08 |
| Railway Sidings and Locomotives (d) | 70.52 | 2.06 | 6.75 | 65.83 | 30.64 | 2.85 | 6.41 | 27.08 | 38.75 | 39.88 |
| Railway Wagons given on lease (e) | 6.43 | - | - | 6.43 | 3.92 | 0.31 | - | 4.23 | 2.20 | 2.51 |

(Contd.)

| Furniture, Fixtures and Office Equipments | 122.03 | 12.72 | 1.80 | 132.95 | 57.93 | 10.59 | 1.12 | 67.40 | 65.55 | 64.10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ships | 115.65 | 46.16 | - | 161.81 | 68.49 | 7.88 | - | 76.37 | 85.44 | 47.16 |
| Vehicles | 61.50 | 5.81 | 5.55 | 51.76 | 28.64 | 6.51 | 4.16 | 31.00 | 20.76 | 22.86 |
| Power Lines (f) | 33.92 | 3.41 | - | 37.33 | 8.51 | 1.06 | - | 9.56 | 27.77 | 25.41 |
| Sub Total | 6,168.65 | 2,584.03 | 31.11 | 8,711.57 | 2,745.51 | 372.64 | 22.28 | 3,095.87 | 5,615.70 | 3,413.14 |
| Intangible Assets: |  |  |  |  |  |  |  |  |  |  |
| Water Drawing Rights | 6.16 | - | - | 6.16 | 4.54 | 0.52 | - | 5.06 | 1.10 | 1.62 |
| Computer Software <br> (h) | 59.32 | 1.77 | - | 61.09 | 34.04 | 16.10 | - | 50.14 | 10.95 | 25.28 |
| Sub Total | 65.48 | 1.77 | - | 67.25 | 38.58 | 16.62 | - | 55.20 | 12.05 | 26.90 |
| Total | 6,234.13 | 2,585.80 | 31.11 | 8,778.82 | 2,784.09 | 389.26 | 22.28 | 3,151.07 | 5,627.75 | 3,440.04 |
| Previous year's Total | 5,706.94 | 567.73 | 50.54 | 6,224.13 | 2,514.19 | 303.85 | 33.95 | 2,784.09 | 3,440.04 |  |

## Notes:

(a) Includes:
(i) Premises on ownership basis of ₹ 95.75 crore ( 31.12 .2009 -₹ 95.30 crore) and ₹ 7.31 crores (31.12.2009-₹ 6.15 crore) being the depreciation thereon upto 31st December, 2010. Cost of shares in Co-operative Societies ₹ 13,130 (31.12.2009-₹ 13,130 ).
(ii) ₹ 13.91 crores ( $31.12 .2009-₹ 10.47$ crore) being cost of roads constructed by the company, ownership of which vests with the Governement/Local Authorities and ₹ 1.05 crore ( $31.12 .2009-₹ 0.94$ crore) being the depreciation thereon up to 31 st December, 2010.
(b) Cost incurred by the Company, ownership of which vests with the State Maritime Boards.
(c) Includes ₹ 34.02 crore ( $31.12 .2009-₹ 22.43$ crore) being cost of bulkers and tippers used as Material Handling Equipment, which are being depreciated under the "Written Down Value Method" at the rate applicable to vehicles and ₹ 18.54 crores ( 31.12 .2009 - $₹ 16.59$ crore) being the depreciation thereon up to 31st December, 2010.
(d) Includes ₹ 6.84 crore ( 31.12 .2009 -₹ 6.84 crore) being cost of Railway siding constructed by the Company, ownership of which vests with the Government/Railway Authorities and ₹ 1.03 crores (31.12.2009-₹ 0.71 crore) being the depreciation thereon up to 31st December, 2010.
(e) Railway wagons given on lease to the Railway under "Own Your Wagon Scheme".
(f) Cost incurred by the Company, ownership of which vests with the State Electricity Boards.
(g) Includes ₹ 2.06 crore ( 31.12 .2009 -₹ 6.86 crore) capitalized as pre-operative expenses.
(h) Computer software is amortized over a period of three years. The remaining amortization period ranges from six months to three years.
The notes to accounts of the company included the following lines:

## Depreciation and Amortization:

## I. Tangible Assets:

(i) Premium on leasehold land is amortised over the period of lease.
(ii) Depreciation on all assets, other than Vehicles, is provided on the "Straight Line Method" in accordance with the provisions of Section $205(2)(\mathrm{b})$ of the Companies Act, 1956, and on Vehicles on the "Written Down Value Method" in accordance with the provisions of Section 205(2)(a) of the Companies Act, 1956, in the manner and at the rates specified in Schedule XIV to the Companies Act, 1956, as the management estimate of useful life coincides with useful life based on the rate
mentioned in the Schedule XIV or is higher. Continuous process plants, are identified based on technical assessment and depreciated at the specified rate as per Schedule XIV to the Companies Act, 1956. Depreciation on additions to fixed assets is provided on a pro-rata basis from the date of acquisition or installation, and in the case of a new project, from the date of commencement of commercial production. Depreciation on assets sold, discarded, demolished or scrapped, is provided upto the date on which the said asset is sold, discarded, demolished or scrapped.

In respect of an asset for which impairment loss is recognised, depreciation is provided on the revised carrying amount of the assets over its remaining useful life.
(iii) Machinery spares which are capitalised are depreciated over the useful life of the related fixed asset. The written down value of such spares is charged to the Profit and Loss Account, on issue for consumption.
(iv) The cost of fixed assets, constructed by the Company, but ownership of which belongs to Government/Local Authorities, is amortised at the rate of depreciation specified in Schedule XIV to the Companies Act, 1956.
(v) Expenditure on Power Lines, ownership of which belongs to the State Electricity Boards, is amortised over the period as permitted in the Electricity Supply Act, 1948.
(vi) Expenditure on Marine Structures, ownership of which belongs to the Maritime Boards, is amortised over the period of agreement.

## II. Intangible Assets:

(i) Expenditure to acquire Water Drawing Rights from Government/Local Authorities/other parties, is amortised on straight line method over the period of rights to use the facilities ranging from ten to thirty years.
(ii) Expenditure on computer software is amortized on straight line method over the period of expected benefit not exceeding five years.

## Leases:

Where the Company is the lessee
Leases where the lessor effectively retains substantially all the risks and benefits of ownership of the leased item, are classified as operating leases. Operating lease payments are recognized as an expense in the Profit and Loss account on a straight-line basis over the lease term.
Where the Company is the lessor
(i) Assets given under finance lease are recognised as a receivable at an amount equal to the net investment in the lease. Lease rentals are apportioned between principal and interest on the internal rate of return (IRR) method. The principal amount received reduces the net investment in the lease and interest is recognised as revenue. Initial direct cost such as legal costs, brokerage costs, etc. are recognized immediately in the Profit and Loss Account.
(ii) Assets subject to operating leases are included in fixed assets. Lease income is recongnised in the Profit and Loss Account on a straight-line basis over the lease term. Costs, including depreciation are recognised as an expense in the Profit and Loss Account. Initial direct costs such as legal costs, brokerage costs, etc. are recognized immediately in the Profit and Loss Account.
Source: Ambuja Cements Limited Investor, Ambuja Cements Limited, Web, 29 Feb. 2016.

## Case Questions

(a) Please list out the possible journal entries the company may have had to make to note the above changes.
(b) During the stated financial year, what type of fixed assets is the company churning? and what type of fixed assets is the company not churning? Discuss.
(c) You are required to link the above notes with the company's fixed assets schedule and comment on the same.
(d) Did the company provide enough information to the readers of annual reports? Discuss.

## Case 8.3 ITI Limited: Case of Provisions for Inventories

## LO 2 MEDIUM

ITI Ltd, India's first Public Sector Unit (PSU), manufactures and supplies telephone and communications equipment and parts. It is listed on the Bombay Stock Exchange. We present excerpts from the annual report of ITI Ltd for the financial year ended March 31, 2010.

Annual Report 2009-2010
Schedules to the Balance Sheet
(₹ in crores)

|  | AS at 31 ${ }^{\text {st }}$ March 2010 | As at $31{ }^{\text {st }}$ March 2009 |
| :---: | :---: | :---: |
| Schedule 5.1 |  |  |
| INVENTORIES |  |  |
| (Valued as per Accounting Policy No. 3.00) |  |  |
| Stock and Stores as taken and certified by Management |  |  |
| Raw material and Production Stores | 98.73 | 156.36 |
| Less: Provision for Obsolescence | 17.91 80.82 | $20.34 \quad 136.02$ |
| Material issued against Fabrication Contracts | 1.01 | 1.00 |
| Less: Provision | $0.95 \quad 0.06$ | $0.95 \quad 0.05$ |
| Material issued on Loan Basis | 0.00 | 0.00 |
| Non-Production Stores | 9.72 | 12.53 |
| Less: Provision for Obsolescence | $2.71 \quad 7.01$ | 4.69 |
| Work-in-Process Production | 51.44 | 63.07 |
| Less: Provision | 7.58 | 7.58 |
| Work-in-Process Installation | 0.00 | 0.00 |
| Less: Provision | $0.00 \quad 0.00$ | 0.00 0.00 |
| Manufactured Components | 18.49 | 38.09 |
| Less: Provision | $0.34 \quad 18.15$ | 1.13 36.96 |
| Stock-in-Trade | 87.23 | 102.91 |
| (including ₹ 40.07 crores, items despatched to customers awaiting billing Previous year ₹ 0.08 crores) |  |  |
| Excise Duty | 5.50 | 2.72 |


|  | 92.73 | 105.64 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Less: Provision | 14.05 | 78.68 | 21.88 | 83.76 |
| Stock Reconcilliation Account | 0.07 |  | (0.07) |  |
| Less: Provision | 0.07 | 0.00 | (0.07) | 0.00 |
| Goods Pending Inspection/Acceptance |  | 36.05 |  | 15.10 |
| Material-in-Transit Advances |  |  |  |  |
| Considered Good | 19.32 |  | 68.08 |  |
| Considered Doubtful | 0.82 |  | 0.82 |  |
|  | 20.14 |  | 68.90 |  |
| Less: Provision | 0.82 | 19.32 | 0.82 | 68.08 |
| Material received and in-Transit Advances |  | 0.22 |  | 0.02 |
| payable as per contra in Schedule 6.1 |  |  |  |  |
| Tools and Gauges |  | 0.05 |  | 0.03 |
|  |  | 284.22 |  | 403.35 |

Source: ITI Limited Financial Information, ITI Ltd Web, 29 Feb. 2016.

## Case Questions

(a) What does the above schedule of ITI Limited for FY2010 convey about its current position? Discuss.
(b) What is the important reason for the company making provision for obsolescence?
(c) What does it mean by having provisions in the inventory schedule? Discuss all the possible reasons in the case of ITI Limited.

## Case 8.4 Splits and Redemptions in the Ashok Leyland Limited

## LO 3 MEDIUM

Ashok Leyland Limited, a Hinduja Group company, is a popular truck manufacturer in India. In the recent past it has been having a hectic time in its items related to capital employed. We reproduce the relevant portions of the balance sheet from its annual report for FY2005 to appreciate the same.

## Ashok Leyland Limited

Schedule on Shareholders Funds

## 2005 <br> 2004 <br> ₹ Millions ₹ Millions

Capital:
Issued capital
(a) $165,025,815$ (2004:33,005,163 Equity shares of $₹ 5$ each issued earlier, consolidated and subdivided into shares of ₹10 each)


## Ashok Leyland Limited

Schedule on Secured Loans

|  |  | 2005 <br> ₹ Millions | 2004 <br> ₹ Millions |
| :--- | :--- | ---: | ---: |
| $\mathbf{1 . 3}$ | SECURED LOANS | $1,663.33$ | $2,020.00$ |
| Debentures |  |  |  |
| Term loans | 957.81 | $1,062.83$ |  |
| From banks | 13.82 | 20.73 |  |
| From financial institutions | $2,634.96$ | $3,103.56$ |  |

Source: Ashok Leyland Limited Investors, Ashok Leyland Web, 29 Feb. 2016.
The annual report also revealed the following redemption plan for its above mentioned debentures:

| Debentures are to be redeemed at par in single/equal instalments, as stated below: |  |  |  |
| :---: | :---: | :---: | :---: |
| Debenture | 2005 ₹ Millions | 2004 ₹Millions | Dates of Redemption |
| Series |  |  |  |
| XXIX | 50.00 | 100.00 | 01 August 2004, 2005 and 01 February 2005, 2006 |
| AL 1 | 166.67 | 250.00 | 15 June 2004, 2005 and 2006 |
| AL 2 | 66.67 | 100.00 | 15 October 2004, 2005 and 2006 |
| AL 3 | 33.33 | 50.00 | 19 December 2004, 2005 and 2006 |
| AL 4 | 400.00 | 400.00 | 10 January 2007, 2008 and 2009 |
| AL 5 | 13.33 | 20.00 | 15 February 2005, 2006 and 2007 |


| AL 6 | 50.00 | 50.00 | 15 February 2007, 2008 and 2009 |
| :---: | :---: | :---: | :---: |
| AL 7 | 83.33 | 250.00 | 01 June 2004, 2005 and 01 December 2004 |
| AL 9(A) | 50.00 | 50.00 | 15 October 2007 |
| AL 10 | 250.00 | 250.00 | 20 June 2006 |
| AL 11 | 500.00 | 500.00 |  |
|  | $1,663.33$ | $2,020.00$ | 17 September 2008, 2009 and 2010 |

## Case Questions

(a) What is the most visible change in the share capital of Ashok Leyland? What is this popularly called? Does it involve bringing in new capital?
(b) Can you provide accounting records for the change in share capital for the FY2005?
(c) Based on the limited details provided, please explain the meaning and implication of a Global Depository Receipt?
(d) How many debentures does Ashok Leyland Limited have? What could be the reason for issuing so many debentures?
(e) Based on the debenture redemption plan provided above, please provide the accounting records for the redemption of the debentures for all the years.

## Case 8.5 Kaushalya Infrastructure Development Corporation Limited

## LO 2,4 MEDIUM

Kaushalya Infrastructure Development Corporation Limited (henceforth, Kaushalya) is a BSE listed company based in Kolkata. The company's website revealed three lines of business:

1. Kaushalya Nirman: Creation of World Class Highways and industrial Infrastructure.
2. Kaushalya Gram: Electrification and Irrigation of Rural India.
3. Kaushalya Parivar: Construction of Commercial and Residential Complexes.

Keshtho Mukherjee was a Kolkata-based financer of working capital items. He browsed through the FY2010 annual report of Kaushalya to see if they could be his potential customers. Keshtho read the following two big items constituting its working capital:

|  | FY2010 | FY2009 |
| :--- | ---: | ---: |
| Schedule 10: Current Liabilities |  |  |
| Sundry Creditors | $226,978,209$ | $59,519,582$ |
| Schedule 7: Sundry Debtors |  |  |
| (Trade, Unsecured and considered good) | $61,568,235$ | $34,200,621$ |
| Debts outstanding for a period exceeding six months | $518,879,129$ | $288,359,679$ |
| Other Debts | $580,447,364$ | $322,560,300$ |
|  |  |  |

[^61]
## Case Questions

(a) Given the implementation of the Schedule III of the Companies Act, 2013 and the proposed new format - suggest a new presentation of the above balance sheet items. Is this going to result in more useful for information the investors and fund managers or the other way round - Comment with focus on the implications for Keshtho Mukherjee? (hint: see Chapter 6 for related information)
(b) Which accounting standards are relevant for the above two items? Is the company following the same?
(c) What do the relevant IFRS state regarding the above two items. Comment.
(d) Try linking your responses to questions (a) and (c) and summarize your views.

## Case 8.6 Desert Safari by Abdullah

## LO 6 MEDIUM

Abdullah is happy with the development all around. Dubai was rocking. A camel ride to a Mercedes ride in a thirty years life-span has made most of the economists to think on all the well-established developmental models on growth phases. Abdullah has learnt from his parents that how tough it was during those days. He strongly supported the architects of all their plans though several of his friends criticized him for giving Dubai a spoilt image. It has given Dubai a strong, dynamic positioning in world's map. It has made people like Abdullah to start their own venture.

Abdullah started a business on desert safari two years back and he was pretty sure of the profitability of his business. He went by the general thumb rule, if standard of living increases without any extra effort, the business is growing. As he left his study during school, for pursuing his other dreams, he has kept an accountant for maintaining the common minimum legal requirements. The accountant knew that if he can balance both the sides of a $\mathrm{B} / \mathrm{S}$, his job is intact (as Abdullah knew the matching concept). So before the submission date, he prepared the following financial statements for the current financial year and submits it to Mr. Abdullah.

Al Maktoum Desert Safari
P\&L a/c (for the month ended December 31, 20X6)
(all figures in '00 AED)

| Revenues | $\mathbf{1 9 , 4 0 0}$ |
| :--- | ---: |
| Investment by owner | 5,000 |
| Service Revenue: | $\mathbf{1 4 , 0 0 0}$ |
| Unearned Service Revenue: | 400 |
| Expenses | $\mathbf{1 8 , 3 0 0}$ |
| Salaries | 2,800 |
| Advertisement | $\mathbf{1 , 6 0 0}$ |
| Vehicle rent | 5,400 |
| Pre paid vehicle rent | 4,600 |
| Drawing | $\mathbf{1 , 8 0 0}$ |
| Depreciation | 100 |
| Sundry expenses | 2,000 |
| Net Profit | $\mathbf{1 , 1 0 0}$ |

## Al Maktoum Desert Safari

Balance sheet as on December 31, 20X6
(in '00 AED)

| Asset |  | Liability |  |
| :--- | ---: | :--- | ---: |
| Tent \& other operating asset (new) | 11,000 | Owners Equity | 5,000 |
| Office building | (net) | 5,200 | Secured Loans |
| Creditors | 8,200 | Unsecured Loan | 8,000 |
|  |  | Interest | 2,000 |
| Investment in shares | 3,600 | Profit carried forward | 2,000 |
| Camels | 1,500 | Reserve \& Surplus | 1,100 |
|  |  | Profit from selling old asset | $\mathbf{7 , 2 0 0}$ |
| Cash | $\mathbf{1 , 9 0 0}$ | Debtors | 4,300 |
| Total | $\mathbf{3 1 , 4 0 0}$ | Total | $\mathbf{1 , 8 0 0}$ |

After seeing this financial statements, Abdullah was happy as both side of the balance sheet was matching. But he got a doubt after referring to the previous year's balance sheet. The reserve and surpluses for year 20X5 was AED 6,700. Abdullah realized that there is some duplication from entry. The moment he deducted AED 500 from liability side, the equilibrium got disturbed. He tried to balance them out, but it only increased his restlessness. He also remembered that the selling of old asset had occurred in 20X5.

Assuming Abdullah has given you the opportunity for finding out the mistake in the financial statements and rectify the same, please prepare a new balance sheet. He requests you to prepare a fresh income statement and balance sheet after considering January 20X7 into account. So, your balance sheet will be as on 31.01.X7. The following are the latest 10 transactions occurred in the month of January.
Following are the transactions for January month:
Jan 1: $50 \%$ of the unearned revenue has transformed into service
Jan 5: Abdullah called the Veterinary surgeon and has spent AED 500
Jan 10: He got a service offer from HSBC and the HR manager paid him 20\% of the agreed charges as advance. Consider the agreed charge is AED 20,000
Jan 15: Abdullah purchased a Safari vehicle paying AED 6,000 . He only paid $50 \%$ of the amount. He agreed to pay the rest amount within a month's time
Jan 20: He got AED 10,000 from his old corporate client
Jan 24: He returned AED $3,00,000$ to bank (secured loan) to reduce his interest burden
Jan 28: He spent AED 2,000 on promotional expenditure
Jan 29: He did a business of AED $1,50,000$ in cash
Jan 30: He spent AED 10,000 as salary expenses to all his staff
Jan 31: He sent a note to the owner of his hired vehicle to deduct AED $1,00,000$ as rent expenses for January. Also other expenses and interest expenses are registered as AED 5,000 and 2,000 respectively.
The bank has sent a summary of bank statements and it indicates a debit balance of AED 16,500. The following three events are the culprit to give you a error in bank reconciliation:
(a) Cheque of AED $1,00,000$, which you had paid as repayment for loan principal amount to National Bank of Dubai, is yet to be presented to your banker (cheque outstanding).
(b) A sum of AED 50,000 which you had presented to your banker, has to be collected.
(c) Bank has debited AED 5,000 for non-fund based transaction charges.

Case Questions
(a) Enter the following transactions in the journal, open ledger for all the entries and prepare financial statements, for both, December ending and January ending?
(b) Prepare a bank reconciliation statement to prove that actually cash balance, based on bank statement, is matching with your cash balance (based on your records) at AED 28,500 (negative) and explain it to Abdullah.

## Case 8.7 Sathvahana Ispat Ltd.

## LO 7 MEDIUM

Sathvahana Ispat Ltd is a listed company in iron and steel industry, engaged in the manufacture and sale of pig iron, ductile iron pipes, and also metallurgical coke - an input material for pig iron. Below is the profit and loss account for the year ended March 31, 2015. The employee benefit expenses relate to direct and indirect in ratio of $60: 40$. Please prepare the manufacturing account out of the following Notes to Statement of Profit and Loss A/c.

Notes to Statement of Profit and Loss

|  |  | $\begin{array}{r} \text { For the } \\ \text { year ended } \\ 31^{\text {st }} \text { March } 2015 \end{array}$ | $\begin{array}{r} \text { For the } \\ \text { year ended } \\ \text { 31 }{ }^{\text {st }} \text { March } 2014 \end{array}$ |
| :---: | :---: | :---: | :---: |
| 21 Sale of Services: <br> Job work services | ₹ | 0 | 815181 |
| 22 Other Operating Income: <br> Sale of scrap arising out of manufacturing process | ₹ | 13454 | 6644 |
| 23 Other Income: |  |  |  |
| (a) Interest income | ₹ | 46417058 | 69530673 |
| (b) Dividend income from long-term non-trade investments | ₹ | 5198 | 73292 |
| (c) Profit on sale of long term investments | ₹ | 88782 | 17570 |
| (d) Sale of other scrap | ₹ | 3753181 | 12581079 |
| (e) Provision for liabilities no longer required written back | ₹ | 0 | 125761 |
| (f) Provision for doubtful debts no longer required written back | ₹ | 3695562 | 357627 |
| (g) Provision for doubtful advances no longer required written back | ₹ | 5750000 | 18851 |



| (c) |  | tribution to employee state insurance | ₹ | 256326 | 257147 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (d) |  | welfare expenses | ₹ | 7227344 | 5788905 |
|  |  |  | ₹ | 220192290 | 181489716 |
| 28 | Other Expenses: |  |  |  |  |
|  | (i) | Consumption of stores and spare parts | ₹ | 89166212 | 53923120 |
|  | (ii) | Power and fuel | ₹ | 65813657 | 71912660 |
|  | (iii) | Rent | ₹ | 4909853 | 4655088 |
|  | (iv) | Repairs to buildings | ₹ | 494181 | 1219491 |
|  | (v) | Repairs to machinery | ₹ | 118095053 | 109400878 |
|  | (vi) | Repairs to others | ₹ | 787537 | 857664 |
|  | (vii) | Insurance | ₹ | 18300311 | 17694771 |
|  | (viii) | Rates and taxes, excluding taxes on income | ₹ | 5337255 | 7713027 |
| (ix) |  | Payments to auditors: |  |  |  |
|  |  | (a) As audiutors | ₹ | 1200000 | 1200000 |
|  |  | (b) As tax auditors | ₹ | 600000 | 600000 |
|  |  | (c) For taxation matters | ₹ | 200000 | 400000 |
|  |  | (d) For quarterly reviews | ₹ | 945000 | 750000 |
|  |  | (e) For certification | ₹ | 591180 | 679522 |
|  |  | (f) For reimbursement of expenses | ₹ | 250698 | 217446 |
|  |  | (g) Total fees | ₹ | 3786878 | 3846968 |
|  | (x) | Printing and stationery | ₹ | 1192834 | 1962852 |
|  | (xi) | Communication expenses | ₹ | 3475132 | 1870934 |
|  | (xii) | Advertisement | ₹ | 233664 | 259085 |
|  | (xiii) | Traveling and conveyance | ₹ | 5509560 | 5169693 |
|  | (xiv) | Vehicle maintenance | ₹ | 9758803 | 15171279 |
|  | (xv) | Legal and professional charges | ₹ | 6930612 | 8158843 |
| (xvi) |  | Net loss on foreign currency transaction and translation (other than considered as finance cost) | ₹ | 152787200 | 356391062 |
|  | (xvii) | Donations | ₹ | 223260 | 480280 |
|  | (xvii) | Bad debts written off | ₹ | 5244368 | 480074 |
|  | (xix) | Provision for doubtful debts | ₹ | 0 | 4129261 |
|  | (xx) | Provision for doubtful advances | ₹ | 25000000 | 0 |
|  | (xxi) | Carriage and freight | ₹ | 192541562 | 162585478 |
|  | (xxii) | Discounts | ₹ | 13336742 | 25781890 |
|  | (xxiii) | Directors fees | ₹ | 447000 | 347000 |
|  | (xxiv) | Bank charges | ₹ | 4439705 | 778369 |
|  | (xxv) | Commission on sales | ₹ | 15052798 | 18559741 |
| (xxvi) |  | Provision for diminution in value of long term investments | ₹ | 0 | 156799 |
|  | (xxvii) | Miscellaneous expenses | ₹ | 39247827 | 38045827 |
|  | (xxviii) | Prior year adjustments (net) | ₹ | 182885 | 1003502 |
|  |  |  | $₹$ | 782294889 | 912555636 |

Source: BSE India: Sathvahana Ispat Ltd Annual Reports, BSE India, Web, 27 Feb. 2015.

## Case 8.8 The $A$ to $Z$ of Accounting

## LO 1,2 DIFFICULT

A young graduate from Birla Institute of Technology (BIT)-Ranchi, Anand, patents a design for a life saving injection for a dreaded disease. Devoid of cash, he is not able to commercialize his innovation. Another graduate from BIT, Srinivas, offers to buy out this patent for a sum of ₹A. The scientist Anand, however, is not interested in an outright sale. Meanwhile, Srinivas and a room acquaintance of Srinivas, decide to start a private company to manufacture biomedical equipment. They are on the lookout for a patent and identify Anand. They offer to commercialize his product and acquire rights to the design. In return, they offer to pay Anand a sum of ₹ B for each unit of the product sold.

Srinivas and XXX bring in ₹ C each as capital and start the company as, Handsome Inc. A bank gives them a loan of ₹ D to start their venture. This loan has to be paid back in 5 equal instalments, starting from the first year-end. This amount is deposited in a current account in the company's name. The interest is to be paid on the first of every month for the previous month at the rate of $18 \%$ p.a. on the principal remaining. The bank also grants them an overdraft facility of ₹ E .

Handsome Inc. buys up land worth ₹ F . The company pays ₹ G as down payment and agrees to pay the balance in five instalments of ₹ $H$ each, every year. A building worth ₹ I is constructed on this site. The useful life of the building is 10 years and the salvage value is $₹ \mathrm{~J}$. The depreciation is applied on the WDV method at the rate of $20 \%$ p.a.

The company buys machines worth ₹ K . While transporting these machines to the factory site, some damages occur, which have to be repaired at a cost of ₹ L. The agency in charge of installation of these machines submits a bill of ₹ $M$ to the company. Meanwhile, due to a technological breakthrough, the cost of these machines in the market plummet to one fourth their previous value.

The company buys raw material for ₹ N . The cost of transporting these to the company warehouse is ₹ O .

The company reflects on its strategy and decides to come up with an improvement to the injection. A consultant works on this project for six months and comes up with the 1.2 version of the injection. He charges the company ₹ P for this project. However, the company decides that it will not introduce this product till next year.

The company has some excess funds and is looking for ways to use them. A broker offers some stock market tips and charges the company ₹ Q . The company makes an investment in the stock market worth ₹ R .

The company pays out ₹ S to its employees as salary in cash. The other expenses for the company amount to ₹ T for the first year.

The company decides to ascertain its financial position at the end of year 1 . The accountant of the company comes up with the following additional information:

- The cash and bank balance of the company amount to ₹ AA.
- The company owes ₹ BB to its suppliers.
- Only $20 \%$ of the inventory has been processed.
- All processed inventory has been sold for ₹ CC.
- The customers owe the company ₹ DD. One of its customers, Vikram, who owes ₹ DDD has a financial crisis.
- The company has made losses for the current year at ₹ U .
- The company during the start of its operations has paid ₹ V in insurance and license expenses for four years.
The accountant draws up the balance sheet as on the last day of the first year of operations. The same day, some unforeseen events take place. The investments that the company has made in the stock
market fluctuate wildly and settle at ₹ W . One of the partners sees an opportunity in some other venture and decides to pull out. He sells off his stock in the company in the market at a profit of ₹ X. UNICEF recognizes the importance of this product and awards ₹ Y in cash to the company. However, a professor of BIT Ranchi charges Anand and the company of stealing his innovation. He files a suit claiming damages of ₹ Z each, from Anand and Handsome Inc.

Srinivas asks the accountant to incorporate these developments into the balance sheet of the company immediately. The accountant, however, is thoroughly confused with these developments and messes up these figures. Srinivas has an important meeting with a financial institution for an additional loan of ₹ ZZ and wants the balance sheet immediately. Help Srinivas draw up the balance sheet in the format given below (fill in the blanks).

If you choose to ignore any of the data given, explain why in the space given below:
State all your assumptions clearly (item-wise) in the space given below:

| Assets | Amount | Liabilities | Amount |
| :---: | :---: | :---: | :---: |
| Current Assets |  | Current Liabilities |  |
| Cash and Bank Balance |  | Accounts Payables |  |
| Accounts Receivable |  | Other CL (mention |  |
| Inventory |  | Other CL (mention ___) |  |
| Loans and Advances |  | Other CL (mention ___ |  |
| Fixed Assets |  | Long-term Liabilities |  |
| Land |  | Bank Loan |  |
| Building |  | Other LTL (mention ___) |  |
| Machinery |  | Other LTL (mention ___) |  |
| Patents |  | Other LTL (mention ___) |  |
| Other Assets |  | Capital Account (mention details) |  |
| Investments |  |  |  |
| Deferred Revenue Expenditure |  |  |  |
| Total |  | Total |  |

## Case 8.9 Investing Time in Investments of Mukand Engineers

## LO 4 DIFFICULT

As the name reflects, Mukand Engineers Limited (henceforth, Mukand) is a Mumbai-based Engineering Construction company. Neelkanth was holding a few equity shares of the company and was not happy with its share price movements. Almost every day he would look at his portfolio at moneycontrol.com and observe that the share prices of Mukand had reached some sort of a steady state. Mukand was part of "Bajaj Group." The promoters of the company i.e., Bajaj Group owned nearly $54 \%$ stake inside the company. The stake was held primarily through two group affiliate firms i.e., Mukand Limited $32 \%$ and Jamnalal \& Sons Pvt. Limited 11\%.

One fine day, Neelkanth's wife, Vijaya Lakshmi received the mail for the day and it included the FY2010 annual report of the company. The standalone FY2010 balance sheet of the company showed the book value of investments as ₹176 lakh, same as the previous year. Neelkanth, being a vela, then went to the relevant schedule of investments and found the following:

|  | (Rupees) | $\begin{gathered} \text { March 31st } \\ 2010 \\ \text { (Rupees) } \end{gathered}$ | $\begin{gathered} \text { March 31st } \\ 2009 \\ \text { (Rupees) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 5. Investments |  |  |  |
| Long-term Investments (At Cost/Book Value): |  |  |  |
| Other than Trade: |  |  |  |
| Nos. of Shares: |  |  |  |
| Unquoted: |  |  |  |
| Indian Thermal Power Limited |  |  |  |
| 7,153 Equity Shares of Rs 10 each, fully paid up | 71,530 |  | 71,530 |
| Less: Provision for Diminution in value | $(71,530)$ |  | $(71,530)$ |
|  |  | - | - |
| Quoted: |  |  |  |
| Mukand Limited@ |  |  |  |
| 681,200 Equity Shares of Rs 10 each, fully paid up | 17,036,812 |  | 17,036,812 |
| Mukand Limited |  |  |  |
| 52,400 0.01\% Cummulative Redeemable Preference |  |  |  |
| Shares of Rs 10 each, fully paid up |  |  |  |
|  | 524,000 |  | 524,000 |
|  |  | 17,560,812 | 17,560,812 |
|  |  | 17,560,812 | 17,560,812 |

Notes:

1. Market value of quoted investments as at 31-03-2010 ₹ $45,260,500$, as at $31-03-2009 ₹ 15,727,336$
2. All the above investments have been classified by the Company as "Long-term Investments" in view of its intention to hold the same on long-term basis.
${ }^{@}$ Pledged as collateral security against working capital facilities availed from Central Bank of India
Source: BSE India: Mukand Engineers Limited Annual Reports, BSE India, Web, 2 March. 2015.
Neelkanth's eyes lit up after looking at these numbers - he was convinced that there was lot of value in the company waiting to be unlocked. He started imagining how the shares prices of his investments will shoot up once the stock markets reflect the unlocking of value. Suddenly, Vijaya Lakshmi took away the annual report from his hands. A surprised Neelkanth shouted at her and she came back stating that her needs for Mukand's annual report were more urgent - as she wanted to use it to plug the leakage from the drainage pipe. She further argued that Mukand Engineering never performed well and this company's shares were only worth plugging drainage and started cribbing about the poor stock performance of the company.

Case Questions
(a) Whom would you side with - Neelkanth or Vijaya Lakshmi? Why? Discuss.
(b) Based on the discussion given in the chapter, what would be the accounting treatment for these figures mentioned above? Will you like to make any changes - discuss and suggest.
(c) Chapter 9 discusses the relevant accounting standards. Identify the few that are applicable to the case above. Is the treatment meted out - appropriate or not? Does the same change - if we try to implement the relevant IAS (part of IFRS) in the above situation? Discuss and comment.
(d) From a promoter-owners perspective, what do you think - these investments might be reflecting for them? How does this differ from Neelkanth's or Vijayalakshmi's views on the company? Will the unlocking of value even happen? Comment.

## Case 8.10 Inventories and Investments of MRO-TEK <br> LO 2,4,7 DIFFICULT

Founded in 1984 by S. Narayanan and H. Nandi, MRO-TEK started with the initial focus on network computing with indigenously developed Line Drivers and Modems. The company became a leader in the networking and last mile access segment.

In a span of 24 years, MRO-TEK has evolved and grown from revenue of a mere ₹ 2 lakhs to $₹ 1.3$ billion. Lately, the firm has been hurt due to the aggressive growth of the wireless technologies. This has led to a negative growth and erratic performance in the company for the last few years.

We probe into FY2005-06 numbers of the firm's inventories, receivables, and investments.
From the FY2006 Annual Report of MRO-TEK Limited

|  | March 31, 2006 ₹ | March 31, 2005 ₹ |
| :---: | :---: | :---: |
| SCHEDULE - 6 Investments |  |  |
| Long-term trade, unquoted, at cost |  |  |
| -in Equity Shares of RAD-MRO Manufacturing Private Limited, Bangalore | 72,52,000 | 72,52,000 |
| 7,25,200 equity shares of ₹10 each, fully paid up |  |  |
| -in Shares of MRO-TEK Singapore PTE LTD. | NIL | 1,52,967 |
| 40,000 equity shares of Singapore \$ 1 each, fully paid up |  |  |
| (Cost ₹10,66,600 -Diminution in Value ₹ $10,66,600$ ) |  |  |
| -SBI MF (Magnum Insta Cash Fund) | 1,00,174 | - |
| (9,471 Units @ ₹10.58 Per unit Market value ₹ $1,00,250$ ) | 73,52,174 | 74,04,967 |
| SCHEDULE - 7 Inventories |  |  |
| Raw Material | 7,47,49,096 | 10,82,42,264 |
| Work-in-progress | 4,14,12,759 | 1,13,90,181 |
| Finished Goods |  |  |
| - Manufactured | 12,18,38,755 | 7,81,90,004 |
| - Traded | 10,56,48,939 | 11,86,01,010 |
| Goods in transit | 21,64,918 | 37,22,297 |
| Bonded Stock | - | 2,64,54,016 |
|  | 34,58,14,467 | 34,65,99,772 |
| SCHEDULE-8 Sundry Debtors |  |  |
| (Unsecured and considered good) Debts Outstanding for a period exceeding |  |  |
| -Six months | 66,47,937 | 71,46,520 |


| -Other Debts | $23,82,38,313$ | $26,91,76,921$ |
| :--- | ---: | ---: |
|  | $24,48,86,250$ | $27,63,23,441$ |
| Less: Inward LC Discount A/c | $68,24,500$ | - |
| Less: Provision for Bad and doubtful debts | $18,62,750$ | - |
|  | $23,61,99,000$ | $27,63,23,441$ |


| SCHEDULE-14 Cost of Goods Sold | 31 March 2006 | 31 March 2005 |
| :---: | :---: | :---: |
| (a) Raw materials |  |  |
| Opening Stock | 10,82,42,264 | 9,67,85,202 |
| Add: Purchases and direct costs | 43,97,86,108 | 29,98,14,392 |
|  | 54,80,28,372 | 39,65,99,594 |
| Less: Closing Stock | 7,47,49,096 | 10,82,42,264 |
|  | 47,32,79,276 | 28,83,57,330 |
| (b) Traded Goods |  |  |
| Opening Stock | 11,86,01,010 | 12,74,49,727 |
| Add: Purchases and direct costs | 48,84,95,527 | 49,14,36,445 |
|  | 60,70,96,537 | 61,88,86,172 |
| Less: Closing Stock | 10,56,48,939 | 11,86,01,010 |
|  | 50,14,47,598 | 50,02,85,162 |
| (c) Increase/(Decrease) in Value of Stocks |  |  |
| Opening Stock |  |  |
| -Semifinished goods | 1,13,90,181 | 2,97,29,707 |
| -Finished goods manufactured | 7,81,90,004 | 7,30,11,035 |
|  | 8,95,80,185 | 10,27,40,742 |
| Closing Stock |  |  |
| -Semifinished goods | 4,14,12,759 | 1,13,90,181 |
| -Finished goods manufactured | 12,18,38,755 | 7,81,90,004 |
|  | 16,32,51,514 | 8,95,80,185 |
|  | (7,36,71,329) | 1,31,60,557 |
| Cost of Goods Sold (a+b+c) | 90,10,55,545 | 80,18,03,049 |

The company's notes to above schedules included the following text:

## Inventories:

(a) Raw Materials, Finished (Traded) Goods \& Goods in Transit are valued at lower of cost and netrealizable value, on First-In, First-Out basis.
(b) Semi-Finished Goods and Finished (manufactured) Goods, are valued at lower of cost (including an appropriate portion of overheads up to the respective stage/s of completion) and, net realizable value, on First-In, First-Out basis.
Raw-materials includes a sum of ₹ NIL (₹42,498), being the value of material with Sub-Contractors.

Finished Goods includes
(a) ₹ $10,05,506$ ( $₹ 37,98,774$ ), being value of material for demonstration purposes at prospective customers' premises.
(b) ₹ 38,646 ( $₹ 28,78,738$ ), being value of material for rectification purposes, at suppliers' premises.

## Investments:

Investments are classified as current investments and long-term investments. Long-term investments are stated at cost (except where there is a diminution in value other than temporary, in which case, the carrying value is reduced to recognize the decline). Current investments are stated at lower of cost or fair market value.

## Diminution in Value of Investments:

During the year, the company has provided for diminution in the value of Long-term Investments in Share Capital of MRO-TEK (Singapore) Ate. Ltd., Singapore, the Joint Venture Company, to the extent of $₹ 1,53,967$ (₹ NIL), being the decline in the value of investments, other than temporary decline, Consequent upon filing of an application filed with the respective authorities, for voluntary winding up of the said Company.

## Sundry Debtors

Sundry Debtors reflected under schedule 8 is net of ₹ $68,24,500$, being value of Letters of Credit received from the company's customers discounted with the Bank.

Source: BSE India: MRO-TEK Limited Annual Reports, BSE India, Web, 2 March. 2015.

## Case Questions

(a) What are the new terms you come across in the above excerpts of MRO-TEKs annual report?
(b) What are the significant changes in the long-term investments of the company? Can you write accounting records for the above changes? Are the changes good or bad? Discuss.
(c) What are the significant changes in the accounts receivable of the company? What do the terms "Inward LC Discount" and "Provision for Bad and Doubtful Debts" mean? Comment on their mmpact? Should a company have more of such items? Discuss
(d) As part of its inventories and cost of goods sold, why is the company having three opening stocks and closing stocks? What is the significance of these items? Inside the company what would be the process of finalizing the inventory and cost of goods sold details of the company?

## INTERNET ASSIGNMENTS

## Assignment 8.1 Accounting Issues for Larger Entities

On the website of this book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies
and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online website.

Your eighth assignment would answer the following two questions:

- Identify and discuss the Inventory Valuation policies adopted by the company in comparison to its peers (within 200 words).
- Identify and discuss the Depreciation and Amortization policies adopted by the company in comparison to its peers (within 200 words).


## Answers

## Answers to the "Let's Check Our Concepts!"

(a) True
(b) False
(c) True
(d) True
(e) False
(f) False
(g) True
(h) True
(i) True
(j) False

## Answers to Activity 7

Note: While there can be multiple answers in the above match the following, we are providing the most appropriate matches herein:

1. Direct Labour
2. Direct Material
3. Direct Expenses
4. Direct Labour
5. Direct Material
6. Factory Overheads.

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 8.1: Solved Illustration
- Annexure 8.2: Additional Reading Material
- Annexure 8.3: Auxiliary Test Material
- Annexure 8.4: Sample Assignment Reports

Accounting Standards

Learning Objectives
After studying this chapter, you should be able to:
LO 1 Know about the functions of Accounting Standards Board (ASB) and creation of Indian Accounting Standards (Ind-AS)
LO 2 Compare IFRS and Ind-AS
LO 3 Understand the presentation and disclosure requirements of Ind-AS focusing on an overall perspective
LO 4 Generate important insights on Ind-AS
LO 5 Explain few other important Indian Accounting Standards

ICAI Accounting Format for Political Parties
In June 2015, the ICAI had organized a programme on Financial Reporting Practices for the Political Parties at New Delhi. It was attended by the auditors of 27 parties and blessed by big names including none other than the Chief Election Commissioner, Dr. Nasim Zaidi.

It was explained that concerns have been raised in various quarters about the quantum and nature of expenditure incurred in conducting free and fair elections. So, the political parties are accountable for funds raised and expenditure incurred which, in turn, has made the role of accounting and auditing professionals more critical in lending credibility to the financial statements. Further, the participants were stressed that the financial statements of political parties should conform to 'Guidance Note on Accounting and Auditing of Political Parties' as mandated by 'Guidelines on transparency and accountability in party funds and election expenditure', issued by Election Commission of India.

It was highlighted that the Guidance note recommends the accrual basis of the accounting to be followed by the political parties in the preparation of their financial statements. Also, the Accounting Standards issued by the ICAI to be charted in preparation of financial statements by the political parties.

Key invitees agreed that detailed disclosures would foster confidence of various stakeholders. ICAI highlighted the responsibility of auditor vis-a-vis their limitations in conducting audit. Similarly, the ICAI was in talks with the Ministry for Human Resource Development to implement a uniform accounting system for universities and colleges. I'm sure, you'll agree that such incredible initiatives bring many interesting questions to the manager in you, such as:

- Why should the ICAI get involved with political parties?
- How will creation of accounting norms help in transparency and accountability?
- Why co-create something so niche along with the Government of India bureaucrats?
- What is so different about these norms (from the other accounting standards created by the ICAI)?
- What if, a particular auditor does not adhere to such auditing norms?

The typical queries there do raise interest in knowing the process of creating the accounting standards. It also raises our curiousness on knowing specifics of the fundamental accounting standards. Our discussion in this chapter provides a few pointers to them and should act as food for thought.

Source: ICAI Press Release - Programme organized on Financial Reporting Practices for Political Parties, icai, web, 25 June 2015 and Workshop on election expenditure monitoring and Auditing and Accounts of Political Parties, icai, web, 10 March 2014.

> As we start this chapter on accounting standards (and as you would have realized) - let me ask you one question: why do accountants make good lovers and yet they avoid reading romantic novels? I'm sure you would have realized - that it is because they are great with numbers and love numbers. Jokes apart! Accounting is a language that communicates the performance and financial position of any organization, to the interested parties.

At this stage, many of us would agree to the fact that accounting is all about capturing, recording, configuring, analyzing and reporting financial data. This is how the performance of an organization is communicated to the internal as well as external stakeholders. Like knowing the rules of playing cricket or football is imperative for the spectators of the game, the users of the financial statements are required to know the basic rules of the preparation and presentation of the financial data in order to derive meaningful information out of the statements. The accounting standards are the rules based upon which the accounts of any company are expected to be prepared.

In Chapter 1, we have seen that the accounting practices followed by different countries are based upon the GAAP of that country. Accordingly, financial statements are prepared by different types of entities and in the process, different groups follow different sets of rules for preparing and presenting these financial statements, therein creating possibilities of confusions in the era of liberalization and globalization of not just companies but also of investors. For example, readers should be aware that a Bharti Airtel or ICICI Bank are more of foreign entities with Indian tags vis-à-vis a Jaguar Car being an Indian product. Also,
this type of differential accounting creates problem for the organizations that operate in more than one country as the financial reports are required to be re-stated as per the requirements of the reporting country. Hence, there came the need for common International Accounting Standards and convergence to IFRS.

The basic rules for preparing and presenting the financial statements kept on changing with the passage of time and the experience of the accountants practicing it. These changes were largely catalysed by the changing business environment across the globe. As a result, in the modern day, there are a large set of norms based upon which the accounts are prepared. For this purpose, several accounting standard setting bodies were established in large developed and developing countries.

The accounting standards suggest the rules for recognition, measurement, treatment, presentation and disclosure of accounting transactions in the financial statements of an organization. It facilitates the disclosure of financial information that is important, but not required to be disclosed by law.

Since most countries were coming out with their own versions of accounting standards, it became more and more difficult to prepare, interpret, and compare financial statements of companies, especially in case of transnational operations. Some of these transnationals were using these different versions of accounting standards for their self-gains (see Chapter 1, case on Lehman Brothers). Additionally, (as already discussed in Section 1.13), the constantly growing pressures of globalization forced a need to harmonize different accounting policies and practices followed by different groups, so that the confusion and complexities are minimized, and thus, led to steady acceptance of the International Accounting Standards Board (IASB)'s initiatives.

It led to the drafting and adoption of the International Financial Reporting Standards (IFRS) which are designed as global language for business affairs so that the company accounts are understandable and accountable (see Annexure 9.1 on the Online Learning Centre i.e., OLC for more). India instead of adopting IFRS has adopted converged Indian accounting standards (Ind-AS), i.e., it has not completely adopted IFRS but converged the same in light of Indian laws, rules and regulations. Indian Accounting Standards are issued by the Institute of Chartered Accountants of India (ICAI) under the guidance and supervision of Accounting Standards Board (ASB) (see Annexure 9.2 on the OLC for the specifics).

### 9.1 INDIAN ACCOUNTING STANDARDS

Know about the functions of Accounting Standards


The council of the Institute of Chartered Accountants of India (ICAI) constituted the Accounting Standards Board (ASB) in April 1977, which performs the functions of preparation of the accounting standards in India. The ASB comprises of representatives from industries, the Central Board of Direct Taxes, the Company Law Board, the Comptroller and Auditor General and other parties such as Practicing Chartered Accounts, who are concerned with the accounting standards.
The ASB determines by the areas in which the accounting standards are required to be prepared. In the preparation of the accounting standards, help is taken from different study groups having specialization in the related subjects. The study groups comprise the members of the ICAI and other related bodies.

## SPOTLTGHIT 9.1

## Functions / Objectives of the Accounting Standards Board

- To conceive of and suggest areas in which Accounting Standards need to be developed.
- To formulate Accounting Standards with a view to assisting the Council of the ICAI in evolving and establishing Accounting Standards in India.
- To examine how far the relevant International Accounting Standards can be adapted while formulating the Accounting Standard and to adapt the same.
- To review, at regular intervals, the Accounting Standards from the point of view of acceptance or changed conditions, and, if necessary, revise the same.
- To provide, from time to time, interpretations and guidance on Accounting Standards.
- To carry out such other functions relating to Accounting Standards.

The process starts by the preparation of an exposure draft of the proposed accounting standard, which is circulated to the members of the ICAI, Institute of Cost and Works Accountants of India (ICWAI), Institute of Company Secretaries of India (ICSI), Central Board of Direct Taxes, Comptroller and Auditor General (CAG) of India, various industry associations, such as the Confederation of Indian Industries (CII), and other interested groups. This exposure draft on the accounting standards includes various points such as:
(a) Applicability of the accounting standards;
(b) Concepts and principles relating to accounting standards;
(c) Definition and meaning of the terms used in the accounting standards;
(d) Disclosure requirements; and
(e) Date from which the accounting standard will be effective.

After receiving the comments on the exposure draft, the accounting standard is finalized by the ASB and is submitted to the council of ICAI for its approval. The council considers the draft, makes the amendments, if necessary, and finally, issues the accounting standard. The accounting standard thus issued is recommendatory in its initial period and made mandatory after some time (after updating the standard with the feedback received).

This led to 32 accounting standards being issued till 2011 by the ASB in India. The implementability and importance of the accounting standards has increased in the recent decades due to recent amendments in the Companies Act making, the adoption of the accounting standards a regulatory need.

In other words, the Ind-AS are issued in place of the prevailing accounting standards to be in line with IFRS. So, Ind-AS are issued by the ICAI under the guidance and supervision of Accounting Standards Board. The Ind-AS are named and numbered in the same way as IFRS. The National Advisory Committee on Accounting Standards (NACAS) recommends these standards to the Ministry of Corporate Affairs (MCA). The MCA spells out the accounting standards applicable for companies in India. As on February 2016, the Government of India, MCA notified 39 Indian Accounting Standards (Ind-AS). This shall be applied to the companies of financial year 2015-16 voluntarily and from 2016-17 on a mandatory basis.

The Ind-AS were issued to comprehend with the IFRS and bring harmony in the preparation and presentation of the Financial Statements and reduce the number


To know more on "Lower (Short-term) Profits Challenge Towards a Path of Change, IFRS " scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/556
of diverse practices prevailing in the country (Table 9.1). Thus, the diverse practices and business environment that India has, IFRS were modified to Ind-AS. For example, given the complexity of balance sheets of banking and financial institutions - there is a delay in Ind-AS related to their numbers. Based on the international consensus, the regulators will separately notify the date of implementation of Ind-AS for the banks, insurance companies etc. Standards for the computation of tax would be notified separately.

### 9.2 INTERNATIONAL FINANCIAL REPORTING STANDARDS



International Financial Reporting Standards (IFRS), designed as a common global language for business affairs, so that company accounts are understandable and comparable across international boundaries. They are a consequence of growing international shareholding and trade and are particularly important for companies that have dealings in several countries. They are gradually replacing the many different national accounting standards. They are the rules to be followed by accountants to maintain books of accounts which are comparable, understandable, reliable and relevant as per the users internal or external.

IFRS began as an attempt to harmonize accounting across the European Union but the value of harmonization quickly made the concept attractive around the world. Today most of the countries have adopted the IFRS as it is, i.e., without


To know more on "Given Ind-AS and IFRS, Suggestions for India Inc's Audit Process" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/557 making any changes and a few countries, like India are adopting the converged IFRS. As discussed, the financial reporting framework in India has undergone major changes recently. These changes are likely to have impact on how a company accounts for and reports the financial results of its operations. In this section, we list the Ind-AS issued till February 2016 along with the comparable IRFS (Table 9.1); and the ensuing importance of the accounting standards. Convergence means alignment of the standards of different standard setters with a certain rate of compromise, by adopting the requirements of the standards either fully or partially.

Thus, the need for Ind-AS can be understood in two different parts: (a) there must be a need to Change or Transition (given the circumstances); and (b) it has to be towards a process of Adoption or Convergence to IFRS. It brings in Better comparability and Better transparency.

The next few sections will discuss some of the important AS and clarify them. To ensure that you have the latest update on accounting standards, we have made use of the information provided by the ICAI.

Table 9.1 Comparison of IFRS and Ind-AS (as on Feb. 2016)

| SI. No. | IFRS / IAS No. | India <br> Accounting <br> Standard | Name |
| :---: | :---: | :--- | :--- |
| 1 | IAS 1 | Ind-AS 1 | Presentation of Financial Statements |
| 2 | IAS 2 | Ind-AS 2 | Inventories |
| 3 | IAS 7 | Ind-AS 7 | Statement of Cash Flows |
| 4 | IAS 8 | Ind-AS 8 | Accounting Policies, Changes in <br> Accounting Estimates and Errors |


| 5 | IAS 10 | Ind-AS 10 | Events after the Reporting Period |
| :---: | :---: | :---: | :---: |
| 6 | IAS 11 | Ind-AS 11 | Construction Contracts |
| 7 | IAS 12 | Ind-AS 12 | Income Taxes |
| 8 | IAS 16 | Ind-AS 16 | Property, Plant and Equipment |
| 9 | IAS 17 | Ind-AS 17 | Leases |
| 10 | IAS 18 | Ind-AS 18 | Revenue |
| 11 | IAS 19 | Ind-AS 19 | Employee Benefits |
| 12 | IAS 20 | Ind-AS 20 | Accounting for Government Grants and Disclosure of Government Assistance |
| 13 | IAS 21 | Ind-AS 21 | The Effects of Changes in Foreign Exchange Rates |
| 14 | IAS 23 | Ind-AS 23 | Borrowing Costs |
| 15 | IAS 24 | Ind-AS 24 | Related Party Disclosures |
| 16 | IAS 26 | * | Accounting and Reporting by Retirement Benefit Plans |
| 17 | IAS 27 | Ind-AS 27 | Consolidated and Separate Financial Statements |
| 18 | IAS 28 | Ind-AS 28 | Investments in Associates |
| 19 | IAS 29 | Ind-AS 29 | Financial Reporting in Hyperinflationary Economies |
| 20 | IAS 31 | Ind-AS 31 | Interests in Joint Ventures |
| 21 | IAS 32 | Ind-AS 32 | Financial Instruments: Presentation |
| 22 | IAS 33 | Ind-AS 33 | Earnings per Share |
| 23 | IAS 34 | Ind-AS 34 | Interim Financial Reporting |
| 24 | IAS 36 | Ind-AS 36 | Impairment of Assets |
| 25 | IAS 37 | Ind-AS 37 | Provisions, Contingent Liabilities and Contingent Assets |
| 26 | IAS 38 | Ind-AS 38 | Intangible Assets |
| 27 | IAS 39 | Ind-AS 39 | Financial Instruments: Recognition and Measurement |
| 28 | IAS 40 | Ind-AS 40 | Investment Property |
| 29 | IAS 41 | ** | Agriculture |
| 30 | IFRS 1 | Ind-AS 101 | First-time Adoption of Indian Accounting Standards |
| 31 | IFRS 2 | Ind-AS 102 | Share based Payment |
| 32 | IFRS 3 | Ind-AS 103 | Business Combinations |
| 33 | IFRS 4 | Ind-AS 104 | Insurance Contracts |
| 34 | IFRS 5 | Ind-AS 105 | Non-current Assets Held for Sale and Discontinued Operations |
| 35 | IFRS 6 | Ind-AS 106 | Exploration for and Evaluation of Mineral Resources |

(Contd.)

| 36 | IFRS 7 | Ind-AS 107 | Financial Instruments: Disclosures |
| :--- | :--- | :--- | :--- |
| 37 | IFRS 8 | Ind-AS 108 | Operating Segments |
| 39 | IFRS 9 | $* * *$ | Financial Instruments |

Note: * Ind-AS corresponding to IAS 26, Accounting and Reporting by Retirement Benefit Plans, has not been placed on MCA's website as this standard is not applicable to companies; ** Ind-AS corresponding to IAS 41, Agriculture, is being redrafted; *** It has been decided that Ind-AS corresponding to IFRS 9, Financial Instruments, should not be issued since it was felt that it was incomplete; instead of this standard, Ind-AS 39 has been issued.

## SPOTLTGHT 9.2

## "Why did India go for Convergence to IFRS instead of Complete Adoption?"

One of main reason in any changes in the IFRS would have been the impact on the books of Indian companies; it would be hard for Indian companies to adopt or cope up with the IFRS as and when amended. Further, the whole process needs cultural shift in thought process, plus consensus building and training among the ICAI members, i.e., the auditors and key accounts personnel of all organizations.

At the same time, India is a multi-regulator nation. In India, there are many regulatory bodies such as, Companies Act, 2013, Income Tax Act, Securities Exchange Board of India (SEBI), Insurance Regulatory and Development Authority (IRDA), and the Reserve Bank of India (RBI). To welcome the change in IFRS, the respective Rules and Regulation must be amended accordingly, which can be time consuming. If the changes in IFRS are not in consensus with the Rules and Regulations, then there will be chaos in the corporate reporting. So, introduction of Ind-AS is a way to buy some time to analyze the situation of change with a view to take necessary action by Ministry of Corporate Affairs as it thinks fit (see implementation Annexure 9.3 on the OLC).

### 9.3 PRESENTATION OF FINANCIAL STATEMENTS ${ }^{1}$

## Understand the presentation and disclosure requirements of Ind-AS focusing on an overall perspective

The objective of financial statements is to provide information that is useful in making economic decisions. In that sense, the objective of issuing this Indian Accounting standard (Ind-AS 1) is to promote a better presentation and thus, understanding of the financial statements. This standard prescribes the basis for the presentation of general purpose financial statements in order to ensure comparability both with the entity's financial statements of previous periods and with those of other entities. It sets out overall requirements for the presentation of financial statements, guidelines for their structure and minimum requirements for their content.
Going concern basis: Financial statements are prepared on a going concern basis unless management intends to either liquidate the entity or to cease trading, or has no realistic alternative to do so.

[^62]Accrual basis: Management prepares its financial statements, except for cash flow information, under the accrual basis of accounting. There are minimum disclosures to be made in the financial statements and in the notes under Ind-AS.

An entity shall present a single statement of profit and loss, with profit and loss and other comprehensive income presented in separate sections within the same statement. The sections shall be presented together with the profit and loss section presented first, followed directly by the other comprehensive section.

An entity shall present, with equal prominence, all of the financial statements in a complete set of financial statements. Financial statements disclose corresponding information for the preceding period, unless a standard or interpretation permits or requires otherwise.
Material item: The nature and amount of items of income and expense are disclosed separately where they are material. Disclosure may be in the statement or in the notes. Such income and expenses might include restructuring costs; write-downs of inventories or property, plant and equipment; litigation settlements; and gains or losses on disposals of property, plant and equipment.
Presentation of true and fair view: Financial statements shall present a true and fair view of the financial position, financial performance and cash flows of an entity. The application of Ind-AS, with additional disclosures when necessary, is presumed to result in financial statements that present a true and fair view. Offsetting: An entity shall not offset assets and liabilities or income and expenses, unless required or permitted by Ind-AS. However, the gains or losses may be grouped if items are of similar nature. But in case gains/losses are material, it needs to be disclosed separately.
Balance sheet: The balance sheet presents an entity's financial position at a specific point in time. Subject to meeting certain minimum presentation and disclosure requirements, the management may use its judgement regarding the form of presentation, such as which sub-classifications to present and what information to disclose on the face of the statement or in the notes.

Ind-AS 1 specifies that the following items, as a minimum, are presented on the face of the balance sheet:

- Assets: Property, plant and equipment; investment property; intangible assets; financial assets; investments accounted for using the equity method; biological assets; deferred tax assets; current tax assets; inventories; trade and other receivables; and cash and cash equivalents.
- Equity: Issued capital and reserves attributable to the parent's owners; and non-controlling interest.
- Liabilities: Deferred tax liabilities; current tax liabilities; financial liabilities; provisions; and trade and other payables.
- Assets and liabilities held for sale: The total of assets classified as held for sale and assets included in disposal groups classified as held for sale; and liabilities included in disposal groups classified as held for sale in accordance with Ind-AS 105, 'non-current assets held for sale and discontinued operations'.
- Current and non-current assets and liabilities are presented as separate classifications in the statement, unless the presentation based on liquidity provides reliable and more relevant information.
Statement of profit and loss: The statement of profit and loss presents an entity's performance over a specific period. The statement of profit and loss includes all items of income and expense and includes each component of other comprehensive income classified by nature.


## Items to be presented in statement of profit and loss

- Ind-AS 1 specifies certain items presented in the statement of profit and loss.
- Additional line items or sub-headings are presented in this statement when relevant to an understanding of the entity's financial performance.
- Any item of income or expense is not presented as extraordinary item in the statement of profit and loss or in the notes.
- The expenses are classified in the statement of profit and loss based on the nature of expense.

Other comprehensive income: An entity shall present items of other comprehensive income grouped into those that will be reclassified subsequently to profit or loss and those that will not be reclassified. An entity shall disclose reclassification adjustments relating to the components of other comprehensive income.

An entity presents each component of other comprehensive income in the statement either as: (i) net of its related tax effects, or (ii) before its related tax effects, with the aggregate tax effect of these components shown separately.

An entity needs to also disclose reclassification adjustments relating to components of other comprehensive income.
Statement of changes in equity: The following items are presented in the statement of changes in equity:

- Total comprehensive income for the period, showing separately the total amounts attributable to the parent's owners and to non-controlling interest
- For each component of equity, the effects of retrospective application or retrospective restatement recognized in accordance with Ind-AS 8, 'Accounting policies, changes in accounting estimates, and errors'
For each component of equity, reconciliation between the carrying amount at the beginning and the end of the period, separately disclosing changes resulting from the following:
- Profit or loss
- Other comprehensive income
- Transactions with owners in their capacity as owners, showing separately contributions by and distributions to owners and changes in ownership interests in subsidiaries that do not result in a loss of control
- Any item recognized directly in equity such as capital reserve on bargain purchase in a business combination transaction
The amounts of dividends recognized as distributions to owners during the period, and the related amount of dividends per share, shall be disclosed.

Statement of Cash Flows: Cash flow statements are addressed in a separate summary dealing with the requirements of Ind-AS 7.

Notes to the financial statements: The notes are an integral part of the financial statements. Notes provide information additional to the amounts disclosed in the 'primary' statements. They also include accounting policies, critical accounting estimates and judgements, disclosures on capital and puttable financial instruments classified as equity.

Ind-AS 1 requires disclosures regarding reconciliation between the carrying amount at the beginning and at the end of the period for each component of equity including disclosure regarding recognition of bargain purchase gain arising on business combination in line with the treatment prescribed in this regard in Ind-AS 103. Annexure 9.4 on the OLC shares more information on Ind-AS 1.

## Illustration 9.1

Swastik Ltd. used to prepare its accounts on the accrual basis. But for the year ended on March 31, 20X5, it has decided to maintain its books of accounts on cash basis. Accordingly, it discloses in the financial statements, that the cash basis of accounting is one of its significant accounting policy. As an auditor of the company, do you think the disclosure to be appropriate?

## Solution

The accounting policies to be followed by an organization depend on the size, nature, constitution and level of activities of the business. The management is empowered to use its discretion and judgement in deciding which policies are suitable for the organization under the given circumstances. While the Income Tax Act permits maintenance of books of accounts under either the cash or accrual basis of accounting, Ind-AS 1 requires the books of accounts to be maintained only on accrual basis. Therefore, it is not proper to maintain the books of accounts only on cash basis. As an auditor, the fact that the applicable accounting standards were not being followed by the company, should be clearly mentioned in the report.

## Illustration 9.2

$\mathrm{M} / \mathrm{s}$ XYZ Ltd. Co. had paid a penalty of $\mathrm{F}_{5,500}$ to Excise Department. The said penalty was grouped in the profit and loss account as general expenses as the amount was not material owing to the sales of the company which was ₹ 13.92 crore. Is it correct?

## Solution

Ind-AS 1 on "Presentation of Financial Statements" states that the material items owing to the nature and amount must be disclosed separately. Here the accountant has grouped the penalty paid to Excise department under General expense as it is not material in amount. But owing to the nature of the expense, i.e. penalty the said amount should be disclosed separately.

### 9.4 REGULATIONS FOR INVENTORIES ${ }^{2}$

The objective of this Standard (Ind-AS 2) is to prescribe the accounting treatment for inventories. This Standard provides guidance on the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also provides guidance on the cost formulas that are used to assign costs to inventories.

## Definition of Inventory

Inventories are assets (a) held for sale in the ordinary course of business: Finished goods, (b) in the process of production for such sale: WIP, or in the form of materials or supplies to be consumed in the production process: Raw materials or in rendering of services.

[^63]Inventories are generally recognized at the lower of cost and net realizable value (NRV). NRV is the estimated selling price in the ordinary course of business, less the estimated costs of completion and estimated selling expenses. The related questions can be: (a) What constitutes inventory cost? Cost of inventories includes cost of purchase (less trade discounts and taxes which can be recovered from the taxing authorities), cost of conversion and other cost in bringing the inventory into present location and condition; (b) What are included in other cost? Costs such as import duties, non-refundable taxes, transport and handling costs and any other directly attributable costs, less trade discounts, rebates and similar items are included; and (c) What are excluded from cost? Costs such as abnormal amount of wasted materials, storage costs, administrative costs and selling costs are excluded from the cost of inventories.

## Techniques for Measurement of Inventory

- Standard cost method: This includes normal level of materials and supplies, labor, efficiency and capacity utilization. These are regularly reviewed and revised in light of current conditions.
- Retail price methods: Where the nature of inventory is rapidly changing items with similar profit margins this method may be used for convenience, if the results approximate cost.


## Cost Formulas

(i) Specific identification: Assigned by using specific identification of their individual cost. This can be applied when inventories items are not ordinarily interchangeable and goods or services produced and segregated for specific projects.
(ii) Cost of other inventory items: Assigned by using either the first-in, first-out (FIFO) or weighted average cost formula.
One needs to be aware that Ind-AS 2 does not permit Last-in, first-out (LIFO) method: An entity should apply same cost formula for all inventories of similar nature or use. A different cost formula may be justified where inventories have a different nature or use. The cost formula used is applied on a consistent basis from period to period.
Treatment in case of deferred payment terms: An entity may purchase inventories on deferred payment terms. When the arrangement effectively contains a financing element, that element, for example a difference between the purchase price for normal credit terms and the amount paid, is recognized as interest expense over the period of the financing.

A very interesting related query can be: How is inventory of service provider valued? The inventory of service provider is measured at cost of production. These costs consist primarily of labor and other costs of personnel directly engaged in providing the service, including supervisory personnel and attributable overheads. The cost of inventory does not include profit margins or non-attributable overheads that are often factored into prices charged by service providers.

## Illustration 9.3

Mohan Pyare purchased raw material at ₹ 100 per kg. But due to a continuous decline in the prices, the finished goods in which the raw material was used, are expected to be sold at below cost. The replacement cost is $₹_{70}$ per kg . Mohan has 100 kgs of raw material on March 31, 20X6. What should be the value of his inventory?

## Solution

Generally, the valuation of inventory should be based on the lower of cost and net realizable value, but if the finished products, in which the raw material is used, are sold below cost, then the estimated realizable value of
the raw material is equal to its replacement price. Accordingly, the stock of 100 kg of the raw material, should be valued at the replacement price, that is, $₹_{70}$ per kg and the total amount of inventory would be worth $₹_{7} 7,000$.

## Illustration 9.4

Ambica Toys Ltd. purchased 1,00,000 units of remote cars, during the year $20 \times 6-X_{7}$. The cost per unit of car consists of raw materials of $\mathrm{F}_{100}$, wages of ₹ 50 and other direct expenses of $\mathrm{F}_{25}$ per car. During the year, 10,000, units of the cars remained unsold. All the manufactured cars were placed in a godown, for which a fixed rent of ₹ 12,000 per annum was paid. Further, a commission of ₹ 50 per car was paid to the selling department. What is the value of the stock at the end of the year?

## Solution

According to Ind-AS-2, the cost of inventories comprises the cost incurred in bringing the inventories to the present condition and location. However, the cost does not include abnormal expenses, storage charges, unless they are necessary for the production process, administration costs not related to the raw material and the selling and distribution costs. Thus, the value of the closing stock can be calculated as follows:

| Item | Cost per unit $₹$ | No. of units ₹ | Total cost ₹ |
| :--- | :---: | :---: | :---: |
| Raw Material | 100 | 10,000 | $10,00,000$ |
| Wages | 50 | 10,000 | $5,00,000$ |
| Direct Expenses | 25 | 10,000 | $2,50,000$ |
| Value of Closing Stock |  |  | $17,50,000$ |

The godown rent and commission to the selling department do not contribute in the valuation of the inventories, hence, they are not included for valuation purposes.

Readers may like to visit Chapter 8 cases for real-life illustrations of inventory presentations.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) International Accounting Standard Committee (IASC) is also known as the International Accounting Standards Board (IASB).
(b) The objective of issuing Indian accounting standard (Ind-AS 2) is to determine the value of the stock or inventories to be carried to the financial statements, until the goods are sold and the revenue is recognized.

### 9.5 STATEMENT OF CASH FLOWS ${ }^{3}$

The statement of cash flows (Ind-AS 7) is one of the primary statements in financial reporting (along with the statement of profit and loss, the balance sheet and the statement of changes in equity). It presents the generation and use of 'cash and cash equivalents' by category (operating, investing and financing) over a specific period of time. It provides users with a basis to assess the entity's ability to generate and utilize its cash.

Operating activities are the entity's revenue-producing activities. Investing activities are the acquisition and disposal of long-term assets (including business combinations) and investments that are not cash equivalents. Financing activities are the changes in equity and borrowings. We state cash and cash equivalents as follows:

- Cash - Cash in hand and demand deposits.
- Cash equivalents - Short-term, highly liquid investments (having maturity date within three months) that are readily convertible to known amounts of cash and which are subject to insignificant risk of change in value.
Methods of Cash flow: Cash flows can be prepared by using either direct method (gross cash receipts/ payments) or the indirect method (adjusting net profit or loss for non-operating and non-cash transactions, and for changes in working capital).

Cash flows from investing and financing activities are reported gross separately (that is, gross cash receipts and gross cash payments) unless they meet certain specified criteria. Interest paid and interest and dividends received are classified as financing cash flows and investing cash flows respectively. This is because they are costs of obtaining financial resources or returns on investments. Dividends paid should be classified as cash flows from financing activities because they are costs of obtaining financial resources.

Cash flows relating to taxation on income are classified and separately disclosed under operating activities unless they can be specifically attributed to investing or financing activities. The total that summarizes the effect of the operating, investing and financing cash flows is the movement in the balance of cash and cash equivalents for the period.

Bank borrowings are generally considered as financing activities. However, bank overdrafts, which are repayable on demand form an integral part of an entity's cash management, are included as a component of cash and cash equivalents. Separate disclosure is made of significant non-cash transactions (such as the issue of equity for the acquisition of a subsidiary or the acquisition of an asset through a finance lease). An interesting query can be, What are non-cash transactions? These are transactions such as impairment losses/reversals, depreciation, amortization, fair value gains/losses and income statement charges for provisions.

In case of foreign currency transactions: Cash flow from transactions in a foreign currency shall be recorded in entity's functional currency by applying the exchange rate between the two currencies at the date of cash flow. And, the cash flow of a foreign subsidiary shall be translated at the exchange rates prevailing on the date of cash flow.

However, one can easily make it out that unrealized gains and losses arising from changes in foreign currency exchange rates are not cash flows. However, the effect of exchange rate changes on cash and cash equivalents held or due in a foreign currency is reported in the statement of cash flows in order to reconcile cash and cash equivalents at the beginning and the end of the period. This amount is presented separately from cash flows from operating, investing and financing activities and includes the differences, if any, had those cash flows been reported at end of period exchange rates.

[^64]In case of operating activities, if payments is made for manufacture or acquire assets held for rental to others and subsequently held for sale will be cash flow from operating activities. The cash receipts from the rentals and subsequent sale will also form part of operating activities and not investing activities. Also, in case an entity, holds securities and loans for dealing or trading, they will also be termed as operating activities.

Readers may like to go through Chapter 4 cases for real-life illustrations of cash flow statements.

### 9.6 CHANGES IN ACCOUNTING POLICIES, ESTIMATES AND ERRORS ${ }^{4}$

The objective of this Standard (Ind-AS 8) is to prescribe the criteria for selecting and changing accounting policies, together with the accounting treatment and disclosure of changes in accounting policies, changes in accounting estimates and corrections of errors. Ind-AS 8 is intended to enhance the relevance and reliability of an entity's financial statement and the comparability of those financial statements over time and with the financial statements of other entities.

An entity follows the accounting policies required by Ind-AS relevant to the circumstances of the entity. However, for some situations, standards offer a choice. There are other situations where no guidance is given by Ind-AS. In these situations, management needs to select appropriate accounting policies.

Management uses its judgement in developing and applying an accounting policy that results in relevant and reliable information. Reliable information demonstrates faithful representation, substance over form, neutrality, prudence and completeness. If there is no Ind-AS or interpretation that is specifically applicable, management needs to consider the applicability of the requirements in Ind-AS on similar and related issues, and then the definitions, recognition criteria and measurement concepts for assets, liabilities, income and expenses in the framework.

In making the judgement on the selection of accounting policies, management may also first consider the most recent pronouncements of IASB and in absence thereof, those of the other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices, to the extent that these do not conflict with Ind-AS.

Accounting policies need to be applied consistently to similar transactions and events (unless a standard permits or requires otherwise). Let us now look at the categorical requirements of this Ind-AS.

### 9.6.1 Changes in Accounting Policies

Changes in accounting policies made on adoption of a new standard are accounted for in accordance with the transition provisions (if any) within that standard. If specific transition provisions do not exist, a change in policy (whether required or voluntary) is accounted for retrospectively (that is, by restating all comparative figures presented) unless this is impracticable.

An entity shall change an accounting policy only if the change: (a) is required by an Ind-AS; or (b) results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows. Note that the application of an accounting policy for transactions, other events or conditions that differ in substance from those previously occurring is no change in accounting policy.

### 9.6.2 Changes in Accounting Estimates

Change in accounting estimates - means an adjustment of carrying amount of an asset or liability, which results from the assessment of the present status and expected future benefits and obligations associated

[^65]with it. These changes in accounting estimates result from new information or new developments and accordingly are not correction of errors.

An entity prospectively recognizes changes in accounting estimates by including the effects in profit or loss in the period affected (the period of the change and future periods), except if the change in estimate gives rise to changes in assets, liabilities or equity. In this case, it is recognized by adjusting the carrying amount of the related asset, liability or equity in the period of the change.

### 9.6.3 Prior Period Errors

Humans are prone to making errors. So, errors do arise from mistakes and oversights or misinterpretation of information. Errors discovered in a subsequent period are known as prior-period errors. Material prior-period errors are adjusted retrospectively (that is, by restating comparative figures) unless this is impracticable (that is, it cannot be done, after 'making every reasonable effort to do so'). Usually such errors are adjusted with retained earnings or equity.

## Illustration $9.5^{5}$

During 20X6, Teen Patti Technologies Limited discovered that some products that had been sold during $20 \mathrm{X}_{5}$ were incorrectly included in inventory at 31 December 20 X5 at ₹6,500. Teen Patti Technologies Limited's accounting records for $20 \times 6$ show sales of ₹ 104,000 , cost of goods sold of $₹ 86,500$ (including ₹ 6,500 for the error in opening inventory), and income taxes of $₹ 5,250$.

In $20 \mathrm{X}_{5}$, Teen Patti Technologies Limited reported:

| Particulars | (₹) |
| :--- | ---: |
| Sales | 73,500 |
| Cost of goods sold | $(53,500)$ |
| Profit before income taxes | 20,000 |
| Income taxes | $(6,000)$ |
| Profit | 14,000 |

20X5 opening retained earnings was ₹ 20,000 and closing retained earnings was ₹ 34,000 . Teen Patti Technologies Limited's income tax rate was 30 per cent for $20 \times 6$ and $20 X_{5}$. It had no other income or expenses. Teen Patti Technologies Limited had ${ }^{5} 5,000$ of share capital throughout, and no other components of equity except for retained earnings. Its shares are not publicly traded and it does not disclose earnings per share.

Teen Patti Technologies Limited Extract from the statement of profit and loss

|  | $20 X 6$ <br> $₹$ |  |
| :--- | :--- | :--- |
| Sales | (restated) <br> $20 X_{5}$ <br> $₹$ |  |
| Cost of goods sold | 104,000 | 73,500 |
| Profit before income taxes | $(80,000)$ | $(60,000)$ |
| Income taxes | 24,000 | 13,500 |
| Profit | $(7,200)$ | $(4,050)$ |

[^66]| Teen Patti Technologies Limited |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Share capital ₹ | Retained earnings ₹ | Total ₹ |
| Balance at 31 December $20 \mathrm{X}_{4}$ | 5,000 | 20,000 | 25,000 |
| Profit for the year ended 31 December $20 \mathrm{X}_{5}$ as restated |  | 9,450 | 9,450 |
| Balance at 31 December 20X5 | 5,000 | 29,450 | 34,450 |
| Profit for the year ended 31 December 20X6 |  | 16,800 | 16,800 |
| Balance at 31 December 20X6 | 5,000 | 46,250 | 51,250 |

## Extracts from the notes:

Some products that had been sold in $20 X_{5}$ were incorrectly included in inventory at 31 December 20X5 at ₹ 6,500 . The financial statements of $20 \mathrm{X}_{5}$ have been restated to correct this error. The effect of the restatement on those financial statements is summarized below. There is no effect in 20X6.

## Illustration 9.6

Ankita Mills Limited entered into an agreement with Munira Traders Limited, owned by Munira Lokhandwala, to purchase raw materials used in handicrafts, at a price of $₹ 140$ per kg . It was also agreed that if the buyer delays in making the payment as per the agreement or delays the clearance from the seller's godown, an additional charge above the negotiated price will be enforced.

It was traditional for the management of Ankita Mills to include this additional charge in the valuation of the closing stock. From the year $20 \mathrm{X}_{5}-\mathrm{X} 6$, the management decided to exclude such change from the valuation of stock and as a result, the closing stock for the year was reduced by $\mathrm{F}_{5}$ lakh, thereby reducing the profit by the same amount. What should be the disclosure?

## Solution

Ind-AS-8 suggests that a change in the accounting policy can be made, if such a change is required by the statute or for a better presentation of the financial statements or for compliance with the accounting standard. Further, a disclosure regarding such a change and its impact on the financial position should be made.

Accordingly, the change in the method of valuation by Ankita Mills is clearly justified because it will result in a better presentation of the accounts and also, it is as per the valuation method suggested in Ind-AS 2. The following disclosure can be made in the annual accounts.
'The decrease in profit by $₹_{5}$ lakh for the year is due to the change in valuation of the closing stock. The additional charges for delays were excluded from the valuation of stock to comply with the Ind-AS 2, resulting in a decrease of $₹_{5}$ lakh in the total value of stock as at the end of the year'.

### 9.7 EVENTS AFTER THE REPORTING PERIOD

The objective of this Standard (Ind-AS 10) is to prescribe: (a) when an entity should adjust its financial statements for events after the reporting period; and (b) the disclosures that an entity should give about the date when the financial statements were authorized for issue and about events after the reporting period.

Events after the reporting period are those events, favorable and unfavorable, that occur between the end of the reporting period and the date when the financial statements are authorized for issue. As per standard an entity should not prepare its financial statements on a 'going concern' basis if events after the reporting period indicate that the 'going concern' assumption is not appropriate. Clear disclosure should also be made in case the 'going concern' assumption is violated.

Two types of such events can be identified: (a) those that provide evidence of conditions that existed at the end of the reporting period, known as, adjusting events after the reporting period; and (b) those that are indicative of conditions that arose after the reporting period, known as, non-adjusting events after the reporting period. An entity shall adjust the amounts recognized in its financial statements to reflect adjusting events after the reporting period. An entity shall not adjust the amounts recognized in its financial statements to reflect non-adjusting events after the reporting period.

The question that arises then is what disclosure is to be done for non-adjusting events. If non-adjusting events after the reporting period are material, non-disclosure could influence the economic decisions of users taken on the basis of the financial statements. Accordingly, an entity shall disclose the following for each material category of non-adjusting event after the reporting period: (a) the nature of the event; and (b) an estimate of its financial effect, or a statement that such an estimate cannot be made.

If an entity receives information after the reporting period about conditions that existed at the end of the reporting period, it shall update disclosures that relate to those conditions, in the light of the new information.

Illustration 9.7

The board of directors of $\mathrm{M} / \mathrm{s}$ Meera Crackers Ltd. approved the financial accounts of the year $20 \times 5$ - X 6 , on June $15,20 \times 6$. The following events occurred before the approval by the board of directors. State how you would deal with the situation.
(a) The market value of the investments declined after the balance sheet date.
(b) Due to a tsunami, Sea water swept in the factory of a debtor, on March 15, 20X6. As a result, the debtor declared himself insolvent on April April 15, 20X6. Amount due from the debtor was ₹1,50,000.
(c) Dividend of ₹3,00,000 was recommended by the board of directors, to be paid.
(d) The company agreed to sell one, of its fixed asset included in the balance sheet, at ₹ 2 lakh, to Nain Sagar Ltd., for ₹8 lakh. The agreement was entered on March 15, 20 X 6 but the sale deed was registered on April 15, $20 \times 6$.

## Solution

(a) As per Ind-AS 10, adjustments to the assets and liabilities are not appropriate for events occurring after the balance sheet date, if such events do not relate to conditions existing at the balance sheet date. Accordingly, the decline in the market value of the investment of Meera Crackers does not relate to the condition of the investment at the balance sheet date. Therefore, no adjustment is required in the financial statement.
(b) As per Ind-AS 10, an adjustment in the financial statements is required if the event relates to a condition existing on the balance sheet date. Here, the event, that is, occurrence of tsunami and hurting one of its debtors, happened on March 15, 20X6, which was before the balance sheet date, due to which the debtor declared himself insolvent. Accordingly, an adequate provision for bad debts should be made to the extent of $₹_{1,50,000 \text {, for the year ended March 31, } 20 X 6 . ~}^{\text {. }}$
(c) As per Ind-AS 10, dividend declared after the reporting period but before the financial statements are approved for issue, the dividend will not be recognized as liability because no obligation exists. The liability
to pay dividend shall be recognized when it is declared by board of directors and approved by the relevant authority, if required. In the given case dividend of $₹_{3,00,000}$ lakh is recommended and hence it need not be recognized as a liability as per Ind-AS 10, but reported as per Ind-AS 1 on "Presentation of Financial Statements".
The agreement to sell the fixed asset was entered on March 15, 20X6, which is well before the balance sheet date. Hence, the impact of the sale should be included in the financial statement, even if the sale deed was registered after the balance sheet date. As the risk and reward has already been transferred. It does not matter if the sale deed was registered after the date of Balance sheet.

## Illustration 9.8

Tanisha and Co. closes its books of accounts on $31^{\text {st }}$ March each year. The accounts were finalized on $30^{\text {th }}$ April 2016. Unfortunately, on $5^{\text {th }}$ April 2016 there was a major fire in the plant and most of the assets of Tanisha and Co. were destroyed. The auditor wants to prepare the financial statements ignoring the 'going concern' concept. However, the management states that the fire took place after the balance sheet date, i.e. after $31^{\text {st }}$ March 2015 . Therefore, there is no need to report the same or prepare the financial statements on the going concern assumption. Is the view of management appropriate?

## Solution

As per Ind-AS 10, on "Events after the reporting period" if the events occurring after the balance sheet date are such that affect the 'going concern' of the entity and the events which are likely to alter the economic decisions of its stakeholders then those should be reported. Hence, in the given case of Tanisha and Co., the view of the management is wrong. The financial statements should be prepared on the basis of going concern and it should also be mentioned in the notes of accounts.

### 9.7.1 Treatment of Dividend Declarations

If dividends are declared after the reporting period but before the financial statements are approved for issue, the dividends are not recognized as a liability at the end of reporting period because no obligation exists at that time. Such dividends are disclosed in accordance with Ind-AS 1.

### 9.8 INCOME TAXES

A tax on income is one of the significant items in the statement of profit and loss of an enterprise. The objective of this Standard (Ind-AS 12) is to prescribe the accounting treatment for income taxes. The principal issue in accounting for income taxes is how to account for the current and future tax consequences of: (a) the future recovery (settlement) of the carrying amount of assets (liabilities) that are recognized in an entity's balance sheet; and (b) transactions and other events of the current period that are recognized in an entity's financial statements.

Ind-AS 12 is based on the balance sheet approach, wherein, it requires recognition of tax consequences of differences between the carrying amounts of assets and liabilities and their tax base. It is inherent in the recognition of an asset or liability that the reporting entity expects to recover or settle the carrying amount of that asset or liability. If it is probable that recovery or settlement of that carrying amount will make future tax payments larger (smaller) than they would be if such recovery or settlement were to
have no tax consequences, this Standard requires an entity to recognize a deferred tax liability (deferred tax asset), with certain limited exceptions. We elaborate the same further.

## SPOTLGMT 9.3

## Companies Prepare Two Income Statements

A company computes its taxable income (and hence, the tax payment) based on an income statement prepared as per the Income Tax Act. This is quite different from the regular profit and loss statement (as per the Companies Act) we have been discussing throughout this book.

This divergence between taxable income and accounting income arises due to two main reasons. Firstly, there are differences between items of revenue and expenses as appearing in the statement of profit and loss and the items which are considered as revenue, expenses or deductions for tax purposes. Secondly, there are differences between the amount in respect of a particular item of revenue or expense as recognized in the statement of profit and loss and the corresponding amount which is recognized for the computation of taxable income.

For instance, while a particular provision for warranty may be allowed by the Companies Act, on the other hand, this provision is not allowed by the Income Tax Act and hence, expensing of warranties are done on an actual basis. This results in a difference in the net profit figures as per both the acts (due to timing of expenses). As a result, companies often postpone or pre-pay taxes on profits pertaining to a particular period. Matching of such taxes against the revenue for a period poses special problems arising from the fact that in a number of cases, taxable income may be significantly different from the accounting income. Also, there are difference in depreciation rates under the Companies Act and under the Income Tax Act which results in different profits / losses.

Hence, there are two profit and loss accounts prepared by a company - (a) the regular one as per the books of the accounts maintained according to the Companies Act 2015; and (b) the other one as per the Income Tax Act. ICAI brought in Ind-AS 12 to limit the confusion due to these two different statements.

### 9.8.1 Deferred Tax

Deferred tax is the tax effect of timing differences. Timing differences are the differences between taxable income and accounting income for a period that originate in one period, and which are capable of reversal in one or more subsequent periods. For example, the expenses debited in the statement of profit and loss for accounting purposes, but allowed for tax purposes in subsequent years. The expenditure of the nature mentioned in the Income Tax Act (example, taxes, duty, cess, fees, etc.) that are included in the statement of profit and loss on mercantile basis (in regular accounts), but allowed for tax purposes in subsequent years, on payment basis, is a case in point.

Permanent differences are the differences between taxable income and accounting income for a period that originate in one period and do not reverse subsequently. For example, while computing taxable income, the tax laws disallow a part (or whole) of an item of expenditure. The disallowed amount would result in a permanent difference.

The difference between the tax expenses, which are calculated as per the books of accounts, and the current tax liability as per the Income Tax Act, is called deferred tax (assets/liability). Therefore, tax expense for any year = Current Tax + Deferred Tax. It is important to know that the deferred tax (Asset/

Liability) arises only when there is a difference in the taxes due to the timing difference. A permanent difference does not result in any tax (Asset/Liability).

### 9.8.2 Deferred Tax Asset

Deferred tax asset is the amount of temporary differences that will result in deductible amounts in future years. There are cases where the companies charge off duty, cess and tax dues against profits, when they become due, but they would be recognized for tax computation only when actually paid. Similar is the case with other expenses that are not allowed (fully/partly) as per the Income Tax Act. In such cases, a company is actually pre-paying taxes pertaining to future years. For the year, the profits according to the Income Tax Act (made by the Income Tax department), would be higher than that computed in the company's books of accounts. So, while the company shells out a disproportionately high tax in the current year, it would save on tax in the years when the expenses or provisions actually materialize. This results in a Deferred Tax Asset.

This Standard deals with the recognition of deferred tax assets arising from unused tax losses or unused tax credits, the presentation of income taxes in the financial statements and the disclosure of information relating to income taxes. Thus, deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. For example, existence of loss, which in India can be carried forward for set off against future taxable profits up to a maximum of eight years, gives rise to deferred tax asset. But, the standard calls upon an enterprise to practice restraint and not take credit for deferred tax asset too readily. There must be virtual certainty and not mere reasonable certainty of realizing this benefit in future when it comes to deferred tax asset in the form of unabsorbed depreciation or carried forward loss.

The criteria for recognizing deferred tax assets arising from the carry forward of unused tax losses and tax credits are the same that for recognizing deferred tax assets arising from deductible temporary differences. However, the existence of unused tax losses is strong evidence that future taxable profit may not be available. Therefore, when an entity has a history of recent losses, the entity recognizes a deferred tax asset arising from unused tax losses or tax credits only to the extent that the entity has sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses or unused tax credits can be utilized by the entity.

### 9.8.3 Deferred Tax Liability

Deferred tax liability is the amount of temporary difference that will result in a payment of tax in future years. In some cases, the tax laws allow a company to deduct certain expenses totally in a single year, but the management wants to phase out the charge over a number of years. For example, on some assets, the Income Tax Act permits complete depreciation (or higher rates of depreciation), compared to the depreciation provided in the statement of profit and loss. Here, the profit as per the books of accounts is lower than the amount computed as per the provisions of the Income Tax Act. In these cases, a company ends up postponing a part of its tax liability on this year's profits, to future years. This is because, in the current year, its profits for tax purposes would be lower than the profits computed for accounting purposes.

By recognizing deferred tax liabilities in its books, a company makes sure that the tax liability for any particular year is reflected in that year's financials and does not carry over to future profits. It brings investors one step closer to understanding exactly how much of a company's profits for a period are from its operations (rather than from monetary savings).

Following prudence, a deferred tax liability should be recognized, but a deferred tax asset should be recognized and carried forward only to the extent that there is a reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. This reasonable level of certainty would normally be achieved by examining the past record of the enterprise and by making realistic estimates of profits for the future. This Standard requires an entity to account for the tax consequences of transactions and other events in the same way that it accounts for the transactions and other events themselves. Thus, for transactions and other events recognized in profit or loss, any related tax effects are also recognized in profit or loss.

An entity shall offset deferred tax assets and deferred tax liabilities if, and only if: (a) the entity has a legally enforceable right to set off current tax assets against current tax liabilities; and (b) the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either: (i) the same taxable entity; or (ii) different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously.

Ind-AS 12 disclosure requirements are detailed. They include:
(a) Deferred tax assets and liabilities should be distinguished from assets and liabilities representing current tax for the period. Deferred tax assets and liabilities should be disclosed under a separate heading in the balance sheet of the enterprise, separately from current assets and current liabilities.
(b) The break-up of deferred tax assets and deferred tax liabilities into major components of the respective balances, should be disclosed in the notes to accounts.
(c) The nature of the evidence supporting the recognition of deferred tax assets should be disclosed if an enterprise has unabsorbed depreciation or carry forward of losses under tax laws.
For instance, Ind-AS 12 provides guidance that deferred tax asset/liability arising from revaluation of assets shall be measured on the basis of tax consequences from the sale of asset rather than through use.

## Illustration 9.9

Moolchand Cements Limited purchased a machinery for ₹3,00,000 on April 5 20Xo having an expected life of 3 years. The salvage value of the machinery after the expected life, was estimated at zero. As per the IT Act, the depreciation on this machinery is allowable at 100 per cent in the year of purchase, but the management wants to depreciate it on the straight line basis. How will you account for the taxes on the income for the year and the next two years, if the tax rate applicable to the company is 30 per cent and the profit is $₹_{4}, 00,000$ per annum in all the cases.

## Solution

We know that deferred tax is created as the profit as per the books will not be the same because of the difference in the rate of depreciation on the machinery. This is a clear case of timing difference. Let us first calculate the tax liability under both the methods.

Moolchand Cements Tax as per Books of Accounts

| Year ending 31st March | $\mathbf{2 0 X} \mathbf{1}$ |  | (all figures in ₹) |
| :--- | :--- | :--- | :--- |
| Profit | $\mathbf{4 , 0 0 , 0 0 0}$ | $\mathbf{4 , 0 0 , 0 0 0}$ | $\mathbf{4 , 0 0 , 0 0 0}$ |
| Dep. | $\mathbf{1 , 0 0 , 0 0 0}$ | $\mathbf{1 , 0 0 , 0 0 0}$ | $\mathbf{1 , 0 0 , 0 0 0}$ |
| Tax Profit | $3,00,000$ | $3,00,000$ | $3,00,000$ |
| Tax @ 30\% | 90,000 | 90,000 | 90,000 |

Moolchand Cements Tax as per the Income Tax Act
(all figures in ₹)

| Year ending 31st March | $\mathbf{2 0 X} \mathbf{1}$ | $\mathbf{2 0 X} \mathbf{2}$ | $\mathbf{2 0 X} \mathbf{3}$ |
| :--- | :--- | :--- | :--- |
| Profit | $\mathbf{4 , 0 0 , 0 0 0}$ | $\mathbf{4 , 0 0 , 0 0 0}$ | $\mathbf{4 , 0 0 , 0 0 0}$ |
| Dep | $3,00,000$ | 0 | 0 |
| Tax Profit | $\mathbf{1 , 0 0 , 0 0 0}$ | $4,00,000$ | $4,00,000$ |
| Tax @ $30 \%$ | 30,000 | $\mathbf{1 , 2 0 , 0 0 0}$ | $\mathbf{1 , 2 0 , 0 0 0}$ |

We see from the above calculation that the total tax payable, for three years, under both the methods is the same, that is, $\mathrm{F}^{2,70,000 \text {, but the tax to be paid as per the matching concept is different, so we need to create a }}$ deferred tax account.

We know that the total tax for the year is current tax plus deferred tax. Current tax, according to the above calculation, is ₹ 90,000 every year, for all three years, but the actual payment is different in all the cases.

In the first year, the current tax (as per the income tax) is ₹ 30,000 , but we know that the total tax is current tax plus deferred tax. Here, we need to create a deferred tax liability of ₹ 60,000 . This difference is because of the difference in the depreciation rates ( $₹ 3,00,000-1,00,000$ ) at the tax rates applicable ( $30 \%$ ). In this case, we pass the following journal entry.

| Profit and Loss account | (Debit) | 90,000 |  |
| :--- | :--- | :--- | :--- |
| Current Tax Account | (Credit) | 30,000 |  |
| Deferred Tax Liability Account | (Credit) | 60,000 |  |

(Being the amount of tax including deferred tax charged to the profit and loss for the year).
In the second year, the tax liability comes to ₹ $1,20,000$ according to the tax laws, but tax as per books is ₹ 90,000 . Again, this difference is due to the difference in depreciation for the year ( $1,00,000-0$ ) at 30 percent rate of tax. The liability created in the previous year will be reversed in this year. So, we pass the following journal entry.

| Profit and Loss account | (Debit) | 90,000 |  |
| :--- | :--- | :--- | :--- |
| Deferred Tax Liability Account | (Debit) | 30,000 |  |
| Current Tax Account | (Credit) |  | $\mathbf{1 , 2 0 , 0 0 0}$ |

(Being amount of tax charged to the profit and loss account after adjusting the deferred tax liability on account of timing difference for the year).

The third year's journal entry would be similar to the second year's entry as follows:

| Profit and Loss account | (Debit) | 90,000 |  |
| :--- | ---: | :--- | :--- |
| Deferred Tax Liability Account | (Debit) | 30,000 |  |
| Current Tax Account | (Credit) |  | $\mathbf{1 , 2 0 , 0 0 0}$ |

(Being amount of tax charged to the profit and loss account after adjusting the deferred tax liability on account of timing difference for the year).

Based upon the above journal entries, we find that the total amount debited to the profit and loss account is
₹ $2,70,000$ and after three years, there will no balance in the Deferred Tax Liability account.

### 9.9 PROPERTY, PLANT AND EQUIPMENT ${ }^{6}$

The objective of this Standard (Ind-AS 16) is to prescribe the accounting treatment for property, plant and equipment so that users of the financial statements can discern information about an entity's investment in its property, plant and equipment and the changes in such investment. The main issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognized in relation to them.

Property, plant and equipment are tangible items that: (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and (b) are expected to be used during more than one period. The cost of an item of property, plant and equipment shall be recognized as an asset if, and only if: (a) it is probable that future economic benefits associated with the item will flow to the entity; and (b) the cost of the item can be measured reliably.

An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost. The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date. If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognized as interest over the period of credit unless such interest is capitalised in accordance with Ind-AS 23.

The cost of an item of property, plant and equipment comprises: (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates; (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management; and (c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

### 9.9.1 Measurement of Plant, Property, and Equipment

An entity shall choose either the cost model or the revaluation model as its accounting policy and shall apply that policy to an entire class of property, plant and equipment as follows:

- Cost model: After recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.
- Revaluation model: After recognition as an asset, an item of property, plant and equipment whose fair value can be measured reliably shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.
If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued. Further, revaluations shall be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

The question comes on: how do we deal with upward revaluation? If an asset's carrying amount is increased as a result of a revaluation, the increase shall be recognized in other comprehensive income and accumulated in equity under the heading of revaluation surplus. However, the increase shall be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss.

[^67]The question comes on: how do we deal with devaluation? If an asset's carrying amount is decreased as a result of a revaluation, the decrease shall be recognized in profit or loss. However, the decrease shall be recognized in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset. The decrease recognized in other comprehensive income reduces the amount accumulated in equity under the heading of revaluation surplus.

Table 9.2 summarizes the above discussion in terms of accounting journal entries.

Table 9.2 Journal Entries for Revaluation and Devaluations

| Upward revaluation | Devaluation |
| :--- | :--- |
| If no earlier devaluation: | If no earlier upward revaluation |
| Assets $\mathrm{A} / \mathrm{c}$ Dr | Profit and loss $\mathrm{A} / \mathrm{c} \mathrm{Dr}$ |
| To Revaluation reserves A/c | To Assets A/c |
| If earlier devaluation took place | If earlier upward revaluation |
| Assets A/c Dr | Revaluation reserves A/c Dr |
| To Profit and loss A/c | To Assets A/c |
| (to the extent of earlier devaluation) | (to the extent of balance in revaluation reserves account) |

Readers may like to revisit Section 8.1.2 on the Ind-AS implications on meaning of depreciation, depreciation methods, recognition of depreciation and depreciable amount. The residual value of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

To determine whether an item of property, plant and equipment is impaired, an entity applies Ind-AS 36, Impairment of Assets. The carrying amount of an item of property, plant and equipment shall be de-recognized: (a) on disposal; or (b) when no future economic benefits are expected from its use or disposal. The gain or loss arising from the de-recognition of an item of property, plant and equipment shall be included in profit or loss when the item is de-recognized (unless Ind-AS 17 requires otherwise on a sale and leaseback). Gains shall not be classified as revenue.

## Illustration 9.10

Gemini Limited sold its machinery, which had a written down value of ₹50,000; for ₹ 20,000 , on January 15, 20 X7. This machinery was revalued upwards in the year $20 X_{5}-X 6$ and as a result the revaluation reserve account was having a balance of $₹ 40,000$. The accountant of Gemini wanted to debit the profit and loss account for the year ending March 31, 20X7, with a loss amount of ₹ 30,000 . Please give your views on this move.

## Solution

Ind-AS 16 suggests that on disposal of a fixed asset, the difference between the net proceeds and the net book value should be first adjusted with the revaluation reserve and only then, it should be taken to the profit and loss account for the period.

In the given illustration, there is a balance of $₹ 40,000$ in the revaluation reserve account. Hence, the loss of $₹ 30,000$ (written down value less sales price) on the sale of the machinery should be first adjusted with the revaluation reserve. On completion of this accounting record, a balance of ₹ 10,000 would be left in the revaluation reserve account. This balance should be transferred to the General Reserve.

## Illustration 9.11

The notes to accounts of HDFC Bank annual report for FY2015 reveal "during the previous year, one of its subsidiary company, HDFC Standard Life Insurance Co. Ltd., had decided to use the investment property for use in service and administrative purpose. Consequently, should the value of the property so used for own business be reclassified? The investment in the real estate investment property by the company is valued at historical cost plus revaluation, if any. And, revaluation of the investment property is done at least once in three years. And, if the same asset has been revalued, how should the same be treated/reflected in the annual report of HDFC?

## Solution

The illustration states that HDFC Bank has a subsidiary firm, HDFC Standard Life Insurance Co. Ltd. As per IndAS, its investment property represents land or building held for use other than in services or for administrative purposes. This item has to be reclassified from investment property to fixed assets.

In case of revaluation, the change in the carrying amount of the item (herein, investment property) is to be taken to the revaluation reserve in the balance sheet. Impairment loss, if any, exceeding the amount in Revaluation Reserve is to be recognized as an expense in the Revenue Account or the Profit and Loss Account. The revaluation reserve, if any, has to be adjusted for depreciation on revalued amount from date of its classification as investment in properties till its reclassification to fixed assets.

## Illustration 9.12

Anjani Textiles Limited had purchased machinery in the year $20 \mathrm{X}_{0}-\mathrm{X}_{1}$, for $\mathrm{F}_{50}$ lakh and has followed the straight line method of depreciation. The management plans to change the method of depreciation. What shall be the effect on the disclosure before profit \& loss account for the period?

## Solution

As per Ind-AS 16, depreciation is charged on the basis of useful life of the asset. The useful life is determined at the end of each year and may be changed. Also, Ind-AS 16 states that there can be a change in the method of accounting for depreciation which is to be treated as change in accounting estimate as per Ind-AS 8.

Ind-AS 8 states that in case of change in the method of depreciation the amount of depreciation income or expense recognized should be adjusted to Profit and Loss account in the same year when there is a change in the method of depreciation.

### 9.10 BORROWINGS COST

Borrowing costs are interest and other costs that an entity incurs in connection with the borrowing of funds. The objective of this accounting standard (Ind-AS 23) is to give clarity on the borrowing costs.

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset form part of the cost of that asset. Other borrowing costs are recognized as an expense in the period in which incurred. Thus, a qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

An entity shall begin capitalizing borrowing costs as part of the cost of a qualifying asset on the commencement date. The commencement date for capitalization is the date when the entity first meets all of the following conditions:

- Incurs expenditures for the asset
- Incurs borrowing costs
- Undertakes activities that are necessary to prepare the asset for its intended use or sale

The actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings.

To the extent that an entity borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the entity shall determine the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate shall be the weighted average of the borrowing costs applicable to the borrowings of the entity that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that an entity capitalizes during a period shall not exceed the amount of borrowing costs it incurred during that period.

On the other side, the standard brings clarity stating that an entity shall suspend capitalization of borrowing costs during extended periods in which it suspends active development of a qualifying asset. Also, an entity shall cease capitalizing borrowing costs when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

### 9.11 RELATED-PARTY DISCLOSURES

Under Ind-AS 24, disclosures are required in respect of an entity's transactions with related parties. So, the objective of Ind-AS 24 on Related Party Disclosure is to ensure that an entity's financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties and by transactions and outstanding balances, including commitments, with such parties.

Related parties include the following:

- Parents
- Subsidiaries
- Fellow subsidiaries
- Associates of the entity and other members of the group
- Joint ventures of the entity and other members of the group
- Members of key management personnel of the entity or of a parent of the entity (and close members of their families: that person's children and spouse or domestic partner, dependants of that person or that person's spouse or domestic partner)
- Persons with control, joint control or significant influence over the entity (and close members of their families)
- Post-employment benefit plans
- Entities (or any of their group members) providing key management personnel services to the entity or its parent
Further, this standard clarifies: (a) finance providers are not related parties simply because of their normal dealings with the entity; (b) key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly,
including any director of the entity; and (c) an entity shall disclose key management personnel compensation in total and for each of the following categories: (i) Short-term employee benefits; (ii) Post-employment benefits; (iii) Other long-term benefits; (iv) Termination benefits; and (v) Share-based payment.

Management disclosure required in case of related party transactions during the period are:

- Management discloses the name of the entity's parent and, if different, the ultimate controlling party.
- Nature of relationship, transactions and outstanding balances including commitments. This is necessary for users to understand the potential impact of the relationship on the financial statements.
- Provisions for doubtful debts related to the amount of outstanding balances
- Relationships between a parent and its subsidiaries are disclosed irrespective of whether there have been transactions with them
- Disclosure is made by category of related party and by major type of transaction.
- Items of a similar nature may be disclosed in aggregate, except when separate disclosure is necessary for an understanding of the effects of related party transactions on the entity's financial statements.
- Management only discloses that related party transactions were made on terms equivalent to those that prevail in arm's length transactions if such terms can be substantiated.
A question that can linger in a keen accounting mind is, when an entity is exempt from the disclosure of transaction? An entity is exempt from the disclosure of transactions (and outstanding balances) with a related party that is either a government that has control, joint control or significant influence over the entity or is another entity that is under the control, joint control or significant influence of the same government as the entity. Where the entity applies the exemption, it discloses the name of the government and the nature of its relationship with the entity. It also


To know more on "What does Ind AS New Accounting Norms say on Related Party Deals?" scan the QR code, or visit: http://grcode.flipick.com/ index.php/559 discloses the nature and amount of each individually significant transaction and the qualitative or quantitative extent of any collectively significant transactions.

## Example 9.1

Ms. Madhu Toshniwal, has 100 percent investment in Mad Max and Co, and is a director of M/s Saifiya \& Co. Further, M/s Beck \& Co. has 100 percent investment in M/s Saifiya \& Co.

For M/s Saifiya \& Co financial statements, Mad Max \& Co. is related to M/s Saifiya \& Co because Ms. Madhu Toshniwal controls Mad Max and Co. and is a member of the key management personnel of M/s Saifiya \& Co.

For M/s Saifiya \& Co financial statements, Mad Max \& Co. is also related to it if Ms. Madhu Toshniwal is director of $\mathrm{M} / \mathrm{s}$ Saifiya \& Co. and not of $\mathrm{M} / \mathrm{s}$ Beck \& Co.

### 9.12 IMPAIRMENT OF ASSETS ${ }^{7}$

This accountant standard (Ind-AS 36) on Impairment of assets prescribes the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried

[^68]at more than its recoverable amount if its carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired and the Standard requires the entity to recognize an impairment loss. Ind-AS 36 also specifies when an entity should reverse an impairment loss and prescribes disclosures.

Please note that this standard does not applies to:

- Inventories
- Contracts that are recognized in accordance with Ind-AS 115
- Deferred Tax Assets
- Financial Assets
- Non-current Assets classified for sale in accordance with Ind-AS 105
- Biological Assets related to agricultural activity
- Assets arising from the employee benefits
- Deferred acquisition costs and intangible assets in case of insurance contract

An entity shall assess at the end of each reporting period whether there is any indication that an asset may be impaired. If any such indication exists, the entity shall estimate the recoverable amount of the asset. Further, irrespective of whether there is any indication of impairment, an entity shall also: (a) test an intangible asset with an indefinite useful life or an intangible asset not yet available for use for impairment annually by comparing its carrying amount with its recoverable amount. This impairment test may be performed at any time during an annual period, provided it is performed at the same time every year. Different intangible assets may be tested for impairment at different times. However, if such an intangible asset was initially recognized during the current annual period, that intangible asset shall be tested for impairment before the end of the current annual period; \& (b) test goodwill acquired in a business combination for impairment annually.

If there is any indication that an asset may be impaired, recoverable amount shall be estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, an entity shall determine the recoverable amount of the cash-generating unit to which the asset belongs. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

In the next sub-sections, we discover more clarity on this standard.

### 9.12.1 Measuring Recoverable Amount in Impairment

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs of disposal and its value in use. It is not always necessary to determine both an asset's fair value less costs of disposal and its value in use. If either of these amounts exceeds the asset's carrying amount, the asset is not impaired and it is not necessary to estimate the other amount.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Costs of disposal are incremental costs directly attributable to the disposal of


To know more on "Ind-AS 115 and Reasons for its Deferment" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/560 an asset or cash-generating unit, excluding finance costs and income tax expense.

Value in use is the present value of the future cash flows expected to be derived from an asset or cash generating unit. The following elements shall be reflected in the calculation of an asset's value in use:
(a) an estimate of the future cash flows the entity expects to derive from the asset;
(b) expectations about possible variations in the amount or timing of those future cash flows;
(c) the time value of money, represented by the current market risk-free rate of interest;
(d) the price for bearing the uncertainty inherent in the asset; and
(e) other factors, such as illiquidity, that market participants would reflect in pricing the future cash flows the entity expects to derive from the asset.
This implies that the estimates of future cash flows shall include:
(a) projections of cash inflows from the continuing use of the asset;
(b) projections of cash outflows that are necessarily incurred to generate the cash inflows from continuing use of the asset (including cash outflows to prepare the asset for use) and can be directly attributed, or allocated on a reasonable and consistent basis, to the asset; and
(c) net cash flows, if any, to be received (or paid) for the disposal of the asset at the end of its useful life.

Future cash flows shall be estimated for the asset in its current condition. Estimates of future cash flows shall not include estimated future cash inflows or outflows that are expected to arise from: (a) a future restructuring to which an entity is not yet committed; or (b) improving or enhancing the asset's performance. Further, estimates of future cash flows shall not include: (a) cash inflows or outflows from financing activities; or (b) income tax receipts or payments.

### 9.12.2 Recognizing and Measuring an Impairment Loss

If and only if, the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable amount. That reduction is an impairment loss.

An impairment loss shall be recognized immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Standard (for example, in accordance with the revaluation model in Ind-AS 16 on Property, Plant and Equipment). Any impairment loss of a revalued asset shall be treated as a revaluation decrease in accordance with that other Standard.

An impairment loss shall be recognized for a cash-generating unit (the smallest group of cash-generating units to which goodwill or a corporate asset has been allocated) if, and only if, the recoverable amount of the unit (group of units) is less than the carrying amount of the unit (group of units). The impairment loss shall be allocated to reduce the carrying amount of the assets of the unit (group of units) in the following order: (a) first, to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of units); and (b) then, to the other assets of the unit (group of units) pro rata on the basis of the carrying amount of each asset in the unit (group of units). However, an entity shall not reduce the carrying amount of an asset below the highest of: (a) its fair value less costs to sell (if determinable); (b) its value in use (if determinable); and (c) zero. The amount of the impairment loss that would otherwise have been allocated to the asset shall be allocated prorata to the other assets of the unit (group of units).

### 9.12.3 Goodwill

For the purpose of impairment testing, goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units or groups of units.

The annual impairment test for a cash-generating unit to which goodwill has been allocated may be performed at any time during an annual period, provided the test is performed at the same time every year. Different cash generating units may be tested for impairment at different times. However, if some or all of the goodwill allocated to a cash-generating unit was acquired in a business combination during the current annual period, that unit shall be tested for impairment before the end of the current annual period.

This accounting standard permits the most recent detailed calculation made in a preceding period of the recoverable amount of a cash-generating unit (group of units) to which goodwill has been allocated
to be used in the impairment test for that unit (group of units) in the current period, provided specified criteria are met.

### 9.12.4 Reversing an Impairment Loss

An entity shall assess at the end of each reporting period whether there is any indication that an impairment loss recognized in prior periods for an asset other than goodwill may no longer exist or may have decreased. If any such indication exists, the entity shall estimate the recoverable amount of that asset.

An impairment loss recognized in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. A reversal of an impairment loss for a cash-generating unit shall be allocated to the assets of the unit, except for goodwill, pro rata with the carrying amounts of those assets. The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset in prior years.

A reversal of an impairment loss for an asset other than goodwill shall be recognized immediately in profit or loss, unless the asset is carried at revalued amount in accordance with another Ind-AS (for example, the revaluation model in Ind-AS 16 on Property, Plant and Equipment). Any reversal of an impairment loss of a revalued asset shall be treated as a revaluation increase in accordance with that other Ind-AS. An impairment loss recognized for goodwill shall not be reversed in a subsequent period.

## Illustration 9.13

On January 1, 20 ${ }_{2}$, Rummy Inc. purchased a dead plant for $₹_{1}$ million. The investment was intended to use the said plant for some years and then re-sale the same on profits, as plant in working condition shall definitely fetch better value. Rummy Inc. further made expenditure of $₹_{1}$ million to bring life to the dead plant. Its estimated useful life at that date was 20 years and the company uses straight line depreciation method. On December 31, 20X6, the government embarked on a plan to construct an establishment plus a plan of flyover was on queue adjacent to the building and the related installation reduced the access to the premises and other facilities nearby. This decreased the value of the plant to some extent. The company estimated that it can sell the company for ₹ 1 million but it has to incur costs of $\mathrm{F}_{1}$ lakh. Alternatively, it if continues to use it the present value of the net cash flows the building will help in generating is ₹ 1.1 million.

The basic rule is to recognize impairment, if carrying amount exceeds the recoverable amount.
First, we need to determine the carrying amount. The building has a cost of $₹ 2$ million, useful life of 20 years and is used for 5 years so far. This means that accumulated depreciation is ₹ $2 / 20 * 5$ or 0.5 million. Carrying amount is $₹ 2$ million minus $₹^{2} 0.5$ million or $₹_{1.5}$ million.

Second, we need to determine the recoverable amount. Recoverable amount is the higher of fair value less costs to sell and value in use. Fair value less costs to sell in this scenario is ₹ 1 million minus ₹ 0.1 million or $\mathrm{F}^{\circ} 0.9$ million. Value in use is the present value of future cash flows which amounts to ₹ 1.1 million. Recoverable amount is the higher of $₹ 0.9$ million and $₹ 1.1$ million.

Carrying amount is $₹_{1.5}$ million while recoverable amount is $₹_{1.1}$ million. An impairment loss of $₹_{0.4}$ million is to be recognized. The journal entry would be:
Impairment Loss
Accumulated Impairment Losses
4,00,000

### 9.13 PROVISIONS, CONTINGENT LIABILITIES AND CONTINGENT ASSETS

The objective of Ind-AS 37 on "Provisions, Contingent Liabilities and Contingent Assets" is to ensure that appropriate recognition criteria and measurement bases are applied to provisions, contingent liabilities and contingent assets and that sufficient information is disclosed in the notes to enable users to understand their nature, timing and amount.

Ind-AS 37 prescribes the accounting and disclosure for all provisions, contingent liabilities and contingent assets except: (i) those resulting from financial instruments that are carried at fair value; (ii) those resulting from executory contracts, except where the contract is onerous. Executory contracts are contracts under which neither party has performed any of its obligations nor both parties have partially performed their obligations to an equal extent; (iii) those arising in insurance entities from contracts with policyholders; or (iv) those covered by another Standard.

### 9.13.1 Provisions

A provision is a liability of uncertain timing or amount.
To answer the question: when provisions should be recognized? A provision should be recognized when: (a) an entity has a present obligation (legal or constructive) as a result of a past event; (b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and (c) a reliable estimate can be made of the amount of the obligation.

If these conditions are not met, no provision shall be recognized. The amount recognized as a provision shall be the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The best estimate of the expenditure required to settle the present obligation is the amount that an entity would rationally pay to settle the obligation at the end of the reporting period or to transfer it to a third party at that time. Where the provision being measured involves a large population of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities. Where a single obligation is being measured, the individual most likely outcome may be the best estimate of the liability. However, even in such a case, the entity considers other possible outcomes.

In rare cases, if it is unclear whether there is a present obligation - in these cases, a past event is deemed to give rise to a present obligation if, taking account of all available evidence, it is more likely than not that a present obligation exists at the end of the reporting period.

### 9.13.2 Contingent Liabilities

A contingent liability is: (a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or $(b)$ a present obligation that arises from past events but is not recognized because either it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability.

An entity should not recognize a contingent liability. An entity should disclose a contingent liability, unless the possibility of an outflow of resources embodying economic benefits is remote.

### 9.13.3 Contingent Assets

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the
control of the entity. A claim that a business entity is pursuing through legal processes, where the outcome is uncertain - is an example of a contingent asset.

An entity shall not recognize a contingent asset. However, when the realization of income is virtually certain, then the related asset is not a contingent asset and its recognition is appropriate.


Figure 9.1 Main Recognition Requirements for Provisions and Contingent Liabilities

## SPOTLTGHT 9.4

## Provisions for Warranties and Guarantees

A manufacturer gives warranties at the time of sale to purchasers of its product. Under the terms of the contract for sale the manufacturer undertakes to make good, by repair or replacement, manufacturing defects that become apparent within three years from the date of sale. On past experience, it is highly probable that there will be some claims under the warranties.

In such cases a provision is recognized for the best estimate of the costs of making good under the warranty products sold before the balance sheet date. In preparing the estimate one can use information such as present obligation as a result of the sale of the product with a warranty and economic costs involved in settlement. Even software companies (having products promising performance) do make a provision for post-sales warranties. For example, in recent years, Infosys Technologies Limited has provided a few crore every financial year as a provision for its post-sales warranties.

## Example 9.2

Lalli Technologies Limited gives warranties at the time of sale, to purchasers of its three product lines. Under the terms of the warranty, the manufacturer undertakes to repair or replace items that fail to perform satisfactorily for two years from the date of sale. At the balance sheet date, a provision of $₹ 60,000$ has been recognized. Should the firm disclose any information in its reports? The owner is bothered that it will hurt the sales of the company.

## Solution

Lalli Technologies Limited should disclose the following information along with its financial statements -
'A provision of ₹ 60,000 has been recognized for expected warranty claims on software products sold during the last three financial years. It is expected that the majority of this expenditure will be incurred in the next financial year, and all will be incurred within two years of the balance sheet date'.

## Example 9.3

For example, on $15^{\text {th }}$ February $20 \mathrm{X}_{5}$, the service tax authorities have issued a demand notice for the service tax on few services rendered by $\mathrm{M} / \mathrm{s}$ Keshav \& Co. The company contested the case and the lawyers were of the opinion that no service tax is payable on the selected services rendered by M/s Keshav \& Co. as on $31^{\text {st }}$ March 20X5. But on $15^{\text {th }}$ April $20 \mathrm{X}_{5}$, the same lawyers advised that on account of a notification issued by the Government of India, the liability would arise. In the given case, there is no obligation as on $31^{\text {st }}$ March $20 \mathrm{X}_{5}$ and accordingly there is no requirement of creating any provision. But if the case is not resolved up to $31^{\text {st }}$ March 20X6, a provision towards the amount, which can be measured with reliability, should be created in the books of accounts of M/s Keshav \& Co.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(c) Provisions are liabilities that can be measured only by using a substantial degree of estimation.
(d) A contingent asset is not disclosed in the financial statements.

### 9.14 INTANGIBLES

As per Ind-AS 38, intangible asset is an identifiable non-monetary asset without physical substance. An asset is identifiable if it: (a) is separable, i.e. is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so; or (b) arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

Non-monetary assets are assets in which the right to receive a fixed or determinable amount of currency is absent. This feature distinguishes non-monetary assets from monetary assets such as cash,
bank deposits, and accounts and notes receivable, which can be converted into a fixed or determinable amount of currency.

The recognition of an item as an intangible asset requires that the item meets the definition of an intangible asset and the twin recognition criterias of, namely (a) from which future economic benefit will flow to the organization; (b) the cost of assets can be measured reliably.

Intangibles can be acquired by way of separate purchase; As a part of Business Combination; Government grant; Exchange of assets; and Self-generated/Internally generated. The question is: what constitute cost of an intangible asset when procured separately? The answer is (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates; and (b) any directly attributable cost of preparing the asset for its intended use.

### 9.14.1 Intangibles Procured under Business Combination

If intangibles are acquired in a business combination, the cost of that intangible asset is its fair value at the acquisition date. The cost of such intangibles should be recognized separately from goodwill. If it does not meet the definition and recognition criteria of Intangibles than cost of such assets should be included in goodwill on the acquisition date.

A research and development project acquired in a business combination is recognized as an asset at cost, even if a component is research. Subsequent expenditure on that project is accounted for as any other research and development cost.

### 9.14.2 Intangibles are Self-generated

Brands, Goodwill, Publishing Titles, Customer Lists and items similar in substance that are internally generated should not be recognized as an asset. No intangible asset arising from research (or from the research phase of an internal project) shall be recognized. So, in short, all research cost should be expensed out.

However, development costs are capitalized only after technical and commercial feasibility of the asset for sale or use have been established. This means that the entity must intend and be able to complete the intangible asset and either use it or sell it and be able to demonstrate how the asset will generate future economic benefits.

If an entity cannot distinguish the research phase of an internal project to create an intangible asset from the development phase, the entity treats the expenditure for that project as if it were incurred in the research phase only. Accordingly, cost of such development will be treated as expense only.

### 9.14.3 Intangibles Subsequent to Acquisition

Examples of where intangibles might exist: production quotas; fishing licenses; and taxi licenses. Subsequent to acquisition, intangibles can be measured either on Cost model or Revaluation models:

- Cost model: After initial recognition intangible assets should be carried at cost less accumulated amortization and impairment losses.
- Revaluation model: Intangible assets may be carried at a revalued amount (based on fair value) less any subsequent amortization and impairment losses only if fair value can be determined by reference to an active market. Such active markets are expected to be uncommon for intangible assets.
Based on the useful life, the classification of Intangibles assets would be 'Indefinite life' and 'Finite life', wherein, 'Indefinite life' means no foreseeable limit to the period over which the assets is expected to generate net cash flows for the entity; and 'Finite life' means a limited period of benefit to the entity.


### 9.14.4 Measurement of Intangibles

The cost less residual value of an intangible asset with a finite useful life should be amortized on a systematic basis over that life:

- The amortization method should reflect the pattern of benefits.
- If the pattern cannot be determined reliably, amortize by the straight line method.
- The amortization charge is recognized in profit or loss unless another Ind-AS requires that it be included in the cost of another asset.
- The amortization period should be reviewed at least annually.

On the other hand, an intangible asset with an indefinite useful life shall not be amortized. An entity is required to test an intangible asset with an indefinite useful life for impairment by comparing its recoverable amount with its carrying amount (a) annually, and (b) whenever there is an indication that the intangible asset may be impaired.

The useful life of an intangible asset that is not being amortized shall be reviewed each period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite shall be accounted for as a change in an accounting estimate in accordance with appropriate accounting standard (say, IAS 8 or equivalent).

## Example 9.4

The Zingaro Wines product protected by the patented technology is expected to be a source of net cash inflows for at least 15 years. The entity has a commitment from a third party to purchase that patent in five years for 60 per cent of the fair value of the patent at the date it was acquired, and the entity intends to sell the patent in five years.

In such a case, the patent of Zingaro Wines would be amortized over its five-year useful life to the entity, with a residual value equal to the present value of 60 percent of the patent's fair value at the date it was acquired. The patent would also be reviewed for impairment in accordance with Ind-AS 36 by assessing at the end of each reporting period whether there is any indication that it may be impaired.

## Illustration 9.14

An intangible item is appearing in the balance sheet of Meghamita Pharmaceuticals Ltd. at ₹ 10 lakh as on April $\mathbf{1}_{\text {, }}$ 20X6. The item was acquired for $₹_{10}$ lakh on April 1, 2000 and was available for use from that date. The enterprise has been following an accounting policy of not amortizing the item. Help the firm in applying Ind-AS 38.

## Solution

As per Ind-AS 38, intangible assets appearing in the balance sheet should be amortized over the useful life of the said intangible asset. The said asset may have a finite life or an indefinite life. In the given case Meghamita Pharamceuticals have not amortized the value of the intangible asset. So, in the current year the expected useful life of the asset needs to be determined and if the intangible asset has a finite life, amortize the cost over the useful life or if it has an indefinite life the cost may not be amortized. Also, the change of determination of the useful life will be treated as a change in accounting policy as per Ind-AS 8.

### 9.15 INVESTMENT PROPERTY

Certain properties are classified as investment properties for financial reporting purposes in accordance with Ind-AS 40, 'Investment property', as the characteristics of these properties differ significantly from owner-occupied properties. It is the current value of such properties and changes to those values that are relevant to users of financial statements. So, the objective of this Indian Accounting Standard is to prescribe the accounting treatment for investment property and related disclosure requirements.

Investment property is property (land or a building, or part of a building or both) held by an entity to earn rentals or for capital appreciation or both. This category includes such property in the course of construction or development. Any other properties are accounted for as property, plant and equipment (PPE) or inventory in accordance with the following, i.e., Ind-AS 16, 'Property, plant and equipment', if they are held for use in the production or supply of goods or services; or, as Ind-AS 2, inventories where it is held as a stock as part of current assets.

Further, investment property shall be recognized as an asset only when: (a) it is probable that the future economic benefits that are associated with the investment property will flow to the entity; and (b) the cost of the investment property can be measured reliably.

Initial measurement of an investment property will be at cost. Subsequent measurement of investment properties to be carried at cost less accumulated depreciation and any accumulated impairment losses. However, the fair value of the investment property is disclosed in the notes. The Standard permits entities to choose either: (a) Fair value model, under which an investment property is measured, after initial measurement, at fair value with changes in fair value recognized in profit or loss; or (b) Cost model, cost model is specified in Ind-AS 16 and requires an investment property to be measured after initial measurement at depreciated cost (less any accumulated impairment losses). An entity that chooses the cost model discloses the fair value of its investment property.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. An investment property shall be de-recognized (eliminated from the statement of financial position) on disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. Gains or losses arising from the retirement or disposal of investment property shall be determined as the difference between the net disposal proceeds and the carrying amount of the asset and shall be recognized in profit or loss (unless Ind-AS 17 requires otherwise on a sale and leaseback) in the period of the retirement or disposal.

### 9.16 NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

The objective of Ind-AS 105 on "Non-current assets held for sale and discontinued operations" is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations. In particular, the Ind-AS requires: (a) Assets that meet the criteria to be classified as held for sale to be measured at the lower of carrying amount and fair value less costs to sell, and depreciation on such assets to cease; (b) An asset classified as held for sale and the assets and liabilities included within a disposal group classified as held for sale to be presented separately in the statement of financial position; and (c) The results of discontinued operations to be presented separately in the profit and loss account.

The key contribution of this accounting standard is that: (a) it adopts the classification 'held for sale'; (b) introduces the concept of a disposal group, being a group of assets to be disposed of, by sale or
otherwise, together as a group in a single transaction, and liabilities directly associated with those assets that will be transferred in the transaction; and (c) classifies an operation as discontinued at the date the operation meets the criteria to be classified as held for sale or when the entity has disposed of the operation.

An entity shall classify a non-current asset (or disposal group) as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset (or disposal group) must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups) and its sale must be highly probable.

The question is How to identify sale to be highly probable? The appropriate level of management must be committed to a plan to sell the asset (or disposal group), and an active programme to locate a buyer and complete the plan must have been initiated. Further, the asset (or disposal group) must be actively marketed for sale at a price that is reasonable in relation to its current fair value. In addition, the sale should be expected to qualify for recognition as a completed sale within one year from the date of classification, except as permitted by Paragraph 9, and actions required to complete the plan should indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

A discontinued operation is a component of an entity that either has been disposed of, or is classified as held for sale, and represents a separate major line of business or geographical area of operations and is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations or is a subsidiary acquired exclusively with a view to resale.

A component of an entity comprises operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity. In other words, a component of an entity will have been a cash-generating unit or a group of cash-generating units while being held for use. In that sense, an entity shall not classify as held for sale a non-current asset (or disposal group) that is to be abandoned. This is because its carrying amount will be recovered principally through continuing use.

### 9.17 IND-AS 18: REVENUE

The important issue in accounting for revenue is to determine when to recognize the revenue. The objective of this standard is to identify the circumstances in which these criteria will be met and, therefore at that time the revenue should be recognized. It also provides practical guidance on the application of these criteria.

## What is revenue?

Revenue is the gross inflow of economic benefits to an entity during the period. Such benefit arises in the course of the ordinary activities. Also these inflows result in increases in equity, other than increases relating to contributions from equity participants.

## When Revenue is recognized?

Revenue is recognized when:
(i) It is probable that future economic benefits will flow to the entity and
(ii) Economic benefit can be measured reliably.

This Standard shall be applied in accounting for revenue arising from the following transactions and events:
(a) The sale of goods;
(b) Rendering of services; and
(c) Use by others of entity assets yielding interest, royalties and dividends.

The recognition criteria in this Standard are usually applied separately to each transaction. However, in certain circumstances, it is necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction.

Example: When selling price of a product includes an identifiable amount for subsequent servicing (like after sale service, warranty, etc.) that portion of amount is deferred and recognized as revenue over the period during which the service is performed.

Conversely, the recognition criteria are applied to two or more transactions together when they are linked in such a way that the commercial effect cannot be understood without reference to the series of transactions as a whole.

Example: An entity may sell goods and, at the same time, enter into a separate agreement to repurchase the goods at a later date, thus negating the substantive effect of the transaction; in such a case, the two transactions are dealt with together.

## Revenue Measurement

Revenue is measured at the fair value of the consideration received or receivable. Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

The amount of revenue arising on a transaction is usually determined by agreement between the entity and the buyer or user of the asset. It is measured at the fair value of the consideration received or receivable taking into account the amount of any trade discounts and volume rebates allowed by the entity.

## Revenue recognition on sale of goods

Revenue from the sale of goods shall be recognized when all the following conditions have been satisfied:

- The Selling entity has transferred to the buyer the significant risks and rewards of ownership of the goods;
- The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- The costs incurred or to be incurred in respect of the transaction can be measured reliably; and
- It is probable that the economic benefits associated with the transaction will flow to the selling entity


## Revenue recognition on rendering of services

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction shall be recognized by reference to the stage of completion of the transaction at the end of the reporting period.

The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the transaction will flow to the entity;
- the stage of completion of the transaction at the end of the reporting period can be measured reliably; and
- the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

Note: The recognition of revenue by reference to the stage of completion of a transaction is often referred to as the percentage of completion method.

Under this method, revenue is recognized in the accounting periods in which the services are rendered. The recognition of revenue on this basis provides useful information on the extent of service activity and performance during a period.

When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue shall be recognized only to the extent of the expenses recognized that are recoverable.

## Revenue recognition on interest, royalties and dividends

Revenue shall be recognized on the following bases:
(a) interest shall be recognized using the effective interest method as set out in IAS 39,

Note: The effective interest method is a method of allocating the interest expense over the relevant period.
(b) royalties shall be recognized on an accrual basis in accordance with the substance of the relevant agreement; and
(c) Dividends shall be recognized when the shareholder's right to receive payment is established.

## Illustration 9.15

Alibaba Limited filed a case against Alladin \& Company for breach of contract in the year $20 \mathrm{X}_{4}-\mathrm{X}_{5}$. The amount of claim was $₹_{10}$ lakh, but no entry was passed in the books for the year $20 X_{4}-X_{5}$. Alibaba won the case in $20 X_{5}-X_{6}$ and Alladin was required to pay the money, which was received in the same year. The finance manager of Alibaba is confused about the treatment for the amount gained. While he believes it is a prior period item, others in his office suggest that the amount is due to a change in an accounting estimate.

## Solution

Non-passing of entry in any year does not necessarily make it a prior period item, because as in the given case, there was no certainty in the year $20 X_{4}-X_{5}$ regarding the amount to be received on account of filing the case and winning it. Also, the concept of revenue realization (as per Ind-AS 18), states that the revenue should be recognized only when it is probable that future economic benefits will flow to the enterprise. Therefore, it is neither a prior period item, nor a change in accounting estimate. The amount of $₹_{10}$ lakh should be credited to the profit \& loss account for the year $20 \mathrm{X}_{5}-\mathrm{X} 6$.

## Illustration 9.16

Prakash Advertising Company has 10,000 equity shares of $₹_{10}$ each, of Sumit Media Enterprises, on which the company receives an annual dividend of 10 percent. Based on this background, the accountant of Prakash Advertising recognized $₹_{10,000}$ for the year ending March $31,20 X_{5}$, in its books. The directors of Sumit Media Enterprises proposed a dividend of 15 percent for the year $20 X_{4}-X_{5}$, on April $10,20 X_{5}$ and it was paid on June 15 , $20 X_{5}$. Comment on what the accountant should do.

## Solution

As per Ind-AS-18, the divided should be recognized only when the right to receive the dividend is established. In the given case, the right to receive dividend is established on June $15,20 X_{5}$, so the right was established in the financial year $20 \mathrm{X}_{5}-\mathrm{XX}_{6}$ and accordingly, the revenue should be recognized for the year $20 \mathrm{X}_{5}-\mathrm{X} 6$. The treatment by Prakash Advertising Company is not as per Ind-AS 18.

## Illustration 9.17

The directors of Surabhi Activities Ltd. decided on March 31, $20 X_{5}$, to increase the sale price of its products by 10 percent, on sales taking place from June $30,20 X_{5}$, onwards. The intimation regarding the same was sent to all the customers by June $15,20 \mathrm{X}_{5}$. From which date should the revenue pertaining to the increase in sale price by $10 \%$ be recognized?

## Solution

The revenue relating to the increased price can be recognized in the year $20 \mathrm{X}_{5}-\mathrm{X} 6$ only, provided there is reasonable certainty that all the customers will accept the decision of the directors of Surabhi Activities Ltd. And the ultimate collection of money is also certain.

## Illustration 9.18

Vanshika advertising obtained the advertising rights for the IPL T-20 cricket tournaments to be held in the month of February/ March $20 \times 6$ for ₹ 250 million.

- By Jan 31, $20 \times 6$ they paid $₹_{150}$ million to secure these advertising rights. The balance amount of $₹_{100}$ millions was paid in February $20 \times 6$
- By Jan 31, $20 \times 6$ they processed advertisement for $70 \%$ of the available time for $₹ 350$ million. The advertisers paid $60 \%$ of the amount by that date. The balance was received in the month of March 20X6.
■ The advertisement for the balance $30 \%$ time was processed in February $20 \times 6$ for ₹ 150 million.
- The advertisers paid the full amount while booking the advertisement. $25 \%$ of the advertisement time is expected to be available in the month of February 20 X6 and balance $75 \%$ in March $20 X 6$.
- Compute the profit / loss for the month of January, February and March 20X6


## Solution

Revenue should be recognized only when there is no significant uncertainty regarding the amount of consideration receivable. Further, Ind-AS 18 states that the revenue from advertising should be recognized when the service is completed. In our case, the service will be deemed to be completed when the advertisement appears before the public i.e., $25 \%$ in February and the balance in March 20X6.

| Total Revenue $(350+150)$ | 500 Millions |  |
| :--- | :--- | :--- |
| Total Costs | $(150+100)$ | 250 Millions |
| Net Revenue | 250 Millions |  |

Of this, an amount of ₹ 62.50 millions (being $25 \%$ of the total) has to be recognized in the month of February $20 \times 6$ and the balance ₹ 187.50 has to be recognized in the month of March 20X6.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(e) Revenue should be recognized after deducting the service taxes, value added taxes and goods and service taxes, (Ind-AS 18).
(f) Accounting Standard (AS 16) on property, plant and equipment is not applicable to mineral rights and mineral reserves like oil, natural gas and similar non-regenerative resources.

### 9.18 EMPLOYEE BENEFITS

The objective of this Standard (Ind-AS 19) is to prescribe the accounting and disclosure for employee benefits. The Standard requires an entity to recognize: (a) a liability when an employee has provided service in exchange for employee benefits to be paid in the future; and (b) an expense when the entity consumes the economic benefit arising from service provided by an employee in exchange for employee benefits. This Standard shall be applied by an employer in accounting for all employee benefits, except those to which Ind-AS 102 Sharebased Payment applies.

When an employee has rendered service to an entity during an accounting period, the entity shall recognize the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service: (a) as a liability (accrued expense), after deducting any amount already paid. If the amount already paid exceeds the undiscounted amount of the benefits, an entity shall recognize that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund; and (b) as an expense, unless another Standard requires or permits the inclusion of the benefits in the cost of an asset (see, for example, Ind-AS 2 Inventories and Ind-AS 16 Property, Plant and Equipment).

Further, Ind-AS 19 states that an entity shall recognize the expected cost of short-term employee benefits in the form of compensated absences in the case of accumulating compensated absences, when the employees render service that increases their entitlement to future compensated absences; and in the case of non-accumulating compensated absences, when the absences occur. An entity shall measure the expected cost of accumulating compensated absences as the additional amount that the entity expects to pay as a result of the unused entitlement that has accumulated at the end of the reporting period.

An entity shall recognize the expected cost of profit-sharing and bonus payments only when the entity has a present legal or constructive obligation to make such payments as a result of past events; and a reliable estimate of the obligation can be made.

An entity shall classify a multi-employer plan as a defined contribution plan or a defined benefit plan under the terms of the plan (including any constructive obligation that goes beyond the formal terms). Where a multi-employer plan is a defined benefit plan (say, a retirement benefits scheme for workers), an entity shall account for its proportionate share of the defined benefit obligation, plan assets and cost associated with the plan in the same way as for any other defined benefit plan; and disclose the information required.

## Illustration $9.19^{8}$

An entity has employee benefit funding level on the minimum funding requirement basis (which is measured on a different basis from that required under Ind-AS 19) of 82 per cent in Plan A. Under the minimum funding requirements, the entity is required to increase the funding level to 95 per cent immediately. As a result, the entity has a statutory obligation at the end of the reporting period to contribute ₹ 200 to Plan A immediately. The plan rules permit a full refund of any surplus to the entity at the end of the life of the plan. The year-end valuations for Plan A are set out below.

|  | (Amount in Rs.) |
| :--- | :---: |
| Market value of assets | 1,200 |
| Present value of defined employee benefit obligation under Ind-AS 19 | $(1,100)$ |
| Surplus | 100 |
| Defined employee benefit asset (before consideration of the minimum funding <br> requirement)* | 100 |

*For simplicity, it is assumed that there is no unrecognized past service cost.

[^69]
## Application of Requirements

Ind-AS 19 requires the entity to recognize a liability to the extent that the contributions payable are not fully available. Payment of the contributions of ₹ 200 will increase the Ind-AS 19 surplus from ₹ 100 to ₹ 300 . Under the rules of the plan this amount will be fully refundable to the entity with no associated costs. Therefore, no liability is recognized for the obligation to pay the contributions.

### 9.19 GOVERNMENT GRANTS, AND GOVERNMENT ASSISTANCE

This standard (Ind-AS 20) shall be applied for accounting and disclosure of government grants and other government assistance.

Government assistance is action by government designed to provide an economic benefit specific to an entity or range of entities qualifying under certain criteria. Government assistance for the purpose of this Standard does not include benefits provided only indirectly through action affecting general trading conditions, such as the provision of infrastructure in development areas or the imposition of trading constraints on competitors.

Government grants are assistance by government in the form of transfers of resources to an entity in return for past or future compliance with certain conditions relating to the operating activities of the entity. A significant input of this AS is that government grants should not be recognized until there is reasonable assurance that (i) the enterprise will comply with the conditions attached to them, and (ii) the grants will be received.

Government grants shall be recognized in profit or loss on a systematic basis over the periods in which the entity recognizes as expenses the related costs for which the grants are intended to compensate. A government grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs shall be recognized in profit or loss of the period in which it becomes receivable.

Government grants may be of two types: (a) Grants related to assets - the primary condition for this type of grants is that an entity qualifying for them should purchase, construct or otherwise acquire long-term assets. Government grants related to assets, including non-monetary grants at fair value, shall be presented in the balance sheet by setting up the grant as deferred income; and (b) Grants related to income - government grants other than those related to assets. In case, the government grants are nonmonetary, fair value of the same shall be recognized.

Ind-AS 20 also states that the accounting treatment of the grant should be done as per the terms and conditions of the grant received. For example, if a grant is received towards the setting up of a factory building, the same cannot be used for working capital or distributed by way of dividends. We cannot say that there is no need of recording a land that is received free of cost from government because no money has been spent by the company for its acquisition. The proper treatment is to record the land at fair value.

### 9.20 CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS

Consolidated financial statements means the financial statements of a group presented as those of a single economic entity. Group refers to a parent entity along with its subsidiaries. Ind-AS 27 states that consolidated financial statements are required along with the separate financial statements and it is not an alternate to standalone financial statements.

In preparing the consolidated financial statements, an entity combines the financial statements of the financial statements of the parent and subsidiaries line by line adding together items of assets, liabilities, equity, income and expenses. But care should be taken to:
(a) Carrying amount of parent's investment in each subsidiary and parent's portion of equity of each subsidiary are eliminated.
(b) Non-controlling interests in the profit or loss of consolidated subsidiaries for the reporting period are identified.
(c) Non-controlling interests in the net assets of consolidated subsidiaries are identified separately from the parent's ownership interests in them.
(d) Inter group balances, transactions, incomes, expenses and dividen should be eliminated in full. Even the profits and losses resulting from intragroup transactions that are recognized in assets (such as, inventory, fixed assets sold to group company) should also be eliminated.
Further, Ind-AS 27 states that the financial statements of the parent and subsidiaries used in the preparation of consolidated financial statements should be prepared as on the same date. Consolidated financial statements should be prepared using uniform accounting policies and practices for like transactions and other events in similar circumstances.

Non-controlling interests shall be presented in the consolidated balance sheet within equity, separately from the owner's equity of the parent. An entity shall recognize a dividend from a subsidiary, jointly controlled entity or associate in profit or loss in its separate financial statements when its right to receive the dividend is established.

Ind-AS 27 also provides a proforma of consolidated financial statements. The same is provided in this section to ensure ease of understanding.

## Consolidated Balance Sheet

Name of the Group.
Consolidated Balance Sheet as at
(Rupees in. $\qquad$

| Particulars | Note <br> No. | Figures as at <br> the end of cur- <br> rent reporting <br> period | Figures as at <br> the end of pre- <br> vious reporting <br> period |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 |  |

## I. EQUITY AND LIABILITIES

(1) Equity

Equity attributable to owners of the parent
(a) Equity Share capital
(b) Other Equity
(i) Equity component of other financial instruments
(ii) Retained earnings
(iii) Reserves
1.1 Reserves representing unrealized gains/losses
1.2 Other Reserves
(iv) Money received against share warrants
(v) Others
(Contd.)

## Equity attributable to non-controlling Interests

(a) Equity Share Capital
(b) Other equity
(2) Share application money pending allotment
(3) Non-current liabilities
(a) Financial Liabilities
(i) Liability component of other financial instruments
(ii) Long-term borrowings
(iii) Others
(b) Liabilities associated with group(s) of assets held for disposal
(c) Long-term provisions
(d) Deferred tax liabilities (Net)
(e) Other non-current liabilities
(4) Current liabilities
(a) Financial liabilities
(i) Short-term borrowings
(ii) Trade and other payables
(iii) Others
(b) Other current liabilities
(c) Short-term provisions
(d) Liabilities for current tax (Net)

TOTAL

## II. ASSETS

(1) Non-current assets
(a) Property, Plant and Equipment
(b) Capital work-in-progress
(c) Investment property
(d) Intangible assets
(i) Goodwill
(ii) Other intangible assets
(iii) Intangible assets under development
(e) Biological assets
(f) Financial assets
(i) Non-current investments
(ii) Long-term loans and advances
(iii) Others
(g) Deferred tax assets (net)
(h) Other non-current assets

## (2) Current assets

(a) Inventories
(b) Financial Assets
(i) Current investments
(ii) Trade and other receivables
(iii) Cash and cash equivalents
(iv) Short-term loans and advances
(c) Non-current assets classified as held for sale
(d) Assets for current tax (Net)
(e) Other current assets

TOTAL

### 9.21 EARNINGS PER SHARE

An ordinary share is an equity instrument that is subordinate to all other classes of equity instruments. A potential ordinary share (such as, a warrant) is a financial instrument or other contract that may entitle its holder to ordinary shares. The objective of this standard (Ind-AS 33) is to prescribe the principles for the determination and presentation of the earnings per share, which will facilitate a comparison of performance among different enterprises for the same period and among different accounting periods for the same enterprise. An entity that discloses earnings per share shall calculate and disclose earnings per share in accordance with this Standard.

While, earnings per share is not a complicated figure to compute, the need for Ind-AS 33 can be understood in the context of organizations issuing large number of financial instruments which can lead to change in the number of equity shares in the future. For instance, increase in earnings per share or a reduction in loss per share can result due to the assumption that convertible instruments are converted, that options or warrants are exercised, or that ordinary shares are issued upon the satisfaction of specified conditions. Contingently issuable ordinary shares are ordinary shares issuable for little or no cash or other considerations upon the satisfaction of specified conditions in a contingent share agreement are another case in point.

Basic earnings per share shall be calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity (the numerator) by the weighted average number of ordinary shares outstanding (the denominator) during the period. An entity shall also calculate diluted earnings per share amounts for profit or loss attributable to ordinary equity holders of the parent-entity and, if presented, profit or loss from continuing operations attributable to those equity holders. For the purpose of calculating diluted earnings per share, an entity shall adjust profit or loss attributable to ordinary equity holders of the parent entity, and the weighted average number of shares outstanding, for the effects of all dilutive potential ordinary shares.

Thus, the focus of Ind-AS 33 is on the denominator in the earnings per share calculation. The standard requires an enterprise to clearly present the basic and diluted earnings per share for all the reported accounting periods, even if the amounts disclosed are negative (a loss per share).

## Illustration $9.20^{\circ}$

Entity $D$ issued non-convertible, non-redeemable class A cumulative preference shares of $₹ 100$ par value on 1 January $20 \times 4$. The class A preference shares are entitled to a cumulative annual dividend of $₹ 8$ per share starting in 20X7.

At the time of issue, the market rate dividend yield on the class A preference shares was 8 percent a year. Thus, Entity D could have expected to receive proceeds of approximately ₹ 100 per class A preference share if the dividend rate of ₹8 per share had been in effect at the date of issue.

In consideration of the dividend payment terms, however, the class A preference shares were issued at ₹ 79.38 per share, ie at a discount of $₹ 20.62$ per share. The issue price can be calculated by taking the present value of $₹_{100}$, discounted at 8 percent over a three-year period.

Because the shares are classified as equity, the original issue discount is amortised to retained earnings using the effective interest method and treated as a preference dividend for earnings per share purposes. To calculate basic earnings per share, the following imputed dividend per class A preference share is deducted to determine the profit or loss attributable to ordinary equity holders of the parent entity:

| Year | Carrying amount of <br> class A preference <br> shares on 1 January <br> $(₹)$ | Imputed <br> Dividend <br> (₹) | Carrying amount ${ }^{(\mathrm{b})}$ <br> of class A preference <br> shares on <br> 31 December (₹) | Dividend paid <br> (₹) |
| :--- | :---: | :---: | :---: | :---: |
| $20 \mathrm{X}_{4}$ | 79.38 | 6.35 | 85.73 | - |
| $20 \mathrm{X}_{5}$ | 85.73 | 6.86 | 92.59 | - |
| $20 \mathrm{~K}_{6}$ | 92.59 | 7.41 | 100.00 | - |
| Thereafter: | 100.00 | 8.00 | 108.00 | $(8.00)$ |

(a) at $8 \%$
(b) This is before dividend payment.

| Weighted average number of ordinary sha |  |  | Illustration 9.21 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Treasury }{ }^{(\mathrm{a})} \\ \text { shares } \end{gathered}$ |  |
|  |  | Shares Issued |  | Shares outstanding |
| 1 January 20X6 | Balance at beginning of year | 2,000 | 200 | 1,800 |
| 31 May 20X6 | Issue of new shares for Cash | 600 | - | 2,400 |
| 1 December 20X6 | Purchase of treasury shares for cash | - | 240 | 2,160 |
| 31 December 20X6 | Balance at year-end | 2,800 | 550 | 2,250 |

[^70]Calculation of weighted average:
$(1,800 \times 5 / 12)+(2,400 \times 6 / 12)+(2,160 \times 1 / 12)=2,130$ shares or $(1,800 \times 12 / 12)+(600 \times 7 / 12)-(240 \times 1 / 12)=$ 2,130 shares.

Note: Treasury shares are equity instruments reacquired and held by the issuing entity itself or by its subsidiaries.

## Illustration 9.22

## Bonus issue

| Profit attributable to ordinary equity holders of the parent entity 20X5 | ₹ 180 |
| :---: | :---: |
| Profit attributable to ordinary equity holders of the parent entity 20X6 | ₹600 |
| Ordinary shares outstanding until 30 September 20X6 | 200 |
| Bonus issue 1 October 20X6 | 2 ordinary shares for each ordinary share outstanding at 30 September 20X6 $200 \times 2=400$ shares |
| Basic earnings per share 20X6 | $\frac{₹ 600}{(200+400)}=₹_{100}$ |
| Basic earnings per share $20 \mathrm{X}_{5}$ | $\text { = ₹ } 0.30$ <br> Because the bonus issue was without consideration, it is treated as if it had occurred before the beginning of $20 \mathrm{X}_{5}$, the earliest period presented. |

Illustration 9.23

## Convertible bonds*

| Profit attributable to ordinary equity holders of the parent entity | $₹_{1,004}$ |
| :--- | :--- |
| Ordinary shares outstanding | $1_{1,000}$ |
| Basic earnings per share | $₹_{1.00}$ |
| Convertible bonds | 100 |
| Each block of 10 bonds is convertible into three ordinary shares |  |
| Interest expense for the current year relating to the liability <br> component of the convertible bonds | $₹_{10}$ |
| Current and deferred tax relating to that interest expense | $₹_{4}$ |

Note: The interest expense includes amortization of the discount arising on initial recognition of the liability component (see Ind-AS 32 Financial Instruments: Presentation).

### 9.22 OTHER INDIAN ACCOUNTING STANDARDS

## Explain few other important indian accounting standards

While we have discussed the key Indian Accounting Standards, we have not discussed some of the other Indian Accounting Standards issued by the ICAI. In this section, we discuss the other important accounting standards issued by the ICAI. Annexure 9.5 on the Online Learning Center i.e., OLC goes through the remaining ones.

### 9.22.1 Ind-AS 11: Construction Contracts

The objective of this accounting standard is to prescribe the accounting treatment of the revenues and costs associated with construction contracts. Due to the inherent nature of the activities undertaken in the construction contracts, the date at which the contract is entered and the date on which the contract completes falls in different accounting periods. Therefore the primary issue that arises in case of construction contracts is allocation of contract revenue and contract costs and determining the profit earned during an accounting year. This standard provides the recognition crieteria to determine whether the contract revenue or contract cost should be recognized in a particular accounting period.

Broadly, the Ind-AS 11 states that the contract revenue and expenses should be recognized on the basis of percentage completion method. It also states the method of determining the stage of completion of the contract. In case the outcome of construction contract cannot be estimated reliably: (a) revenue shall be recognized only to the extent of contract costs incurred that it is probable will be recoverable; and (b) contract costs shall be recognized as an expense in the period in which they are incurred. Further, an expected loss on contract can be recognized as an expense immediately.

### 9.22.2 Ind-AS 17: Leases ${ }^{10}$

A lease is an agreement whereby the lessor gives/conveys the right to use an asset for an agreed period of time, to the lessee, in return for a payment or series of payments. A finance lease is a lease that transfers substantially, all the risks and rewards incident to the ownership of an asset. An operating lease is a lease other than a finance lease. The objective of Ind-AS 17 is to prescribe, for lessees and lessors, the appropriate accounting policies and disclosures in relation to finance leases and operating leases.

As per Ind-AS 17, in the books of lessee, finance lease recognition is to be done at the commencement of the lease term. Lessees shall recognize finance lease as assets and liabilities in the balance sheet at amount equal to the fair value of the leased property or if lower, the present value of minimum lease payments determined at the inception of lease. In case of operating lease recognition, lease payments under an operating lease shall be recognized as an expense on a straight line basis over the lease term.

[^71]In the books of lessor as per Ind-AS 17, in case of finance lease recognition - lessor shall recognize assets held under a finance lease in their balance sheets and present them as receivable at an amount equal to net investments in the lease. In case of an operating lease recognition - Usually the lease income form operating lease is recognized as income on straight line basis over the lease term.

## Example 9.5

An entity agrees to enter into a new lease arrangement with a new lessor. The lessor agrees to pay the lessee's relocation costs as an incentive to the lessee for entering into the new lease. The lessee's moving costs are ₹1,000. The new lease has a term of 10 years, at a fixed rate of $₹$ 2,000 per year.

The accounting is:
The lessee recognizes relocation costs of Rs.1, 000 as an expense in Year 1. Net consideration of ₹ 19,000 consists of ₹ 2,000 for each of the 10 years in the lease term, less a Rs.1, ooo incentive for relocation costs. Both the lessor and lessee would recognize the net rental consideration of Rs.19, ooo over the 10 year lease term using a single amortization method.

## Example 9.6

An entity agrees to enter into a new lease arrangement with a new lessor. The lessor agrees to a rent-free period for the first three years as incentive to the lessee for entering into the new lease. The new lease has a term of 20 years, at a fixed rate of ₹5,000 per year for years 4 through 20 .

The accounting is:
Net consideration of Rs. 85 , 000 consists of 5,000 for each of 17 years in the lease term. Both the lessor and lessee would recognize the net consideration of $₹ 85,000$ over the 20 year lease term using a single amortization method.

### 9.22.3 Ind-AS 21: Effects of Changes in Foreign Exchange Rates ${ }^{11}$

Ind-AS 21 states that an enterprise may carry on activities involving foreign exchange in two ways. It may have transactions in foreign currencies or it may have foreign operations. In order to include foreign currency transactions and foreign operations in the financial statements of an enterprise, transactions must be expressed in the enterprise's reporting currency and the financial statements of its foreign operations must be translated into the enterprise's reporting currency.

The principal issues in accounting for foreign currency transactions and foreign operations are: to decide which exchange rate to use and how to recognize in the financial statements, the financial effect of changes in the exchange rates. Ind-AS 21 gives the regulations regarding these issues. It states that at the end of each reporting period (a) foreign currency monetary items shall be translated using closing rate, (b) non-monetary items measured in terms of historical cost in a foreign currency shall be translated using exchange rate on the date of transaction, and (c) non-monetary transactions measured in terms of fair value in a foreign currency shall be translated using exchange rate prevailing on the date when such fair value was determined. Such exchange differences is normally recognized in the profit and loss statement unless provided otherwise.

[^72]
## Example 9.7

Entity Haldi has a foreign subsidiary Entity Ram. The functional currencies of Entities Haldi and Ram are Indian Rupee and US Dollar respectively. Both the entities follow financial year as accounting year. Accounting Year of both the entities ends on March 31. The presentation currency for Haldi's separate as well as consolidated financial statements is Rupee.

In all the following situations, it is assumed that the loan forms part of the entity's net investment in the foreign operation.

Situation 1:
Ram owes to Haldi US \$1,000 towards a loan obtained some years back. Exchange rates as at 31 March $20 X_{5}$ and 31 March 20 X6 were US $\$ 1=₹ 48$ and US $\$ 1=₹_{50}$ respectively.

In the above situation, in the individual financial statements of Ram, no exchange difference arises on the loan since it is denominated in its own functional currency.

In the separate financial statements of Haldi, an exchange gain of ₹ 2,000 arises as shown below:

| Loan asset of US $\$ 1,000$ translated | $₹$ |
| :--- | :--- |
| @ exchange rate as at 31 March $20 \times 6$ (₹50 per US $\$$ ) | 50,000 |
| @ exchange rate as at 31 March $20 X_{5}(₹ 48$ per US $\$)$ | 48,000 |
| Exchange gain | 2,000 |

In the consolidated financial statements of Haldi, the exchange gain of $₹ 2,000$ will be recognized in other comprehensive income and accumulated in equity.

### 9.22.4 Ind-AS 28: Investment in Associates

An associate is an enterprise in which the investor has a significant influence and which is neither a subsidiary, nor any interest in joint venture of the investor. Ind-AS 28 states that an investment in an associate should be accounted for in the consolidated financial statements, under the equity method.

The equity method is a method of accounting whereby the carrying amount of the investment is adjusted for the post acquisition change in the investor's share of net assets of the investee. The consolidated statement of profit and loss reflects the investor's share in the results of the operations of the investee. Please note that when an investment is classified as held for sale - it shall not be accounted under the equity method but in accordance with Ind-AS 105 non-current assets held for sale and discontinued operations.

### 9.22.5 Ind-AS 29: Financial Reporting in Hyperinflationary Economies

This standard (Ind-AS 29) is applicable to the financial statements and consolidated financial statements, of any entity whose functional currency is the currency of a hyperinflationary economy. The financial statements of such entity shall be stated in terms of measuring unit current at the end of the reporting period. The gain or loss on the net monetary position shall be included in profit or loss or shall be disclosed separately. These procedures should be applied consistently. The corresponding figures of previous reporting period are restated by applying a general price index so that the comparative financial statements are presented in terms of measuring unit current at the end of the reporting period.

When an economy ceases to be hyperinflationary and the entity discontinues the preparation and presentation of financial statements as per this standard, the carrying amounts of the previous reporting period should be considered as carrying amount in the subsequent financial statements.

### 9.22.6 Ind-AS 31: Interests in Joint Ventures

A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control. Ind-AS 31 has been created to set out the principles and procedures for accounting of interests in joint ventures and reporting of joint venture assets, liabilities, income and expenses, in the financial statements of venturers and investors.

Ind-AS 31 precribes that interests in jointly controlled operations, a venturer shall recognize in its financial statements: (a) the assets that it controls and the liabilities that it incurs; and (b) the expenses that it incurs and its share of the income that it earns from the sale of goods or services by the joint venture. In respect of its interest in jointly controlled assets, a venture shall recognize in its financial statements: (a) its share of the jointly controlled assets, classified according to the nature of the assets; (b) any liabilities that it has incurred; (c) its share of any liabilities incurred jointly with the other venturers in relation to the joint venture; (d) any income from the sale or use of its share of the output of the joint venture, together with its share of any expenses incurred by the joint venture; and any expenses that it has incurred in respect of its interest in the joint venture.

One of the significant points of Ind-AS 31 is that a venturer should disclose the information required in its separate financial statements as well as in the consolidated financial statements. Further, a venturer shall discontinue the use of proportionate consolidation from the date on which it ceases to have joint control over a jointly controlled entity.

### 9.22.7 Ind-AS 32: Presentation of Financial Instruments ${ }^{\mathbf{1 2}}$

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The objective of this Standard (Ind-AS 32) is to establish principles for presenting financial instruments as liabilities or equity and for offsetting financial assets and financial liabilities. It applies to the classification of financial instruments, from the perspective of the issuer, into financial assets, financial liabilities and equity instruments; the classification of related interest, dividends, losses and gains; and the circumstances in which financial assets and financial liabilities should be offset. The principles in this Standard complement the principles for recognizing and measuring financial assets and financial liabilities in Ind-AS 39, Financial Instruments: Recognition and Measurement and for disclosing information about them in Ind-AS 107, Financial Instruments: Disclosures.

The issuer of a financial instrument should classify the instrument, or its component parts, on initial recognition as a financial liability, a financial asset or an equity instrument in accordance with the substance of the contractual arrangement and the definitions of a financial liability, a financial asset and an equity instrument. Regarding the settlement options, this Ind-AS states that when a derivative financial instrument gives one party a choice over how it is settled (say, the issuer or the holder can choose settlement net in cash or by exchanging shares for cash), it is a financial asset or a financial liability unless all of the settlement alternatives would result in it being an equity instrument.

This Ind-AS further states that the Interest, dividends, losses and gains relating to a financial instrument or a component of financial instrument that is a financial liability should be recognized as income or

[^73]expense in the statement of profit and loss. Distributions to holders of an equity instrument should be debited by the entity directly to an appropriate equity account, net of any related income tax benefit. Transaction costs of an equity transaction should be accounted for as a deduction from equity net of any related income tax benefit.

## Example 9.8

## Accounting for Compound Financial Instruments

An entity issues 2,000 convertible bonds at the start of year 1 . The bonds have a three-year term, and are issued at par with a face value of $₹_{1}, 000$ per bond, giving total proceeds of $₹_{2,000,000 \text {. Interest is payable annually in }}$ arrears at a nominal annual interest rate of 6 per cent. Each bond is convertible at any time up to maturity into 250 ordinary shares. When the bonds are issued, the prevailing market interest rate for similar debt without conversion options is 9 per cent.

### 9.22.8 Ind-AS 34: Interim Financial Reporting

Governments, security regulators, stock exchanges and accountancy bodies often require entities to prepare and present interim financial statements. Timely and reliable interim financial reporting improves the ability of stakeholders to understand the entity's capacity to earn revenues and generate cash flows. This standard (Ind-AS 34) does not mandate which entities should prepare interim financial reports but mentions the minimum disclosure that needs to be mentioned while preparing interim financial reports.

Interim period is a period shorter than a full financial year. Interim financial report means a financial report containing either a complete set of financial statements or a set of condensed financial statement. Contents of interim financial reports are to include: (a) A balance sheet; (b) Profit and loss statement; (c) Statement of cash flows for the period; and (d) Notes to accounts. The minimum components of financial statements are: a condensed balance sheet, condensed profit and loss statement, a condensed cash flow statement and self-explanatory notes. The basic and diluted EPS also needs to be stated in the interim financial statements.

As per Ind-AS 34, an entity shall include in its interim financial report an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the entity since the end of the last annual reporting period. If an estimate of an amount reported in an interim period is changed significantly during the final interim period of the financial year but a separate financial report is not published for that final interim period, the nature and amount of that change in estimate shall be disclosed in a note to the annual financial statements for that financial year.

Additionally, Ind-AS 34 prescribes that an entity shall apply the same accounting policies in its interim financial statements as are applied in its annual financial statements, except for accounting policy changes made after the date of the most recent annual financial statements that are to be reflected in the next annual financial statements.

### 9.22.9 Ind-AS 39: Recognition and Measurement of Financial Instruments

We often observe loan commitments that business entities designate as financial liabilities at fair value through profit or loss (say, due to securitization). For example, a real estate entity that has a past practice of selling the assets or future commitments (say receivables-backed securitization) resulting from its loan
commitments shortly after origination to all its loan commitments in the same class. There exists a class of financial instruments such as asset-swaps that need accounting standard to ensure that their truthful picture is presented in the financial statements. This class of financial instruments (such as asset-swaps) need accounting standard to ensure that their truthful picture is presented in the financial statements.

These standardized (or similar class) of loan commitments often can be settled net in cash or by delivering or issuing another financial instrument. These loan commitments do also include hedge instruments and derivatives. Such loan commitments and similar instruments are not regarded as settled net merely because the loan is paid out in instalments. A mortgage construction loan that is paid out in instalments in line with the progress of construction is a case in point. The commitments to provide a loan at a below-market interest rate are another instance.

The objective of this Ind-AS is to establish principles for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard is applied to those contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments, with the exception of contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements.

An entity should recognize a financial asset or a financial liability in its balance sheet only when the entity becomes a party to the contractual provisions of the instrument. When a financial asset or financial liability is recognized initially, an entity should measure it at its fair value plus, in case of financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

### 9.22.10 Ind-AS 102: Share-based Payments ${ }^{13}$

Any share-based payment arrangement such as employee stock options (ESOPs) are typically defined as an agreement between the business entity (or another affiliate business group entity or any shareholder of any business group entity) and another party (including an employee of the entity and such) that entitles the other party to receive cash or other assets for the amounts that are based on the price (or value) of equity instruments (including shares or share options) of the entity or another group entity. This share based payment arrangement by such business entities also includes equity instruments (including shares or share options) of the entity or another group entity.

The objective of this Ind-AS is to specify the financial reporting by an entity when it undertakes share based payment transactions. So that the profit and loss account and the financial position reflects the share-based payments transactions and also the expenses associated with it. A share-based payment transaction may be settled by another group entity (or a shareholder of any group entity) on behalf of the entity receiving or acquiring the goods or services.

The grants of equity instruments might be conditional or unconditional. Whereby the employee has to satisfy certain conditions before he can avail the grant is known as conditional offer. For example an employee is required to work for the company for a continuous period of three years before exercising his option for the grant. For equity settled share-based payment transactions, Ind-AS 102 prescribes that the business entity shall measure the goods or services received at fair values. In case the fair values cannot be estimated reliably, then it should be measured with reference to the fair value of equity instruments granted.

[^74]
## Illustration 9.24

An entity grants 100 share options to each of its 500 employees. Each grant is conditional upon the employee working for the entity over the next three years. The entity estimates that the fair value of each option is $₹_{15}$.

On the basis of weighted average probability, the entity estimates that 20 percent of employees will leave during the three-year period and therefore forfeit their rights to share options.

## Solution

Application of requirements:
Scenario 1
If everything turns out exactly as expected, the entity recognizes the following amounts during the vesting period, for services received as consideration for the share options.

| Year | Calculation | Remuneration <br> expense for the period | Cumulative <br> representation expense |
| :---: | :--- | :---: | :---: |
| 1 | 50,000 options $\times 80 \% \times ₹ 15 \times 1 / 3$ years | $2,00,000$ | $2,00,000$ |
| 2 | $(50,000$ options $\times 80 \% \times ₹ 15 \times 2 / 3$ years $)-2,00,000$ | $2,00,000$ | $4,00,000$ |
| 3 | $(50,000$ options $\times 80 \% \times ₹ 15 \times 3 / 3$ years $)-4,00,000$ | $2,00,000$ | $6,00,000$ |

## Scenario 2

During the year 1,20 employees leave. The entity receives its estimate of total employee departures over the three year period from 20 percent ( 100 employees) to 15 percent ( 75 employees). During year 2 , a further 22 employees leave. The entity revises its estimate of total employee departures over the three-year period from 15 percent to 12 percent ( 60 employees). During year 3, a further 15 employees leave. Hence, a total of 57 employees forfeited their rights to the share options during the three-year period, and a total of 44,300 share options ( 443 employees x 100 options per employee) vested at the end of year 3 .

| Year | Calculation | Remuneration expense <br> for the period | Cumulative <br> representation expense |
| :---: | :--- | :---: | :---: |
| 1 | 50,000 options $\times 85 \% \times ₹ 15 \times 1 / 3$ years | $2,12,500$ | $2,12,500$ |
| 2 | 50,000 options $\times 88 \% \times ₹ 15 \times 2 / 3$ years | $2,27,500$ | $4,40,000$ |
| 3 | 44,300 options $\times ₹ 15$ | $2,24,500$ | $6,64,500$ |

### 9.22.11 Ind-AS 103: Business Combinations ${ }^{14}$

The objective of Ind-AS 103 is to improve the relevance, reliability and comparability of the information that a reporting entity provides in its financial statements about a business combination and its effects. This standard suggests that any business combination is a transaction or event in which an entity obtains control of one or more businesses (say, by merger). If merely the assets acquired are not a business, it will be treated as asset acquisition and not a business combination. For example acquisition of a "shell" or shelf company is not accepted as a business combination because there is no business being acquired.

[^75]Additionally, this accounting standard provides the recognition, measurement and accountability in case of business combinations. Ind-AS 103 also sets out the method of recognizing goodwill and its accountability and also the expenditure incurred on acquisitions.

### 9.22.12 Ind-AS 107 : Financial Instruments Disclosures ${ }^{\mathbf{1 5}}$

The objective of Ind-AS 107 is to require entities to provide disclosures in their financial statements that enable users to evaluate: (a) the significance of financial instruments for the entity's financial position and performance; and (b) the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period, and how the entity manages those risks.

The principles in Ind-AS 107 complement the principles for recognizing, measuring and presenting financial assets and financial liabilities in Ind-AS 39 Financial Instruments: Recognition and Measurement and Ind-AS 32 Financial Instruments: Presentation. An entity shall disclose information that enables users of its financial statements to evaluate the significance of financial instruments for its financial position and performance.

The carrying amounts of each of the following categories, as defined in Ind-AS 39, shall be disclosed either in the balance sheet or in the notes: (a) financial assets at fair value through profit or loss, showing separately (i) those designated as such upon initial recognition and (ii) those classified as held for trading in accordance with Ind-AS 39; (b) held-to-maturity investments; (c) loans and receivables; (d) available-for-sale financial assets; (e) financial liabilities at fair value through profit or loss, showing separately (i) those designated as such upon initial recognition and (ii) those classified as held for trading in accordance with Ind-AS 39; and financial liabilities measured at amortized cost.

Ind-AS 107 also states that it should be applicable to those contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments, as if the contracts were financial instruments, with the exception of contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity's expected purchase, sale or usage requirements.

## Example 9.9

## Application of Disclosure Requirement

On $31^{\text {st }}$ December 20X6, if interest rates at that date had been 10 basis points lower with all other variables held constant, post-tax profit for the year would have been ₹ 1.7 million ( $20 \mathrm{X}_{5}-₹ 2.4$ million) higher, arising mainly as a result of lower interest expense on variable borrowings, and other comprehensive income would have been ₹2.8 million ( $20 \mathrm{X}_{5}-₹_{3} .2$ million) higher, arising mainly as a result of an increase in the fair value of fixed rate financial assets classified as available for sale.

If interest rates had been 10 basis points higher, with all other variables held constant, post-tax profit would have been $₹_{1.5}$ million ( $20 X_{5}$ - $\mathcal{F}_{2.1}$ million) lower, arising mainly as a result of higher interest expense on variable borrowings, and other comprehensive income would have been $₹_{3} .0$ million ( $20 \mathrm{X}_{5}$ - ₹ 3.4 million) lower, arising mainly as a result of a decrease in the fair value of fixed rate financial assets classified as available for sale. Profit is more sensitive to interest rate decreases than increases because of borrowings with capped interest rates. The sensitivity is lower in $20 \times 6$ than in $20 \mathrm{X}_{5}$ because of a reduction in outstanding borrowings that has occurred as the entity's debt has matured.

[^76]
### 9.22.13 Ind-AS 108: Operating Segments

This accounting standard states that an entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

An operating segment is a component of an entity: (a) that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity), (b) whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and (c) for which discrete financial information is available.

An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

## SUMMARY

In this chapter, we understood the way Accounting Standards are created and the importance of adhering to them. One can see that, convergence to IFRS will remain the focus and agenda in the near future, at least one decade. We then went through the key accounting standards and browsed through the objectives of the rest of the accounting standards. We also looked at the importance of 'auditor's qualification/ disclosures' and the 'notes to account' provided along with the financial statements.

Apart from convergence to IFRS, a major advantage of Ind-AS compared to GAAP includes its focus and promise for accurate, timely and comprehensive financial statement information that is relevant to the specific national needs. Due to harmonization of reporting standards under IFRS, the investors do not need to forgo a lot of resources for adjusting the financial statements to be able to understand them. The most noteworthy disadvantage of IFRS relate to the costs related to the application by companies which comprise of changing the internal systems to make it compatible with the new reporting standards, training costs and such.

Critics will criticize - and that should be taken as a feedback to improve. Manipulators would always seek to misuse gaps and loopholes for their own benefit, at the cost of the other stakeholders - and should be minimized as much as feasible. Now, the test is to apply these standards 'In toto'. ${ }^{16}$ This indeed raises the need for a right attitude by the primary stakeholders, proactive regulator, supplementing institutional mechanisms including intermediaries and related process systems. The recent proactive changes made in the accounting standards by the ICAI (prodded by the Ministry of Company Affairs); and the related changes in the Companies Act regarding the policies and practices are most welcome and steps in the right direction. These should largely assist the reader of financial statements. But, it is also important that the changes made above are taken and implemented in the right spirit.

[^77]
## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Accounting estimates ■ Impairment loss
- Biological assets
- Interim financial reporting
- Business combination
- Investment property
- Construction contracts
- Non-adjusting events
- Cost model
- Discontinued operations
- Non-monetary asset
- Employee benefits
- Prior period errors
- Fair value
- Related parties
- Financial instruments
- Residual value
- Hyperinflationary economies
- Revaluation model
- Share-based payments


## EXERCISES

## Multiple Choice Questions

1. Indian Accounting standards suggest that:

LO 3 EASY
(a) Management prepares all its financial statements under the accrual basis of accounting.
(b) The notes to financial statements are supporting points to improve understanding of the same and so these items are not an integral part of the financial statements
(c) Both (a) and (b)
(d) None of the above
2. Indian Accounting Standards suggest the following in the presentation of Income Statement:

LO 3 EASY
(a) Any item of income or expense is not presented as extraordinary item in the statement of profit and loss or in the notes.
(b) The expenses are classified in the statement of profit and loss based on the nature of expense.
(c) The statement of profit and loss includes all items of income and expense and includes each component of other comprehensive income classified by nature.
(d) All of the above.
3. One can disagree on the following lines with respect to the cost of inventory:

LO 4 EASY
(a) It includes cost of purchase, cost of conversion and other cost in bringing the inventory into present location and condition;
(b) It includes costs such as import duties, non-refundable taxes, transport and handling costs and any other directly attributable costs;
(c) It includes costs such as abnormal amount of wasted materials, storage costs, administrative costs and selling costs.
(d) It can be measured using either standard cost method or retail price method.
4. As per Ind-AS 1, which of the following would you agree to:

LO 3 MEDIUM
(a) Restructuring costs should always be disclosed separately. Gains/losses on disposals of property, plant and equipment, if material, should be disclosed separately.
(b) Restructuring costs should always be disclosed separately. Gains/losses on disposals of property, plant and equipment should always be disclosed separately.
(c) Restructuring costs, if material, should be disclosed separately. Gains/Losses on disposals of property, plant and equipment, if material, should be disclosed separately.
(d) Restructuring costs, if material, should be disclosed separately. Gains/Losses on disposals of property, plant and equipment should always be disclosed separately.
5. Indian Accounting Standard on Inventory agrees with the following: LO 4 DIFFICULT
(a) When an entity purchases inventories on deferred payment terms then effective financing element ought to be recognized as inventoriable costs over the period of the financing.
(b) When an entity purchases inventories on deferred payment terms then effective financing element ought to be recognized as interest expense over the period of the financing.
(c) The inventory of service provider is to be expensed out directly.
(d) The inventory of service provider is to be not measured.

## True or False

(a) The Institute of Cost and Works Accountants of India (ICAI) issues the Indian accounting standards. LO 1 EASY
(b) Fifty two Indian accounting standards have been issued and made mandatory till March 2016 by the ASB in India. LO 2 EASY
(c) Indian Accounting standard (Ind AS 28) deals with accounting for investments in associates.

LO 4 EASY
(d) Indian Accounting standard (Ind AS 21) is related with the effects of changes in Foreign Exchange Rates.

LO 4 EASY
(e) The Objective of the Accounting Standards Board is to examine how far the relevant International Accounting Standards can be adapted while formulating the Accounting Standard and to adapt the same.

LO 1 MEDIUM

## Self-Assessment Questions

1. Explain the process of preparation of an accounting standard.

LO 1 EASY
2. Take up any seven accounting standards and mention the accounting principles behind them.

LO 4 MEDIUM
3. Pick up an annual report of your choice and show how ten accounting standards have been adhered to by the management of the company.

LO 4 MEDIUM
4. Refer to questions raised in the chapter opener on Accounting Guidelines to the auditors of Political Parties - discuss and answer any two of them.

LO 1 DIFFICULT
5. Compare the Indian Accounting Standards with the International Accounting Standards and US GAAP. Mention the significant differences. LO 4 DIFFICULT

## Numerical Problems

1. Fayaz Takkar Limited is involved in a dispute with a competitor, Kelawala Furniture Limited. The competitor is alleging that Fayaz Takkar has infringed patents and is seeking damages of ₹99 lakh. Fayaz Takkar, in his annual report, recognizes a provision for its best estimate of the obligation, but discloses none of the information.
The following information is disclosed in its annual report: 'Litigation is in process against the company, relating to a dispute with a competitor, who alleges that the company has infringed pat-
ents and is seeking damages of ₹99 lakh. The information usually required by AS 29, Provisions, Contingent Liabilities and Contingent Assets is not disclosed on the grounds that it can be expected to prejudice the interests of the company. The directors are of the opinion that the claim can be successfully resisted by the company'. Is the company correct in its stance? Discuss. LO 4 EASY
2. Under a new legislation, Billu Badshah Filters Limited is required to fit smoke filters to its factories by September 20, 201X. The enterprise has not fitted the smoke filters as on March 31, 201X. Should the managers account for it? LO 4 MEDIUM
3. The government introduces a number of changes to the income tax system. As a result of these changes, Bijli Investments Limited, a company in the financial services sector, will need to retrain a large proportion of its administrative and sales workforce, in order to ensure continued compliance with financial services regulations. At the balance sheet date, no retraining of staff had taken place. Should the firm make a provision for the above change in the income tax system?

## LO 4 DIFFICULT

4. Bholenath starts a business by issuing 18,000 shares with a face value of ₹ 10 , with ₹ 1 on application; and of ₹ 4 on allotment, in 20X5. Out of this, DJ Baba, owner of 200 shares, did not pay the ₹ 4 on allotment money, which was done before the end of the year 20X5. Dr. Funny, owner of 180 shares, paid the remaining uncalled amount, not including the share premium, in 20X5. The share premium of ₹ 2.50 was to be paid on the first and final call, to be made in 20X6.
The other items in the balance sheet of 20X5 are as following: Gross fixed assets amounting to ₹ $2,00,000$; Investments purchased worth ₹ 27,000 ; Inventory ₹ 78,000 ; Debtors ₹ 75,000 ; Cash balance ₹ 40,000 ; Loan to the Director ₹ 2,000 , Preliminary expenses not written down ₹ 15,000 ; Depreciation of ₹ 25,000 ; Term loan ₹ 50,000 . Creditors ₹ 36,000 ; Provision for $\operatorname{F}$ ₹ 18,000 ; and Provision for Dividends ₹ 15,000 . The company made a profit before tax and dividend of $₹ 1,00,000$. There is no other account in the balance sheet, apart from a cash credit facility from the Bank of Baroda to the extent of ₹ $5,00,000$.
In 20X6, the company made full sales on credit for ₹ $4,00,000$. The cost of goods (which was only goods) was ₹ $2,40,000$. the operating expense was ₹ $1,11,000$, out of which depreciation was ₹ 25,000 . The company wrote off ₹ 5,000 of the preliminary expenses. The company also made a provision for tax of ₹ 21000 and of Dividend ₹ $1,80,000$. The previous year's provisions were fully paid off. The company also sold an asset of ₹ 30,000 (written down or book value) for a profit of ₹ $2,00,000$. Regarding items in balance sheet the following information will be useful.

- The company got the share premium of ₹ 2.50 from all except owners of 150 shares, who did not pay allotment money or other calls.
- The company lined up an extra ₹ $1,75,000$ on term loan. Nothing was repaid.
- Sundry creditors were $₹ 45,000$ as at end.
- Fixed assets of $₹ 2,55,000$ were purchased during 2002.
- No investments were added.
- No change in inventory.
- Debtors were $25 \%$ of sales at end.
- Cash balance was maintained at the same level (as there was a compulsion to do so).
- The loan to the director increased to $₹ 1,00,000$. Nothing was repaid.


## Questions

(a) Prepare the funds flow statement.
(b) Mention the relevant accounting standards used in taking care of the different items.

LO 4 DIFFICULT
5. COCHIN International Airport Ltd (CIAL), the promoter and operator of the Cochin international airport in the country, located near Nedumbassery, is to allot shares worth ₹ 35 crore to its 10,000 shareholders as rights issue.
"A sub-committee constituted by the company's board of directors during its meeting held here on September 10, 2004 would be submitting its recommendations on these lines to the board soon", C.V. Jacob, Chairman of the Sub Committee, told The Hindu Business Line. The rights issue would be available soon to its shareholders at $3: 1$, he said.
The shares aggregating ₹52 crore have become available for allotment following the board's decision last week. The company had been keeping the shares for long to be converted in to equity of the Housing and Urban Development Corporation (HUDCO), and repay ₹52 crore to the corporation, he said. Under a one-time settlement, CIAL had repaid ₹ 120 crore to HUDCO out of the total outstanding dues amounting to ₹ 172 crore and set aside ₹ 52 crore for converting in to its equity. But, HUDCO does not seem to be interested in the offer.
The company's decision to enhance its capital base to ₹200 crore had been pending for about two years for want of a positive response from the HUDCO, he said.
After the completion of the rights issue, the paid-up capital of the company would go up to ₹ 183 crore against the authorized capital of ₹ 200 crore, he said. Meanwhile, the company is in the process of raising ₹ 52 crore as loan at 6 per cent interest from a bank for settling the outstanding dues of the Hudco, Mr Jacob said.
CIAL had been in the red ever since it was commissioned in June 1999. The company had for the first time posted a net profit of ₹ 12.54 crore in 2002-03 and that had gone up to ₹ 22.11 crore last fiscal.
The major stake holders in the company is the Government of Kerala and the state public sector undertakings with 26 per cent and the rest is held by State Bank of Travancore, Federal Bank, BPCL, Air India, NRIs and the public.

Source: "CIAL to allot ₹ 35 -cr shares as rights issue," The Hindu Business Line 13 Sep. 2004, web.

## Questions

(a) Assuming the company clearing the HUDCO loan using a $6 \%$ Bank loan for 90 days from a bank and finally returning the bank loan also using a rights issue to be. Please list out the possible journal entries the company may have had to note?
(b) You are required to analyze the impact of the changes on the company's financial statements and comment on the same?

LO 4 DIFFICULT

## MINI CASES

## Case 9.1 Kevat Equipment Limited

LO 4 MEDIUM

About the Industry: The compressor and drilling equipment industry is cyclical in nature and its prospects depend on the general economic conditions and fresh investments in user industries. Compressors find applications in industries such as petrochemicals, fertilizers and food processing. Drilling equipment is used in coal mining, rock drilling, road construction, and other infrastructure projects.

There are five players in the sector. Most have a wide product profile. This forces players to maintain a high level of inventories. The level of technology plays a significant role in product design. Hence, product design upgradation and innovation play a critical role in retaining customers.

Multinationals dominate the business in India. The Indian subsidiaries thus, have access to technology, product profile and markets of the MNC parent. The export and sale of spares and services contribute significantly to the topline.

About the company: Established in 1972, in collaboration with a US-based Pneumatic Tool Company, Kevat Equipment Ltd. manufactures water-well rigs, blast-hole rigs, and allied products. The company has a tie-up with another US-based company to manufacture and export small pneumatic track drills on a continuous basis. It has also developed a new model of an air-operated pump, which has wider applications and a larger market. Kevat has now ventured into wind and gas based power generation projects.

During 20X2-20X3, the company undertook a restructuring of its operations, so as to have flexibility in meeting the cyclical nature of the business, which was foreseen in the coming years. During 20X320X4, the company's erstwhile foreign promoters sold their stake to Indian promoters.

The Big Issue in August 20X7: The company's union leaders and the management were locked in a dead-end over the bonus payment for the financial year 20X6. The workers were becoming restless about not being paid bonus for the past three years and there were high chances of a strike being called by them. On the other hand, the company's argument was that they did not have enough profits and liquidity to pay any bonus for the year. They were requesting the workers to be patient.

The labour commissioner finally interfered and called a meeting of both the parties. He had in his hands, the last three years balance sheet and profit and loss account along with the relevant notes of the company.

## Kevat Equipment Limited Profit and Loss Account

| As on ( Months ) | 31-Mar-X6(12) | 31-Mar-X5(12) | 31-Mar-X4(12) |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{4 3 4}$ | $\mathbf{5 0 9}$ | $\mathbf{4 6 8}$ |
| Net Sales | 450 | 509 | 476 |
| Operating Income (OI) | 147 | 145 | 118 |
| OPBDIT | 144 | 139 | 113 |
| OPBDT | 139 | 135 | 108 |
| OPBT | 26 | 27 | 28 |
| Non-Operating Income | -100 | -140 | -59 |
| Extraordinary/Prior Period | 50 | 18 | 44 |
| Tax | $\mathbf{1 5}$ | $\mathbf{4}$ | $\mathbf{3 3}$ |
| Profit after tax(PAT) | 8 | 0 | 32 |
| Dividend-Equity | $\mathbf{4 3 4}$ | 509 | $\mathbf{4 6 8}$ |

## Kevat Equipment Limited

Balance Sheet

| As on | 31-Mar-X6(12) | 31-Mar-X5(12) | 31-Mar-X4(12) |
| :--- | :---: | :---: | :---: |
| Assets | ₹ $\mathbf{m n}$ | ₹ $\mathbf{~ m n}$ | ₹ $\mathbf{~ m n ~}$ |
| Gross Block | 287 | 167 | 163 |
| Net Block | 140 | 24 | 22 |
| Capital WIP | 0 | 0 | 0 |
| Investments | 30 | 90 | 42 |
| Inventory | 175 | 102 | 34 |
| Receivables | 97 | 116 | 131 |
| Other Current Assets | 174 | 257 | 402 |
| Total Assets | 615 | 589 | 630 |
| Liabilities | $₹ \mathbf{m n}$ | $₹ \mathbf{m n}$ | ₹ mn |
| Equity Share Capital | 32 | 32 | 32 |
| Reserves | 462 | 457 | 453 |
| Long-term Debt | 0 | 0 | 29 |
| Creditors and Acceptances | 46 | 46 | 34 |
| Other current liab/prov. | 74 | 54 | 82 |
| Total Liabilities | 615 | 589 | 630 |

[Note: All figures are rounded off (and thus, there can be rounding off errors)]

## Notes for FY20X6

- Expenditure includes Increase/Decrease in stock in Trade ₹ (90) million, Consumption of Raw Material ₹298 million, Staff Cost ₹38 million, and Other expenditure ₹ 65 million.
- Provision for Taxation includes Current Tax ₹ 35 million and Deferred Tax ₹ 15 million.
- The extraordinary item of previous year represents payment of non-compete/non-solicitation fee, to Daksh India Ltd.
- ₹90 million invested in $12 \%$ Non-cumulative Redeemable Preference Shares of Bali Asset Company Pvt Ltd., have been redeemed and proceeds have been received.
- ₹116 million invested in Wind Power Project.
- ₹30 million invested in 12 year 15\% Cumulative Participating Preference Shares of Lal Batti Electric Company Ltd.
- Board has recommended ₹ 2.50 per share as dividend for the year 20X5-X6.
- Prior year figures have been regrouped to conform with the current year's presentation, wherever applicable.
- The last installment of non compete/non solicitation fee of ₹ 100 million, has been paid to Daksh India Ltd. to ensure that it, along with companies associated with Daksh AB, Europe, do not compete with Kevat or solicit its key employees for specified periods.


## Notes for FY 20X5

- Expenditure includes Increase/Decrease in stock in Trade ₹36 million, Consumption of Raw Material ₹ 311 million, Staff Cost ₹ 35 million, and Other expenditure ₹ 58 million.
- Tax includes Current Tax ₹ 14 million and Deferred Tax ₹ 4 million.
- The Company's operations relate to the manufacture and sale of Drilling Rigs. Accordingly, this being the only primary reportable segment, the Company's entire sales, profit before tax, asset and liabilities are represented by this segment's operations.
- The first installment for non compete/non solicitation fee of ₹ 140 millions has been paid to Daksh India Ltd., to ensure that it, along with companies associated with Daksh AB, Europe, do not compete with Kevat or solicit its key employees for specified periods. This expenditure has been incurred for protecting the business interests of the Company and hence, protecting shareholder value. Extra-ordinary item of ₹9 million in year 20X3-X4 refers to VRS Compensation paid.
- No dividend has been declared during the year.
- Prior year figures have been regrouped to conform with the current year's presentation, wherever applicable.


## Notes for FY20X4

- Expenditure includes Increase/Decrease in Stock ₹5 million, Consumption of Raw Materials ₹266 million, Staff Cost ₹ 31 million, and other expenditure ₹ 60 million.
- Provision for taxation for year ended March 31, 20X4, includes current tax expenses of ₹ 62 million and deferred tax credit of ₹8 million.
- Pneumatic Tool Company, USA, holding $40 \%$ shares, has entered into an agreement on April 21, 2002.
- The company changed its accounting policy for depreciation from straight line method to written down value method, resulting in a one time depreciation write off to the extent of ₹ 51 million.



## Case Questions

- What do the above financial statements indicate? Is the company's management correct in saying that they are not having sufficient money to pay bonus? Are the elected union leaders just creating some scenario to ensure enough mileage in the coming elections?
- Imagine yourself in the place of the labour commissioner - What would be your analysis and hence, the points in favor of the management and the union leaders?


## Case 9.2 Reorganization of Capital at Marico ${ }^{17}$

The following are excerpts from the Annual Report of Marico Industries for the financial year ended 31 March, 2003.

During the year, the Company's shareholders approved a scheme of re-organization of Capital ('Scheme') which was approved by the Hon’ble Bombay High Court on March 25, 2003. In accordance with the Scheme, the Company has adjusted the carrying amount of ₹ 445 million of intangible assets as on December 3, 2002, against Share Premium Account ₹ 165 million and Capital Redemption Reserve ₹ 280 million.

[^78]| Description | Acquisition Value | Accumulated Depreciation | Book value |
| :--- | :---: | :---: | :---: |
| Business \& commercial rights | 108.651 | $(18.561)$ | 90.090 |
| Technical know-how | 54.000 | $(30.005)$ | 23.995 |
| Trademarks and copyrights | 385.284 | $(60.654)$ | 324.630 |
| Non-compete convenants | 9.000 | $(2.700)$ | 6.300 |
| Total | 556.935 | $(111.920)$ | 445.015 |

Consequent to the above adjustments, depreciation and amortization is lower by Rs. 11.533 million and the profit for the year is higher by an equivalent amount.

## $?$

## Case Questions

- Pass the necessary journal entries for the above adjustments.
- As per Ind-AS the above information enough for the above changes? Discuss.


## Case 9.3 Global Trust Bank: First Indications of an Unfortunate End

LO 4 EASY

Established in 1993 and headquartered at Secunderabad, the Global Trust Bank (GTB) was promoted as a private sector bank by Ramesh Gelli, Jayanta Madhab and Sridhar Subasri against the backdrop of the government's policy of deregulation and liberalization. With a 40 -percent contribution by the core promoters, the bank was the first in India to attract equity participation from two international multilateral institutions - International Finance Corporation (IFC) and Asian Development Bank (ADB) - the only other major shareholders.

The bank had a network of 104 branches and 275 ATMs in 34 towns/cities across the country. Retail banking products, wholesale banking products, treasury products, investment banking products, nonresident Indian products, depository services and advisory services were some of the offerings the bank has served up. GTB was once touted to be one of India's best before it succumbed to staggering losses and non-performing assets.

For the year ending 31 March, 2002, the audited balance sheet of GTB showed a profit of ₹ 40 crore while in September 2002, the annual inspection report of the Reserve Bank of India (RBI) reported negative net worth, a fact, confirmed by an external auditor in February 2003. It is hard to believe auditors, who are members of the ICAI appending their valued names to suspect numbers.

It was informed by the media that, the RBI has taken up the issue with the ICAI, but that will not remove public doubts over audited bank balance sheets. Auditors were changed on the advice of RBI and a monthly monitoring of GTB by the RBI was put in place.

On July 24, 2003 GTB was put under moratorium by the RBI.

## Case Questions

- Imagine yourself as part of the new auditing team in 2003. Under which accounting standards would you treat the findings of RBI? Discuss.
- What could be the possible reasons behind the GTB's old auditing team not revealing the true picture?


## Case 9.4 Hatsun Agro Changes its Accounting Policies <br> LO 4 MEDIUM

Hatsun Agro Products is the largest private player in the dairy milk industry in South India, with its corporate office in Chennai. The brands owned by it are well known, including Arokya, Komata, and Arun Ice Creams.

Following is an excerpt from the Annual Report of Hatsun Agro Product Ltd., for the year ended March 31, 2004.

## Changes in Accounting Policies

During the year, the company has changed the method of depreciation from the written down value method to the straight-line method. This, in the opinion of the management, would result in a more appropriate presentation of the financial statements of the Company. In accordance with Accounting Standard 6-Depreciation Accounting, depreciation has been recalculated under the straight-line method with retrospective effect, that is, from the date of the asset coming into use. Accordingly, excess depreciation determined, amounting to $₹ 1,10,530$, has been credited to the profit and loss account of the current year. Further, pursuant to this change, the net depreciation charge for the year is lower by ₹ 62,893 . Consequently, the profit after tax and reserves and surplus are higher by ₹ 103,289 , net fixed assets by $₹ 1,73,423$, net deferred tax liabilities by ₹ 62,216 and provision for tax by ₹ 7,918 .

Fixed Assets

|  |  |  | Original Cost |  |  | Accumulated depreciation |  |  |  |  |  | Net Block |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | As at 1 <br> April, <br> 2003 | Additions on Amalgamation | Additions for the year (refer note 2) | Deletions | $\begin{gathered} \text { As at } 31 \\ \text { March, } \\ 2004 \end{gathered}$ | As at 1 April, 2003 | Additions on Amal-gamation (refer note 3) | Depreciation written back (refer note 4) | For the year (refer note 5) | Deletions | As at 31 <br> March, 2004 | As at 31 <br> March, $2004$ | As at 31 <br> March, 2003 |
| Intangible assets |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Goodwill | 32,488 | - | - | - | 32,488 | 13,523 | - | - | 6,498 | - | 20,021 | 12,467 | 18,965 |
| Noncompete fee | 23,947 | - | - | - | 23,947 | 5,987 | - | - | 5,987 | - | 11,974 | 11,973 | 17,960 |
| Brand | 21,198 | - | 7,024 | - | 28,222 | 5,300 | - | - | 5,417 | - | 10,717 | 17,505 | 15,898 |
| ERP <br> Software | 4,918 | - | 7,500 | - | 12,418 | 2,459 | - | - | 1,283 | - | 3,742 | 8,676 | 2,459 |

(Contd.)

| Tangible assets |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Freehold land | 90,772 | 11,093 | 2,216 | 319 | 103,762 | - | - | - | - | - | - | 103,762 | 90,772 |
| Buildings | 143,304 | 15,957 | 42,883 | - | 202,144 | 29,848 | 2,858 | 20,683 | 6,117 | - | 18,140 | 184,004 | 113,456 |
| Plant and machinery | 525,435 | 43,437 | 167,343 | 57,861 | 678,354 | 221,486 | 8,898 | 80,132 | 97,742 | 53,764 | 194,230 | 484,124 | 303,949 |
| Future and fixtures | $6,580$ | 1,933 | 1,347 | - | 9,860 | 3,944 | 581 | 1,525 | 895 | - | 3,895 | 5,965 | 2,636 |
| Office equipment | 8,108 | 453 | 1,237 | - | 9,798 | 2,881 | 112 | 752 | 575 | - | 2,816 | 6,982 | 5,227 |
| Vehicles (refer note 1) | $34,164$ | 383 | 12,647 | 5,428 | 41,766 | 14,992 | 167 | 7,438 | 3,579 | 1,994 | 9,306 | 32,460 | 19,172 |
| Leased assets |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Computers | - | - | 13,190 | - | 13,190 | - | - | - | 2,336 | - | 2,336 | 10,854 | - |
| Total | 890,914 | 73,256 | 255,387 | 63,608 | 1,155,949 | 300,420 | 12,616 | 110,530 | 130,429 | 55,758 | 277,177 | 878,772 | 590,494 |
| $\begin{aligned} & 31 \text { March } \\ & 2003 \end{aligned}$ | $581,684$ | - | 312,977 | 3,747 | 890,914 | 165,046 | - | - | 137,820 | 2,446 | 300,420 | 590,494 |  |

Notes:

1. Includes cost of assets acquired under hire purchase - ₹ 11,491 (March 31, 2003: ₹5,003).
2. Includes interest capitalised - ₹558 (March 31, 2003: Nil) and exchange gain adjusted - ₹5,879 (March 31, 2003: Nil).
3. Includes prior period adjustment of ₹4,912 (March 31, 2003: Nil) arising out of amalgamation.
4. Represents depreciation written back arising on account of change in the method of depreciation.
5. Includes prior period adjustment - ₹710 (31 March 31, 2003: ₹30,313).

Profit and Loss Account for the Year Ended March 31, 2004

|  | (Rs in '000s) |  |  |
| :---: | :---: | :---: | :---: |
|  | Schedule No. | Year ended March 31, 2004 | $\begin{array}{r} \text { Year ended } \\ \text { March 31, } \\ 2003 \end{array}$ |
| INCOME |  |  |  |
| Sales - Gross | 14 | 3,661,115 | 3,253,187 |
| Less: Excise Duty |  | 42,018 | - |
| - Net |  | 3,619,097 | 3,253,187 |
| Other income | 15 | 7,396 | 9,150 |
|  |  | 3,626,493 | 3,262,337 |
| EXPENDITURE |  |  |  |
| Cost of manufactured goods | 16 | 2,638,578 | 2,187,005 |
| Cost of traded goods | 17 | 35,418 | 263,178 |
| Employee costs | 18 | 95,060 | 76,861 |
| Manufacturing, administrative and selling expenses | 19 | 700,655 | 545,890 |

(Contd.)

| Interest and finance charges | 20 | 43,829 | 47,028 |
| :---: | :---: | :---: | :---: |
| Depreciation |  | 129,719 | 107,507 |
| Depreciation written back (refer note 2(r) of Schedule 21) |  | $(110,530)$ | - |
| Miscellaneous expenditure amortised | 13 | - | 16,445 |
|  |  | 3,532,729 | 3,243,914 |
| Profit before prior period adjustments and tax |  | 93,764 | 18,423 |
| Prior period adjustments (net) (refer note 2(m) of Schedule 21) |  | 1,623 | 2,432 |
| Profit before tax |  | 95,387 | 20,855 |
| Income Tax expense: - Current tax |  | 7,776 | 6,825 |
| - Deferred tax expense/(benefit) |  | 33,758 | $(16,721)$ |
| Profit after tax |  | 53,853 | 30,751 |
| Balance brought forward from previous year |  | 4,882 | 505 |
| Adjustments relating to amalgamation (refer note $2(n)$ of Schedule 21) |  | 5,270 | - |
| Profit available for appropriation |  | 53,465 | 31,256 |
| Appropriations: |  |  |  |
| Transfer to General reserve |  | 4,040 | 3,100 |
| Transfer to Capital redemption reserve |  | - | 3,000 |
| Dividend paid (current year exempt from tax, previous year subject to deduction of tax) |  | 13,516 | 20,274 |
| Proposed dividend on equity shares allotted pursuant to amalgamation (exempt from tax) |  | 61 | - |
| Corporate dividend tax (including Rs. 8 on proposed dividend) |  | 1,740 | - |
| Balance carried to Balance Sheet |  | 34,108 | 4,882 |
|  |  | 53,465 | 31,256 |
| Earnings per share: - Basic \& Diluted (Rs) |  | 7.93 | 4.55 |
| - Weighted average number of equity shares outstanding |  | 6,788,818 | 6,758,090 |
| - Par value of equity shares (Rs) |  | 10 | 10 |

## Case Questions

- Mention the relevant accounts that have influenced in the presentation of the above profit and loss account of Hatsun Agro?
- Analyse the impact of the change in the depreciation policy of Hatsun Agro? Is it correct for the company to change its depreciation policy? Comment.


## Case 9.5 Siemens Limited ${ }^{18}$

LO 4 MEDIUM

Siemens Limited (henceforth, Siemens) was incorporated in the year 1957 and is listed on the BSE and NSE. We provide below the schedule related to provisions and contingencies of Siemens for FY2010.

## Siemens Limited <br> Schedules to the Financial Statements as at 30 September 2010

 (Currency: Indian rupees thousands)|  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| :--- | ---: | ---: |
| Provisions |  |  |
| Pension | 166,332 | 174,983 |
| Leave wages | 228,961 | 240,841 |
| Medical benefits | 202,067 | 70,754 |
| Silver Jubilee | 82,647 | 74,418 |
| Warranty (Refer Schedule 25) | $2,882,574$ | $2,441,545$ |
| Loss order (Refer Schedule 25) | 661,819 | 891,614 |
| Liquidated damages (Refer Schedule 25) | $6,718,140$ | $5,651,320$ |
| Contingencies (Refer Schedule 25) | $2,763,991$ | $2,106,815$ |
| Proposed dividend | $1,685,801$ | $1,685,801$ |
| Tax on proposed dividend | 279,990 | 286,502 |
|  | $15,672,322$ | $13,624,593$ |

## Disclosure relating to Provisions

## Provision for warranty

Warranty costs are provided based on a technical estimate of the costs required to be incurred for repairs, replacement, material cost, servicing and past experience in respect of warranty costs. It is expected that this expenditure will be incurred over the contractual warranty period.

## Provision for liquidated damages

Liquidated damages are provided based on contractual terms when the delivery/commissioning dates of an individual project have exceeded or are likely to exceed the delivery/commissioning dates as per the respective contracts. This expenditure is expected to be incurred over the respective contractual terms upto closure of the contract (including warranty period).

## Provisions for loss orders

A provision for expected loss on construction contracts is recognised when it is probable that the contract costs will exceed total contract revenue. For all other contracts loss order provisions are made when the unavoidable costs of meeting the obligation under the contract exceed the currently estimated economic benefits.

[^79]
## Contingencies

The Company has made provisions for known contractual risks, litigation cases and pending assessments in respect of taxes, duties and other levies, the outflow of which would depend on the cessation of the respective events.
The movements in the above provisions are summarised below:

|  | Warranties | Liquidated <br> damages | Loss orders | Contingencies |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Balance as at 1 October 2009 | $2,441,545$ | $5,651,320$ | 891,614 | $2,106,815$ |
| Additions on amalgamation of Flender (Refer <br> Schedule 2.1) | 10,934 | 6,841 | 16,325 | 5,892 |
| Provisions: |  |  |  |  |
| - Created | $(246,124,320$ | $1,836,318$ | $(213,725)$ | $(746,827)$ |
| - Utilised | $(448,124)$ | $(562,614)$ | $(154,771)$ | $(105,924)$ |
| - Reversed | $2,882,574$ | $6,718,140$ | 661,819 | $2,763,991$ |
| Balance as at 30 September 2010 |  |  |  |  |

## Case Questions

(a) What are the new jargons you have come across in the above disclosure of the contingent liabilities? Clarify them.
(b) From the above contingent liabilities, what can you make out as the company's main business activities?
(c) Discuss the application of the relevant accounting standards on the schedule given.

## Case 9.6 Provisions and Contingencies at ICICl Bank ${ }^{19}$

ICICI Bank Limited ${ }^{20}$ and its aggressive growth story in the past decade is a legend. Today the firm is the second largest bank in India (next to the State Bank of India). The company provided following information regarding its provisions and contingent liabilities in its annual report for FY2010.

[^80]ICICI Bank at March 31, 2010
( $\mathcal{F}^{\text {in }}$ '000s)

| Schedule | At 31.03.2010 | At 31.03.2009 |
| :---: | :---: | :---: |
| Schedule 17-Provisions and Contingencies |  |  |
| I. Income tax |  |  |
| - Current period tax | 15,977,789 | 17,933,052 |
| - Deferred tax adjustment | $(2,804,400)$ | $(4,716,700)$ |
| - Fringe benefit tax | - | 342,010 |
| II. Wealth tax | 30,000 | 30,000 |
| Total Taxes | 13,203,389 | 13,588,362 |
| III. Provision for investments (net) | $(26,540)$ | 977,328 |
| IV. Provision for advances (net) | 43,621,629 | 37,500,259 |
| V. Others | 273,493 | $(395,006)$ |
| Total Provisions and Contingencies | 57,071,971 | 51,670,943 |
| 1. Includes provisions on standard assets, non-performing advances, non-performing leased assets and others. |  |  |

## From the Notes to Accounts

## Provisions, contingent liabilities and contingent assets

The Bank estimates the probability of any loss that might be incurred on outcome of contingencies on the basis of information available up to the date on which the financial statements are prepared. A provision is recognised when an enterprise has a present obligation as a result of a past event and it is probable that an outflow of resources will be required to settle the obligation, in respect of which a reliable estimate can be made. Provisions are determined based on management estimates of amounts required to settle the obligation at the balance sheet date, supplemented by experience of similar transactions. These are reviewed at each balance sheet date and adjusted to reflect the current management estimates. In cases where the available information indicates that the loss on the contingency is reasonably possible but the amount of loss cannot be reasonably estimated, a disclosure to this effect is made in the financial statements. In case of remote possibility neither provision nor disclosure is made in the financial statements. The Bank does not account for or disclose contingent assets, if any.

## Provisions and contingencies

The following table sets forth, for the periods indicated, the break-up of provisions and contingencies included in profit and loss account.
(₹ in million)

|  | Year ended <br> March 31, 2010 | Year ended <br> March 31,2009 |
| :--- | ---: | ---: |
| Provisions for depreciation of investments | $43,621.6$ | 977.3 |
| Provision towards non-performing assets | - | $37,690.3$ |
| Provision towards standard assets | $13,173.4$ | $(190.0)$ |
| Provision towards income tax ${ }^{1}$ | 30.0 | $13,558.4$ |
| Provision toward wealth tax | 273.5 | 30.0 |
| Other provision and contingencies | $(395.0)$ |  |

[^81]
## Description of contingent liabilities

The following table sets forth description of contingent liabilities.

| Sr. No. | Contingent Liability | Brief Description |
| :---: | :--- | :--- |
| 1. | Claims against the Bank <br> not acknowledged as <br> debts | This item represents demands made in certain tax and legal matters against <br> the Bank in the normal course of business. The Bank does not consider these <br> matters to have a material adverse financial impact in excess of provisions <br> already made in the financial statements. |
| 2 | Liability for partly paid <br> investments | These represent amounts remaining unpaid towards purchase of investments. <br> These payment obligations of the Bank do not have any profitloss impact. |
| 3. | Liability on account of <br> outstanding forward <br> exchange contracts | The Bank enters into foreign exchange forward contracts in its normal course <br> of business, to exchange currencies at a pre-fixed price at a future date. This <br> item represents the notional principal amount of such contracts, which are <br> derivative instruments. With respect to the transactions entered into with its <br> customers, the Bank generally enters into off-setting transactions in the inter-bank <br> market. This results in generation of a higher number of outstanding transactions, <br> and hence a large value of gross notional principal of the portfolio, while the <br> net market risk is lower. |
| 4. | Guarantees given on <br> behalf of constituents, <br> acceptances, <br> endorsements and other <br> obligations | These items represent the guarantees and documentary credits issued by the <br> Bank as part of its trade finance banking activities, on behalf of its customers <br> in favour of third parties, with a view ko agument the customers' credit standing. <br> Through these instruments, the Bank undertakes to make payments for its <br> customers' obligations, either directly or increase of failure of the customers to <br> fuffil their financial or performance obligations. |



## Case Questions

(a) What are the new jargons you have come across in the above disclosure of the provisions and contingent liabilities? Clarify them.
(b) Discuss the application of the relevant accounting standards on the schedule given.

## Case 9.7 Adjustment in Depreciation by Hexaware Technologies ${ }^{21}$

## LO 4 DIFFICULT

Hexaware Technologies Limited is a leading software services provider, specializing in Application Management, EAI, e-Commerce, ERP and Embedded Systems. Industries served by the company include Airlines, Banking and Financial Services, Insurance and Healthcare.

Following are excerpts from their Annual Report of December 2003. These relate to a change in depreciation policy and practices adopted by the company:

[^82]
## Hexaware Technologies, India

| Schedule "4" - Fixed Assets |  |  |
| :--- | ---: | ---: |
| Gross Block |  |  |
| Freehold Land | 153,699 | 153,699 |
| Buildings | $297,196,253$ | $767,480,091$ |
| Plant and Machinery | $606,415,857$ | $185,416,242$ |
| (Includes Computers and Software) | $224,238,720$ | $33,821,162$ |
| Furniture and Fixtures | $37,196,328$ | $1,267,864,524$ |
| Vehicles | $1,165,200,857$ | $375,586,949$ |
|  | $418,870,621$ | $746,330,236$ |
| Less : Accumulated Depreciation |  | $892,277,575$ |

Schedule " 4 " - Fixed Assets

|  | Gross Block |  |  |  | Depreciation |  |  |  | Net Block |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | $\begin{gathered} \text { As at } \\ \text { 01.01.2003 } \end{gathered}$ | Addition during the Year | Deductions during the Year | $\begin{gathered} \text { As at } \\ \text { 31.12.2003 } \end{gathered}$ | $\begin{gathered} \text { As at } \\ 01.01 .2003 \end{gathered}$ | Provided during The Year | Deduction during the Year | $\begin{gathered} \text { As at } \\ 31.12 .2003 \end{gathered}$ | $\begin{gathered} \text { As at } \\ 31.12 .2003 \end{gathered}$ | $\begin{gathered} \text { As at } \\ \text { 31.12.2002 } \end{gathered}$ |
| Land | 153,699 |  |  | 153,699 | - | - | - | - | 153,699 | 153,699 |
| Buildings | 280,386,636 | 16,809,617 | - | 297,196,253 | 7,704,418 | 4,582,847 | - | 12,287,265 | 284,908,988 | 272,682,219 |
|  <br> Machinery <br> (Includes <br> Computer <br> and <br> Softwares) | 656,992,002 | 174,195,196 | 343,891,423 | 487,295,775 | 247,086,487 | 105,238235 | 88,492,779 | 263,831,943 | 223,463,831 | 409,905,514 |
| Furniture \& Fixture | 166,756,313 | 62,354862 | 13,431,957 | 215,679,218 | 25,187,886 | 11,288,571 | 2,120,797 | 34,355,660 | 181,323,558 | 141,568,427 |
| Vehicles | 33,821,163 | 9,916,433 | 6,541,268 | 37,196,328 | 4,315,137 | 3,317,077 | 1,451,313 | 6,180,901 | 31,015,428 | 29,506,026 |
| Current Year | 1,138,109,813 | 263,276,108 | 363,864,648 | 1,037,521,273 | 284,293,928 | 124,426,730 | 92,064,889 | 316,655,769 | 720,865,504 | 853,815,885 |
| Previous Year | 943,403,734 | 279,568,572 | 82,862,494 | 1,138,109,813 | 200,731,589 | 114,466,110 | 30,903,771 | 284,293,938 | 853,815,885 | 742,672,145 |

Relevant Observation on Fixed Assets mentioned in the management discussion:

- Net Fixed assets decreased by 16 percent from ₹ 892.39 million in 2002 to $₹ 746.33$ million in 2003. This was mainly due to investments in infrastructure of ₹ 279.40 million and a provision of ₹ 239.31 million for impairment of fixed assets. The Company has also accelerated its depreciation for computers and software from the earlier 3-5 years to 3 years resulting in the reduction in net fixed assets.
Relevant Explanations on Fixed Assets and Depreciation in the schedule:
- Fixed Assets are stated at cost of acquisition less accumulated depreciation. Cost includes all expenses incurred for acquisition of assets like inward freight, duties, taxes, etc.
- Depreciation of fixed assets is provided on straight line method over the useful life of assets, as estimated by the management as stated under on a pro-rata basis, or as per Schedule XIV of the Companies Act, 1956 in cases where the rates specified therein are higher.

$$
\begin{array}{lr}
\text { Buildings } & 58 \text { Years } \\
\text { Computers and Software } & 3 \text { Years } \\
\text { Furniture and Fixtures } & 15 \text { Years } \\
\text { Other Plant and Machinery } & 20 \text { Years } \\
\text { Vehicles } & 10 \text { Years }
\end{array}
$$

## Relevant Notes on Fixed Assets and Depreciation in the Notes to accounts:

- During the year the Company has reduced the estimated useful life for Computers Systems and Software included in Plant and Machinery from 3-5 years to 3 years, consequently, the provision for depreciation for the year is higher by ₹ $34,580,414$ and correspondingly the net profit, reserves and surplus and net fixed assets are lower by ₹ $34,580,414$.
- During the year 2003, the Company has adopted Accounting Standard 28 issued by the Institute of Chartered Accountants of India and accordingly it has provided for impairment of fixed assets against General Reserve, amounting to ₹ $239,306,706$.


## Case Questions

(a) Please list out the possible journal entries the company may have had to note the above changes?
(b) You are required to analyze the impact of the changes on the company's financial statements and comment on the same?
(c) As per Ind-AS, did the company comply with the same? Did it provide enough information to the readers of annual reports? Discuss.

## INTERNET ASSIGNMENTS

## Assignment 9.1 Accounting Standards

On the website of this book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor we have uploaded sample worked out assignments in our online website.

Your ninth assignment would answer the following two questions:

- Is your company following Ind-AS? Is it also releasing financial results complying to the IFRS, US FASB and such authorities? Deliberate on the possible rationale.
- Discuss on the treatment method used for 'Investment Assets' adopted by the company. Which accounting standard(s) have been followed? and how? (within 300 words).


## Answers

## Answers to the "Let's Check Our Concepts!"

(a) False
(b) True
(c) True
(d) True
(e) True
(f) True

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 9.1: Background of IASB
- Annexure 9.2: Convergence of Indian Accounting Standards with IFRS
- Annexure 9.3: Roadmap of Ind AS
- Annexure 9.4: Applicability of Ind AS to whom and from when
- Annexure 9.5: More on 'Presentation of Financial Statements'
- Annexure 9.6: Remaining Ind AS
- Annexure 9.7: Additional Reading Material
- Annexure 9.8: Auxiliary Test Material
- Annexure 9.9: Sample Assignment Reports



## Financial Reporting Practices and Corporate Governance

## Learning Objectives

After studying this chapter, you should be able to:
LO 1 Understand the need for good financial reporting practices and types of audit
LO 2 Describe modern day accounting information system
LO 3 Show how quality financial accounting is a primary foundation behind corporate governance success
LO 4 Explain the role played by creative accounting in corporate governance-failures
LO 5 Review the demands and intricacies of internal financial controls

## Was Bank Reconciliation Statement Manipulation the Key in Satyam scam?

In 2014, nearly six years after B Ramalinga Raju confessed the fraud he had committed at Satyam Computer Services, the SEBI, Indian securities regulator has found him and four Satyam-ites (former MD B Rama Raju, CFO Vadlamani Srinivas, VP G Ramakrishna and Head of Internal Audit V S Prabhakara Gupta) guilty of committing "a sophisticated white collar financial fraud". It has levied on them a penalty and has barred them from accessing the securities market for 14 years.

The order throws light on how they falsified the books of Satyam and gained from it. The bad behavior resulted in inflated bank accounts. Taking the example of one current account, the SEBI order says that two sets of statements were generated: a daily one received on email from the bank and filed with the accounts department, and a monthly one sent by Raju's office. The second (and the higher one) was always used for the monthly bank reconciliation statement. And accounts were prepared on the basis of these false statements.

Alike, receipts of deposits were maintained in Raju's office and were shown to auditors by designated executives only! The banks were required to send statements of the deposits to Satyam that were to be given to the auditors. The SEBI order says deposit numbers and addresses were not mentioned in many of the letters, even logo of the bank looked suspicious in one instance, and in few cases the signatories were not on the bank's rolls on the dates mentioned. All this leads one to believe these documents could have been forged.

Of course, the big thing was inflating the revenue of the company through fake invoices. All said, 7,561 invoices were falsified. This was done by playing with the invoice management system. Interestingly, the SEBI order says that the internal audit team of Satyam had discovered in the first quarter of 2007-08 that there were discrepancies in the invoices mentioned. Those who perpetrated the fraud snuffed out any unwanted enquiry. In one case, the SEBI order says, an elaborate charade of placing an order through email was placed, and teams were assigned to work on the fictitious project. "By taking into account the fictitious invoices alone, Satyam's revenues were overstated to the extent of $₹ 4,782.75$ crore between 2003-04 and September 2008," the SEBI order says.

Feeling bad to the stakeholders who lost out, the SEBI order throws many interesting questions to the 'ethical accountant' in you, such as:

- How (and what) did these men gain from cooking up the accounts?
- How (and who) did were the stakeholders who lost out?
- Can we say that the "false and manipulated financial position was with a view to mislead some investors"? Discuss.
- Why did (and what for) SEBI have to take so long to give its verdict?

The questions raised above makes us aware of the need to know more on the financial reporting practices and corporate governance within the purview of financial accounting. Our discussion in this chapter provides a few pointers to the above questions.

Source: "Revisiting the Satyam scam," The Hindu Business Line, 17 July 2014, print.

The main objective of this chapter is to emphasize upon the need to be aware of financial reporting practices; and their practicality. The second portion of the above sentence assumes importance largely due to the 'human beings' driven organizational intent and connect with corporate governance norm by the regulatory authorities having large cost-benefit implications on the organization.

In an ideal scenario, a universal approach to corporate governance would be to adopt a stakeholdercentric corporate governance model involving the employees, the management, the customers, the lenders, the local community, the government and the shareholders. Thus, the interests of all the stakeholders are taken into account. In the modern day global era, with the increasing distance between ownership and management of joint stock companies, the only way to ensure survival and success is through corporate governance backed by impeccable financial reporting practices.

We would like to know the way out for enabling corporate governance backed by impeccable financial reporting practices. It is by way of ensuring good audit practices. Section 10.1 attempts to clarify the same. In a technology-led world - it is by way of appropriate computerized accounting information systems. Section 10.2 briefly touches upon the same. It is by way of having a fair idea of corporate governance and its social foundation. Section 10.3 gives a brief description of the same. It is by having an idea of creative accounting; and the typically processes and ploys adopted. Section 10.4 enables the same. It is by having internal financial controls. Section 10.5 journeys us through it. Most importantly, learning from past mistakes and other experiences is the best way out. Thus, by going through cases and illustrations throughout this chapter - we attempt to ensure the same.

### 10.1 AUDIT PURPOSE AND PROCESS



Understand the need for good financial reporting practices; and types of audit

Financial audits involve the inspection of an individual, business division or organization's accounts. It is typically performed by an independent individual or firm with specialized skills and knowledge of auditing procedures. Since 1913, audits of joint stock company accounts in India have been made compulsory. The ICAI, established under the Chartered Accountants Act, 1949, ensures the upkeep of India's accounting and auditing standards. All chartered accountants, i.e., members of this professional body have to comply with these accounting standards and the Audit and Assurance Standards Board's (AASB) norms.

Accordingly, using AASB norms, qualified chartered accountants verify that a company's business transactions were recorded correctly. They should provide a true and fair replication of that company's financial position and performance. The importance of the audit process cannot be undermined as the results not only achieve the auditing objectives, but also directly/indirectly help in:

- Facilitating investors know the financial health of the company
- Reassuring the government that the company is correctly discharging its legal duties
- Assisting lenders evaluate the credibility of the company
- Directing management's attention to any inadequacies in the operations; and flagging potential downsides
- Helping management improve business efficiency


### 10.1.1 Audit Types

In a conference, members on forensic audit - the light bulb fused. Amazingly, no member moved to change the light bulb. Do you know the reason? Answer: they did not know on how many auditors does it take to change a light bulb? Neither had they any idea on how many it took in the previous year? Jokes apart! Across the globe, there are basically two types of audits:
(a) Statutory Audit (or External Audit): These are performed by qualified auditors working as external and independent parties to report the current state of a company's finances and accounts to the Indian government and shareholders in the form prescribed by the government agency, i.e., Schedule III of the Companies Act, 2013. Chapter 6 (Section 6.12) share more details on requirements of the external audit; and
(b) Internal Audit: Performed at the will of internal management in order to check the health of a firm's finances, and analyze the organization's working efficiency. They may be executed by an independent party or by the company's own internal staff.
As per company law, every publicly listed entity must have an internal auditing system in place. Even those not listed need to comply with this - if they meet minimum criteria (such as, large enough size, measured by average turnover exceeds ₹5 crore during the previous three years).

Further, the statutory external auditor of the company must additionally report on the company's internal auditing system of the company in the final report. At the end of the audit, the statutory external auditors need to issue an 'audit certificate' and an 'audit report', the details of which forms part of the annual report.


To know more on "Audit Committee Members' Role is Central" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/561

The two most common types of statutory audits in India are:
(a) Company Audits, as contained in the Companies Act, 2013. It has been elaborated in Chapter 6 and has been our assumed focus of discussion throughout the book; and
(b) Tax Audits, required under Section 44AB of India's Income Tax Act, 1961. The tax audit report is to be completed within six months, i.e., by $30^{\text {th }}$ September after the end of the previous fiscal year. Non-compliance with the tax audit provisions attracts a penalty. There are no specific rules regarding the appointment or removal of a tax auditor.
Having had an idea of audit, we now move to computerization of accounts.

### 10.2 COMPUTERIZATION OF ACCOUNTS ${ }^{1}$

Describe modern day accounting information system

The preparing and processing of accounts is an integral part of running a business, despite many managers seeing it as an activity which has no connection to the 'real business' of attracting customers or making and selling goods and services. A company needs seamless management of finances to ensure that it is maintaining its progress and therefore, accurate and realistic financial information should be available at all times, particularly when preparing the annual accounts.

## SPOTLIGHT 10.1

## World of Change due to Technology - Kirana Store in Your Hand

Technology has enabled quick, convenient, cost-effective distribution of produce from farm to doorstep which threatens to deal the death blow to the good, old kirana stores of your neighborhood. Be thankful for supermarket home delivery. All of those daily essential and groceries are now made available through 'apps'. Place the order and get the same delivered to your choice of place. It saves you from the trouble of going to the shop and getting them. Your supermarket will instead be a farmers' market filled with fresh fruits, vegetables, idli batter, atta and the kind of products you would like to spend some time browsing.

Emergence of technology and process optimization is inevitable, and this would happen.
The task may, at first, appear daunting but there are ways to simplify the process. One can consider using a computerized accounts system. Suppose two brothers, Surajmal Jain and Puranmal Jain purchase a car each, for $₹ 6,00,000$, from a Tata Motors showroom, on an installment basis, and were to update their accounts. If Puranmal Jain were following the manual system - imagine his plight. Compare this to Surajmal Jain, who makes an appropriate entry in the computer's accounting software package. Immediately, the package will update the fixed asset account, which is automatically increased by the purchase price of the car; and a liability is created for the amount outstanding on account of principal repayment as well as the interest on the unpaid amount. Also, depreciation would automatically be calculated on the value of the car and the value of the fixed asset would be decreased on one hand, while the expenditure account (depreciation) would be increased on the other. Surajmal will also get timely reminders for repayment of the installment.

[^83]
## SPOTLGHT 10.2

# Changes in Accounting due to Technology - from Munimji (Book-keeper) to Cloud-wale Babuji (Accountant with Accounting Records on the Cloud) 

The life of a 'munimji' got transformed into 'babuji' due to the technological advancement.

| Before Computerization (Munimji) | After Computerization (Babuji) |
| :--- | :--- |
| Earlier entries were done manually | Eliminated calculators, pen, pencil and paper mode |
| Mistakes could mean hours of recalculation and <br> "missing" figure | Errors minimized |
| Finding errors was a tedious work | Easy to spot the errors and getting them corrected |

The most obvious impact of technology in accounting is the presence of computers, printers, scanners and faxes. Internet opened many doors and made life easier in many ways, especially in the accounting area, where documents can be shared, research can be conducted and taxes can be filed all online.

The biggest impact has been from accounting software. Software can help accountants in their daily tasks, such as paying bills, recording transactions and reporting. The program keeps all data organized and in a centralized location. The latest trend with accounting applications is web hosting off-site. Instead of installing a program onto your computer and saving data there, the program resides on a server in a different location; the saved information is accessed via the Internet. That's also called "working in the cloud".

Businesses can save money in software and hardware purchases by signing up with a cloud provider and using its programs and space for saving data, meaning there is no need to get a bigger hard-drive or worry about program versions. The other advantage of the cloud is that you have access to your information anywhere you may be. Cloud computing allow us to perform accounting and auditing procedures irrespective of the location; and second, the emerging enterprise resource planning (ERP) software which will enable access to complete databases. Lately, employee attendance and their salary benefits have already started taking place through the cloud.

Computerized accounting systems, for the most part, are just automated, traditional, manual bookkeeping procedures. Although a computer-based process results in immense speed and improved accuracy in the accounting process, the fundamental problems associated with the traditional manual accounting processes (such as, a wrong journal entry) remain. These problems are mostly due to the limited understanding of accounting theory and policies by a few persons involved in book-keeping.

However, computerizing the accounts system will ensure the process of keeping the books much easier; it will give the business a more professional image, improve efficiency, and give a quick access to accurate information. Perhaps, the most useful aspect of computerization is the fact that once the information is recorded, it can be used to give you a snapshot of the business performance at any time, which is ideal for preparing the end of year accounts.

Irrespective of the size of the organization or the type of accounting software used, computer accounting programs carry out functions such as invoicing, dealing with payments, paying wages and providing of regular management reports, such as the trading and profit and loss accounts and balance sheets. Businesses
also make a considerable use of computer spreadsheets, particularly for budgets. They can also be used for speeding up the processes in manual accounting systems, for example, for setting up a trial balance. This progression towards an "Accounting Information System (AIS)" is usually done by organizations by creating a "chart of accounts" and "account numbers". Spotlight 10.3 and Annexure 10.1 (on the Online Learning Center i.e., OLC) provide us more details about the chart of accounts and its linkage to AIS and account number. Spotlight 10.4 lists the advantages and the other side of computerization.

## SPOTLGHT 10.3

## What are 'Chart of Accounts' and 'Account Numbers'?

The chart of accounts (COA) is a listing of all accounts used in the general ledger of an organization. The chart is used by the accounting software to aggregate information into an entity's financial statements. The chart is usually sorted in order by account number, to ease the task of locating specific accounts. The accounts are usually numeric, but can also be alphabetic or alphanumeric. Accounts are usually listed in order of their appearance in the financial statements, starting with the balance sheet and continuing with the income statement. An important purpose of a COA is to segregate expenditures, revenue, assets and liabilities so that viewers can quickly get a sense of a company's financial health. A well-designed COA not only meets the information needs of management, it also helps a business to comply with financial reporting standards. A company has the flexibility to tailor its chart of accounts to best suit its needs. In one of the accounting software, the chart of accounts are defined in the following format:

Chart of Accounts (COA)

| Heads | Code Series |
| :--- | :---: |
| Assets | 1000 |
| Liabilities | 2000 |
| Income | 3000 |
| Expenses | 4000 |
| Equity | 5000 |

The above helps in turn to get the trial balance and the financial statements of an organization.

## SPOTLGగ『 10.4

## Two Sides of Computerization of Accounts

## Advantages

- Routine tasks, such as updating a transaction, take 1-4 minutes instead of days (since, entering a transaction once is sufficient, instead of having to update 2-3 books and registers in the manual system).
- Accounting statements and other regular correspondence can be mail-merged and personalized and up-todate balances included.
- Reduced paper work, documentation, and eco-friendly.
- Easy transmission of data.
- Low chances of damage to data due to fire and natural calamities.
- Doing away with human errors (such as, incorrect addition).
- Correction of any mistakes can be done with minimum fuss.
- Financial statements can be easily generated from the software
- Auditing of records becomes interesting as compared to the tedious manual system.
- It can analyze the data rapidly to provide useful information to the managers such as bank reconciliations, preparing budgets, forecasting, and financial ratios.
- Software tools in a computerized accounting can prevent fraud or loss of data.
- Helps in securing with regular statutory compliance requirements.


## Disadvantages

- Resistance from staff due to a job loss scenario.
- Initial time and costs involved in installing the system, training the personnel and so on [Most of the data entry folks are already well-versed with this].
- Cost of the software package and additional costs of updating the packages.
- Dangers of system failure, virus attacks, etc., resulting in the need to maintain backups [This gets largely resolved with cloud computing].
- Dangers of the system being misused by internal department employee, for a large manipulation [Modern security systems are very strong - one can even have biometric processes built-in].
- Dangers of system being hacked by external people [Modern security systems are very strong].

Hence, computerization of accounts can be in various stages - right from 'running of the whole system on computers' to 'just do some sales invoicing'. It could mean 'automating just the main ledgers' or it could mean' a sales order processing-cum-purchase order processing-cum-stock control system'. A computerization of accounts helps to search, sort, and manipulate an electronic document in a fraction of the time. It can instantly sort a large volume of information by date, file name, author, storage location, or any number of other criteria, thereby highlighting key documents in what could otherwise be an extremely time-consuming manual review.

Although some businesses, particularly small ones, still use paper-based accounting systems, an increasing number of enterprises have mostly moved to digitized world. Small businesses can buy 'offthe shelf' accounting packages from suppliers, such as Tally, Subh-Labh, and Sage, while medium-sized businesses opts for softwares such as Microsoft Navision and Tata EX Next Generation. On the other hand, all the large sized companies, with thousands of transactions, including banks and financial institutions, get their own custom designed accounting programs as part of their Enterprise Resource Planning (ERP), from many software companies like Infosys, TCS, Wipro, SAP, and Satyam. For example, most banks use "Finacle" a core banking product developed by Infosys (See Annexure 10.2 on the OLC to know more on Computerized Accounting Information Systems).

Accounting software consists of a number of modules which perform all the tasks needed to maintain a normal accounting function like payables or payroll. The modules are usually integrated with each other, so that data entered in one module will be passed automatically into other required module. ERP
systems are multiple module software packages. Core objective of ERP is to integrate key processes of the organization such as order entry, manufacturing, procurement and accounts payable, payroll, and human resources.

Accounting software helps to extract the data in XBRL format. XBRL stands for eXtensible Business Reporting Language (XBRL). It is a language for the electronic communication of business and financial data. XBRL offers major benefits at all stages of business reporting and analysis. The benefits are seen in automation, cost saving, faster, more reliable and more accurate handling of data, improved analysis and in better quality of information and decision making. XBRL enables producers and consumers of financial data to switch resources away from costly manual processes, typically involving time consuming comparison, assembly and reentry of data. They are able to concentrate effort on analysis, aided by software which can validate and process XBRL information. It is a flexible language, which is intended to support all current aspects of reporting in different countries and industries. Its extensible nature means that it can be adjusted to meet particular business requirements, even at the individual organization level.

From this discussion, one can say that the levels of computerizing accounts vary and computerization has its own advantages and disadvantages. The disadvantages are required to be taken care of before implementing of an accounting package. A good manager is expected to overcome most of these disadvantages by using his knowledge, skill, experience and position in the organization. Accounting Information Systems becomes useful because of the following reasons:

- Electronic (faster) payment of vendor invoices, which means less cash discounts.
- Increased time in collecting on receivables.
- Late periodic reports.
- Increasing length of time to close books of accounts at the year end.
- Managers concerned about cash flows and financial picture of organization.
- Manager complaints about lack of information needed for decision-making.
- Owner worries about cash flows, taxes, and profitability.


### 10.2.1 Information Systems Audit

Given the above move towards computerization, brings importance to information systems audit (or, information technology audit). It is an examination of the management controls within an information technology (IT) infrastructure. During the early days of computers, many people were suspicious of a computer's ability to replace human beings performing complex tasks. The first business software applications were mostly in the domain of finance and accounting. The numbers from paper statements and receipts were entered into the computer, which would perform calculations and create reports. Computers were audited using sampling techniques. An auditor would collect the original paper statements and receipts, manually perform the calculations used to create each report, and compare the results of the manual calculation with those generated by the computer. In the early days, accountants would often find programming errors, and these were computer audit findings. However, these exercises also sometimes yielded findings of fraud. Fraud activities ranged from data entry clerks changing cheque payees to programmers making deliberate rounding-off errors designed to accumulate cash balances in hidden bank accounts. However, the normal scope of an information systems audit still does cover the entire lifecycle of the technology under scrutiny, including the correctness of computer calculations.

## Illustration 10.1

Basant Angoor Limited is a small grapes exporter, with large expansion plans. The Managing Director Basant is considering the introduction of a computerised accounting system, which will completely replace the existing manual based double-entry system. He is worried because he knows that the proposition will not go down very well with the employees, who have been with the company for a long time.

He requests you to prepare small notes in which you are to set out the potential benefits and issues of dissatisfaction to the staff?

## Solution

(a) Potential benefits to staff

- The staff will be able to update their skill;
- They will receive training;
- They may get an increase in pay;
- The training will increase their career prospects;
- They will be motivated;
- They will get job satisfaction; and
- Their tedious job will be simplified.
(b) Causes of staff dissatisfaction
- Staff prefers doing the job in a way which is familiar to them;
- They do not like computers;
- They may see their jobs being threatened (worries of redundancy);
- They may lose the opportunity to earn money by doing overtime;
- They do not look forward to the disruption of the work time and existing work culture; and
- They worry about the possible bad effects to their health, having heard about RSI and radiation and eye damage from computer screens.

Having looked at the computerization of financial accounts, we move to corporate governance.

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(a) Accounting software can be tailored to suit the needs of a particular entity.
(b) Internal auditor must be an independent party.

Illustration 10.2

## Satyam Computers

Having gone through the chapter opener on Satyam Computers (Satyam), a student brought a report by a brokerage on Satyam recommending a 'thumbs up' rating - just three months before its collapse at a share
price of ₹ 275 . The IT giant had reported a cash balance of $\mathrm{₹}_{4,500}$ crore in the previous financial year. The Satyam accounting scam, one of the biggest in India, left millions of investors in the lurch, as the stock fell from ₹ 179 to $₹ 23$ in one trading session. ${ }^{2}$

Stating the above, the student asked: If the stock analysts were unable to identify the 'accounting gaps' in the books of Satyam. How can someone having simple knowledge of the financial statements be able to do the same? How can one know of the techniques used by companies to report untrue numbers?

The response of the professor was: You have a point. You have a solid reason. Yet, with learning about corporate governance, financial reporting practices and our foundational accounting knowledge; asking the above questions on corporate governance using this cross-functional knowledge might just help you unravel such nutty puzzles, i.e., you may be able to see what a particular professional expert was (either, consciously or unconsciously) unable to see. After reading this chapter - if you revisit this question you should be able to make out.

### 10.3 CORPORATE GOVERNANCE AND ACCOUNTING

> Show how that quality financial accounting is a primary foundation behind corporate governance success

The question that comes across as a young MBA student is: What is Corporate Governance? And why is it being covered in a book titled 'Financial Accounting for Management'? By now, readers would have realized that managing financial statements is perhaps the easiest way out (compared to say, managing human beings) - if the one in power (say, Chief Financial Officers OR Chief Accountant) is hand in glove with the top management; and such. So, the second question at the start of the paragraph is relatively easy to understand, link up and appreciate (for example, see the Chapter 10 opener or even Chapter 1 opener). We attempt to answer the first one below.

Governance of any entity is the practice of putting things together orderly and making that organization to function effectively. Corporate Governance is taking into account all stakeholders interests (when in power). Therefore, it also means not to misuse the powers with intent for hurting any particular stakeholder's interests. So, the simplest example of a corporate governance would be: if a Bank chief with 1-2 years remaining for retirement and a variable pay package keeps on delaying the recognition of nonperforming assets by adhering to tougher compliance norms (perhaps, with an intent to maximize personal compensation gains and such salary benefits). Unannounced changes in service charges for customers using automatic teller machine (ATM) services in the above bank example would be a governance issue of the second type. In other words, this can mean corporate governance issues can largely be creations of owner(s) and/or managements, as they call the shots - when it comes to taking such decisions.

Corporate Governance in India is very different from western countries - It starts with differences in the ownership patterns itself. The stake held by active institutional investors and/or informed investors are relatively low (compared to the western countries). The ownership stake held by retail investors and domestic institutional investors is (relatively) higher. Given the low percentage of shareholding by active institutional owners and thus the (relatively) lower level of interest results in a potential combination of creating quick corporate governance issue - if a particular party (especially, management) intends to do the same. Most retail investors (often) lack capability, have poor access to information and governance awareness levels.

Securities regulators (such as, SAT, i.e., Securities Appellate Tribunal) and institutional intermediaries (such as, committees appointed by ICAI in few cases) often succumb to pressures. This results in reneging

[^84]on their duties or their being painfully slow to respond. All of this results in delays in punishments and hence implementation of corporate governance norms is slow, stuttered and weak.

Corporate(s) and its managers (especially owner-managers) often tend to do things that are legal, but questionable. And, it often starts with manipulating the financial accounts. Satyam computers failure in 2008-09 (see, this chapter opener) is an unfortunate yet extreme example of that. (As pointed by Prof. K. R. S. Murthy) ${ }^{3}$, to resolve such issues on these lines the corporate governance questions can be:

- Why do business leaders do things they know should not be done?
- What are the pressures or fears that force them to do so?
- How can they be helped to be more integral to their own beings?
- How can the board of directors play a more useful role?

Having gone through nine chapters of this book, this last chapter is to ask the same set of questions from a capstone built into the Financial Reporting practices perspective. And, we do the same in Illustration 10.3 on Silverline.


To know more on "Corporate Governance Norms in India: From 'Rules-based' to 'Principle-based' Framework" scan the QR code, or visit: http://qrcode.flipick.com/ index.php/562

## Illustration 10.3

## Silverline Technologies Limited ${ }^{4}$

In the year 2000, one of the few investors, Guru Ramani (Guru), bought the Silverline stock at the peak price of $₹_{1,395}$. In October 2003, he watched the one-time blue chip company and the first Indian IT player to be listed on the New York Stock Exchange sink to ₹5, a level that he was unable to comprehend.

Guru was not the only one on the long list of people affected by Silverline's current woes - Employees, bankers and retail investors also met with a similar fate and were left trying to fathom the causes for this state of affairs.

## Backdrop

In 1991, India experienced a major economic crisis, inflation was at a high of $17 \%$, foreign exchange reserves were at an all-time low of US $\$ 1.2$ billion and could sustain for only two weeks of import coverage. ${ }^{5}$ Suddenly, the economic growth story of the Indian elephant seemed to have hit a stumbling block. It led to the government introducing a reform program that focused on fiscal and monetary tightening, financial sector liberalization and decreased central control, overhaul of foreign trade regulations, and elimination of micro economic regulations such as import licensing. It was during this phase that the country saw the emergence of the promising Information Technology (IT) Industry.

The Indian IT revolution started in 1991, breaking all the shackles of economic restraints enforced by the state. This was an appropriate setting for the industry to leapfrog onto the international stage. A decade later, the Indian software and service industry resembled the state of the country: diverse, unequal,

[^85]and growing. It was highly fragmented, with the top 10 players accounting for less than 20 per cent of the total industry size in 2001. Divided between Tier 1, Tier 2, MNC back-ends, focused and smaller players, the Indian software and services industry had around 2,810 companies operating within the domain (Table 10.1). Like other upcoming Indian IT Giants, Silverline Technology Limited (hereon, referred as STL) also witnessed its growth during the latter half of the 1990s. Along with TCS, Infosys, and Wipro, STL was one of the biggest companies during 1997-2002 (Table 10.2).

## Table 10.1 Structure of the Indian Software Industry

The Indian IT services industry comprises a diverse group of companies-large, near-billion dollar global companies and small start-ups, Indian companies and multinationals. Growth rate across companies is quite varied.

- Tier 1 companies (i.e., the top 5 firms) account for about 32 per cent of total software exports.
- Tier 2 companies (with revenues between ₹ 1 billion and ₹ 10 billion) account for about 24 per cent of the industry, and face the challenge of differentiation from Tier 1 players. The revenues of these companies are under pressure because of fierce bidding by those in Tier 1.
- MNC back-ends account for about 26 per cent of the industry.
- Focused companies (about 3-4 per cent of the industry) include those with a focus on a particular domain/ service line/products, who are facing the challenge of cutbacks in key markets such as telecom.
- Small companies, with revenues of less than ₹ 1 billion, account for 12-14 per cent of the market, and many have witnessed a slow growth due to excessive dependence on staff augmentation.
(Source: Nasscom, Annual Report, 2003)
Table 10.2 Ranking of Top 20 Players in the Indian IT Industry (By Sales)

| Company Name II Year Ending $\rightarrow$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
| Aptech Ltd. | 5 | 7 | 6 | NA | 17 | 15 |
| CMC Ltd. | 4 | 8 | 8 | 7 | 5 | 6 |
| Cognizant Technology Solutions India Pvt. Ltd. | NA | 12 | 12 | 10 | 9 | 5 |
| D S Q Software Ltd. | 10 | 10 | 5 | NA | 12 | 18 |
| H C L Technologies Ltd. | NA | 9 | 11 | 4 | 4 | 4 |
| Hexaware Technologies Ltd. | 5 | 6 | 6 | 18 | 18 | 16 |
| Infosys Technologies Ltd. | 7 | 3 | 2 | 2 | 2 | 2 |
| Larsen \& Toubro Infotech Ltd. | 13 | 14 | 19 | 14 | 14 | 13 |
| NIIT Ltd. | 2 | 2 | 3 | 5 | 11 | NA |
| Oracle Financial Services Software Ltd. | 16 | 16 | 15 | 11 | 8 | 8 |
| Pentasoft Technologies Ltd. [Merged] | 17 | 19 | 10 | 6 | 10 | 14 |
| Polaris Software Lab Ltd. | 18 | 20 | 20 | 13 | 13 | 10 |
| Rolta India Ltd. | 11 | 15 | 14 | 15 | NA | 11 |
| Satyam Computer Services Ltd. | 8 | 5 | 4 | 3 | 3 | 3 |
| Siemens Information Systems Ltd. | 9 | 13 | 17 | 16 | 15 | 12 |
| Silverline Technologies Ltd. | 15 | 18 | 16 | 12 | 16 | NA |
| Sonata Software Ltd. | 14 | 17 | 18 | 17 | 19 | 17 |
| Tata Infotech [Merged] | 3 | 4 | 9 | 8 | 7 | 9 |
| Tech Mahindra Ltd. | 12 | 11 | 13 | 9 | 6 | 7 |
| Wipro Ltd. | 1 | 1 | 1 | 1 | 1 | 1 |

Note: (a) NA stands for not applicable; (b) Wipro Ltd. is the only company in the list which is diversified and has activities in other areas than just software).
Source: Centre for Monitoring of Indian Economy (CMIE) Database.

## History of Silverline

In April 1992, a limited liability company was incorporated under the name of "Silverline Industries Limited" (hereon, referred to as SIL). The owner-manager of the company was Ravi Subramanian. The company went public with its listing on the Bombay Stock Exchange (BSE) in September 1992. The prospectus mentioned Pat Sarma, Paramjeet Bhalla, Ram Mahtani, and Arjan Daswani as other copromoters (see, Table 10.3 for a list of board members at different times during 1997-2004).

SIL was envisioned as an international software development and integration services firm. In its initial years, SIL provided a comprehensive set of IT services, including technology integration and implementation, creative design, as well as management and maintenance of Internet and legacy applications. It focused primarily on Forbes Global 2000 clients in key industry sectors, such as automotive, discrete manufacturing, financial services, healthcare, insurance, technology and telecommunications. The company also focused on the upcoming technologies such as mobile and wireless applications, e-payments and enterprise information portals, as well as business processes including customer relationship management (CRM), e-Procurement, channel management, and employee enablement. ${ }^{6}$

SIL delivered its services through a global network of software development centers. At the heart of the network were core offshore centers based in India (Chennai, Hyderabad, and Mumbai), and Cairo in Egypt. These centers supported regional development facilities located close to clients throughout North America, Europe and Asia Pacific.

SIL also had a technical alliance partnership for e-business infrastructure with BEA Systems Inc. - a San Jose based Software Company specializing in enterprise infrastructure software products. The company had also tied up with Siebel Systems, a leading provider of e-Business applications and software as a consulting and implementation partner. SIL was also a developer partner of Sun Microsystems. The company built a strong presence in Europe, India and the US with its customers including Bell Atlantic, First Data, Deutsche Bank, Goldman Sachs and Lucent Technologies. On the home front, in FY1995, SIL entered into a joint venture with MECON Ltd., ${ }^{7}$ which led to the formation of a subsidiary named Silverline Mecon Ltd., with its headquarters in Bangalore. In high-tech training, SIL tied up with National Centre for Software Technology (NCST) and Center for Development of Advanced Computing (C-DAC), the country's premier computing bodies, to offer superior quality instruction.

In terms of financial performance, SIL's total income gradually rose from ₹ 0.5 billion in FY1993 to ₹ 1.5 billion in FY1997 (see Table 10.4 for US \$ v/s Indian Rupees conversion rates at different points in time). Of the total income, substantial contributions were from the software export division. The bottomline improved from ₹49 million in FY1993 to ₹316 million in FY1997. The share price of SIL climbed to ₹ 33 per share in February 1998.

Lalbhai and Maganbhai, two investors and childhood friends, were looking forward to buying the stocks of some company in the IT Sector as it seemed to be the most promising sector at that time. According to Maganbhai, SIL was a great pick as he saw great potential in the company; and with the recent news of SIL entering into a strategic alliance with US-based Platinum Technology Inc (PTI), the world's seventh largest independent software vendor, the market was buoyant about SIL. In March 1998, Lalbhai and Maganbhai bought shares of SIL at a price of $₹ 30$ per share.

[^86]Table 10.3 Silverline Technologies Limited: Name(S) of Board of Directors, Auditors, and Bankers from FY1998 to FY2004

| Financial Year $\rightarrow$ | $1998 \text { (12m) }$ | 1999 (12m) | 2000 (12m) | 2001 (12m) | 2002 (15m) | 2003 (12m) ${ }^{\text {\# }}$ | 2004 (12m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chairman | Ravi <br> Subramanian* | Ravi <br> Subramanian ${ }^{*}$ | Ravi <br> Subramanian* | Ravi <br> Subramanian | Ravi <br> Subramanian ${ }^{*}$ | Ravi <br> Subramanian * | Ravi Subramanian * |
| Whole Time Directors | Krishnakumar <br> Subramanian* <br> Kulathu K <br> Subramanian* | Krishnakumar <br> Subramanian* <br> Kulathu K <br> Subramanian* | Krishnakumar <br> Subramanian* <br> Kulathu K <br> Subramanian* | Krishnakumar <br> Subramanian* <br> Kulathu K <br> Subramanian* | Krishnakumar <br> Subramanian ${ }^{*}$ <br> Kulathu K <br> Subramanian* | Krishnakumar Subramanian | Krishnakumar Subramanian* Kulathu K Subramanian* |
| Other Directors | Arjan R Daswani Narendra Kumar Kale S V Mony Sreedhar Menon | Arjan R Daswani Shanker lyer* <br> S V Mony <br> V <br> Panchapakesan | Arjan R Daswani <br> George R <br> Zoffinger <br> Pejavar Murari <br> S V Mony <br> Shanker Iyer* <br> V <br> Panchapakesan | Arjan R Daswani <br> George R <br> Zoffinger <br> Pejavar Murari <br> S V Mony <br> Shanker lyer* <br> V <br> Panchapakesan | Ram V <br> Ramanan <br> Ramachandra N <br> Swamy | Prem Rajani Ramachandra N Swamy | Jagdish P. <br> Gandhi <br> Nallicheri J. <br> Shivgiri <br> Ramachandra N. Swamy |
| Auditors Name | Deloitte Haskins \& Sells | Deloitte Haskins \& Sells | Deloitte Haskins \& Sells | Deloitte Haskins \& Sells | M/s S <br> Vishwanathan | M/s S <br> Vishwanathan | CNGSN \& Associates |
| Bankers Name | Corp. Bank; IDBI; \& CBI | Corp. Bank; IDBI; \& CBI | Corp. Bank; IDBI; CBI; Bol; \& IB | Corp. Bank; IDBI; \& Global Trust Bank | Corp. Bank; IB; CB; PNB; DBS; CBI; \& BI | Information Not Available | No Banker's Name Mentioned |
| WoS No(s). | 1 | 2 | 1 | 3 | 4 | No Information | 0 |

Note: (a) Names against whom asterisk ( ${ }^{*}$ ) is marked indicates members belonging to the promoters family; (b) Information tabulated from STL's annual reports; (c) WoS Nos indicates Number of First Level Wholly Owned Subsidiaries; (d) '\#' for FY2003 indicates information is reconstructed using second sources (as STL's FY2003 annual report is not available in public domain); and (e) Bankers: Corp. Bank is Corporation Bank; IDBI is IDBI Bank; CBI is Central Bank of India; CB is Canara Bank; Bol is Bank of India; IB is Indian Bank; PNB is Punjab National Bank; and DBS is DBS Bank.

Table 10.4 Indian Rupee (INR) Conversion Rates in US Dollar (USD) Over the Period 1997-2004

| Year | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 0}$ | $\mathbf{1 9 9 9}$ | $\mathbf{1 9 9 8}$ | 1997 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| USD/INR | 45.2 | 46.5 | 48.5 | 47.1 | 44.9 | 43.0 | 41.2 | 36.3 |

Source: Oanda.com website, accessed on 9 February 2011
In the following two sections, we document the story of how SIL spread itself in almost all parts of the world.

## SIL Journey: 1997-1999

In September 1999, SIL commissioned the Silverline Software Technology Park in Thane, which was a high tech facility with a total area of over $110,000 \mathrm{sq}$. ft . spread over eight floors. The facility could accommodate 1,000 professionals and had 512 Kbps (Kilobyte per second) ${ }^{8}$ dedicated frame relay network to the US. SIL recorded a compounded annual growth rate of 22 per cent and 29 per cent in revenues and post-tax earnings respectively, between 1995 and 1999. By 1999, it employed 1,350 professionals, with 920 in India and 430 in the US.

> Lalbhai and Maganbhai, who were still holding the shares of this company in February 1999, were having a casual conversation during lunch. Lalbhai seemed to be worried after getting the news that SIL had made a transaction with its holding company valuing the shares at less than the market price. On the other hand, Maganbhai’s confidence in SIL increased. According to him, an increase in the stake of the promoters was a positive signal, hinting at their confidence in its future. Maganbhai also pointed to Lalbhai the phenomenal increase in the stock price from ₹ 105 to ₹ 272 , during January 1999, handing them impressive returns. The daily trading volume on NSE for this stock had reached a feverish pitch, clocking over a million shares on 44 consecutive trading days since December 16, 1998 .

Although SIL was emerging as a strong player, the majority of its revenues were coming from a few clients. For two years (1997-99), nearly 45 per cent of the revenues of SIL came from two corporate clients. During Q4 of FY1999 and FY2000, SIL's biggest client, First Data Corp accounted for approximately 30 per cent of the revenues. The main business of SIL was mainframes, from where it derived nearly 35 per cent of the revenues in 1999. At that time, mainframes were considered to be low-end businesses with even poor margins. Going forward, there was consensus that the company's future would depend to a large extent on its ability to switch to client server and web-based solutions environment. With a future perspective, the company changed its ownership structure by divesting a part of its equity holdings in favor of another promoter owned entity, Subra Holdings Inc., US, in January 1997. Subra Holdings acquired a 51 per cent shareholding in SIL, making the latter its subsidiary. The stated objective of the above change was - to meet the growing fund requirement for expanding the infrastructure and marketing operations of its subsidiaries. ${ }^{9}$ In March 1998, Silverline Industries made a fresh issue of 22,050,030 warrants to Subra Holdings, convertible into one equity share per warrant at a price of ₹ 22 . These warrants, if exercised, would raise the stake of Subra Holdings in the company to $69 \%$. In December 1998, Subra Holdings Inc., USA changed its name to Silverline Holdings Corp., USA.

[^87]
## 2000: The Year of Reckoning

In November 1999, the company changed its name from Silverline Industries Limited to Silverline Technologies Limited (hereon, STL). This move coincided with the dot-com boom wherein there was an increased fancy amongst investors to invest in 'technology companies'- or companies having the word 'technology' or 'software' in their names, leading many companies to change their names. Prominent examples were two BSE listed companies Claswin Credit Capital Limited and Sony Corp India Limited changing their names to CAT Technologies Limited and Soni Infosys Limited, respectively. Often, such change in company name is done to better reflect its relevant business to its stakeholders.

This was a time when the dramatic rise of IT companies was the talk of the day among investors. A number of brokers of the BSE during this time observed that many naïve investors would come to them and demand stocks of any IT company*. STL more often than not turned out to be one of their easy picks given its reputation of being amongst the top 20 Indian IT companies of that time.

* for example, see, Komaromi, Gyorgy, Anatomy of Stock Market Bubbles, ICFAI Press, 2006.

In May 1999, the company issued $22,050,030$ equity shares at $₹ 22$ per share to Silverline Holdings Corp., USA on exercising the warrants issued to them. The going price of STL was above ₹ 400 at that time. In the same financial year, STL also began a process of restructuring, with the company disinvesting its entire equity stake in its subsidiary, Silverline Mecon Ltd. ${ }^{10}$

In June 2000, STL made a public offering in the US, becoming the first Indian IT company to be listed on the NYSE (ticker "SLT"). The company issued 4.35 million American Depository Shares (ADS), representing 8.7 million equity shares at a price of $\$ 25$ per ADS, significantly higher than the indicative price of $\$ 19.68$ at the time of primary registration with the SEC. This was also indicative of the high demand for technology stocks in the market. The company raised a sum of $\$ 101$ million (₹ 4.7 billion) through the ADS issue. ADS holders now represented about $12 \%$ of the equity of the company.

While all other IT companies listed themselves mainly on NASDAQ, ${ }^{11}$ STL had moved away from the beaten track. The objective of the NYSE listing was to expose itself to heightened market attention and investor scrutiny. STL's filing documents quoted that it proposed "to use the proceeds for capital expenditure consisting primarily of the build-out of existing facilities, working-capital requirements, expansion of sales and marketing efforts, potential acquisitions and other strategic transactions and other general corporate purposes". ${ }^{12}$

This move was also aimed at restructuring the organization, coming in the wake of indicative takeovers. As a part of the restructuring, STL decided to transfer the entire shareholding from Silverline Holdings Corp, USA in Silverline Technologies Inc., USA (hereon, STI), for a total consideration of $\$ 46.3$ million. This was done by making a preferential offer of STL's 4.5 million equity shares of ₹ 10 each at a premium of ₹435 per share to Silverline Holdings Corp. USA (Figure 10.1) for the acquisition of the entire capital stock of 50,000 shares of $\$ 100$ each in STI. This helped the promoter company, Silverline Holdings Inc. to have all software ventures of the promoter group under the aegis of STL only. A possible reason for this action could be to reduce the potential agency conflicts and perception issues due to a single promoter company having two different arms (one listed, STL and another non-listed, STI) in the same sector.

[^88]
## In FY1998



In FY2002
Silverline Holdings Inc. USA
Silverline Holdings Inc. USA


Figure 10.1 Silverline Technologies Limited and its Key Subsidiaries
Other Subsidiaries and Investments of Silverline Technologies Limited include:

- SeraNova Asia Pacific
- Unitedherbal.com UK - $15 \%$ stake
- Expo24-7.com UK - 36\% stake
- K.S. Software Intl. Inc.
- Cosmic Pacific Ltd.
- K.K. Crossvision Intl. - $25 \%$ stake
- Starpoint Solutions - $5 \%$ stake
- Spectrum Corporation
- Modern Capital (Head Quarters at British Virgin Islands)

Source: Compiled from information available in STL's annual reports (for respective years)
STI opened its new facilities in its Global Development Center at New Jersey in May 2000. Pramod Mahajan, the IT Minister, Government of India, inaugurated the center. The event was graced by

Dewang Mehta, NASSCOM ${ }^{13}$ President, and other distinguished guests including the Indian business and government delegates accompanying the Minister. ${ }^{14}$ Close on the heels of the NYSE listing, the June quarter results of 2000 showed an 80 per cent annual growth in revenues to $₹ 1.45$ billion and a 91 per cent increase in profit after tax. The bulk of the incremental profits came from its e-business. The stock price touched its all time high of ₹ 1,395 per share in February 2000 (See Figure 10.2 for stock price movements of Silverline, its peer Infosys and other related Indian indices).

## 2000-01: Silverline's Acquisition Spree

With the NYSE equity issue proceeds, STL went on a takeover spree in FY2001, acquiring three companies in a span of six months. In April 2000, STI's Canadian subsidiary, Silverline Technologies Canada, acquired CIT Canada, a software development firm in Toronto for $\$ 4.2$ million in cash. In September 2000, the company acquired Michigan-based Megasys Software Services for $\$ 6.2$ million in cash, followed by the acquisition of Sky Capital International, a Hong Kong-based IT consulting firm for $\$ 22$ million in cash. It thus formally created a base in the Asia-Pacific and gained over fifty customers of Sky Capital International. This was meant to help STL create revenue streams away from the US and move away from dependence on a single customer, First Data Corp. But these deals started raising eyebrows in the media because normally acquisition deals in the IT industry were a combination of stock and cash and not all-cash deals. ${ }^{15}$

In November 2000, STL made its biggest acquisition, a New Jersey based company, SeraNova Inc., ${ }^{16}$ a global provider of internet professional services, in an all stock transaction deal valued at approximately $\$ 99$ million (Table 10.5 for few finer details having implications on STL).The deal involved issue of a further 6.23 million ADSs in March 2001 (representing 12.5 million equity shares of STL) for the acquisition through a stock swap, by the issue of STL's ADSs against the Common Stock of SeraNova (These ADSs were traded on the NYSE under the symbol SLT-PR). ${ }^{17}$

The combination of STL and SeraNova created one of the largest global IT service company, with over 2,600 IT engineers working from offices across twelve countries. Combined revenues of the companies for the twelve months ended June 2000, totalled $\$ 175$ million. SeraNova had accumulated losses of $\$ 7$ million and debt of $\$ 14$ million. The management believed that SeraNova's positioning as an up-thechain business solutions company was, for then, the critical plus that would help STL to upgrade its largely legacy-based, mainframe-oriented business to the upper end of the Net Solutions and consulting domain. ${ }^{18}$ While Silverline provided IT solutions and outsourcing services in the areas of e-business, CRM, Legacy Transformation, and Application Maintenance, SeraNova was a global provider of Internet professional services, including business-to-business solutions. STL finalized the acquisition of SeraNova in March

[^89]
Figure 10.2 Comparative Stock Price Movements from Mar.-1997 to Mar.-2004 Note: Data from the BSE. Share prices (Infosys and Silverline) and both BSE indices were made equal to 1,000 on 30 September 1999 and their comparative movements were tracked.

## Table 10.5 Excerpts from Form 20-F Filed with the SEC after the Acquisition of SeraNova Inc.


#### Abstract

"Most of our ADSs issued in the merger with SeraNova, Inc. are eligible for immediate resale; substantial sales of ADS shares could cause the market price to fall. Following the merger with SeraNova, Inc. we had $85,654,884$ equity shares outstanding, including approximately $12,454,884$ equity shares represented by ADSs issued in connection with the merger. If former SeraNova, Inc.'s shareholders sell a large number of our ADSs in the public market, the trading price of our ADSs could decrease dramatically. Further, any perception that these sales could occur could also result in a dramatic decline in the trading price of our shares. These sales also might make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. The former directors and executive officers of SeraNova, Inc., Messrs. Rajkumar Koneru, Nagarjun Valluripalli, Ravi Singh and Rajan Nair, agreed that without our written consent, they will not sell on the New York Stock Exchange the ADSs they receive in the merger between SeraNova, Inc. and Silverline Acquisitions Corp. for a period of one year from the effective date of the merger ending March 5, 2002. Nevertheless, most of our ADSs issued in the merger, most of our equity shares, and all the ADSs issued prior to the merger are currently, freely tradable. Sales of substantial amounts of our equity shares and ADSs, or the availability of such shares for sale, could materially adversely affect the market price of our ADSs. Further, 1,329,454 ADSs held by Messrs. Rajkumar Koneru and Nagarjun Valluripalli are pledged with Bank of America against their margin accounts. Recently, Bank of America sold these ADSs or the underlying shares to recover the amount due to them."


Source: Securities and Exchange Commission (SEC), 31 March 2002, Web.
2001. Industry experts felt that these were two different business requiring varied skills and knowledge and were surprised at the deal terms. ${ }^{19}$

STL was known for having been certified as ISO 9001 and SEI CMM ${ }^{20}$ Level 4 with centers in the US, India, Canada, the UK, Germany, Hong Kong, Japan, and Egypt. It signaled the arrival of a transnational software service provider. After these acquisitions and mergers, STL went in for consolidation of its core business of legacy systems. It announced a partnership with Dharma Systems Inc., a developer and marketer of application integration technology for e-business developers, to help client leverage their legacy applications into corporate e-business initiatives by integrating the necessary applications without compromising their current functionality. The Information Week magazine conducted a survey in which $58 \%$ of IT managers indicated that Web/Intranet legacy integration tools or products were on their organization's planned project list. ${ }^{21}$ This was an attractive target market for STL.

Though it started to seem that STL had committed too many resources to its strategy of growth through acquisition and consolidation, the hunger to form alliances and to reach out to new partners did not end there. In June 2001, it formed a strategic alliance with Corechange, Inc., a global provider of e-access framework software, to deploy enterprise information portals for clients, enhancing collaboration among employees, customers and partners. The idea was to use Corechange's Corepot 3G technology with its own expertise in broad integration to deploy enterprise-wide portals to access all existing information from their various enterprise, web and legacy applications through one interface. It also proposed the acquisition of CTC Corp., a New Jersey based IT Services Company by the issue of 4.5 million new ADRs in the same year.

In July 2001, STL announced that it would partner with Panama Tech., provider of outsourced business-to-business integration and transaction management services, to pursue joint projects with clients who wished to conduct business transactions electronically. STL also completed the integration of SeraNova's

[^90]Australian subsidiary in the same month. As part of the integration, the name SeraNova Australia Pty Ltd was changed to Silverline Technologies Pty Ltd. The company also consolidated its development activities, with three centres in Chennai, Hyderabad and Mumbai. A realignment of projects was carried out so that all work for a single client was managed at one centre. It also joined Palm's Enterprise alliance to offer mobile e-business applications. ${ }^{22}$ Given that high-end mobile phones were just making their presence felt in the market, many investors considered this move by the promoter to be visionary and much ahead of the time- a move which could reap great dividends for the company in the future. ${ }^{23}$

Though STL witnessed a hike in its financial graph, the global hovering of the financial growth of the company and the 11 September 2001 terror strikes on the USA (especially its World Trade Center) was pulling it downwards.

## 2001-02: The Downward Slide

With the burst of the Dot-Com Bubble and the crash of IT companies stock prices across the world, ${ }^{24}$ STL also started to feel the pinch and the situation started changing drastically. In India, the BSE IT index which was at 4229 points at the start of the year 2000 touched a low of 835 points in 2001. The share price of STL also fell from the heights of ₹ 1,395 per share to below ₹ 100 per share levels in 2001 (Table 10.6).

Table 10.6 Yearly Stock Price Information of Infosys, Polaris and Silverline from 1998 to 2003

| Company $\rightarrow$ | Infosys Technologies <br> Hear $\downarrow$ | Polaris Software <br> High; Low; Market <br> Capitalization | Silverline Technologies <br> Capitalization |
| :--- | :---: | :---: | :---: |
| 1998 | $96 ; 34 ; 34.2$ | No listing data | High; Low; Market <br> Capitalization |
| 1999 | $916 ; 92 ; 165.6$ | $588 ; 187 ; 16.2$ | $128 ; 25 ; 2.7$ |
| 2000 | 1,$727 ; 677 ; 520.8$ | 1,$075 ; 245 ; 27.0$ | $864 ; 105 ; 17.2$ |
| 2001 | $874 ; 270 ; 270.2$ | $365 ; 50 ; 9.6$ | 1,$395 ; 237 ; 36.4$ |
| 2002 | $608 ; 367 ; 248.5$ | $285 ; 142 ; 10.6$ | $278 ; 23 ; 7.2$ |
| 2003 | $709 ; 34 ; 265.8$ | $258 ; 95 ; 9.6$ | $77 ; 15 ; 4.1$ |

Note: (a) Year High and Year Low figures are in ₹ (b) Market Capitalization figures are given in ₹ billion and are computed based on 365 days average; (c) Source: All data taken from CMIE-PROWESS database

In the latter half of 2001, STL laid off 2,300 employees of the combined entity, a whopping $22 \%$ of the total workforce. It soon thereafter led to a cash outflow of around ₹ 2.8 billion towards the lay-off. This outflow significantly affected the capital expenditure program of the company. It also created more anxiety since it came at the time of the dot-com crash, which had resulted in considerable uncertainty regarding the growth prospects of mid-size software companies. The uncertainty in the case of STL was even higher because of the big-ticket acquisition made by the company last year and this capital outflow. The stock price further slipped to a low of ₹ 23 per share.

Many reasons began to be cited for this downslide of STL, but there was no denying that it could

[^91]have been triggered by the long integration process involved in inorganic growth of an erstwhile family driven company (see, Table 10.7 for board members background). The revenues of STL's Hong Kong based subsidiary, Sky Capital International, primarily into maintenance, professional services and old style body shopping crashed by nearly $74 \%$, from ₹ 5 billion to ₹ 1.3 billion. Some positive news came in the shape of growing revenues from its US subsidiary and SeraNova (see, Table 10.8 and Table 10.9 for key standalone and consolidated financial numbers). ${ }^{25}$

Table 10.7 Background of the Board of Directors of Silverline Technologies Limited
Ravi Subramanian, a graduate in accounting from Mumbai, had over two decades of business experience. He founded Silverline Electronics Private Ltd., a personal computer service and reselling firm. The board composition of STL had a few related members. ${ }^{26}$ A snapshot of other board of directors for the year 1999 is - Krishnakumar Subramanian held a bachelors degree in statistics along with a Diploma in Computer Programming and had 18 years work experience in the IT sector; K. Kulathu Subramanian did not hold any college degree but had spent around 22 years in the industry.
The three wholetime directors Ravi Subramanian, Krishnakumar Subramanian and K. Kulathu Subramanian were members of the same family (they were brothers). Others included Sankar lyer, S.V. Mony, V. Panchapakesan, Pejavar Murari and George R Zoffinger. V Panchapakesan had served with a bank in Hong Kong from 1979 to 1996 and was an advisor to Rabobank, Singapore. Pejavar Murari was a retired IAS officer who had held several important positions in the Indian Government including the secretary to the President of India. George Zoffinger had a master's degree in finance from New York University and was the President and CEO of Constellation Capital Corporation. Shankar lyer was the brother-in-law of Ravi Subramanian.

Meanwhile, STL informed the BSE that it was proposing to increase the authorized share capital of the company from the existing ₹ 1.35 billion to ₹ 1.90 billion by creation of additional 55 million equity shares of ₹ 10 each. The company was doing this to ensure that its growing working capital needs did not hamper its growth plans. ${ }^{27}$ With India's capital market regulator, the Securities Exchange Board of India (SEBI), rules mandating that preferential offers should be at the average of the previous six months' stock prices, STL announced preferential offers to promoters using warrants route at a price of ₹ $157 .{ }^{28}$

By this time, a lot of questions also started to come up. ${ }^{29}$ The change of auditors of STL and its subsidiaries, and the resignation of five independent directors from the board of the company raised eyebrows. ${ }^{30}$ The company also initiated a one-time write-off of assets to the tune of $\$ 95.6$ million, out of which accounts receivables and investments formed the biggest chunk with $\$ 32.2$ million and $\$ 31.6$ million respectively (Table 10.10 for information related to these write-offs and further details). This was the beginning of STL's problems as analysts started doubting the quality and capabilities of the management (Table 10.11 for board members and meetings attended and Table 10.12 for promoters' stake over the years). Analysts began to point out that the company had not given enough thought to merger and acquisition issues and the integrations were resulting in a failure.

From November 2001 to January 2002, both the domestic shares as well as ADSs started showing

[^92]Table 10.8 Significant Accounting Figures for Financial Years 1998-2003 of Infosys, Polaris, and Silverline

| Company Name $\rightarrow$ | Infosys Technologies |  |  |  |  |  | Polaris Software |  |  |  |  |  | Silverline Technologies |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Financial Year (FY) $\downarrow$ | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| BALANCE SHEET - Assets Side |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cash and Bank Balances | 439 | 4,051 | 4,318 | 3,851 | 7,670 | 13,287 | 81 | 39 | 108 | 313 | 353 | 732 | 300 | 297 | 263 | 351 | 15 | 18 |
| Accounts Receivables | 622 | 1,222 | 2,411 | 3,211 | 3,801 | 6,444 | 121 | 179 | 555 | 782 | 881 | 1,964 | 251 | 281 | 936 | 1,645 | 2,725 | 267 |
| WoS Acct Receivables | 6 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 6 | 0 | 0 | 0 | 0 | 0 | 1,411 | 2,615 | 0 |
| Loans and advances | 73 | 116 | 508 | 2,879 | 3,695 | 4,581 | 0 | 0 | 7 | 72 | 27 | 225 | 1 | 0 | 0 | 335 | 293 | 348 |
| Inventories | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 116 | 0 | 0 |
| Current Assets | 1,157 | 5,463 | 7,273 | 8,299 | 13,833 | 22,631 | 203 | 220 | 712 | 1,142 | 1,298 | 2,696 | 567 | 590 | 1,214 | 1,829 | 2,740 | 633 |
| Gross Fixed Assets | 1,125 | 1,838 | 3,410 | 8,018 | 11,113 | 13,499 | 63 | 116 | 321 | 634 | 1,078 | 2,277 | 1,052 | 1,462 | 1,829 | 2,394 | 2,768 | 2,024 |
| Investments | 108 | 8 | 209 | 341 | 444 | 332 | 23 | 133 | 650 | 539 | 616 | 585 | 14 |  | 2,007 | 8,058 | 6,948 | 1 |
| Total Assets | 1,987 | 6,594 | 10,063 | 17,095 | 25,397 | 35,639 | 286 | 452 | 1,643 | 2,273 | 2,816 | 5,243 | 1,496 | 1,854 | 4,811 | 12,502 | 12,353 | 2,165 |
| BALANCE SHEET - Liabilities Side |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Current Liab and Provisions | 257 | 850 | 1,730 | 3,199 | 4,594 | 7,032 | 35 | 43 | 265 | 349 | 368 | 828 | 107 | 110 | 175 | 435 | 238 | 216 |
| Long-term Liabilities | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 38 | 1 | 0 | 8 | 30 | 196 | 0 | 17 | 73 | 881 | 1,319 |
| Net Worth | 1,730 | 5,744 | 8,333 | 13,896 | 20,803 | 28,607 | 210 |  | 1,378 | 1,924 | 2,441 | 4,384 | 1,194 | 1,744 | 4,619 | 11,995 | 11,234 | 630 |
| Total Liabilities | 1,987 | 6,594 | 10,063 | 17,095 | 25,397 | 35,639 | 286 | 452 | 1,643 | 2,273 | 2,816 | 5,243 | 1,496 | 1,854 | 4,811 | 12,502 | 12,353 | 2,165 |
| Shares Outstanding | 16.0 | 33.1 | 66.2 | 66.2 | 66.2 | 66.5 | na | 17.1 | 34.1 | 51.2 | 51.4 | 97.6 | 37.9 | 64.5 | 73.2 | 85.7 | 167.9 | 167.9 |
| INCOME STATEMENT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Sales | 2,587 | 5,089 | 8,844 | 19,006 | 26,036 | 36,227 | 308 | 597 | 1,459 | 2,654 | 2,739 | 3,961 | 837 | 1,104 | 1,953 | 2,727 | 2,068 | 356 |


| Other Income | 1 | 2 | 5 | 7 | 19 | 39 | 0 | 0 | 41 | 26 | 55 | 3 | 1 | 0 | 3 | 9 | 4 | 9 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Auditors' Expenses | 0 | 0 | 0 | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 10 | 3 | 1 | na |
| PBDITA | 871 | 1,898 | 3,862 | 8,130 | 11,118 | 13,590 | 56 | 165 | 452 | 694 | 755 | 888 | 352 | 523 | 798 | 1,459 | $-1,989$ | $-2,729$ |
| Financial Charges | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 40 | 60 |
| Depreciation and <br> Amortization | 228 | 359 | 532 | 1,129 | 1,607 | 1,863 | 6 | 15 | 30 | 87 | 94 | 184 | 68 | 75 | 82 | 105 | 166 | 124 |
| PBT | 644 | 1,539 | 3,330 | 7,001 | 9,512 | 11,700 | 48 | 147 | 419 | 607 | 661 | 696 | 242 | 412 | 702 | 1,345 | $-2,221-2,913$ |  |
| Profit After Tax | 604 | 1,353 | 2,935 | 6,288 | 8,080 | 9,579 | 47 | 147 | 372 | 601 | 623 | 542 | 242 | 412 | 702 | 1,315 | $-2,221-2,913$ |  |

[^93]Table 10.9 Consolidated Financial Numbers of Silverline Technologies LTD. (2000-2002)
(all figures in ₹ million)

| Financial Year $\rightarrow$ | FY2000 (12m) | FY2001 (12m) | FY2002 (15m) |
| :---: | :---: | :---: | :---: |
| BALANCE SHEET |  |  |  |
| Assets Side |  |  |  |
| Cash and Bank Balances |  | 477 | 67 |
| Accounts Receivable |  | 2,760 | 2,649 |
| Loans and Advances |  | 241 | 29 |
| Inventories and Other Current Assets |  | 636 | 402 |
| Current Assets |  | 4,114 | 3,147 |
| Fixed Assets |  | 2,331 | 2,298 |
| Intangibles, Investments, etc. |  | 4,001 | 3,987 |
| Total Assets |  | 10,446 | 9,432 |
| Liabilities Side |  |  |  |
| Current Liabilities |  | 2,208 | 2,026 |
| Provisions |  | 595 | 331 |
| Total Current Liabilities and Pro |  | 2,803 | 2,357 |
| Long-term Liabilities |  | 2,986 | 3,648 |
| Net Worth |  | 4,657 | 3,427 |
| Total Liabilities |  | 10,446 | 9,432 |
| No. of Equity Shares | 64.5 | 85.6 | 107.9 |
| Income Statement |  |  |  |
| Total Sales | 4,535 | 6,511 | 10,482 |
| Other Income |  | 284 | 95 |
| Cost of Goods Sold (includes contract manufacturing) |  | 3,013 | 6,008 |
| Gross Profit |  | 3,498 | 4,474 |
| Operating/Other Expenses |  | 4,484 | 6,192 |
| PBDIT | 1,051 | -986 | -1,718 |
| Interest |  | 140 | 327 |
| Depreciation and Amortization |  | 742 | 1,007 |
| Exceptional Items |  | -4,461 | -3,349 |
| PBT (includes other income) |  | -4,281 | -3,638 |
| Tax |  | 97 | 10 |
| Profit After Tax | 849 | -4,378 | -3,648 |
| Dividend to Equity Shareholders |  | 105 | 0 |

Note: Figures from STL Annual Reports for FY2000 through FY2002 are provided. Please note that before 2001, Indian accounting standards did not require consolidated figures to be presented.

Table 10.10 Assets Written-Off by STL during FY2001-02
During the years FY2001 and FY2002, the subsidiary companies of STL, Silverline Technologies Inc. USA and SeraNova Inc. wrote off US $\$ 96$ million and US $\$ 53$ million of their balance sheets respectively. Details are as follows:

| Financial Year (FY) $\boldsymbol{\rightarrow}$ | $\mathbf{2 0 0 2}$ (in US \$ million) | $\mathbf{2 0 0 1}$ (in US \$ million) |
| :--- | :---: | :---: |
| Item $\downarrow$ |  | 32.2 |
| Accounts Receivables | 29.1 | 31.6 |
| Investments | 1.6 | 13.7 |
| Goodwill | 2.5 | 8.7 |
| Property, Plant and Equipment | 11.9 | 4.7 |
| Purchased Software | 3.7 | 4.8 |
| Others | 3.8 |  |

Income and Assets Break up of STL and its Subsidiaries in FY2002

| As on 30 ${ }^{\text {th }}$ June $\mathbf{2 0 0 2}$ | Total Revenue (in ₹ million) | Total Assets (in ₹ million) |
| :--- | :---: | :---: |
| Silverline Technologies Ltd., India | 2,066 | 2,156 |
| Silverline Technologies Inc. USA | 4,091 | 6 |
| SeraNova Inc. USA | 2,982 | 122 |
| Sky Capital International Ltd. Hong Kong | 1,527 | 2 |
| ECommServer Inc., USA | 103 | 42 |
| Inter-Company | $(291)$ | 2,331 |
| Total | 10,482 |  |

Note: Tabulated based on information provided in STL's FY2002 annual report
signs of spiking volumes, suggesting huge trading by speculators or operators. For instance, on November 14 2001, the volume of ADR's traded was 12,600 while the very next day it jumped to 247,000 . The highest volume traded was registered on November 27, 2001 at 461,000 . Similarly volume traded was a meager 306,000 shares on November 5, 2001, but shot up to the month's high of 3.6 million shares on November 28, 2001 on the BSE. This was highly unusual for a mid-sized firm with a decade old history to show such behavior. ${ }^{31}$

By this time, STL started feeling the heat. STL postponed the annual meeting of its Board of Directors which was to be held on January 22, 2002. The official statement said that it was done to consider allotment of equity shares of the company to creditors of its subsidiary. ${ }^{32}$

Ravi Singh, ${ }^{33}$ the Chief Executive Officer (CEO) of STL, resigned in March 2002, citing the company's decision to shift its senior management function to India from the US as the main reason. ${ }^{34}$ However, company insiders speculated that the real reason could have been something entirely different other than

[^94]Table 10.11 STL Board Meetings Attendance: From FY2001 to FY2004

|  | Category of Directorship $\downarrow$ | Number of Board Meetings Attended |  |  |
| :--- | :--- | :--- | :---: | :---: |
| Financial Year (FY) $\rightarrow$ |  | FY2001 | FY2002 | FY2004 |
| Name of the Director $\downarrow$ |  | 15 | $5^{\star}$ | 5 |
| Ravi Subramanian | Promoter - Chairman | 12 | 16 | 5 |
| Krishnakumar Subramanian | Promoter - Vice Chairman | 7 | 17 | 5 |
| K. Kulathu Subramanian | Promoter - Whole Time Director | 13 | 6 | NA |
| S V Money | Non-Executive Director | 4 | 6 | NA |
| Shankar lyer | Independent Non-Executive Director | 6 | 10 | NA |
| V. Panchapakesan | Independent Non-Executive Director | 10 | 7 | NA |
| Arjan Daswani | Independent Non-Executive Director | 3 | 2 | NA |
| P. Murari | Independent Non-Executive Director | 4 | $0^{\#}$ | NA |
| George Zoffinger | Independent Non-Executive Director | NA | NA | 2 |
| Prem Rajani | Independent Non-Executive Director | NA | NA | 2 |
| Nirmal Jain | Vice Chairman | NA | NA | 0 |
| Ram V Ramanan | Independent Non-Executive Director | NA | NA | 0 |
| Ramachandra N Swamy | Independent Non-Executive Director |  |  |  |

Note: (a) NA indicates Not Available; (b) Items marked with asterisk (*) were present in the rest of the board meetings through video conferencing; (c) Items marked with (\#) were present in two board meetings through video conferencing. Source: Compiled from available annual reports.
what had been reported. ${ }^{35}$ Ravi Subramanian, the founder and executive chairman of the company, then took the responsibilities of the CEO.

The global slowdown had also affected the financials of both STL and SeraNova. The company posted a net loss of ₹ 286 million on total revenue of ₹ 1.8 billion for the quarter ended September 2001, compared with ₹ 559 million profit and ₹ 1.73 billion revenue recorded for the corresponding period in the previous fiscal. It was at this time that the second phase of corporate restructuring started in STL. It temporarily extended the FY2002 by one quarter, in effect changing its accounting year-end from March to June, an action that took the market by surprise. ${ }^{36}$ STL also called upon the Technology Investment Banking Group of TAIB Bank ${ }^{37}$ to assist the financial and strategic restructuring of the company. TAIB was asked to lead manage the financing and working capital restructuring to assist the company in meeting its capital needs and existing debt obligations. In addition to participating in the financing of STL's growth plans, TAIB was to invest US\$ 10-15 million and also work closely with the company to address certain strategic issues which included institutionalizing best practices in corporate governance, greater operational and financial transparency and strengthening of its India based senior management team. ${ }^{38}$

STL was also facing a severe liquidity crunch at this time. The crunch was so severe that the company

[^95]Table 10.12 Details of Promoter's Stake Over the Years

| Company Name $\rightarrow$ | Infosys Technologies Ltd. |  |  | Polaris Software Ltd. |  |  | Silverline Technologies Ltd. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time (in MM/YYYY format) $\rightarrow$ | 12/2001 | 12/2002 | 12/2003 | 12/2001 | 12/2002 | 12/2003 | 12/2001 | 12/2002 | 12/2003 |
| Promoters Holding (in \%) | 28.8 | 28.4 | 26.6 | 46.4 | 46.4 | 24.4 | 19.9 | 2.7 | 0.1 |
| Non-promoters Holding (in \%) | 71.2 | 71. 6 | 73.4 | 53.6 | 53.6 | 75.6 | 80.2 | 97.3 | 99.9 |
| Institutions (in \%) - Non-Promoters | 46.2 | 48.1 | 48.4 | 15.0 | 15.6 | 31.6 | 2.8 | 1.4 | 0.3 |
| Non-institutions (in \%) - Non-Promoters | 25.0 | 23.5 | 24.9 | 38. 6 | 38.1 | 44.0 | 77.4 | 95.8 | 99.6 |
| Corporate Bodies (in \%) - Non-Promoters | 1.7 | 2.2 | 1.7 | 10. 9 | 11.1 | 23.4 | 12.5 | 18.6 | 14.5 |
| Individuals (in \%) - Non-Promoters | 12.3 | 10.7 | 9.0 | 20.2 | 22.9 | 15.4 | 46.7 | 45.3 | 82.9 |
| Other Non-institutions (in \%) - Non-Promoters | 11.0 | 10.6 | 14.3 | 7.5 | 4.1 | 5.2 | 18.2 | 31.9 | 2.2 |
| Total equity holding (in \%) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total equity holding (Nos. in millions) | 66.2 | 66.2 | 66.5 | 51.2 | 51.4 | 97.6 | 85.7 | 167.9 | 167.9 |

Source: Centre for Monitoring of Indian Economy-PROWESS Database
failed to pay salaries to employees in India and the US (see Table 10.13). Analysts argued that the increase in receivables cycle amid the economic slowdown had possibly effected the company's working capital position. ${ }^{39}$ The company also defaulted on its payments to its bankers in India, the Punjab National Bank, and the Jammu \& Kashmir Bank. One of the ways of solving the cash crunch was an international offering of equity or equity-linked securities, which was seriously considered by STL at that time. ${ }^{40}$

In July 2002, Lalbhai and Maganbhai were chatting on the phone again about the recent approval of Foreign Investment Promotion Board (FIPB) of the company's plans to bring new equity using the preferential warrants route. There was also a company release stating that the warrants would be considered for issue at a revised price of ₹51 instead of the originally approved ₹ 157 .

Maganbhai sounded optimistic as he believed that promoters were trying to address their falling stake in the company and would be giving it a boost. He was aware that the promoter's stake in STL had steadily fallen to $31 \%$ in 2000 and $23 \%$ in 2001 respectively. If Subra Mauritius exercised this option, the promoter holding in the company would have risen to $31.1 \%$. He believed that this would address the liquidity crunch the company was facing. It would also help the company in making a few more overseas acquisitions.

Lalbhai, on the other hand had reservations in mind. Not only was he aware of the fact that the Subra Holdings Mauritius was a promoter group company, he had also gone through the recent report of a mid-sized local brokerage company, Khandwala Finance. The report made scathing attacks on the STL management and advised investors to dump the stock by quoting the following lines:
"Silverline will be doing a preferential issue of warrants to its promoters-Subra Mauritius. The total number of warrants issued will be 20 million and the price for conversion is fixed at ₹ 51 , reduced radically from the earlier ₹ 157 . This exercise looks absolutely bizarre considering the current market price at around ₹59, essentially implying that the promoters themselves have no faith in the improvement of the stock price."

Source: ‘Is there a Silverlining for Silverline?’ Express Computers Magazine, 11 August 2003.
Table 10.13 Excerpts of Employees Reaction on Non-Payment of Salaries by STL Management
"STL employees in the U.S. and India say their salaries weren't paid and money that was ostensibly withheld for their 401 (k) plans never made it there. Instead, they said, they were repeatedly bamboozled with partial salary payments and promises that everything would be made right.
Many other employees were outraged at the way they were treated. More than $80 \%$ of the company's workforce in the US, which totalled 756 people last November, were Indian nationals who had arrived in this country on H1B visas. If they lost their jobs at STL, they would have 30 days to find similar work or return to India. This made many employees reluctant to leave the company even when they weren't being paid. "He [Subramanian] has made so many families suffer. This is mental terrorism," says Arjun, a former STL employee who asked to be identified by his first name only. He said that he is still owed $\$ 16,000$. "People should not be able to come to any country, any place like this, and treat people badly. For what he has done, he should go to prison."
"Why didn't the government go after these guys? Somebody needs to do some explaining," says another former STL worker who claims to be out $\$ 18,000$.
In February 2003, the New Jersey Department of Labour docketed a judgment in Superior Court against STL for failure to pay more than $\$ 5.2$ million in wages and benefits to employees. The company made one payment of $\$ 700,000$ but still owed more than $\$ 4.5$ million."

Source: 'A pioneer stumbles', All business, All New Jersey Newspaper, web, 28 January 2011.

[^96]
## 2002-03: REVIVAL EFFORTS

STL started making concentrated efforts to portray itself as a professionally run company. There were a few changes in the board of directors and in August 2002, a new face, Dr. Nirmal Jain, was appointed as the vice-chairman and CEO of the company. Dr. Jain was previously the managing director at Tata InfoTech Limited and was not related to any of the existing board members. Developments were also taking place in the US at the same time. Cognizant Technology Solutions Corporation, an Indian multinational company based in the US, made an offer in September 2002 to buy the assets related to Silverline Technologies Inc's information technology contract with the travel related services arm of American Express. While STL officials refused to comment, the company's official statement in its announcement on the development was that: "We have received an offer from Cognizant Technology Solutions US Corporation, to acquire certain assets of a business unit of Silverline Technologies Inc. that provides information technology services to a Fortune 100 financial services company. This business unit was acquired as part of the acquisition of SeraNova Inc, an e-business consulting services company that was acquired by STL in March 2001. "41 Finally, in October 2002, Silverline Technologies Inc. sold its American Express contract to Cognizant Technology Solutions for $\$ 9.7$ million to settle a lawsuit brought by HSBC Bank over an unpaid loan. ${ }^{42}$

Following reports of a launch of a further US\$ 35 million overseas equity issue by STL, shares of the company somewhat rebounded to ₹ 25 in November 2002. In December 2002, STL announced its results for July-September 2002 quarter, wherein it posted a net loss of ₹ 65 million for the quarter, as compared to a net profit of 139 million in the quarter ended on 30 September, 2001. Things were going from bad to worse for STL during this time, as Punjab National Bank served it a 60 days' notice on 6th January 2003 for failing to repay an outstanding loan of over ₹ 40 million. The bank also threatened to attach a large residential complex in Mumbai's suburb of Andheri East, and the other properties. ${ }^{43}$ In the wake of all this, the company officials tried to show a strong face by announcing key BPO initiatives. Through this strategy the company planned a revival of its business. It aimed at freshly embarking on new business initiatives in the BPO/ITES areas through the direct marketing approach with its overseas clients. ${ }^{44}$

## 2003: THE DOWNWARD SLIDE CONTINUES

The next shock to STL came from Dr. Nirmal Jain's resignation in December 2002. ${ }^{45}$ During the FY 2003, the company also became involved in a number of litigations both in India and the USA. ${ }^{46}$ These litigations mostly dealt with non-payment of dues and rent for existing facilities of its subsidiaries SeraNova Inc. and Silverline Technologies Inc., fraudulent misrepresentation and non-honoring of promissory notes issued

[^97]by the company. On 18 March, 2003, Silverline filed with the US Regulator, Securities and Exchange Commission (SEC) to allow changing of ratio of shares from two per American Depository Receipts (ADR) to 10 per ADR. The reactions in the market were bearish towards this move as consequent to this ratio change, $A D R$ holders would have received five new ADR for one ADR surrendered. ${ }^{47}$

Maganbhai and Lalbhai met each other again during their morning jog in a park. Maganbhai seemed buoyant with the company's announcements on BPO initiatives and ADR changes. According to him, this was a clear indication of the fact that even though the company was tied up in litigations, it was trying its best to protect itself from bankruptcy. By this time, Lalbhai was convinced that there was something fishy in the way the company was going about its dealings as he was clear in his mind that such action (on ADR's) leads to diluting the promoter's stake in the company even further.

Lalbhai was in fact correct with his statistics. The promoters' stake in the company had gone down to 15\% in FY2003 as the warrants issued to Subra Holdings Mauritius were never exercised. When Lalbhai pointed this out to Maganbhai, he retorted by saying that this was a signal of increasing professionalism in the company and it was the right stage for the promoters to hand over the company in professional hands. Maganbhai felt that STL was replicating the Infosys way of managing a company.

However, the biggest blow to the company finally came in April 2003, the SEBI and the Department of Company Affairs (DCA) initiated prosecution against brokers, vanishing companies, and companies owned by Ketan Parekh, a former stock broker from Mumbai involved in massive stock market manipulations during 1999-2001. ${ }^{48}$ A Joint Parliamentary Committee (JPC) probed the issue and had suspected fifteen companies and their promoters of having links with Ketan Parekh or involved in price manipulation STL was one of those. ${ }^{49}$

Views on the company ranged from positive to extreme negativity. Larry Cox, former vice president in charge of its human resources stated - "Ravi Subramanian built a global organization at a time when many American companies couldn't have done it. He just didn't know when to quit." He further went to state "I feel sorry for Ravi. He was trying to hold onto his life's dream and he just got into quicksand."50

In August 2003, Silverline finally gave up its hope of reviving its US business and announced the closure of its subsidiaries in USA, namely Silverline Technologies Inc. and SeraNova, Inc. following accumulated deficits from operations and losses on account of write off of assets. ${ }^{51}$ The total non-recurring write offs was $\$ 102$ million and the net loss for the nine-month period ended March 31, 2003, was $\$ 110$ million. In view of this, the subsidiaries filed for liquidation in the US under appropriate laws. The shares of the company at BSE fell to a new all-time low of ₹6.65 in May 2003.

Meanwhile, the New York Stock Exchange suspended trading in American Depository Receipts of STL from Thursday, 14 August, 2003. The Exchange's action was the result of the company's declaration dated August 8, 2003, announcing its financial results for the nine months, which ended on March 31, 2003. An added reason was the filing of the company's US subsidiaries for liquidation. The announced

[^98]results indicated that the company had now fallen below the NYSE's continued listing standards regarding average global market capitalization over a consecutive 30 trading-day period of not less than $\$ 50$ million and total stockholders' equity of not less than US $\$ 50$ million. ${ }^{52}$

The very next month, STL had to sell off its European arm to TranSys Technologies, the UK based subsidiary of Soffia Software. Following this acquisition, STL lost the client base including JP Morgan, AIT plc, CPL and Faversham that it was so proud of. ${ }^{53}$ This was probably the final nail in the coffin for a once high flying company.

## Guru Ramani's Dilemma

In October 2003, Guru Ramani was pondering about the reasons which could have lead to the depletion of his invested capital and the sudden downfall in the fortunes of the company. On $22^{\text {nd }}$ Feb. 2000, he had invested ₹ 13.9 million to purchase 10,000 shares of STL - an amount which was nearly a third of his total wealth. And in October 2003, STL was just a paper tiger trading at ₹ 4.6 and his investment was worth a mere ₹ 46,000 . He was wondering what could have been the reason behind such a blunder on his part - was it greed? Or was it fear? To this question, his wife retorted - from whose perspective was he talking, STL promoters or his own?

Guru Ramani dwelled that it might be a case of the strategy of a technology company going wrong and the related risks of investing in a technology firm. The company seemed to make all the right moves. All the three major acquisitions were higher up in the value chain, and this gave the company access to new customers and markets. Sky Cap was a Hong Kong based consultancy (FY2000 revenues: US $\$ 24.3$ million) with offices in Japan, and a clientele that included Amex, Cathay Pacific, Standard Chartered and Lehman Brothers. And SeraNova was a value-added Internet Solutions provider with a strong presence in the US, Europe, Australia and New Zealand. But these acquisitions turned out to be the Achilles heel of Silverline.

On the other hand, Guru Ramani's informed wife hinted that Silverline might not have had been entirely transparent in its dealings over the past. According to her, the warning signs were visible for every investor. But Guru Ramani, as most other retail investors who had invested for a long term in the company, tended to ignore these basic signs. When the bloodbath had finally ended, the market capitalization of STL had eroded from a high of ₹ 83 billion in the year 2000 to mere ₹ 0.6 billion in the year 2003.

## Questions

i. Divide the case situation in three time periods, namely - (a) Solid growth phase of STL with large positive signals, till 2000; (b) The phase of aggressive acquisitions with low growth and mixed signals, from 2000-2002; (c) the phase of failure with very bad signals and skeletons coming out of the cupboard, from April 2002 onwards. In the light of discussion on 'corporate governance and accounting', you are required to evaluate the case events during each of these periods and discuss the logical validity of the arguments of both Lalbhai and Maganbhai.
ii. From the case, please list down a few early warning signs of Silverline in trouble. List a few supporting red flags using the financial reporting practices of the comapny.

[^99]
## Solution:

Readers interested in accessing the complete solution for this illustration might like to go through Annexure 10.3.

A few clues for cracking this puzzle would include:

- STL Group's Marketing Company till 1999
- STL Investments in Wholly Owned Subsidiaries for more than ₹ 300 crore
- STL Loans and Advances to related parties
- STL Debtors / Receivables of Wholly Owned Subsidiaries
- Contingent Liabilities
- Bank / Corporate Guarantees
- Other Board of Directors
- High Figures on 30 June 2002


To know more on "Public Available Information, Reporting Practices and Corporate Governance" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/563

- Large number of litigations
- STL Investments in other areas including incubators
- Other Issues - Auditors Payments, Managerial Remuneration, Board Meetings Attended, Commitment of Funds, Resignation of Independent Directors .
The Silverline case must have surely given you enough learning for thought regarding creative accounting. In not giving up our learning momentum, we move on to the same section.


### 10.4 CREATIVE ACCOUNTING AND GOVERNANCE



Explain the role played by creative LO 4 accounting in corporate governance-failures

Having gone through the case of Silverline, some of you might like to take a side favoring the owner-management. You may state that the downfall of Silverline was completely external environment induced largely led by the mergers and acquisitions not working well at a time of global recession. The other way round to argue could be, "it's a case of systematic manipulation of accounting policies and practices by the Silverline's management."

While Silverline and Satyam are extreme examples of such creative accounting; yet, we often come across of cases of creative accounting which are somewhere in the middle of the continuum. A question that comes to an inquisitive mind is "why Financial Reporting Procedures and Practices get misused"?

A quick answer to it is for 'earnings management' with an intent for direct/indirect self-gains. Important corollaries that can be drawn from that point are: Firstly, flexibility in GAAP requires judgment. And thus, the intent of having some self-gains gets kicked up at various levels and places. Secondly, those involved in financial reporting procedures and practices are finally human beings as well. Also, there is scope to have conscious/unconscious error(s) from them as well. They are from the same set of society of which we all are part of (with similar levels of ethos, culture and such facets). For example, auditors need not be perfect detector of fraud is one lesson that can be drawn. In fact, they may be part of it. Perhaps, a related question to that would be: if given a chance, how many of us would behave the other way round? And, our behavior of that would be to what extent or level?

In this section, we discuss a few common forms of accounting frauds companies indulge in and hint upon a few signs that may alert a watchful reader of financial statements of such potential wrongdoings
(they may come across in future). This brings us to the fact that - there can be various degrees of 'earnings management'. We elaborate and illustrate the same below:

1. Employment of conventional GAAP Flexibility

This is a low level of 'earnings management'. For example, a firm preferring to use a certain accounting policy of inventory valuation over others is a case in point. Delay in implementation of a particular 'optional' accounting standard is, perhaps, another example.
2. Employment of Flexibility that strains GAAP

A firm changing its accounting policy of inventory valuation from one method to another (such as, FIFO to LIFO) to wade through a temporary earnings crisis can be an excellent case in point. We also do observe situations of some companies sharing their 'current investments' as 'non-current investments' in their balance sheet to avoid 'Mark-to-market' bench-marking their investments.
3. Behavior Beyond the Boundaries of GAAP

Banks delaying recognizing their non-performing assets by managing the loan account with the customer (say, with another rollover loan) is a case in point.
4. Understating liabilities

Treatment of many events and transactions within the Silverline Illustration 10.3 are a case in point. There are examples galore in that. Most organizations


To know more on "A Statutory Flip to Governance by Revamping Fraud Risk Management" scan the QR code, or visit:
http://qrcode.flipick.com/ index.php/564 behavior before taking a big bath is also an example of such actions.
5. Fraudulent Financial Reporting

This degree is intended with the highest levels of 'earnings management'. Satyam Computers example comes in this category.

### 10.4.1 Ruses to Do Creative Accounting

Classic literature on Financial Reporting Practices linking to Corporate Governance suggests that business entities and other organizations adopt a combination of the following five ploys to do creative accounting:

The first ploy is to Recognize Revenue Early. Firms often tend to recognize revenue before they qualify to do so. This step leads to (temporal) benefits such as substantial performance; confidence in collections; and also acts as a good handle on costs.

The second ploy is to Record Fictitious Revenue. Firms record fictitious revenue by employing aggressive accounting procedures or by conducting outright fraud. Examples include: Benami transactions and transactions done using wholly-owned subsidiaries by Silverline. Recording revenue when the firm ships goods to its own off-site warehouses even though the goods (or services) have not yet been purchased by customers is another example. Grossing up revenue i.e., recording large amounts of revenue along with offsetting cost of sales for swap transactions, etc. is another method. Other modes of this are: selling goods to affiliated parties, which may technically qualify as sales under GAAP (if the affiliates are not consolidated) but which are primarily conducted to increase reported revenue; recording investment income as operating revenue; and recording revenue that lacks economic substance.

The third ploy is of Overstating Assets to Understate Expenses. List of examples includes, capitalizing expenditures as assets rather than recording them as an expense; failing to write down assets which have permanently declined in value (i.e., the present value of expected cash flows is less than book value); failing to properly amortize intangible assets when impairment occurs; overstating assets, e.g., ending inventory; and understate reserves for bad debts, inventory, etc.

The fourth ploy is to Understate Liabilities to Understate Expenses. Examples that we frequently come across include simply ignoring invoices when received; recording revenue when cash is received even though services have not yet been performed (this cash should be recorded as an 'advance from customer' as a current liability); and ignoring lawsuits and other contingent liabilities that are likely to be realized.

The fifth ploy is to Take Big Baths. The theory being investors will largely ignore the one-time charge, and by taking the charge today, the income statement will look stronger in the future. Special charges for big baths include primarily asset write-offs of goodwill, inventory, or plant and machinery equipment (asset impairments). Firms sometimes record large special charges in the current period. These charges set up reserve accounts that reduce recorded expenses in later periods. Restructuring charges associated with big changes in an entity's business and/or strategy, such as divestment of business units, termination of employees with severance packages, etc. may also get employed.

### 10.4.2 Identifying Creative Accounting

While not an easy job to do for every manager - yet, we do have a few suggestions based on experience and also reading literature on this subject.

One of the first places to look for identifying the above ruses of creative accounting is to look for 'Audit Report'. Within that one should look for: a qualified opinion; any reservations the auditors may express regarding the financials; and any changes in accounting methods that the auditors highlight.

Having an eye on Proxy Statements and being watchful about them also makes sense. Thus, one should look for: Executive stock options, which often provide the incentive for earnings management; Related-party transactions, which can be used to inflate reported revenue or hide liabilities; Litigations that are not accrued on the financials; and Changes in auditors which may relate to disputes. Please note that Silverline had all of the above in various proportions.

Lastly, once an entity is flagged for any reason, we also suggest Financial Statement Investigation. As a consequence, analyzing financial statement metrics: both, across firms in the same industry (e.g., cross-sectional analysis), and over time for the same firm (e.g., cross-time analysis) does help. Nonetheless, the point to be noted is that the indicators listed (herein) often can be interpreted two ways. On the one hand, they could reflect 'earnings management'. On the other hand, they could reflect actual strength or improvement for the firm. Therefore, when an indicator is detected, it simply means that further analysis must be conducted to distinguish between actual strength and feigned strength.

Further, the lessons learnt from Silverline Technologies would also include: that one ought to be relatively wary to be associated and be part of a company with a very complicated organization or business model (i.e., includes association in any fashion, say, as investor or employee or lender); be wary of organizations that lack Financial Transparency; be wary of the ones involved in Stock Price Manipulations; and be wary of ones involved in Insider Trading. Finally, one should always stress on Quality of Management while taking decisions of 'creative accounting', 'corporate governance' or even any sort of association with such firms.

That brings us to the topic of IFC!!?

### 10.5 INTERNAL FINANCIAL CONTROLS ${ }^{54}$

Review the demands and intricacies of internal financial controls

Readers would have realized that internal financial controls (IFC) ought to be an essential part of given corporate governance. IFC has been introduced in the Companies Act, 2013. 'Internal Financial Controls' means the policies and procedures adopted by the company for ensuring:

- orderly and efficient conduct of its business, including adherence to company's policies,
- safeguarding of its assets,
- prevention and detection of frauds and errors,
- accuracy and completeness of the accounting records, and
- timely preparation of reliable financial information.

The auditors in their audit report are now required to comment on the adequacy and operating effectiveness of IFC. The Companies Act, 2013, has mandated three significant requirements in relation to IFC over Financial Reporting:

- a requirement to state in the Board report that the directors, in the case of a listed company, had laid down IFC to be followed by the company and that such IFC are adequate and were operating effectively.
- requires the Board of Directors report of all Companies to state the details in respect of the adequacy of IFC with references to the financial statements.
- a requirement to comment in the Independent Auditors report on whether the company has adequate IFC system in place and the operating effectiveness of such controls.
IFC involves "a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP". A company's IFC over financial reporting can provide the reader of financial statements with:
- Assurance that financial statements fairly reflect all financial transactions;
- Assurance that all transactions are recorded in accordance with applicable policies, directives and standards;
- Assurance that transactions are carried out in accordance with delegated authorities;
- Assurance that financial resources are safeguarded against material loss due to waste, abuse, mismanagement, errors, fraud, omissions and other irregularities.
Internal Controls are the methods and procedures designed by management to safeguard assets and to manage resources. It is the system of checks and balances. A system of such control serves to minimize errors in the accounting records and to deter fraud, embezzlement and theft by employees, customers and vendors. Adequate controls should be included in daily operations. The system of internal control provides reasonable assurance of the following:
- Reliable financial and operational reports
- Efficient and effective operations
- Helps to plug revenue leakages and controlling cost
- Compliance with applicable laws and/or regulations
- Standardizing policies and procedures

[^100]In 1992, the Committee on Sponsoring Organizations of the Treadway Commission ("COSO"), an initiative of several groups with an interest in effective internal control, released a framework to assist companies in structuring and evaluating controls that address a broad range of risks. That framework defines internal control as "a process, affected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance."

## Let's Check Our Concepts!

## State whether the following statements are True or False:

(c) A qualified audit report means that there is nothing wrong with the entity or we can say no errors/frauds in the financial statements.
(d) Internal financial control provides an assurance that transactions are recorded in accordance with applicable policies, directives and standards.

### 10.5.1 Internal Control: Types and Elements

Two types of internal control are there.

- Detective controls are designed to detect errors or irregularities that may have occurred. They provide evidence that a loss has occurred but do not prevent the loss from occurring. For example, reviews, reconciliations, physical verifications and audit.
- Preventive controls are designed to keep errors or irregularities from occurring in the first place. They are proactive controls that help to prevent a loss. For example, separation of duties, proper authorization, adequate documentation, and physical control over assets.
Both preventive and defective controls are essential to an effective internal control system.
Control Activities are actions supported by polices and procedures that, when carried out properly and
in a timely manner, manage or reduce risks. Control activities including:
- Approvals
- Authorizations
- Verifications
- Reconciliations
- Review of operating performance
- Security of assets
- Segregation of duties

Internal control consists of five interrelated components or elements: the control environment, risk assessment, control activities, information and communications, and monitoring. Each of these components is an integral part of the management process and plays a specific role in departmental internal control procedures.

## SPOTLIGHT 10.5

## "How is internal audit different from internal financial control?"

The role and objectives of the internal audit function are determined by management and, where applicable, those charged with governance. While the objectives of the internal audit function and the auditor are different insofar as it relates to financial statements, the ways in which the internal audit function and the auditor achieve their respective objectives in an audit of internal financial controls may be similar.

The auditor's consideration of the internal audit function in an audit of internal financial controls, applies in a combined audit of internal financial controls over financial reporting and financial statements.

Readers would agree that no matter how well internal controls are designed, they can only provide reasonable assurance that objectives will be achieved. Segregation of duties decreases the chances of controls being circumvented through collusion, but controls can still break down through human error and judgment, as well as management override. Management override should not be confused with management intervention, which represents management actions to depart from prescribed policies and procedures for legitimate purposes. Internal control deficiencies should be reported to the department head, with serious matters reported to executive management.

## SPOTLGHT 10.6

## "Top Ten Internal Controls to Prevent and Detect Fraud!"

A recent "KPMG Fraud Survey" found that organizations are reporting more experiences of fraud than in prior years and that three out of four organizations have uncovered fraud. Following list of internal controls would assist you in preventing and detecting fraud at your organization/agency. Annexure 10.4 on the OLC details the same.

1. Use a system of checks and balances to ensure no one person has control over all parts of a financial transaction.
2. Reconcile bank accounts every month.
3. Restrict use of agency credit cards and verify all charges made to credit cards or accounts to ensure they were business-related.
4. Provide Board of Directors oversight of agency operations and management.
5. Prepare all fiscal policies and procedures in writing and obtain Board of Directors approval.
6. Ensure that agency assets such as vehicles, cell phones, equipment, and other agency resources are used only for official business.
7. Protect petty cash funds and other cash funds.
8. Protect cheques against fraudulent use.
9. Protect cash and cheque collections.
10. Avoid or discourage related party transactions.

Source: Top Ten Internal Controls to Prevent and Detect Fraud!, Office of Mental Health, web,5 March 2016

## SUMMARY

Financial reporting (and book-keeping) in this technology-driven gadgets world has progressively moved away from the manual accounting system. The more complex is the financial activities of an entity, the more likely that they will adapt computerized accounting information system to ensure effective real-time financial reporting. In this chapter, we understood the varied issues involving the same such as software programs, cloud-based remote-accounting and such. Accounting information systems allow you to not just set up periodical income and expense advises such as rental income/expenses, salaries expenses but also to ensure cash management and financial planning.

The purpose of an audit as an independent examination to enable control and good governance can never be undermined. We appreciated the purpose of alternative types of auditor including: internal auditor and an external auditor. We understood the fundamentals to take note of in enabling good audit practices. We also appreciated the increasing importance of information systems audit expertise given widespread computerized accounting systems apart from traditional good practices such as physical stock verification and cross checking with bankers.

For good governance practice, the synchronous roles of financial reporting practices and administration cannot be undermined. Good corporate governance calls for separation of duties and functions, to create room for finest practice with both professional and personal integrity by those in power right (from CEO to CAO). Accordingly, the duties and functions of internal audit team cannot be mixed with external audit work. Similarly, in a small organization, where the same party (or individual) becomes influential (or, primarily responsible) for both creation of bills and invoices and processing of payments in the accounts department work place, then there are bound to be problems or potential problems within the organization (it is just a matter of time). Corporate controls, both, internal and external, which financial accountants, as recorders and evaluators of the financial history of the organization ought to adhere, can create potential agency issues if the planning, monitoring, are under the direct (or even indirect) influence of one single party.

Accountants being the key professionals in ensuring corporate governance issues from cropping inside business entities need to constantly be aware of the present/potential agency issues, present/potential integrity issues and flag them appropriately; to ensure their roles as backbones of noble financial reporting practices. In that right, accountants should keep reflecting and champion the cause of the profession as an unbiased timely historian adhering to its basic tenets.

## KEY WORDS

Please see Glossary (at the book-end) to appreciate and review the following key words used in this chapter:

- Accounting Information Systems
- Agency Issues
- Audit
- Computerization
- Chart of Account (COA)
- Corporate Governance
- Earnings Management
- Enterprise Resource Planning
- External Audit
- Extensible Business Reporting Language (XBRL)
- Financial Reporting
- Fraudulent Practices
- Governance
- Internal Audit
- Information Technology
- Internal Financial Control
- Tax Audit


## EXERCISES

## Multiple Choice Questions

1. After the Satyam scam (as revealed in the chapter opener), the ICAI's High Power Committee would have suggested the strengthening of regulatory framework on:

LO 1 EASY
(a) External auditors
(b) Credit rating agencies
(c) Valuation companies
(d) Financial analysts
2. Refer to the QR code on Illustration of Corporate Fraud: Credit facility given is 200 times the underlying collateral, the degree of earnings management in the case of 'Surya Vinayak Industries Limited' amounts to:

LO 4 EASY
(a) Employment of flexibility that strains GAAP
(b) Behaviour beyond the boundaries of GAAP
(c) Understating liabilities
(d) Fraudulent financial reporting
3. Refer to the QR code on Illustration of Corporate Fraud: Credit facility given is 200 times the underlying collateral, the ploys adopted in creative accounting by 'Surya Vinayak Industries Limited' is primarily:

LO 4 EASY
(a) Recognizing revenue early
(b) Recording fictitious revenue
(c) Understating liabilities
(d) Taking big baths
4. Which of the following provides the organizational structure for the general ledger in 'accounting information systems'?

LO 2 EASY
(a) Special journals
(b) A source document
(c) General journals
(d) The chart of accounts
5. After the Satyam scam (as revealed in the chapter opener), the ICAI's High Power Committee on Satyam fraud would have suggested which of the following:

LO 4 MEDIUM
(a) The Reserve Bank of India should ask all commercial banks to send their confirmation letters of bank account balances to both the statutory auditors and the company concerned.
(b) The Reserve Bank of India should ask all commercial banks to send their confirmation letters of bank account balances only to the statutory auditors and not to the company concerned.
(c) The Reserve Bank of India should ask all commercial banks to send their confirmation letters of bank account balances only to the company concerned and not to the statutory auditors.
(d) The Reserve Bank of India should ask all commercial banks to not send any confirmation letter or such communications on bank account balances either to the statutory auditors or to the company concerned.

## Self-Assessment Questions

1. A small scale industry has its guest house for the company guests. The guest house is controlled by Guest House In-charge who orders the consumables required for guests and receives the same directly by the vendors. He is also in-charge of authenticating the goods received and the invoice raised by the vendor. However, the approving authority is the Chief Administrative Officer. Finally the invoice is sent to the accounts department for the payment. Would you like to suggest internal financial control review for the above situation?

LO 5 EASY
2. Livemint, a financial newspaper from the Hindustan Times stable, flashed on one fine morning headline "top Indian firms take on more debt to pay dividends"- Do you perceive any corporate governance issue in the above? Discuss.

LO 3 MEDIUM
3. The Indian Premier League (IPL) is a professional cricket league in India contested annually by franchise teams representing Indian cities in Twenty-over matches. The league, founded by the Board of Control for Cricket in India (BCCI) in 2008, is scheduled during summer season every year. Filmstar Shah Rukh Khan owned Kolkata Knight Riders is the most successful team financially in the history of IPL. Whereas, historically, the best performer on the field has been Mumbai Indians. Given the limited information, does this variance ring any corporate governance issues or creative accounting issues? Discuss.

LO 4 MEDIUM
4. IFRS 8 requires publicly listed companies to disclose information their operating segments, products and services, the geographical areas in which they operate, and their major customers. In a recent research study on Indian firms, it is found that family ownership has an inverse relationship with voluntary financial disclosure of segment financial information in listed firms in India. From a corporate governance perspective - discuss the pros and cons of doing the same. If you were a regulator, what would you suggest? Discuss.

LO 1 DIFFICULT
5. Dr. Reddy's Laboratories follows the financial reporting disclosure norms required by the US and Indian regulators, i.e., the Securities and Exchange Commission (SEC) and Indian stock exchanges, including accounting practices as per the IFRS and Ind-AS. What could be the reasons find the same? Discuss.

LO 1 DIFFICULT

## Numerical Problems

## 1. Shalini Pesticides Limited

LO 1 MEDIUM
Shalini Beck was an ideal mother-in-law! Both, at work and at home. Her firm, Shalini Pesticides was doing fine. The following table contains the numbers of Shalini Pesticides. They are computed without deferred taxes, which are estimated to have an average tax rate of about $35 \%$. It is known that these deferred taxes are resultant from two activities for Shalini Pesticide. First, taxes due upon the sale of inventories and other assets that are part of ongoing acitivities wherein ₹ 100,000 of pesticides would yield ₹ 100,000 of taxable income. Second, taxes due upon the sale of capital assets sold at the value indicated as $₹ 1,700,000,000$ on the balance sheet, whereas, it is known that the tax-basis value of these is $₹ 750,000,000$.

You are required to: (a) Compute the table with deferred taxes; (b) How much is the difference in total shareholders' funds between earlier balance sheet and the new balance sheet created by you; (c) For good 'financial reporting practice' which one of the financial statement you would agree with? How will you present the same with traditional stakeholders who are unwilling to change?

|  | All figures in ₹ million |
| :--- | ---: |
| Assets | Without deferred taxes |
| Cash | 10 |
| Inventories | 400 |
| Current Assets | 410 |
| Machinery | 500 |
| Land | $\mathbf{1 , 2 0 0}$ |
| Total Assets | $\mathbf{2 , 1 1 0}$ |
| Accounts Payable | 50 |
| Accrued Interest | 30 |
| Promissory Note Payable | 250 |
| Current Maturity of Long-term Loan | 55 |
| Current portion deferred taxes | 0 |
| Current Liabilities | $\mathbf{3 8 5}$ |
| Long-term Loan, Secured | 375 |
| Non-current portion deferred taxes | 0 |
| Total Liabilities | $\mathbf{7 6 0}$ |
| Total Shareholders Funds | $\mathbf{1 , 3 5 0}$ |
| Total Liabilities and Shareholders Funds | $\mathbf{2 , 1 1 0}$ |

2. Government of India's Balance Sheet ${ }^{55}$

LO 4 MEDIUM
The Central Government of India recently made disclosures from the its latest balance sheet, in terms of the assets that it owns: office equipment worth ₹ 40,731 crore; roads valued at ₹ 10,256 crore, land ₹ $2,19,404$ crore, residences and offices ₹ 44,283 crore, bridges ₹ 11,717 crore, irrigation projects ₹ 1,416 crore, power projects ₹ 368 crore, and vehicles ₹ 43,554 crore.

The total value of the Centre's assets for which the data are available, was ₹ $10,31,139$ crore. Of this, physical assets were worth ₹ $4,06,129$ crore and financial assets, mainly its shareholdings in public sector companies - both unlisted and those listed on the bourses - were worth ₹ $6,25,010$ crore.
Based on the above, answer the following:
(a) Comment on the above figures that seem surprising. Preferably, provide explanations for some extremes such as value of office equipment being more than the value of roads and such.
(b) IFRS 13 requires fair value measurements and disclosures about fair value measurement. The standard defines fair value on the basis of an 'exit price' notion, which results in a marketbased, rather than entity-specific, measurement. Are these figures a reflection of the same? Discuss.
3. Vijaya Bank's Debenture Redemption Reserve Norms ${ }^{56}$

LO 4 MEDIUM
Vijaya Bank is registered with Capital markets regulator Securities and Exchange Board of India (SEBI) as a debenture trustee. SEBI conducted an inspection of Vijaya Bank in September 2013, during which a team from the regulator examined records and documents pertaining to various issues handled by the bank from April 2007 to March 2013.

[^101]SEBI found violation of norms related to debenture trustee. It found that the bank has violated norms that include providing of misleading information with regard to loans granted to issuer firms, non-compliance of creation of debenture redemption reserve by issuer companies in respect of all the issues, among others. Further, the bank did not comply with the listing agreement in respect of Karnataka State Financial Corporation and Canara Bank. Also, the bank did not maintain the database of issues handled and failed to maintain a proper system to track due dates of interest payment and redemption. Other violations include allotment of debentures to over 50 persons, non-dissemination of information on the website, non-issuance of press release and non-dissemination of the updated events of defaults on DT's (Debenture Trustee) website.

Investor grievances reported by the issuer companies Tata Motors and Tamil Nadu Newsprint Papers include not monitoring and no written agreement was signed between the bank and Tata Motors which also counted as a violation of debenture trustee regulations.

Based on the above: (a) Identify the corporate governance issues in the above discussion; (b) Did any party lose money? If yes, to what extent? (c) Given the nature of violations suggest what should be the penalty/punishment by SEBI on the Bank (on a scale of 1 to 10 wherein 1 implies written warning and 10 the other extreme).
4. Corporate Governance categorization based on Financial Reporting Practices ${ }^{57}$

## LO 4 DIFFICULT

Ambit Capital research discussed the Indian IT sector companies based on their corporate governance report: Following are abridged excerpts of the report for three companies:

Firm A: This firm was unable to curb the illegitimate activities in one of its subsidiaries. It owns large number of such exchanges. Further analysis indicates suspicious manipulation of subsidiary accounts to present a better picture at standalone business.

Firm B: Receivable days increased to 300 days in the current year compared to 120 days in the previous year; whilst the doubtful debt provisioning has increased to $12 \%$ of debtors (previous year was $10 \%$ of revenues).

Firm C: Margins appear to be overstated given the accounting policies and estimates that are different from its peers. Its accounting policy of excluding reimbursements both from income and cost (contrary to accounting policy followed by most peer companies) benefits its margins by approximately $0.5 \%$.
The newspaper titled these three companies as: 'Suspicious subsidiary accounts; corporate governance concerns'; 'Magnified margins'; and 'Are the revenues real'?

You are required to match these three titles with the appropriate company paragraph's above. Give reasons for the same. What are the corporate governance issues in each of the above case? Which stakeholder would be getting hurt the most in each of the above case?
What is the degree of 'earnings management' in each of the case above? Discuss. What type of analysis would have detected each of the above? Discuss.

## MINI CASES

## Case 10.1 Disputed Dues of Wim Plast Limited

## LO 1 EASY

In 1988, Wim Plast Limited was incorporated. The company is engaged in manufacturing plastic moulded furniture. The main products of the company are injection-moulded plastic furniture like chairs, tables,

[^102]and stools. The products are marketed under the brand name 'Cello'. Auditor's report of the company's annual report for FY2010 containing the following lines:
a. According to information and explanation given to us on the basis of our examination of the records of the company accounts deducted/accrued in the books of account in respect of undisputed statutory dues including Provident Fund, Investor Education and Protection Fund, Income Tax, Sales Tax, Wealth Tax, Excise Duty, Service Tax, Custom Duty and other material statutory dues have generally been regularly deposited during the year by the company with the appropriate authorities.
b. The details of disputed statutory dues are as follows:

| Name of the Statute | Nature of the dues | Amount (₹) | Period to which the amount relates | Forum where Dispute is pending |
| :---: | :---: | :---: | :---: | :---: |
| Service Tax Act-1994 | Service Tax | 3,40,340 | 2006-07 | Appellate Tribunal (Custom Excise and Service Tax) |
| Central Excise Act-1944 | Excise Duty | 92,356 | 2006-07 | Custom Excise and Service Tax- Appeal |

The company's FY2010 "Notes to Accounts" schedule also mentioned the following items (in ₹ lakh):
(a) Outstanding letters of credit
56.31
(b) Guarantees issued by Company's Bankers 162.75

Case Questions
(a) As per Ind-AS, how will each of the above items be treated by the company?
(b) Given the limited information - compute the amount of contingent liabilities and related provisioning that you would expect from the company?
(c) What additional information do you expect the company to provide regarding the above items to ensure good 'financial reporting practice'? Discuss.

## Case 10.2 Inventory Valuation at Bajaj Auto

LO 1,4 EASY
Bajaj Auto Ltd is India's leading two wheeler manufacturers with expertise in manufacturing high end motorcycles. Established in 1945, Bajaj Auto Ltd. was incorporated as a trading company. Till 1959, they imported scooters and three-wheelers from Italy and sold them in India. The company got a production license in the year 1959 and fastened a technical collaboration with Italian PIAGGIO in 1960. Today, Bajaj Auto Ltd. is India's second largest 2-wheeler companies in terms of market capitalization and annual turnover.

## Schedule 8

Current Assets, Loans and Advances
As at 31 March 2009

|  | ₹ in million | ₹ in million | ₹ in million₹ in million <br> (a) Inventories \# <br> Stores, at cost*$\quad 80.4$ |
| :---: | :---: | :---: | :---: |
| Tools, at cost* | 79.9 | 71.1 |  |

(Contd.)

| Stock-in-trade, at cost or market value whichever is <br> lower: |  |  |
| :--- | ---: | ---: |
| Raw Materials and Components* | $1,509.0$ | $1,077.9$ |
| Work-in-progress (including factory made components <br> ₹145.9 million, previous year ₹75.7 million) | 310.3 | 120.3 |
| Finished Goods: | $1,673.7$ | $1,462.7$ |
| Vehicles | 714.8 | 743.7 |
| Auto Spare Parts, etc | $4,368.1$ | $3,542.0$ |
| As valued and certified by Management | 215.8 | 175.6 |
| Goods in transit, at cost to date |  | $\mathbf{4 , 5 8 3 . 9}$ |
|  |  |  |

The notes to accounts of the company included the following lines:

## Inventories

Cost of inventories have been computed to include all costs of purchases, cost of conversion and other costs incurred in bringing the inventories to their present location and condition.
(a) Finished stocks, Auto spare parts and Work-in-progress are valued at cost or net realizable value whichever is lower. Finished stocks lying in the factory premises, Branches, Depots are valued inclusive of excise duty.
(b) Stores and Tools are valued at cost arrived at on weighted average basis. However, obsolete and slow moving items are valued at cost or estimated realizable value whichever is lower.
(c) Raw materials and components are valued at cost arrived at on weighted average basis or lower of cost and net realizable value, as circumstances demand. However, obsolete and slow moving items are valued at cost or estimated realizable value whichever is lower.
(d) Machinery spares and Maintenance materials are changed out as expense in the year of purchase. However, Machinery spares forming key components specific to a machinery and held as insurance spares are capitalized along with the cost of the Asset.
(e) Goods in transit are stated at actual cost incurred upto the date of Balance Sheet.

## Case Questions

(a) What is the inventory valuation method used by the company? Why are some items being valued at estimated realization value?
(b) What is the importance of the opening stocks, purchases, and closing stocks?
(c) Will Bajaj Auto have a "change in stocks" item in its financial statements? If yes then where shall that get reflected? Discuss.
(d) Ind-AS enables better financial reporting practices - given the same, do you suggest any change in the representation of the above items and the notes.
(e) For someone deep into creative accounting, suggest few steps to ensure that the above items be managed to achieve each degree of 'earnings management' (see Section 10.4). Discuss.

## Case 10.3 Bonus Issue by Marico

LO 1 EASY
We present excerpts from the annual report of Marico Limited (earlier, Marico Industries Limited and even earlier, Bombay Oil Industries Limited) for the financial year ended March 31, 2003.

The highlights pertain to the financial performance of Marico Consolidated
Amount in ₹ million

| Year ended March 31st | 1994 | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | 2002 | 2003 |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Sales and Services | 2,364 | 2,833 | 2,486 | 4,097 | 4900 | 5,512 | 6,497 | 6,707 | 6,957 | 7,755 |
| Profit before Interest and Tax <br> (PBIT) | 207 | 252 | 364 | 353 | 424 | 477 | 458 | 537 | 619 | 651 |
| Operating Profit before Tax | 140 | 191 | 268 | 277 | 365 | 440 | 426 | 501 | 578 | 640 |
| Extraordinary/Exceptional <br> items | - | - | 29 | 14 | - | - | $(18)$ | - | - | - |
| Profit before Tax (PBT) | 149 | 191 | 297 | 291 | 365 | 440 | 408 | 501 | 578 | 640 |
| Profit after Tax (PAT) | 64 | 118 | 212 | 215 | 300 | 375 | 357 | 458 | 501 | 562 |
| Cash Profits (PAT + <br> Depreciation) | 81 | 150 | 238 | 246 | 340 | 427 | 435 | 546 | 703 | 783 |
| Economic Value Added | 48 | 90 | 125 | 87 | 188 | 230 | 233 | 278 | 291 | 313 |
| Refer Management |  |  |  |  |  |  |  |  |  |  |
| Discussion) |  |  |  |  |  |  |  |  |  |  |

In financial year 2003, Marico's distribution to shareholders comprised the following:

- Bonus equity shares in the ratio of 1:1.
- Bonus Redeemable Preference Shares in the ratio of $1: 1$ on the enhanced equity capital of ₹290 million.
The company's balance sheet schedule 1 had the following important information:

| Schedules to Balance Sheet |  |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} 2003 \\ \text { ₹ million } \end{gathered}$ | $\begin{gathered} 2002 \\ \text { ₹ million } \end{gathered}$ |
| SCHEDULE ' ${ }^{\text {' }}$ |  |  |
| SHARE CAPITAL |  |  |
| Authorised: |  |  |
| $30,000,000 \quad(29,900,000)$ Equity shares of ₹ 10 each | 300,000 | 299,000 |
| 30,000,000 (Nil) Preference shares of ₹ 10 each | 300,000 | - |
| Nil ( 10,000 ) 14\% Cumulative Redemable Preference shares of ₹100 each | - | 1,000 |
|  | 600,000 | 300,000 |
| Issued and Subscribed: |  |  |
| 29,000,000 (14,500,000) Equity shares of ₹10 each fully paid up | 290,000 | 145,000 |
| 29,000,000 (Nil) 8\% Redeemable Preference shares of ₹10 each fully paid up (redeemable on or before October 1, 2005) | 290,000 | - |
| The above includes $26,500,000(12,000,000)$ equity shares issued as fully paid bonus shares by capitalization of General Reserve of Rs 265 million ( $₹ 120$ million) and preference shares issued as fully paid bonus shares by capitalization of general reserves of ₹287.5 million (₹ Nil) and capital reserves of ₹2.5 million (₹ Nil) |  |  |
|  | 580,000 | 145,000 |

Case Questions
(a) Pass the necessary journal entries to account for the issue of bonus shares and bonus cumulative redeemable preference shares.
(b) Assuming redemption of the cumulative preference shares on October 1, 2005, list the necessary journal entries.
(c) When did the company come with a public issue at a share premium?
(d) Is providing such historical information (1994-2003) as part of the annual report a good practice? In which section/part of the annual report can such information be made available? Discuss.

## Case 10.4 Anomalies in a Cash Flow Statement ${ }^{58}$

Cash flow statement from the annual report of a company listed on the Bombay Stock Exchange, namely, Vishnu Chemicals Limited is shared below:

[^103]
## Vishnu Chemicals Limited

 Cash flow statement|  | Current Year | Previous Year |
| :---: | :---: | :---: |
| Cash Flows from Operating Activities |  |  |
| Net Profit after Tax and Extraordinary items | 114 | 16 |
| Adjustments for : | 0 | 0 |
| Depreciation | 104 | 100 |
| Defered Tax | 37 | 43 |
| Income Tax ( Provision ) | 32 | 12 |
| Fringe Benefit Tax (Provision) |  |  |
| Income Tax ( Prior Period Taxes) | 8 | 11 |
| Profit on Sale of Fixed Assets / Investments |  |  |
| Interest Paid | 239 | 210 |
| Miscellaneous expenditure written off |  | 3 |
| Interest Earnings | -6 | -6 |
| Operating Profit before working Capital changes | 529 | 389 |
| Adjustments for : |  |  |
| Increase/(Decrease) in Trade and Other Receivables | -192 | -145 |
| Increase/(Decrease) in Inventories | -13 | -50 |
| Increase/(Decrease) in Trade Payables | 19 | 317 |
| Increase/(Decrease) on Loans and Advances | -41 | -2 |
| Other Current Assets Cash deficit from Operations | -226 | 119 |
| Direct Tax paid | -33 | -23 |
| Dividend paid |  |  |
| Cash generated from operations | -259 | 96 |
| Net Cash Flow from operating activities | 270 | 485 |
| Cash Flows from Investing Activities |  |  |
| Purchase of Fixed Assets | -238 | -79 |
| Sale Proceeds from Fixed Assets |  |  |
| Purchase of Investments |  | -1 |
| Capital Work-in-progress | 43 | -63 |
| Increase/Decrease in Share Capital | 100 | 75 |
| Net Cash used in investing activities | -95 | -68 |

(Contd.)

| Cash Flows from Financing Activities: |  |  |
| :--- | ---: | ---: |
| Proceeds from long-term borrowings | 50 | 0 |
| Repayment of term liabilities | -362 | -26 |
| Increase in Bank Borrowings Working Capital | 105 | -8 |
| Other Unsecured Loans | 223 | -117 |
| Interest Paid | -239 | -210 |
| Interest Received | 6 | 6 |
| Net Cash used in financing activities | -217 | -356 |
| Net increase/Decrease in cash and cash equivalents | -42 | 62 |
| Cash and cash equivalents as at 01-04-2010 | 121 | 59 |
| Cash and Cash equivalents as at 31.03.2011 | 79 | 121 |

Note: Current Year is for the year 2011 and Previous Year is for the year 2010.


## Case Questions

(a) Identify the anomalies vis-à-vis the ICAI accounting standards for the same (if any).
(b) Comment on your response for (a). Who among the company insiders and the company outsiders should share the responsibilities for the error above (if any)? Discuss.
(c) Using appropriate Ind-AS on cash flow statement, suggest a few corrections to the above financial report.

## Case 10.5 Economic Offences at the National Stock Exchange ${ }^{59}$

LO 4,5 DIFFICULT

We had come across a firm with large number of subsidiaries in Chapter 3 (see Mini Case 3.7), namely, Jignesh Shah promoted Financial Technologies India Limited (FT). The National Spot Exchange Limited (NSEL), a spot commodity exchange, was a subsidiary promoted by the FT. The NSEL crisis erupted in August 2013 after it was found that the exchange was in no position to honor payouts worth ₹5,500 crore to its investors and the underlying stock was woefully short against the receipts issued.

Mukesh P Shah who is a maternal uncle of Jignesh Shah has been internal as well as external auditor of NSEL from time to time including FY2013. Investigations by Mumbai Police revealed that that Mukesh P Shah was not only owning the shares of FT but also doing insider-trading in FT shares. Besides, Mumbai police also confirmed that most companies owning shares of FT were registered at the address of Mukesh Shah. Further, Mukesh Shah was the auditor of all these companies which traded on

[^104]NSEL to the tune of $₹ 1,352$ crore and moved out in May-June 2013 without losing a penny showing their knowledge of the scam.

A high-level government team under the then economic affairs secretary Arvind Mayaram, set up by the finance minister in August 2013, had reported "possible violations" by entities such as "auditors in due-diligence". The panel, which gave its recommendations in September 2013, said action needed to be initiated over "failure to furnish a true and fair view of the state of affairs at NSEL in its balance sheet for the financial year ended March 2013". When Deloitte, Haskins \& Sells, the auditor of NSEL's parent, FT, came to know about this, it informed FT that accounts of the parent, too, could not be relied on.

Thus, popular media suggests that NSEL scam were a systematic and premeditated fraud perpetrated in the commodity market. It was a Ponzi scheme wherein over 13,000 investors lost about ₹ 5,600 crores. The ICAI, the licensing and regulatory body for accountants, is examining the role of auditors in the default at NSEL. Surprisingly, an associate of global accounting firm Ernst \& Young in India, SV Ghatalia \& Associates, auditors of the beleaguered National Spot Exchange (NSEL) for FY2012, was been kept outside the purview of scrutiny by the ICAI. The new Managing Director, Anjani Sinha, had stated publicly that the fraud has been going on for past few years. Inspite of this ICAI decided to close its eyes raising doubts in the eyes of regulators and other stakeholders. The sequence of events also brought the issue of investigation of any audit firm must be done by an independent body and not by ICAI as it is related party where auditors are its members.

Time flew. In 2015, six months after a Delhi High Court order in the matter, NSEL investor IGL Finance initiated contempt of court proceedings against the ICAI and its disciplinary committee for not completing the proceedings in complaints against Mukhesh P Shah \& Co. Immediately, within a week, ICAI released the disciplinary committee findings.


## Case Questions

(a) Based on the above limited discussion - identify the corporate governance issues from a financial reporting perspective. Also, identify the stakeholders who would have suffered in the process (and how).
(b) List the internal auditor's role in NSEL. How feasible would be for a related party to perform the same? Suggest the traits of an ideal person/party that should have been part of this team at the NSEL.
(c) List the external auditor's role in NSEL. How feasible would be for a related party to perform the same? Suggest the traits of an ideal person/party that should have been part of this team at the NSEL
(d) Can the internal auditor also act as the external auditor? Comment.

## Mini Case 10.6 Intangibles at Sterlite Industries (India) Limited

## LO 1 EASY

Incorporated in 1979, Sterlite Industries (India) Limited (SIIL) is a key-producer of copper and related products. It has set up a number of smelters and refineries. The company is also engaged in manufacturing various chemical products, such as, sulphuric acid and phosphoric acid. We present below the fixed assets schedule of Sterlite Industries:
Schedules forming part of the Balance Sheet

| (Rs Cro |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross Block |  |  |  | Depreciation |  |  |  | $\begin{gathered} \text { Net Block } \\ \text { Before } \\ \text { Impairment } \\ \hline \end{gathered}$ | Impairment | Net Block |  |
| Nature of Fixed Assets | $\begin{gathered} \text { As at } \\ 01.04 .2009 \end{gathered}$ | Addition/ Adjustments | Deductions | $\begin{gathered} \text { As at } 31 \\ 03.04 .200 \end{gathered}$ | $\begin{gathered} \text { Upto } \\ \text { 31.03.2009 } \end{gathered}$ | $\begin{aligned} & \text { For the } \\ & \text { Year } \end{aligned}$ | Depreciation Adjustments | $\begin{gathered} \text { Upto } \\ \text { 31.03.2010 } \end{gathered}$ | $\begin{gathered} \text { As at } \\ 31.03 .2010 \end{gathered}$ | $\begin{gathered} \text { Upto } \\ \text { 31.03.2010 } \end{gathered}$ | $\begin{gathered} \text { As at } \\ \text { 31.03.2010 } \end{gathered}$ | $\begin{gathered} \text { As at } \\ 31.03 .2009 \end{gathered}$ |
| Tangible Fixed Assets |  |  |  |  |  |  |  |  |  |  |  |  |
| Land | 40.43 | 28.24 | - | 68.67 | 2.87 | 0.31 | - | 3.18 | 65.49 | - | 65.49 | 37.56 |
| Buildings | 150.65 | 10.74 | - | 161.39 | 31.99 | 4.04 | - | 36.03 | 125.36 | 3.50 | 121.86 | 115.16 |
| Buildings (Lease-Hold) | 6.33 | - | - | 6.33 | 2.48 | - | - | 2.48 | 3.85 | - | 3.85 | 3.85 |
| Plant and Machinery | 2,578.27 | 52.45 | 7.19 | 2,623.53 | 1,110.57 | 138.58 | 4.47 | 1,244.68 | 1,378.85 | 81.15 | 1,298.70 | 1,386.55 |
| Furniture and Fixtures | 11.50 | 0.30 | 0.13 | 11.67 | 6.71 | 0.62 | 0.04 | 7.29 | 4.38 | - | 4.38 | 4.79 |
| Data Processing Equipment | 23.16 | 0.54 | 0.01 | 23.69 | 17.08 | 1.79 | 0.01 | 18.86 | 4.83 | - | 4.83 | 6.08 |
| Office Equipment | 7.15 | 0.73 | 0.09 | 7.79 | 2.84 | 0.35 | 0.01 | 3.18 | 4.61 | - | 4.61 | 4.31 |
| Electrical Fittings | 50.09 | 0.53 | - | 50.62 | 12.05 | 2.39 | - | 14.44 | 36.18 | - | 36.18 | 38.04 |
| Vehicles | 10.64 | 2.59 | 1.45 | 11.78 | 2.62 | 1.02 | 0.47 | 3.17 | 8.61 | - | 8.61 | 8.02 |
| Intangible Assets* |  |  |  |  |  |  |  |  |  |  |  |  |
| Computer Software | 3.56 | 5.55 | - | 9.11 | 0.34 | 1.16 | - | 1.50 | 7.61 | - | 7.61 | 3.22 |
| Technical Know-how | 7.29 | - | - | 7.29 | 1.21 | 0.38 | - | 1.59 | 5.70 | - | 5.70 | 6.08 |
| Total: | 2,778.07 | 101.67 | 8.87 | 2,98187 | 1,190.76 | 150.64 | 5.00 | 1,336.40 | 1,645.47 | 84.65 | 1,560.82 | 1,613.66 |
| Previous Year | 2,76534 | 126.64 | 2.91 | 2,889.07 | 1,045.79 | 145.60 | 0.63 | 1,190.76 | 1,698.31 | 84.65 | 1,613.66 | 1,613.66 |
| Capital Work-in Progress (including Advances against Capital Expenditures) |  |  |  |  |  |  |  |  |  |  | 265,81 | 32.16 |

Notes to Account related to intangibles are:
(i) Intangible Assets are stated at cost of acquisition less accumulated amortization.
(ii) Technical know-how is amortised over the useful life of the underlying plant.
(iii) Amortization is done on straight line basis. Software is amortised on straight line basis.


## Case Questions

- Pass the necessary journal entries for the above adjustment.
- Is the above information enough for incredible financial reporting practices perspective?
- Which Ind-AS/IFRS apply to the above items? Does the above information comply with the latest accounting standards norms? Discuss.


## Case 10.7 Financial Restructuring at Tata Motors ${ }^{60}$

## LO 1,3 MEDIUM

Tata Motors, a Tata group company, is the largest automobile company in India. It manufactures light and medium commercial vehicles and cars. Its plants are located in Pune, Lucknow, Dharwad, and Jamshedpur. It recently also acquired plants abroad one of them being located in Korea.

The following are excerpts from the Tata Engineering and Locomotive Company Limited's (now TATA Motors Ltd.) fifty-seventh annual report, for the financial year 2001-02.

## Summarized Balance Sheet

| (₹ crore) |  |  |
| :--- | :---: | :---: |
| What The Company Owned | As on | As on |
|  | March 31, 2002 | March 31, 2001 |
| 1. Net Fixed Assets | 3478.34 | 3823.60 |
| 2. Investments | 1189.92 | 1387.18 |
| 3. Deferred Tax Assets (Net) | 95.00 | - |
| 4. Net Current Assets | 9.52 | 150.00 |
| 5. Miscellaneous Expenditure | -4772.78 | 891.88 |
| 6. Total Assets (Net) |  | 6252.66 |
| What the Company Owned | 2307.72 |  |
| 1. Loans | 2465.06 | 2998.88 |
| 2. Net Worth |  | 3253.78 |
| Represented by: |  |  |
| Share Capital ₹319.82 crore (Previous Year ₹255.90 crore) |  |  |
| Reserves ₹2145.24 crore (Previous Year ₹2997.88 crore) | $\mathbf{4 7 7 2 . 7 8}$ | $\mathbf{6 2 5 2 . 6 6}$ |
| 3. Total Funds Employed |  |  |

[^105]Profit and Loss Account
for the year ended March 31, 2002

|  | Schedule | Page | ₹ crore | ₹ crore | $\begin{aligned} & 2000-01 \\ & \text { ₹ crore } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |
| 1. Sale of Products and other Income | A | 6 |  | 8918.06 | 8164.22 |
| Expenditure |  |  |  |  |  |
| 2. Manufacturing and other Expenses | B | 7 | 8299.34 |  | 7778.67 |
| 3. Expenditure Transferred to Capital and other Accounts |  |  | (144.63) |  | (112.32) |
|  |  |  |  | 8154.71 | 7666.35 |
| Profit before Amoritization, Depreciation Interest Extraordinary/Exceptional Items and Tax |  |  |  | 763.35 | 497.87 |
| 4. Amortisation of Deferred Revenue Expenses |  |  |  | 89.83 | 137.36 |
| 5. Depreciation |  |  |  | 354.68 | 347.37 |
| 6. Interest [Note B (6), Page 28] |  |  |  | 382.23 | 443.58 |
| (Loss) for the Year before Extraordinary/Exceptional Items and Tax |  |  |  | (63.39) | (430.44) |
| 7. Provision for Contingencies [Note B (7), Page 29] |  |  |  | (20.00) | - |
| 8. Power Cost Relating to Previous Years |  |  |  | - | (48.99) |
| 9. Employee Separation Cost |  |  |  | (25.82) | (16.71) |
| 10. Adjustment on Sale of Undertaking |  |  |  | - | (4.20) |
| (Loss) Before Tax |  |  |  | (109.21) | (500.34) |
| 11. Provision for Taxation |  |  |  |  |  |
| (i) Current |  |  |  | - | - |
| (ii) Deferred [Note B (8), Page 29] |  |  |  | 55.48 | - |
| (Loss) After Tax |  |  |  | 53.73 | (500.34) |
| 12. Transfer from General Reserve |  |  |  | 53.73 | 353.65 |
| 13. Investment Allowance (Utilised) Reserve Written Back |  |  |  | - | 11.20 |
| 14. Balance Brought forward from Previous Year |  |  |  | - | 135.49 |
| Amount Available for Appropriation/Balance Carried to Balance Sheet |  |  |  | - | - |
| 15. Earnings per Share [Note B(9), Page 29] Basic and Diluted Rupees |  |  |  | (1.98) | (18.45) |
| 16. Significant Accounting Policies |  | 18 |  |  |  |
| 17. Notes to Profit and Loss Account | 14 to 18 | 28 |  |  |  |

In order to more appropriately reflect its operational efficiency and present a more accurate financial performance in the future, the company undertook a financial restructuring exercise, which was approved by the shareholders in March 2002. As a result, an aggregate amount of $₹ 1,178.91$ crore, standing to the credit of (i) the balance of unamortized expenditure as on December 31, 2001, and accretions thereto, in the period January-March 2002, (ii) balance of certain assets under Capital Work in Progress as on

December 31, 2001, and variations thereto, during the period January-March'02, and (iii) diminution in the value of its investment in Concorde Motors Limited, were set-off against the Company's Securities Premium Account as on March 31, 2002.

To shareholders of the company at the extra-ordinary General Meeting held on March 27, 2002, approved and the High Court of Judicature at Mumbai vide its order passed on May 2, 2002 confirmed the utilisation of Securities Premium. Account in accordance with the provisions of Section 78 read with Section 100 of the Companies Act, 1956, towards adjustment of the following debit balances:

|  | $₹$ crores |
| :--- | ---: |
| Deferred Revenue Expenditure | 950.06 |
| Capital Work-in-Progress | 197.61 |
| Diminution in the value of Investment | 31.25 |
|  | 1178.91 |

## ?

## Case Questions

- You are required to analyze and comment on the impact of the above move on the financial statements of the company.
- Are these moves as per the GAAP of India (of the earlier times)? Are these moves as per the GAAP of India (with the present times)?
- Comment on the move of the above organization in the light of the statement 'corporate governance with impeccable financial reporting practices'.


## INTERNET ASSIGNMENTS

## Assignment 10.1 Financial reporting practices and governance issues

On the OLC of this book we have provided annual reports of seven companies, listed in the Bombay Stock Exchange.

This assignment is a continuation of the annual report assignments series (of earlier chapters). Readers may refer to Chapter 1.

To enhance the learning value on financial accounting, you are to pick up one of the above companies and work on them. You are to make submissions for the topic(s) mentioned in each assignment regarding your selected company. To help you in this endeavor, we have uploaded sample worked out assignments in our online website.

Your tenth assignment would answer the following two questions:

- From a financial reporting practices lens, what do you observe interesting as part of the company's annual report? Please be brief (to the extent possible).
- From corporate governance and compliances perspective, do you observe anything iffy or unanswerable in the company's annual report? Please elaborate with rationale to the red flags being hinted/ stated by you (to the extent possible).


## Answers

## Answers to the "Let's Check Our Concepts!"

(a) True
(b) False
(c) False
(d) False

## Additional Content on OLC

Please check out the Online Learning Center (http://www.mhhe.com/fam4e) of the book for the following annexures:

- Annexure 10.1: More on Chart of Accounts in AIS
- Annexure 10.2: Supporting Material for Computerized Accounting Information Systems
- Annexure 10.3: SilverLine Technologies Limited: Teaching Notes
- Annexure 10.4: Top Ten Internal Controls to Prevent and Detect Fraud!
- Annexure 10.5: Additional Reading Material
- Annexure 10.6: Sample Assignment Reports


Comprehensive Assignment

Readers are suggested to take up this assignment to grasp the subject better. A reader need not have any previous experience or technical background for the preparation of this assignment. Our past experience suggests that this all-inclusive assignment helps in clarifying a large number of financial accounting concepts apart from improving confidence levels by leaps and bounds.

We have detailed this comprehensive assignment, as if it were given to a student doing a course on financial accounting. Our view is that even other readers can immensely benefit from it.

THE PROBLEM
You are launching into a business in the name and style of your choice. It has to be a manufacturing business. It means that your business would involve buying materials, transforming it using plant and machinery, and selling it. Keep in mind the conditions given in this assignment. Strictly adhere to the conditions.

ASSUMPTIONS AND REQUIREMENTS
You can make any assumption, provided it is reasonable in an actual business situation, subject to the conditions 1 to 25 (detailed below). The realistic nature of the assignment would involve factors such as volume of turnover, cost structure and the type and nature of transactions. Please draw up the accounts and reports in a proper form, as if they are being made out for a real-life business.

CONDITIONS

1. Date of commencement of business is to be your date of birth.
2. Capital to be contributed will depend on your Register numbers (or, roll numbers in the class) as listed ahead:

- 101 to 200: Your Register/roll number multiplied by ₹ 7300
- 201 to 300: Your Register/roll number multiplied by ₹ 4560
- 301 to 400 : Your Register/roll number multiplied by ₹ 3850
- 401 to 500: Your Register/roll number multiplied by ₹ 2975
- All others: Your Register/roll number multiplied by ₹ 65760

3. Long-term loans equal to a maximum of 2 times the capital, is available at the rate of $10 \%$ per annum. Long-term loan has to be at least equal to the capital.
4. Grant from the Government available to the extent of $15 \%$ of your contribution or value of fixed assets, whichever is lower.
5. Fixed assets to start with, can vary for the different capital groups (reg. no group) as follows:

- 101 to $200: 25 \%$ to $50 \%$ of long-term funds available
- 201 to $300: 51 \%$ to $60 \%$ of long-term funds available
- 301 to $400: 61 \%$ to $70 \%$ of long-term funds available
- 401 to $500: 71 \%$ to $80 \%$ of long-term funds available
- All others: $65 \%$ of long-term funds available.

6. Depreciation on a monthly basis is to be computed on the sum of years' digit method by all even Register number and written down value basis by all odd Register numbers. Life of asset can vary between 5 to 10 years for different assets.
7. Credit sales can be four times cash sales.
8. Credit purchase can be three times cash purchase.
9. Credit terms for different Registration numbers (there is some credit purchase and sale in all cases), are as follows:

- 101 to 200: 21 days and 45 days for purchase and sales
- 201 to 300: 45 days and 30 days for purchase and sales
- 301 to 400: 1 week and 2 weeks for purchase and sales
- 401 to 500: 2 month and 2 months for purchase and sales
- All others: 45 days and 15 days for purchase and sales

10. One half of the credit sales and purchases are to be against notes (bills of exchange).
11. Cash balance at the end of any month is to be a maximum of 7 days and a minimum of 3 days cash expenses. Deployment of surplus cash on a short-term inter-corporate market, at $9 \%$ per annum, is possible.
12. All notes receivable are discounted with the bankers at $15 \%$ per annum. Bankers will discount all notes receivable at $15 \%$ per annum. You can avail of an overdraft limit from the banker, to the extent of $75 \%$ of unencumbered current assets. However, this is available only after discounting the notes.
13. $20 \%$ of the receivables will be delayed by one half of the normal credit period. (If credit period is 30 days, they will be paid in 45 days).
14. Paying on time warrants a cash discount of $5 \%$ and delay in payments would warrant a penalty of $2 \%$ per month, for the days of default, in case of receivables.
15. $5 \%$ of the receivables due by more than 15 days over the credit period and $10 \%$ of the receivable due for more than 21 days over the credit period, will be bad. Provisions for doubtful debts are provided at $10 \%$.
16. Delay in meeting payables will carry a penalty as in the case of receivables and similar discounts are available for paying on time.
17. Interest on long-term loan is payable monthly and the principal is repayable over 5 year period in monthly installments.
18. Delay in payment of the principal or interest would involve a penal interest of $15 \%$ of the amount in default for the period of default.
19. Sales volume will increase by $10 \%$ over the previous month, sale price will increase by $5 \%$ over the previous month and purchase price will increase by $5 \%$ every 15 days, all reckoned on a calendar month basis.
20. All other costs will remain stable over the period.
21. Assume no gestation period. That is, the business starts operations from day one. If the date of commencement is not the first of a month, then the first accounting period will be longer than a month closing the period at the end of the next complete calendar month. (Say, if you start on 15 February, your first accounting period will be closed on 31 March).
22. Municipal rates are to be paid at the rate of $1 \%$ of owners' equity, at the beginning of each calendar month.
23. Wage cost could be $10 \%$ to $30 \%$ of sales.
24. Rental can be $5 \%$ of sales.
25. You need to have at least 2 transactions per day, for 25 days in a month.

## Required:

1. You are required to prepare the accounts of the business, as if owned by you as an individual proprietorship, in any name and style of your choice, within the frame work of the conditions 1 to 25 (listed before), for three accounting periods. The minimum duration of an accounting period is a complete calendar month.
2. Prepare a precise chronological statement of all transactions.
3. Prepare journal entries for all transactions and post them to appropriate ledgers during the first accounting period.
4. For the 2 nd and 3rd period, follow a cash receipts, cash payments, sales, and purchases book and a general journal, along with the ledger accounts.
5. Prepare a post-closing trial balance, income statement and balance sheet for and or as at $31 / 30 / 28$ of the month, as the case may be. You have at least three financial statements.
6. Prepare a monthly statement showing compliance with the conditions specified. (Demonstrated by relationships worked out with actual accounting numbers)

The Online Learning Center of this book and www.kakani.net website provides a few sample assignments. Interested readers are requested to visit the same and download the assignments.


Account: An account is a basic information format used for recording transactions relating to a revenue, expense, asset, liability, or owner(s) equity. Since the transactions can either increase or decrease these items, an account is structured into two parts, like a capital T .
Accounting Estimates: As per ICAI, Accounting estimates means an approximation of the amount of an item in the absence of a precise means of measurement. These are based on judgement and specialized knowledge based on past experience. For example, an estimate that $3 \%$ of debtors will be bad during the year.
Accounting Information Systems: Accounting information systems is a system of collecting, storing processing and assisting in analysis of the accounting data for the use of the decision makers. It generally indicates to the computer based accounting information systems.
Accounting Period: The period over which the revenues and expenses are summarised in the profit \& loss account. It is also the time spanning two consecutive balance sheets. Generally it starts from 1st April and ends on 31st March.
Accounting Policy: The general principles and procedures under which the accounts of an individual organisation are maintained: any one such principle or procedure. An accounting policy, as distinct to a principle, is an adaptation or a special application of a principle, necessary to meet the peculiarities of an organization or the needs of the management. So, policies are required for the computation of depreciation, the recognition of capital expenditures, etc.
Accounting Postulates: An adequate appreciation of the nature and limitation of concepts requires that we give some attention to the postulates that lie at their roots. Postulates are assumptions - not arbitrary, but deliberate assumptions, - that are necessary and often unrecognised; they reflect the best judgement of the facts of a situation or the trend of events. For example, in recognising a liability, we assume that the creditor will hold the debtor for payment, and that the debtor will make such payment.
Accounting Principles: Accounting concepts are implemented through accounting principles that may be described as guides to proper action. The body of doctrine commonly associated with the theory and
procedure of accounting; serving as an explanation of current practices and as a guide for selection of conventions or procedures where alternatives exist.
Accounting Theory: Accounting theory is 'logical reasoning in the form of a set of broad principles that (i) provide a general frame of reference by which accounting practice can be evaluated and (ii) guide the development of new practices and procedures'. The existence of a theory would mean that we could say and explain why, given a number of assumptions, method X (perhaps, historical cost accounting) is to be preferred to method $Y$ (say, current cost accounting).
Accounting: American Accounting Association (AAA) defines it as the process of identifying, measuring, and communicating economic information to permit informed judgements and decisions by users of the information.

Accounts Payable: Represent the claims of suppliers arising from their furnishing goods or services to the entity for which they have not yet been paid. Such suppliers often are called vendors.
Accounts Receivable: Amounts owed to the entity by its customers.
Accrual Basis: The method of accounting whereby revenues and expenses are identified with specific periods of time, such as a month or a year, and are recorded as incurred, along with the acquired assets, without regard to the date of payment. Specifically, it would imply that the realised revenues accrue to the owner(s) equity and the expired costs or expenses decrease the owner(s) equity. For example: Accrued Expenses: Represent amounts that have been earned by outside parties but have not yet been paid by the entity.
Accrued Liabilities: Accrued liability means the liability which the company has incurred but has not yet paid. For example, when a company consumes the goods received by a supplier but no invoice has been received.
Adjusted Trial Balance: Trial balance that is prepared after all the adjusting entries have been journalised and posted.
Adjusting Entries: When journal entries are prepared at the end of an accounting period to ensure that revenues are recorded in the period in which they are earned, and expenses are recognized in the period in which they are incurred.
Amortization: Amortization is the systematic allocation of the depreciable amount of the asset over its useful life.

Appropriation: Funds set aside for a specific purpose
Articles of Association: The charter of an incorporated company, which regulates the internal management of its affairs, including meetings, election of directors and relations between members and the company, and members with other members. It defines the relationship of the company with its members and among the members
Asset Efficiency: Asset efficiency means how well the assets are being utilized by the business in generating revenue. Asset efficiency is indicated by asset turnover ratio.
Asset: Anything tangible or intangible of monetary value to a business entity. In a more technical sense, assets would mean probable future benefits to be obtained or controlled by an entity as a result of a past transaction.

Audit: As per the Audit and Assurance Standards (AAS1) issued by ICAI, Auditing is the independent examination of financial information of any entity, whether profit oriented or not, and irrespective of its size or legal form, when such an examination is conducted with a view to expressing an opinion thereon.

Authorized Capital: This is the maximum total amount of capital that could be offered to the public for subscription and is mentioned in the Memorandum of Association. It is usually fixed at some round figure sufficient for the company's foreseeable needs. It is also known as nominal capital.
Bad Debts Expense: An expense account that is used to record uncollectible receivables.
Balance Sheet: A statement listing all things of value owned by the business entity, as also all the claims against these things of value owned by the entity. These things of value (balances) are arranged according to their nature and indicate the business's financial position. The balance sheet is normally described 'as at'. It is a snapshot at one particular point in time. The reason it's called a balance sheet is that both the sides balance.
Balance Sheet Equation: The fundamental basis of all accounting, which equates assets owned by an entity, to all its liabilities and owner(s) equity.

$$
\text { Assets }=\text { Liabilities }+ \text { Equity }
$$

Bank Guarantees: Guarantees given to third party. These bank guarantees can be revoked by the party if they suffer any loss or damage through the breach of any of the covenants contained in the agreements.
Bank Reconciliation Statement: It is a statement that is prepared by an enterprise to explain the difference between the cash balance appearing on the bank statement and the balance according to the enterprise's records.
Bill of Exchange: An unconditional order in writing which is addressed by one person to another requiring the person to whom it is addressed to pay on demand, or at a fixed time, a certain sum of money to, or to the order of, a specified person, or to bearer.
Biological Assets: Biological assets mean living plants and animals. IAS 41 on Agriculture deals with biological assets
Block of Assets: For the purpose of income tax, depreciation is charged on block of assets. It is a group of assets falling within a class of assets comprising - (a) tangible assets, or (b) intangible assets.
Bond Indenture: A legal document that sets forth the terms of the bond issue.
Bonus Issues: Distribution of shares to existing as bonus for free. The process is also known as 'Capitalization of Profits'.
Book Keeping: It is a part of accounting that involves only the recording of monetary transactions.
Book Value: This is the amount at which an item appears in the books of account or financial statements.
Business Combination: Business combination is a transaction or other event in which an acquirer obtains control of one or more businesses. Transactions sometimes referred to as 'true mergers' or 'mergers of equals' are also business combinations.
Buy-back of Shares: When a company purchases its own shares for the purpose of cancellation, it is known as buy-back.
Call: Often companies have shares that are not fully paid. A call can be made for the payment of part or all of this outstanding capital.
Called-up Capital: Called up capital means the amount of issued capital that the shareholders are required to pay.
Capital Expenditures: Such expenditures that increase the company's investment in productive facilities, which will have a long term inpact on business.

Capital Leases: When a lease of an asset is taken for a period which is equal to or more than the equipment economic life then that lease is classified as a financial lease or capital lease and is treated like a long-term debt in the balance sheet. A capital lease is an example of accrual accounting's inclusion of economic events.
Capital: Money invested in a business by its owners in order to earn income.
Capitalized Development Costs: Development costs for products that will be sold, leased or otherwise marketed as well as those intended for internal use are capitalized. The starting point for capitalization is based upon management's judgment that the technological and economical feasibility is confirmed, usually when a product development project has reached a defined milestone. Capitalization ceases and amortization of capitalized development amounts begins when the product is available for general use with impairment testing performed annually. The definition of amortization period also requires management's judgment.
Carrying Amount: As per Ind AS 38, carrying amount is the amount at which an asset is recognized in the balance sheet after deducting any accumulated impairment losses therein.
Cash Basis: A basis of keeping accounts, in contrast to the accrual basis, whereby revenue and expenses are recorded on the books of account when cash is received or paid respectively, without regard to the period to which they apply
Cash Book: A cash book is a book that records all the receipts and payments made by the entity during a period of time. The receipts are recorded on the debit side and payments on the credit side.
Cash Flows: Cash flow means the inflow and outflow, i.e. the amount of money being transferred in and paid out of the business entity.
Cash Inflows: Cash inflow refers to the amount of cash flowing inside the organization through its operating, investing and financing activities.
Cash Outflows: Cash outflow refers to the amount of cash flowing outside the organization through its operating, investing and financing activities.
Collateralized Debt obligation (CDO): CDO are pools of assets comprising of loans or debt instruments. These loans are securitized based on varying time and risk required categories. A CDO may also be called a collateralized loan obligation (CLO) or collateralized bond obligation (CBO) if it holds only loans or bonds, respectively. Investors bear the credit risk of the collateral. Multiple tranches of securities are issued by the CDO, offering investors various maturity and credit risk characteristics. Tranches are categorized as senior, mezzanine, and subordinated/equity, according to their degree of credit risk.
Collection Losses: A Collection loss refers to the expenses that are incurred or losses (for example - bad debts) that are incurred when collecting the amounts receivable from the debtors.
Commercial Paper: Instruments to finance the short term needs of large, creditworthy business enterprises. Commercial paper transactions are exempt from SEBI registration requirements, and Commercial paper trades freely in capital markets. Commercial paper is sold through agents or dealers.

Common Size Statements: Financial statements reduced to percentage or fractions. Thus, we have total assets adding up to a hundred and similarly, total liabilities and capital adding up to a hundred. In this process, each individual item on the balance sheet is expressed as a percentage of the total assets or total liabilities and capital, as the case may be. Similarly, each item on the profit \& loss account is expressed as a percentage of the total revenues.

Company: A company is a corporation. A corporation has been defined as a succession or collection of persons having in the estimation of the law an existence, as well as rights and duties, distinct from
those of the individual persons who from time to time comprise it. The company continues in existence irrespective of the death or bankruptcy of a member.

Comparative Financial Statement: Two or more financial statements of the same company, for different periods, or of different companies for the same periods, presented in a similar format for easy comparison.
Conservatism: Conservatism involves selecting that method of measurement which gives the most pessimistic results.
Consistency: Consistency principle states that, once an accounting principle or method is followed, it should be consistently followed in future.
Consolidated Financial Statements: These are prepared by combining the financial results of a parent company and its subsidiaries (domestic as well as foreign). They reflect the financial position of the group (i.e., a company and its arms) as opposed to standalone numbers.

Construction Contracts: As per Ind AS 11, A construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use. It also includes agreements of real estate development to provide services together with construction material in order to perform contractual obligation to deliver the real estate to the buyer.
Contingent Liabilities: A liability which materialises only on the happening (or, in rare cases nonhappening) of a future event. Example: a liability which may arise out of a pending lawsuit.
Contra account: An account on the balance sheet of an entity that offsets the balance of a related and corresponding account. An example of a contra account would be accumulated amortization. This contra asset account credits the amortization account, offsetting the debit position.
Convertible Instruments: Convertible instruments are those instruments which can be converted into equity shares after a certain period of time. Generally debentures that can be converted to equity shares on maturity are issued by the entities.
Corporate Governance: As per the Institute of Company Secretaries of India, Corporate Governance is the application of best management practices, compliance or law in true letter and spirit and adherence to ethical standards for effective management and distribution of wealth and discharge of social responsibility for sustainable development of all stakeholders.
Cost Model: In cost model, fixed assets are carried at the historical cost less accumulated depreciation and accumulated impairment losses.
Cost of Goods Sold: Cost of goods sold, as the name indicates means the cost of goods that has been sold to the customer. It is calculated as [Cost of goods sold $=$ (Opening Stock + Purchases during the year - Closing Stock)]
Cost of Sales: The cost of goods or services sold is called the 'cost of sales'. In manufacturing firms and retailing businesses, it is often called the cost of goods sold.
Cost: The amount paid or to be paid for the acquisition of goods or services.
Current Assets: All those assets held by a firm with the objective of conversion to cash within an operating cycle or an accounting period. Usually include items such as cash, accounts receivable, inventory and prepaid expenses.

Current Liabilities: All those claims against the assets of the firm that are to be met out of cash or other current assets, within an accounting period or within the operating cycle. Usually include items such as accounts payable, tax or other claims payable and accrued expenses.

Debentures: A debenture is a fixed interest loan secured by specific fixed assets or through a "floating charge" on the business as a whole. Such loan stock is often issued with a convertible option attached to it; at the end of a stated period, the lender may convert it into ordinary shares.
Debenture Redemption Reserve:. A debenture redemption reserve is a reserve created as per the provisions of the Companies Act, 2013 for the purpose of redemption of debentures. The reserve is created out of the profits of the company that is available for payment of dividend.

Debt Investments: Investments in government and corporation bonds.
Decretion /(Accretion) to stock: Asset reduction/growth through removal/addition of inventory (including raw material inventory, work in progress, and finished goods inventory).
Deferred Long Term Asset Charges: These are expenses which the company has paid for but not yet subtracted from the assets. They are very similar to Prepaid Expenses. In fact, Prepaid Expenses are type of deferred charge. The difference is, when companies prepay rent or some other expense, they have a legal right to collect the service. Deferred Long Term Asset Charges have no legal rights attached to them.
Deferred Revenues: Represent the liability that arises because the entity has received advance payment for a service it has agreed to render in the future.
Depletion: Depletion is a method used by companies to allocate the cost of extracting natural resources from the earth. It refers to the actual physical depletion of the natural resources by the company. For example, coal mines
Depreciation: Cost expiration of tangible fixed assets over their useful life.
Derivative Instruments: Primarily a hedging instrument. For example, activities exposing it to a variety of financial risks, including the effects of changes in foreign currency exchange rates and interest rates. The Company uses derivative financial instruments such as foreign exchange contracts, Option contracts and interest rate swaps to manage its exposures to interest rate and foreign exchange fluctuations.
Development Capital: Larger volumes of equity finance provided by a professionally managed fund to established firms with a track record of successful enterprise.
Diluted EPS: A performance metric used to gauge the quality of a company's earnings per share (EPS) if all convertible securities were exercised. Convertible securities refer to all outstanding convertible preferred shares, convertible debentures, stock options and warrants. This is a conservative metric because it indicates somewhat of a worst-case scenario. A big difference in a company's basic EPS and diluted EPS can indicate high potential dilution for the company's shares.
Diminishing Balance Method: A method under which the periodic charge for depreciation of the assets is computed by applying a fixed percentage to its historical cost or substituted amount, less accumulated depreciation (net book value). This is also referred to as the written down value method.
Diminution in Value: A measure of damages resulting in a decrease in the value of investment or property with which the contract was concerned.
Discontinued Operations: These are businesses a company has discarded, sold, or shut down, and does not expect to generate revenue or profit in the future.
Discounting Bill: When the bills of exchange before maturity are discounted by the drawer, bank charges a certain charge on such amount and returns the balance amount. This charge is known as 'discounting charges of bill'.

Dividend Warrant: An order of payment (such as a cheque payable to a shareholder) in which a dividend is paid.

Dividend: Part of the company's profit that is distributed among the shareholders for the shares held by them.

Earnings per Share (EPS): Is the portion of profit earned by the company for every ordinary share on issue. It is calculated by taking the net profit and dividing by the number of issued ordinary shares.
EBIT: Earnings before Interest and Tax.
EBITDA Margin: It is the operating profit as the share of total operating income.
Employee Benefits: As per Ind AS 19, employee benefits means all the forms of consideration given by an entity in exchange for service rendered by the employees. It includes the benefits extended to the dependents of the employee.

Employee Stock Option Plan (ESOP): Stock ownership plan whereby employees purchase shares in their company's stock. The idea behind stock options is to align incentives between the employees and shareholders of a company. Shareholders want to see the stock appreciate, so rewarding employees when the stock goes up ensures, in theory that everyone is striving for the same goals.

Enterprise Resource Planning: Enterprise resource planning is business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back office functions related to technology, services and human resources.
Equity: The capital invested in a company by its owners, together with retained profits from previous years that have not been distributed as dividends.
Equity Funding: Through the issuing of new shares. Equity funding is contributed in return for a share of ownership. It is not repayable, demands no provision of security (other than issued shares) and bears no interest.
ESOP Loan: A leveraged ESOP allows a company to raise its capital-to-asset ratio by issuing new shares of stock to an employee trust, which finances the transaction with a loan from a bank. The ESOP loan is repaid in pretax corporate dollars, and dividend payments to employees and the dividends reducing the bank loan. An ESOP loan is often used as a retirement benefit to current employees. These plans often are started by companies seeking to avoid hostile takeover by keeping company stock in friendly hands.
Exceptional Expenses: Expenses incurred that must be noted on a company's balance sheet, in accordance with GAAP principles. Even though they are considered to be part of ordinary business charges, exceptional items must be disclosed separately due to their sheer size or frequency.
Exchange Variation Gain: A gain generated from an investment's value changing due to changes in currency exchange rates. This usually affects businesses that export and/or import, but it can also affect investors making international investments. For example, if money must be converted to another currency to make a certain investment, then any changes in the currency exchange rate cause that investment's value to either decrease or increase when the investment is sold and converted back into the original currency.
Expense: Any reduction in the owner(s) equity not resulting from a distribution of the assets to the owners. It represents an expiration of the costs, use or loss of an asset, without being replaced by another asset of the same value.
Export Incentives: Like all other countries, the Government of India has framed several schemes to promote exports and to obtain foreign exchange. These schemes grant incentives and other benefits. The few important export incentives are as follows: Free Trade Zones (FTZ), Advance Licence / Duty Exemption Entitlement Scheme (DEEC), and Export Promotion Capital Goods Scheme (EPCG), Deemed Exports.

Extensible Business Reporting Language (XBRL): XBRL is a freely available and global standard for exchanging business information. It is used to define and exchange financial information, especially financial statements.
External Audit: The Company's periodic audit performed by an independent person, who is not a department or employed by the directors to be audited.
Face Value: It is the amount that is printed on the face of a bond, which is paid back at maturity, and which is used in calculating the coupon payment. It is also called par value.
Factoring: Factoring can be described as the provision of or the making available of finance against the security of trade debts.
Fair Value for consolidation: The estimated value of all assets and liabilities of an acquired company used to consolidate the financial statements of both companies.
FCCN (Foreign Currency Convertible Notes): Foreign debt issued by a local company (similar to convertible debentures). The investors receive the safety of guaranteed payments on the bond and are also able to take advantage of any large price appreciation in the company's stock. Due to the equity side of the bond, which adds value, the coupon payments on the bond are lower for the company, thereby reducing its debt-financing costs
Financial Instruments: As per Ind As 32 , a financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.
Financial Ratios: The relationship of one or more variable on the financial statement, with another variable.

Financial Reporting: (FASB) has defined financial reporting as activities that are intended to serve 'the informational needs of external users, who lack the authority to prescribe the financial information they want from an enterprise, and therefore, must use the information that management communicates to them'.
Financial Statements: Usually refers to balance sheet, profit \& loss account and statement of cash flow of a company.
Financial Statement Analysis: Evaluation and relation of information contained in the financial statements with a view to interpreting them for arriving at conclusions.
Financing Activities: AS per Ind AS 7, these activities result in changes in the size and composition of the contributed equity or borrowings of the entity.

First in first out (FIFO): First in first out means that the oldest inventory items are recorded as sold first but do not necessarily mean that the exact oldest physical object has been tracked and sold. In other words, the cost associated with the inventory that was purchased first is cost expensed first.
Fixed Asset: It is a tangible long-lived asset. Usually having a life of more than one year and helps in earning revenues. Includes items such as land, buildings, plant and machinery, motor vehicles, and furniture \& fixtures.
Foreign Currency Forward Contract: Helps company's in hedging their foreign currency fluctuation risk by offsetting a portion of such exposure with gains or losses on the forward contract.
Foreign Currency Translation: The method of translating the foreign currency financial statements of the Corporation's international subsidiaries into local current as prescribed by local GAAP. Under these principles, it is necessary to select the functional currency of these subsidiaries.
Fraudulent Practices: Fraudulent practices refer to any act or omission or misrepresentation with intent to mislead a party to obtain financial or other benefit to avoid an obligation.

Full-disclosure: This requires the provision of all relevant and pertinent information to the information users.
Funds Flow: Usually used in the sense of flow of working capital.
Funds from Financing: An accounting of funds related to the financing of the company. This is where the company reports the funds that it took in and paid out to investors, in order to finance its activities. So, it will include any dividend payments that the company made to its shareholders, any money that flowed in by selling new shares, any money it borrowed, and any money it used to repay past borrowings.
Funds from Investments: An accounting of funds related to the company's investments, reported in the funds flow statement of a company. It includes money that the company has gained (or lost) by investing its excess cash in different investments (stocks, bonds, etc), divesting of fixed assets, and all the money the company has spent on its physical property, such as plants and equipment.
Funds from Operations: The changes in the working capital as a result of the operations are called funds from operations. This term indicates the difference between the inflow of funds on account of revenue and the outflow of funds on account of expenses.
Gearing: Gearing refers to the financial leverage of a company and shows the extent to which the business is funded by the owned funds versus borrowed funds.
Generally Accepted Accounting Principles (GAAP): GAAP is the common set of accounting principles, standards, and procedures.
Global depository receipts (GDR): A bank certificate issued in more than one country for shares in a foreign company. The shares are held by a foreign branch of an international bank. The shares trade as domestic shares, but are offered for sale globally through the various bank branches.
Going Concern: The concept of going concern looks at business entities as having a life of an infinite duration. Thus, existing resources will be used to fulfil the objectives of a continuing entity.
Goodwill: Goodwill is an Intangible asset which represents the amount paid over the book value due to strong brand name, good customer relationship and any patents and proprietary technology.
Gross Profit: The excess of Net Sales over the Cost of goods sold.
Gross Revenue: It is the sum total of all receipts from the sale of a products and/or services.
Guarantee Companies: Guarantee companies are those companies which do not have a share capital, but the members act as guarantors. They undertake to contribute a nominal amount in the event of winding up of the company.
Holding Company: A parent corporation that owns enough voting stock in another corporation to control its board of directors (and, therefore, controls its policies and management).
Hyperinflationary Economics: In economics, hyperinflation occurs when a country experiences very high and usually accelerating rates of inflation. Rapidly eroding the real value of local currency and causing the population to minimize their holdings of the local company.
Impairment Loss: As per Ind AS 38, an impairment loss is the amount by which the carrying amount of an asset exceeds its recoverable value.

Impairment of assets and losses on sale of businesses and fixed assets: Impairment could mean, the condition of being unable to perform as a consequence of physical unfitness or damage that result in a reduction of strength or quality. In business, due to wear and tear of the assets, the particular assets at times become Impaired and are not in position to perform at its fullest capacity and hence, they are costs to the company. To do away with such costs, at times the company decides to sell them at giveaway
price. They might incur profit or loss, depending upon the Written down value of the assets. In assessing whether a write-down is required in the carrying value of a potentially impaired asset, its carrying value is compared with its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and value in use.
Imprest System: It is a system of cash disbursement under which a fixed cash advance is given and is periodically replenished for the expenses incurred during a period.
Indemnifications: Indemnification means that the supplier (or contractor or service provider) has to pay the company for any litigation costs resulting from his or her breach of the warranties.
Index Based Statement: Index based statements means the financial statements that are drawn based on the index numbers with a common base year. The amounts in the financial statements are expressed in terms of percentage of amounts against the base year.
Indian Accounting Standards (Ind AS): Indian Accounting standards issued by Accounting standards Board(ASB) under the supervision of ICAI provides for the guidelines that are to be followed (mandatory or recommendatory) by the company to which such Ind AS are applicable.
Information Technology: Information technology refers to the use of computers to store, retrieve, transmit and manipulate the data.
Initial Public Offering (IPO): A new share issue (allotment) from a company (the Issuer).The floating of a company by offering a proportion of its shares to public investors. It is sometimes called the 'Primary issue'.

Institute of the Chartered Accountants of India (ICAI): The Institute of Chartered Accountants of India is the national professional accounting body of India. It regulates the accountancy and financial audit professions in India.
Intangible Assets: Ind AS 38 defines intangible asset as an identifiable non-monetary asset without physical substance. These intangible assets even without the physical existence are very useful in smooth operation of the business. For example, goodwill.

Interim Financial Reporting: Interim financial reporting means reporting of financial statements containing either a complete state of financial statements (as described in Ind AS 1) or a condensed set of financial statements for the interim period.
Interim Period: As per Ind AS 34, interim period is a financial reporting period shorter than a full financial year.
Internal Audit: Internal audit is an audit performed by an independent person or an employee of the entity in order to check the health of a firm's finances and analyze the organizations working efficiency.
Internal Financial Control: The term internal financial control includes policies and procedures adopted by the company for ensuring the orderly and efficient conduct of its business to ensure that financial accounting reflect a true and fair view.
International Financial Reporting Standard (IFRS): International Financial Reporting Standards are principles-based Standards, Interpretations and the Framework adopted by the International Accounting Standards Board (IASB). It is a set of accounting standards developed by International Accounting Standards Board. It provides a global framework for how public companies prepare and disclose their financial statements.
Inventories: The aggregate of those items that are either (a) held for sale in the ordinary course of business, (b) in process of production for such sale, or (c) soon to be consumed in the production of goods or services that will be available for sale.

Inventory Valuation Method, Specific Identification: It refers to the tracking and costing of inventory based on the movement of specific, identifiable inventory items in and out of stock.
Inventory, Cost-basis: It means that the inventory is to be valued at cost that is incurred to bring the inventory to its present location and condition.
Inventory, Net Realizable Value Basis: Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.
Investing Activities: As per Ind AS 7, these activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. For example, purchase of land by the company.
Investment Property: As per Ind AS 40, investment property is property (land or building-or a part of building-or both) held (by the owner or lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for (a) use in the production or supply of goods or services or for administrative purposes, or (b) sale in the ordinary course of business.
Investment, at Cost / Book Value: The investments are valued at the cost at which they were purchased. The long term investments are generally valued at cost / book value
Investments, Diminution in Value: In case there is a permanent diminution (decrease) in the value of investments, they are valued after providing for the diminution in value.
Investments, Market Value: Market value of investments refers to the value which will be realized if the investments are sold in recent future. The short term investments are valued at market prices.
Investor Education and Protection Fund: Investor Education and Protection Fund is a fund created by Central Government with a view to increase awareness among the investors. A company has to deposit all the dividends unclaimed for a continuous period of seven years to investor education protection fund.
Issued Capital: It is the capital issued to the shareholders. It cannot exceed the authorized share capital.
Joint Stock Company: A voluntary association of persons who have invested capital, divisible in the form of transferable shares, for the purpose of earning profit through business.
Joint Venture: An agreement for two or more parties to jointly explore, finance or direct a particular development.
Journal: Journal in the context of accounting is a first record of transactions, where they are analysed, showing the account to be debited and the account to be credited as a result of the transaction, along with a descriptive narration of the transaction.
Last in First Out (LIFO): Last in first out means that the newest inventory items are recorded as sold first but do not necessarily mean that the exact latest physical object has been tracked and sold. In other words, the cost associated with the inventory that was purchased last is cost expensed first
Ledger: Ledger is a collection of an entire group of similar accounts in double-entry bookkeeping. It has separate columns of debits and credits and all the entries from the Journal finds a place in a ledger.
Letter of Credit: A written commitment to pay, by a buyer's or importer's bank to the seller's or exporter's bank. It guarantees payment of a specified sum of money in some specified currency, when the seller meets the conditions and submits the prescribed documents within the reasonable time period.
Liability: Any amount owed by one person, the debtor, to another, the creditor. In a balance sheet, all the claims against the assets of the entity, other than the owner(s) claims are liabilities. More specifically, they are future sacrifices of economic benefits arising from present obligations of the entity, such as a commitment to transfer assets or provide services in the future, to another entity.

Limited Liability: The liability of shareholders is limited to the fully paid value of the shares held. If partly paid shares are held in a limited company and a call is made, the holder is liable to pay the call. A person taking up shares in a company knows from the beginning the extent of his individual liability.
Long-term Investments: Such investments that are not intended to be sold in one year from the date of purchase
Long-term Solvency: Long term Solvency means the ability of the company to meet its long term financial obligations.
Margin-based Ratios: The ratios that predict the profitability of the company. For example, gross profit ratio.
Marketable Securities: Securities that can be easily converted into cash. Securities that are freely traded on recognized exchanges or marketplaces. Such securities will generally have highly liquid markets allowing the security to be sold at a reasonable price very quickly
Matching: It is the income measurement based on a comparison of the expenses relating to the realised revenues of an accounting period.
Materiality: Materiality is the practice of not bothering about trivial values.
Memorandum of Association: The Memorandum was used to set out the objects of the company. In other words, the fundamental charter on which the company is granted registration. It contains: (1) the name, (2) domicile, (3) the objects, (4) statement of liability, (5) authorized Capital and its divisions, and (6) the declaration of association.

Minority Interest: From a purely accounting point of view, a parent company which owns less than $100 \%$ but more than $50 \%$ of a subsidiary presents the value of the remaining ownership (the minority ownership) on the balance sheet in a separate account. Also, a minority interest account is a non-current liability that can be found on a parent company's balance sheet that represents the proportion of its subsidiaries owned by minority shareholders. In such cases, minority interest is shown as either a liability or an equity item on the consolidated balance sheet, and the income (or loss) owed to the minority owners is subtracted from (or added to) the parent's income to arrive at a net income number (consolidated).
Miscellaneous expenditure (to the extent not written off or adjusted): Expenses included under the head 'Miscellaneous Expenditure' are amortised over the period of estimated future benefits.
Monetary Expression: The monetary expression means that business transactions are required to be maintained in monetary terms only. The transactions which could not be expressed in monetary terms are not recorded.
Negotiable Instruments: A negotiable instrument is a document guaranteeing the payment of specific amount of money, either on demand or at a specified time to the payer. In India, these instruments are governed by Negotiable Instruments Act, 1881.
Nominal Share Capital: Nominal share capital means the maximum share capital that a company can issue. It is also known as authorized share capital.
Non-adjusting Events: The events which occur between the end of financial period and the date when the financial statements are approved by the Board of Directors of the company but there were no conditions indicative during the reporting period are known as non-adjusting events.
Non-monetary Asset: Non-monetary assets are those assets in which the right to receive a fixed or determinable amount of currency is absent. For example goodwill, patents, etc.

Non-operating Income: Income from sources other than the core business of the company.

Operating Activities: As per Ind AS 7, operating activities are the principal revenue-producing activities of the entity and other activities that are not investing or financing activities. For example, purchase and sale of goods in which the business deals.
Operating Expenses: Expenses that are incurred in the process of earning sales revenues that are deducted from gross profit in the income statement.
Owner(s) Equity: These are owner(s) claims against the assets of a business entity. It could be expressed as the total assets of an entity, less outsider's claims or liabilities. Includes both contributed capital and retained earnings.
Paid-up Capital: This is the amount of money paid or deemed to have been paid on shares actually allotted.
Par Value: The nominal value once given to shares by the Articles of a company. It often has no relation to the asset value or worth of shares.
Parent Company: A company that owns more than $50 \%$ of the equity shares of another entity. Or which has the power to control the management of other entity.
Performance Shares: In the case of stock compensation, shares of company stock given to managers only if certain company-wide performance criteria are met, such as earnings per share targets. The goal of performance shares is to tie managers to the interests of shareholders. Their goal is similar to employee stock-option plans, as they provide an explicit incentive for management to focus their efforts on maximizing shareholder value. Note that in the case of performance shares, the manager receives the shares as compensation for meeting targets, as opposed to stock-option plans where employees receive stock options as part of their usual compensation package.
Placement: An allotment of shares made directly from the company to investors, rather than through the medium of a cash issue.
Positive Cash Flow: When the total cash inflow exceeds the total cash outflows of an entity for a particular period it is referred as positive cash flow.
Posting: Posting in the context of accounting is the process of recording transactions analysed in the journal in their respective ledger accounts.
Premium: Was an extra amount above par value, payable upon issues of shares.
Prepaid Expenses: Represent certain assets, usually of an intangible nature, whose usefulness will expire in the near future. Example may include an premium paid on an insurance policy.
Price Earnings Ratio (P/E Ratio): The relationship that a company's profits bear to the current sale price/value of its shares, usually expressed as: Market value of share / Earnings per Share
Prior period Errors: As per Ind AS 8, prior period errors are omissions from and misstatements in, the entity's financial statements for one or more prior periods arising from failure to use, or misuse of reliable information that (a) was available when financial statements for those period were approved for issue, and (b) could reasonably be expected to have been taken into account in the preparation and presentation of those financial statements.
Private Placement: This is raising of capital via private rather than public placement. The result is the sale of securities to a relatively small number of investors.
Problem Solving: In the context of accounting information system, problem solving implies the provision of such information, which enables the managers to find solutions to the problems.

Profit \& Loss Account: The final summary of all revenues and expenses and profits or losses during an accounting period. It is also referred to as the income statement or income summary.
Profit After Tax (PAT) : Profit after tax, as the name indicates, is the profit that is available by the company for paying to its preference shareholders and equity shareholders after the tax on the income is paid.
Profit: Revenue minus expenses, for a given accounting period. A negative profit is usually known as a loss.
Profitability: Profitability refers to the ability of the business to earn profit in the normal course of business.
Promissory Note: A promissory note is a written promise, legally enforceable, to pay on demand, or on one or more specified dates, a specified sum. The note sets forth the terms and conditions of the loan arrangement between the company and the investor. Thus a note would provide a certain interest rate paid monthly, quarterly or annually to investors with a maturity date that dictates when the principal is paid back in full to investors.
Property Rights: These are the rights of accounting entities to possess and alienate property (value). Things of value to an entity can be transferred from one entity to another.
Provision for taxation for earlier years written back: The net provision kept for taxation of earlier years which have been again written back (due to various reasons such as tax clarification or tax appellate authorities' favorable ruling, etc.).
Provisions: Provisions are recognized when a company has a present legal or constructive obligation as a result of past events, it is possible that an outflow of resources will be required to settle the obligation and a reliable estimate of amount can be made. When a firm expects a provision to be reimbursed, the same would be recognized as an asset only when reimbursement is virtually certain.
Purchase Book: Purchase book is a type of journal in which all the credit purchases are recorded in a chronological order.

Realisation: Recognition of revenue in accounting, based on the assumption that increases in the owner(s) equity arise at the point of delivery or provision of goods or services. Income measured on the realisation of revenue is independent of the timing of cash receipts.
Rectification Entry: In case the errors are committed in the books of accounts and are identified at a later stage, the correction entry made to fix the accounting error is known as rectification entry.
Related Parties: A related party is any person or entity that is related to the entity that is preparing the financial statements. A person may either be directly related to the business or its owners, directors or controllers.
Related Party Transactions: Transactions material in nature between organization and its promoters, the Directors or the Management, their subsidiaries or relatives, etc., having potential conflict with the interests of Company at large are related party transactions. Companies are required to declare the same in their annual report.
Reserves and Surplus: Reserves means a provision for a specific provision. Surplus on the other hand is the credit balance of profit and loss account after providing for taxes and dividends. Reserves and surplus refers to the retained earnings in the business which is otherwise available for distribution of dividends.
Residual Value: As per Ind AS 38, the residual value of an intangible asset is the estimated amount that an entity would currently obtain from the disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and condition expected at the end of its useful life.

Retained Earnings: It is the difference between the total earnings of the entity from its inception to date and the total amount of dividends paid out to its shareholders over its entire life i.e. the difference represents that part of the total earnings that have been retained for use and reinvested in the business.
Revaluation Model: In revaluation model, an asset is initially recorded at cost but subsequently its carrying amount is increased for any appreciation in the value.
Revaluation Reserve: An accounting term used when a company has to enter a line item on their balance sheet due to a revaluation performed on an asset. This line item is used when the revaluation finds the current and probable future value of the asset is higher than the recorded historic cost of the same asset or vice versa.
Revenue: Increase in the owner(s) equity arising from assets received on the sale of goods or services. Also includes income generated from assets and investments, usually classified as non-operating revenue.
Revenue Expenditures: Expenditures that are immediately charged against revenues as an expense.
Sales Book: Sale book is a type of journal in which all the credit sales are recorded in a chronological order.
Scrap Value: Actual or estimated selling price for an asset like plant to be sold or otherwise retired.
Secured Loan or Secured by First Charge: A secured loan is a loan in which the borrower pledges some asset as collateral for the loan, which then becomes a secured debt owed to the creditor who gives the loan. This means in case of liquidation for the first set of loans (securitized) the lending banks will have first claim on the properties secured.
Securities: Usually refers to the form of investment, i.e. shares, debentures, bonds, etc.
Shares: Shares are the parts into which the capital of the company is divided. The ownership of a share entitles the holder to receive a proportionate part of the profits distributed by the company, and to take part in the management, usually on the basis of one share one vote.
Share Application Money Pending Allotment: The amount received towards application of shares and which is not alloted yet.
Share Based Payment Transaction: A transaction in which the entity (a)receives goods or services in a share based payment arrangement, or (b) incurs an obligation to settle the transaction with the supplier in a share based payment arrangement when another group entity receives those goods or services.
Share Based Payments Agreement: An agreement by the entity(or another group entity or any shareholder of any group entity) and another party (including an employee) that entitles the other party to receive (a) cash or other assets of the entity for the amounts that are based on the share price (or value) of equity instruments, or (b) equity instruments.
Share Capital: The capital raised by a company by way of issuing shares.
Share Premium: Money received by a company for a share issue which is in excess of its nominal (or par) value.
Shares, Bonus Issue: When a company issues shares to the existing shareholders instead of dividend, in proportion of shares already held by them is known as bonus issue of shares.
Shares, Rights Issue: The company may offer the existing security holders the right to purchase the additional shares from the company before it offers any shares to the public.
Sources of Funds: The source from which we may obtain capital for application elsewhere. Sources include operations, extraordinary profits, sale of fixed assets, new long-term borrowing, new issue of capital and the reduction of existing working capital.

Statement of Cash Flow: It summarises the changes in the cash position of a business entity due to various transactions, during an accounting period. The presentation of a statement of cash flow is segregated into three different activities, namely, operating activities, investing activities, and financing activities.

Statuary Corporation: Statutory Corporation is a public enterprise brought into existence by the special act of Parliament. The powers and functions of such corporations are defined under the Act. For example - Reserve bank of India, etc.

Statutory Reserve: The reserves a company is legally required to maintain on its balance sheet with respect to the un matured obligations of the company (or kept due to regulatory restrictions).
Stock Compensation: Stock compensation is basically the payment of stock in lieu of cash for any service provided. This is a common method used by corporations to compensate executives. Employee stock option plans (ESOPs) are a good example. The theory is that executives will work harder since they want their own stock to rise in value and, therefore, have the best interests of shareholders in mind.
Stock Repurchases: All shares purchased as part of publicly announced plans. At Adobe Systems (USA), stocks are repurchased in the open market from time to time by entering into structured stock repurchase agreements with third parties. These are then shown as treasury stocks in the balance sheet.
Stock Split: It is the issuance of additional shares of stock to stockholders which is accompanied by a reduction in the par or stated value per share.
Straight-line method: The method under which the periodic charge for depreciation is computed by dividing the depreciable amount of a depreciable asset by the estimated number of years to its useful life.
Subscribed or Issued Capital: This is the total nominal or face value of the shares of the company which have actually been issued or allocated to shareholders. These shares are generally issued in consideration for cash but can also be issued in consideration for the company acquiring non-cash items such as: intellectual property, real property, etc.
Subscription: The application by the public for shares being offered for issue/allotment.
Subsidiary (affiliated) Company: A company in which more than 50 percent of its stock is owned by another company. Or the management is controlled by the other entry.
Subsidiary: A company that is owned or controlled by another company. Ownership or control need not be complete but must be through a majority, e.g. $51 \%$. (See Parent Company)
Subsidiary Book: Subsidiary books are the books of original entry in which transactions of a similar nature are recorded at one place in a chronological order.
Sum of the Year's Digit Method: A method of calculating the depreciation of an asset that assumes higher depreciation charges and greater tax benefits in the early years of an asset's life.
Suspense Account: It is a section of company's books where unclassified debits and credits are recorded. The suspense account temporarily holds unclassified transactions while a decision is being made as to their classification.

Tax Audit: In India tax audit is covered under the Income tax act, 1961. Tax audit is required by every person who falls under the categories as mentioned under the act. It is conducted by a Chartered Accountant who is required to submit the audit report under the prescribed time limit.
Term Loans: A business loan repayable according to a specified schedule. The lender is usually a bank or an insurance company. It is generally taken to finance long term projects.
Timeliness: Timeliness principle refers to the need for accounting information to be presented to the stakeholders or financial decision takers within the reasonable time.

Transaction: Transaction in the context of accounting is any event either express or implied, which has the effect of changing the revenue, expense, asset, liability, or owner(s) equity of an entity.
Treasury Stock: Shares of equity shares bought back (repurchased) by the company are recorded at cost as treasury stock and result in a reduction of shareholders' equity in the Balance Sheet. Treasury stock is issued but not outstanding, and is not taken into consideration when calculating earnings per share or dividends, or for voting purposes. From time to time, treasury shares may be reissued as part of their stock-based compensation programs. Stock reacquired by a corporation to be retired or resold to the public.
Trial Balance: Trial balance in the context of accounting is the listing of all the accounts in the accounting system with their respective balances as of a particular date.
Unbilled Accounts Receivable: Unbilled accounts receivable represent revenues on contracts to be billed, in subsequent periods, as per the terms of the related contracts.
Unbilled Revenues: Unbilled revenues are included in loans and advances, represent costs in excess of billings as at the balance sheet date.
Unclaimed Dividend: It is the dividend declared by the organization but not collected by the investors. If the dividend is not claimed and collected in seven years after its declaration than it needs to be transferred to 'Investor Education And Protection Fund' and needs to be shown in the annual report separately.
Unearned Revenues: Cash received and recorded as liabilities before revenue is earned.
Units of Production, Depreciation Method: the method under which depreciation is charged for the number of units that are produced during the year divided by the no. of units that can be produced using the said asset.
Use of Funds: Also referred to as application of funds. Use of funds includes increase in working capital, amounts lost in operations (operating loss), acquisition of fixed asset, retiring or repayment of long term loans, and payment of dividends.
Useful Life: An estimate of the expected productive life, also called service life, of an asset.
Venture Capital: Risk finance (equity) provided by a professionally managed fund to an enterprise (investee) in return for a share of the firm's ownership and voting control for the ultimate purpose of capital gain.
Voucher: It is an authorization form that is prepared for each payment by check in a voucher system.
Warrants: A derivative security that gives the holder the right to purchase securities (usually equity) from the issuer at a specific price within a certain time frame. Warrants are often included in a new debt issue as a "sweetener" to entice investors and are tradable in the secondary market.
Weighted average cost (WAC): In this the cost of inventory is based on the average cost of goods available for sale during the period. It is computed by dividing the total cost of goods available for sale by the total units available for sale.
Weighted Average Number of Shares: If a firm had 100 shares issued during the first 10 months of financial year and then issues another 100 shares. The firm had 200 shares issued for the remaining two months during the year. In this case, the weighted average number of shares would be ( $100 * 10+200 * 2$ ) $/ 12$ that comes out to 117 shares.
Working Capital: The amount of short term funds available to a business to perform its normal trading operations. It is usually defined as the difference between current assets and liabilities.
Write-Downs: Reducing the book value of an asset because it is overvalued compared to the market value. This is usually reflected in the company's income statement as an expense, thereby reducing net income.

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[^0]:    ${ }^{1}$ According to the American Institute of Certified Public Accountants (AICPA), accounting is the art of recording, classifying and summarising in a significant manner and in terms of money, transactions, and events, which are, in part at least, of a financial character, and interpreting the results thereof.

[^1]:    ${ }^{2}$ Using $12 \%$ discount rate, the present value of each year's cash flows (for next ten consecutive years) would be ₹ 357,142 ; ₹ 318,877 ; $₹ 284,712$; ₹ 54,207 ; ₹ 226,971 ; ₹ 202,652 ; ₹ 180,940 ; ₹ 161,553 ; ₹ 144,244 ; and ₹ 128,789 . The total of the above would work out to ₹22.6 Lakh approximately.

[^2]:    ${ }^{3}$ Many of these accounting concepts can be easily related to the concepts one would like as part of a school's grade sheet (or similar performance measurement system). Concepts such as materiality, consistency, dependability of data, and timeliness of reporting are equally applicable while deciding on a school's grading and evaluation system. The following article provides an interesting reading, Ram Kumar Kakani and Venugopal Pingali, "Management Education: A Framework for Grading," Management and Labour Studies," Vol. 27(3) (2002), print. URL: http://ssrn.com/abstract=905166.

[^3]:    ${ }^{1}$ By quantitative, we mean something that is expressible in a definite quantity. All the elements that are present in the balance sheet should be measurable in clear-cut monetary terms (say, Rupees). Their value should be ascertained and only then they should be included in the balance sheet. This is precisely the reason why something like the value of human resources, an organization possesses, is not shown in a standard balance sheet.

[^4]:    ${ }^{2}$ A good decision maker would typically look forward to probing into the key reasons behind a particular observation and also consider potential implications of the same. This is similar to our looking at the annual progress report/card/sheet of a child's school performance and then comparing this with the child's past performance (and performance of peer's to make conclusions).

[^5]:    ${ }^{3}$ In practice, there are three big differences between a 'Bill of Exchange' (BoE) and a 'Promissory Note (PN): First, a BoE has three parties, namely, the drawer, the drawee and the payee; while in a PN there are only two parties: (i) maker and (ii) payee. Secondly, a BoE involves an unconditional order to pay, while a PN is an unconditional promise to pay. Lastly, a BoE requires an acceptance of the drawee before it is presented for payment, whereas a PN does not (as it is already signed by the liable parties).

[^6]:    ${ }^{4}$ In case fixed asset are either held for sale or scrapped, depreciation cannot be provided. These assets are to be carried at book value i.e., the depreciated value (as on the date the assets are identified to be scrapped or decided to be sold) or net realizable value, whichever is low.
    ${ }^{5}$ Even though certain types of current assets may lack physical substance, the general practice followed is to use the term intangible asset only when referring to long-lived assets (or non-current assets), which lack physical substance.

[^7]:    ${ }^{6}$ The most common example of contingent liabilities for a bank are the bank guarantees given by them. A bank guarantee is a promise from a bank that if a particular borrower, i.e., their client, defaults on a loan, the bank will cover the loss.

[^8]:    ${ }^{7}$ Please take XXXXXXXX as your date of birth. For example, if your date of birth is 02 January 2000 , then the amount would be ₹ $02,012,000$ only.

[^9]:    ${ }^{8}$ Consolidated financial statements are prepared by combining the financial results of a parent company and its subsidiaries (domestic as well as foreign). They reflect the financial position of the group (i.e., a company and its arms) as opposed to standalone numbers. They are prepared because the users of the financial statements of a parent are usually concerned with, and need to be informed about, the financial position and results of operations of not only the standalone enterprise itself but also of the group (i.e., a company and its arms) as a whole. Hence, a parent company releases both, standalone and consolidated financial statements. A detailed discussion on consolidated financial statements is given in Chapter 6.
    ${ }^{9}$ Includes minorities' interest, explained later in Chapters 6 and 9.
    ${ }^{10}$ Investments here means investments by the bank in government securities, corporate debentures and to a small extent in equity markets (especially, blue chip companies).
    ${ }^{11}$ Advances are loans (both, long-term and short-term) given by the bank to corporates, individuals, and other entities.
    ${ }^{12}$ This is an off balance sheet item. It includes liability on account of outstanding contracts (such as foreign exchange contracts), swaps, claims against the Bank not acknowledged as debts \& other similar items. This also includes bills for collection of ₹ 26,420 crore.

[^10]:    ${ }^{1}$ Just think of two similarly dissimilar balance sheets but with different level of operations:
    Balance Sheet \# 1: Assets $\{100\}=$ Liabilities $\{10\}+[$ Contributed Capital $\{50\}+\operatorname{Revenue}\{50\}-\operatorname{Expenses}\{10\}]$
    Balance Sheet \# 1: Assets $\{100\}=$ Liabilities $\{10\}+[$ Contributed Capital $\{50\}+\operatorname{Revenue}\{500\}-\operatorname{Expenses}\{460\}]$

[^11]:    ${ }^{2}$ Alternatively, you have understood till now that the financial position may have different figures to explain the tale in different point of time provided it is affected with any financial transactions. We could say that a balance sheet is prepared at the point of time (i.e., as on a particular date) to see the change in and the final financial position. However, profit and loss account or the income statement is prepared for a period (monthly, quarterly, semi-annually or annually) and reflects surplus or deficit for that period.

[^12]:    Note: There could be minor rounding off errors.

[^13]:    ${ }^{3}$ Refer: http://forbesindia.com/article/special/how-jignesh-shah-lost-the-plot-his-empire/38573/1\#ixzz3wpqDdkZK

[^14]:    ${ }^{1}$ On similar lines, a Cash Flow Forecast is an estimate, made by the business, of the cash it expects to receive over a period and what it expects to spend over that same period, depending on the progress of the business during that time.

[^15]:    ${ }^{2}$ Capital expenditures (often known in corporate language as CAPEX) are expenditures creating future benefits. A capital expenditure is incurred when a business spends money either to buy fixed assets or to add to the value of an existing fixed asset with a useful life that extends beyond the taxable year. Example: acquisition of fixed assets.

[^16]:    ${ }^{3}$ After his wife's name.
    ${ }^{4}$ Please take XXXXXXXX as your date of birth. For example, if your date of birth is 02 January 2000 then the amount would be ₹ $02,012,000$ only.

[^17]:    ${ }^{5}$ Downtown area of Motihari City of East Champaran district in Bihar state.
    ${ }^{6}$ Depreciation would be @ $20 \%$ written down value basis if your roll number is odd and depreciation would be based on the sum of the years digit method if your roll number is even
    ${ }^{7}$ to be considered a withdrawal
    ${ }^{8}$ A.k.a. cell phone / mobile
    ${ }^{9}$ It may help your cause, if you prepare balance sheet, income statement, funds flow statement, and cash flow statement to answer the following.

[^18]:    ${ }^{1}$ In accounting, we simplify and break complex transactions into a unified and standardized framework. All transactions are reduced to statements of facts. These facts are then specified as a set of relationships. Each item on a balance sheet can be changed only in one of the two possible ways, by a transaction. That is, (a) transaction can increase it, or (b) it can decrease it; This relationship of the transaction with the balance sheet makes the process of recording easier. Thus, by recording of transactions in accounts, we are just accumulating increases and decreases in the various items of the balance sheet, during a period, to be summarized and presented as part of financial statements at the end of the accounting period.

[^19]:    ${ }^{2}$ Closing of the permanent accounts is also achieved by a journal entry being posted. However, in practice, the journal entry is never recorded.

[^20]:    ${ }^{3 / S a l a m i '}$ or 'key money' is a requirement that tenants must make a lump sum payment to the promoter at the time that they occupy their shop/flats. This arrangement, which is found in other cities in which housing demand exceeds supply, provides the main source of income for the promoter.

[^21]:    ${ }^{1}$ Companies have all constitutional rights except for voting rights.

[^22]:    ${ }^{2}$ Check out the MoA and AoA of the Reliance Industries Limited at URL: http://www.ril.com/getattachment/80abe319-9c00-4f30-9d14-2d872529e844/Memorandum-of-Association.aspx

[^23]:    ${ }^{3}$ Source: REL Revathi Equipment Limited, Investors Relation, Revati, Web, 10 Jan. 2016. One can visibly make out during the year 2015 there has been no change in the share capital.
    ${ }^{4}$ Further, the earlier annual reports of the company reported that (i) $24,07,350$ equity shares have been issued as bonus shares by capitalization of general reserve, share premium account and profit on reissue of forfeited shares. Share premium and forfeiture of shares are explained later in Sections 6.6 and 6.8 , respectively. (ii) $1,59,800$ equity shares have been issued as fully paid-up pursuant to a contract without payment being received in cash. (iii) In the year 2006-07 and 2007-08, the company bought back and extinguished $1,42,857$ equity shares. Company repurchases of its own shares is called buy back of shares and is covered later in Section 6.14.

[^24]:    ${ }^{5}$ Source: Indiabulls Real Estate, Investors, Real Estate Indiabulls, Web, 10 Jan. 2016.
    ${ }^{6}$ Global Depository Receipts are receipts evidencing ownership in the underlying shares of a foreign company. See, Glossary at the book-end for more.

[^25]:    ${ }^{7}$ Andhra Pradesh Paper Mills Limited, Investors, Ipappm, Web, 10 Jan. 2016.
    ${ }^{8}$ Warrant is attached to a security and gives the holder the right to purchase an underlying security at a specific price within a certain time frame. A detachable warrant can be removed from the security by the holder and sold in the secondary market separately.

[^26]:    ${ }^{9}$ Due to technological progress and e-banking - a large number of norms and timelines given in this sub-section are under review by SEBI (and are being cut down).

[^27]:    ${ }^{10}$ In fact, most popular international stocks (for example, Google Inc.) do not have a par value; those that do (usually only in jurisdictions where par values are required by law, like India) have extremely low par values.

[^28]:    ${ }^{11}$ Before 2013, such issue of shares at a discount was possible - if it was authorized by a resolution passed by the company in a general meeting, and sanctioned by the court.

[^29]:    ${ }^{12}$ BSE India: Riba Textiles Ltd. Corporate Announcements, BSE India, Web, 22 Dec, 2015.
    ${ }^{13}$ BSE India: Neuland Laboratories Limited. Corporate Announcements, BSE India, Web, 22 Dec, 2015.

[^30]:    ${ }^{14}$ In rare cases, the Central Government may, by a notification in the official gazette, exempt any class of companies from compliance with any of the requirements in Schedule III, if in its opinion, it is necessary to grant the exemption in public interest.

[^31]:    ${ }^{15}$ Companies Act, 2013 Section 205(1A) and thereafter, the provisions contained in Sections 205, 205A, 205C, 206 and 206A apply.

[^32]:    ${ }^{16}$ Source: "Better handle on the books," The Hindu Business Line 13 Dec. 2013, print.
    ${ }^{17}$ Source: "Widening the CFS window," The Hindu Business Line 24 Nov. 2013, print.

[^33]:    ${ }^{18}$ This case has been co-authored by Ms Itika Ganguly, CA, Research Associate, XLRI Jamshedpur.
    ${ }^{19}$ Source: BSE India: Pioneer Distilleries Ltd. Annual Reports, BSE India, Web, 1 Jan, 2016.

[^34]:    ${ }^{20}$ Reliance Industries Ltd. Investor Relation, ril, Web, 1 Feb. 2016.

[^35]:    ${ }^{1}$ For example, there is good work in finance that emphasizes the need for a firm to use industry wide averages as targets and there is evidence that firms do adjust their financial numbers especially ratios to such targets.

[^36]:    ${ }^{2}$ If time permits, one should avoid such short cuts as these databases use financial figures and definitions of financial terms in a fashion which need not be in agreement with your own definition. Further reasons for avoiding database generated financial ratios include - (a) At times, financial figures in databases are wrongly entered (human error); (b) disagreeable computation/ definition of a financial ratio; and (c) working with raw financial figures gives a richer feel of the ground realities.

[^37]:    ${ }^{3}$ Source: BSE India: Colgate-Palmolive (India Ltd), BSE India, Web, 18 Dec, 2015.
    ${ }^{4}$ Source: BSE India: Marico Limited, BSE India, Web, 18 Dec, 2015.
    ${ }^{5}$ Early in the nineteenth century, it started as a small soaps and candle business that William Colgate began in New York City. Today (more than 200 years later) it is a truly global company serving hundreds of millions of consumers worldwide has numerous subsidiaries spanning 200 countries, but it is publicly listed in only two countries, the United States and India.
    ${ }^{6}$ Marico's history can be traced back to 1862 when Kanji Morarji started a small trading business in Mumbai. The family set up the Bombay Oil Industries Limited in 1948 with manufacturing facilities in Mumbai for coconut oil extraction plant, vegetable oil refinery and a chemical plant. Over the decades, this company expanded. In 1990, Marico Limited was created from this company. It is currently led by Harsh Mariwala.

[^38]:    ${ }^{7}$ However, these ratios could be comparable as a time series, even when based on the year-end figures.

[^39]:    ${ }^{8}$ Operating profit does not include the Other Income.

[^40]:    ${ }^{9}$ A high accounts payable turnover means a relatively short time between purchase of goods and services and payment for them; that is, the company pays its bills quickly. A low turnover would indicate the opposite.

[^41]:    ${ }^{10}$ Here we can see that CPIL seems to be getting high credit from its suppliers (six months). It indicates that the company is into high volume of business (selling toothpastes) by purchasing huge quantities of stock using contract manufacturing by vendors. At the same it is possibly focusing its energies on sales.

[^42]:    ${ }^{11}$ Normally, firms use this to invest in capital markets through mutual funds or part them with their banks or put in inter-corporate deposits.

[^43]:    12 The first one is known as the balance sheet approach. The second one is known as the income statement approach.

[^44]:    ${ }^{13}$ Some readers might disagree to a few of the points mentioned below but we are speaking of majority scenarios.

[^45]:    ${ }^{14}$ Another ratio which is used to look at capital asset efficiency is the fixed asset turnover ratio wherein we divide sales upon average fixed assets to see the amount of usage of fixed assets.

[^46]:    ${ }^{15}$ While doing trend analysis, one major limitation of ratio analysis as a tool of financial analysis is associated with price level changes. This, in fact, is a weakness of the traditional financial statements which are based on historical costs. An implication of this feature of the financial statements as regards ratio analysis is that assets acquired at different periods are, in effect, shown at different prices in the balance sheet, as they are not adjusted for the change in price level. As a result, ratio analysis will not yield strictly comparable and, therefore, dependable results.

[^47]:    ${ }^{16}$ The most common instances for violations while making comparisons are in a) difference in the basis of inventory valuation; b) difference in depreciation methods; c) difference in estimated working life of assets; d) amortization of intangible assets like goodwill and patents; e) amortization of deferred revenue expenditure such as preliminary expenditure and discount on issue of shares; f) capitalization of lease; g) treatment of extraordinary items of income and expenditure; and $h$ ) difference in accounting periods.

[^48]:    ${ }^{17}$ For example, take soaps and detergents category, if we compare two firms in the same sector such as Hindustan Lever Limited and Nirma Limited, though both of them may be in the same industry would have different current ratios and quick ratios simply due to the different competitive conditions both of them face. Hindustan Lever can use both its monopoly powers towards its customers and monopsony powers towards its suppliers to squeeze them out and keep a quick ratio of less than 1 whereas Nirma would not be able to play such a game. In the same industry, the condition of a small unknown player like Doctors Detergent Products (Fena Brand) would worsen having a current ratio of more than 3 simply due to lack of any monopoly and monopsony powers.

[^49]:    ${ }^{18}$ Typically, young readers end up concluding very fast and end up suggesting many things. For example, most of the young readers after observing a very high current ratio and quick ratio for all the Indian IT software companies including Infosys Technologies (Infosys) and Tata Consultancy Services (TCS) end up suggesting that the companies are not utilizing their current assets (or working capital funds) properly. If one takes into account the competitive conditions of the IT software sector then the high current and quick ratios of all the software companies can be easily justified. Obviously, financial managers managing funds in such large companies are no fools (with years of experience and high intellectual capital). Some of the reasons for the high short-term solvency ratios being maintained by the IT companies include - (a) ability to latch on to opportunities to acquire other firms (in case of mergers and acquisition); (b) ability to give strong financial signal to its competitors (especially the cash rich giants in the USA) about their capability to survive takeovers and price wars (and hence ensure that there are no price wars in the trade); and importantly (c) by remaining debt free and having large short-term liquid current assets they are also able to influence and create a culture of innovation and risk-taking inside the organization.

[^50]:    ${ }^{19}$ Source: Lehar Footwear Investors Section, Lehar Footwear, Web, 23 Jan. 2016.
    ${ }^{20}$ Source: PTC India Ltd. Investors Relation, PTC India, Web, 23 Jan. 2016.
    ${ }^{21}$ Source: SJVN Limited Investors Relations, SJVN, Web, 23 Jan. 2016.
    ${ }^{22}$ Source: Vishnu Chemicals Investors, Vishnu Chemicals, Web, 23 Jan. 2016.

[^51]:    ${ }^{23}$ Source: Pioneer Distilleries Limited Investor Relations, Pioneer Distilleries, Web, 23 Jan. 2016.
    ${ }^{24}$ Notes: (1) All Unsecured and Secured Loans (including Deferred Liabilities) are treated as long-term in nature; (2) We have used all year-end balance sheet figures to compute ratios (ideally one should have used average values of balance sheet figures); (3) Wherever needed, other Income figures are adjusted/deducted; (4) Sales are taken as "Net Sales" and are adjusted for the change in stocks; (5) The prior period tax adjustments are being ignored for all ratio computations and analysis.

[^52]:    ${ }^{25}$ Share price quotations are taken from the BSE. The averages are computed using the high and low share prices during the year.
    ${ }^{26}$ Usually, companies not going through a tough phase end up having accounting periods which are different than 12 months. In the above case, we observe that Pioneer had two consecutive accounting periods of 18 months each, its income statement number do convey the tough times it was going through.

[^53]:    Note: NA indicates figures are not available

[^54]:    ${ }^{27}$ Source: Bank of India Ltd. Investor Corner, Bank of India, Web, 15 Dec. 2015.
    ${ }^{28}$ Source: Reliance Industries Ltd. Investor Relations, Ril, Web, 15 Dec. 2015.

[^55]:    ${ }^{29}$ Source: Infosys Investors, Infosys, Web, 15 Dec. 2015.
    ${ }^{30}$ Source: Raymond Investor Relations, Raymond, Web, 18 Dec. 2015.
    ${ }^{31}$ Source: BSE India: Blue Dart Annual Reports, BSE India, Web, 18 Dec, 2015.
    ${ }^{32}$ Source: BSE India: Colgate-Palmolive (India Ltd), BSE India, Web, 18 Dec, 2015.
    ${ }^{33}$ While analyzing the case, please take into consideration the business and economic conditions of FY2002 in India. For example, this was a period post-September 2001 attack on the World Trade Center in New York, USA.

[^56]:    ${ }^{34}$ Jhula is a merry go round wheel with cars and horses to seat for little children. It is small and hand driven.
    ${ }^{35}$ Rasoiwala are cooks (who largely cater to the social requirements of three major events in an Indian's life cycle i.e., birth, marriage, and death). So they cook for small parties.
    ${ }^{36}$ Sells tasty and spicy eatables especially snacks and in-betweens (similar to hot dog sellers in western countries)
    ${ }^{37}$ Sells balloons in all shapes and sizes ... he does not carry any machine and prepares them on his own (and usually moves around on a bicycle)
    ${ }^{38}$ Teaches poor children of nearby locality in a small room (in groups or batches) ... unlike modern day coaching centers.
    ${ }^{39}$ Usually runs a Maruti-Omni Van to drop kids in the local school (from nearby locality).
    ${ }^{40}$ Cycle-mechanic needs no introduction.
    ${ }^{41}$ Will usually stack lots of books and magazines (for lending to customers) ... can be thought of as a privately owned road-side community library.

[^57]:    ${ }^{42}$ Sells pans, cigarettes, beedis, gutka, etc.
    ${ }^{43}$ Buys newspapers and other things from households and sells it to wholesaler ... rag picker on a bicycle.
    ${ }^{44}$ Runs a roadside saloon largely to cut hair, shaving, and provide a head massage.
    ${ }^{45}$ A middleman who will take up all brokerage services and provides customers essential things like driving license or signature of a notary (they are available especially near a court or government office). The modern day real estate and other brokers in big cities also do similar roles (at a different level).
    ${ }^{46}$ Buys milk from a wholesaler (dairy packets supplier) and delivers it at home (usually everyday morning).
    ${ }^{47}$ Owns a big grinding machine ... to grind wheat and other cereals (and pulses) to powder (such as atta, besan, etc.).
    ${ }^{48}$ A typical 3-cyke rickshaw puller .. does not contain any automatic machines
    ${ }^{49}$ Carries a 4 -wheel wooden cart also known as thela (always pushed with hands) and roams around. He carries with him the required raw materials and a coal fired stove

[^58]:    ${ }^{50}$ Source: Anik Industries Limited Investors, Anik Group, Web, 25 Jan. 2016.
    ${ }^{51}$ Source: Gayatri Bio-organics Investors, Gayatri Bio organics, Web, 25 Jan. 2016.
    ${ }^{52}$ Source: Lehar Footwear Investor Section, Lehar Footwear, Web, 25 Jan. 2016.
    ${ }^{53}$ Source: Mukand Engineering Investor Related, Mukand Engineers, Web, 25 Jan. 2016.

[^59]:    ${ }^{54}$ Source: Arvind Investors, Arvind, Web, 31 Jan. 2016.
    ${ }^{55}$ Source: Raymond Investor Relations, Raymond, Web, 18 Dec. 2015.

[^60]:    ${ }^{1}$ HUF stands for Hindu Undivided Family headed by a family member, known as Karta. It is defined under the Hindu Law as a family that consists of all persons lineally descended from a common ancestor, including wives and unmarried daughters. HUF is used in income tax computation and it works as under - "In Income Tax Act, 1961, there is special provision for any income earned from joint property held by HUF. You can open an account where you can deposit and file Income Tax Returns separately in the name of Karta and all the income received from joint resources will be treated as HUF income and will not be clubbed with any other individual income. Here, Karta can file two returns one for self and one for HUF separately."

[^61]:    Source: BSE India: Kaushalya Infrastructure Annual Reports, BSE India, Web, 18 Feb. 2015.

[^62]:    ${ }^{1}$ This section draws heavily from the ICAI Ind-AS 1 document.

[^63]:    ${ }^{2}$ This section draws heavily from the ICAI Ind-AS 2 document.

[^64]:    ${ }^{3}$ This section draws heavily from the ICAI Ind-AS 7 document.

[^65]:    ${ }^{4}$ This section draws heavily from the ICAI Ind-AS 8 document.

[^66]:    ${ }^{5}$ This section draws from the ICAI Ind-AS 8 document.

[^67]:    ${ }^{6}$ This section draws from the ICAI Ind-AS 16 document.

[^68]:    

[^69]:    ${ }^{8}$ This section draws heavily from the ICAI Ind-AS 19 document.

[^70]:    ${ }^{9}$ This section draws heavily from the ICAI Ind-AS 33 document.

[^71]:    ${ }^{10}$ This section draws from the ICAI Ind-AS 17 document.

[^72]:    ${ }^{11}$ This section draws from the ICAI Ind-AS 21 document.

[^73]:    ${ }^{12}$ This section draws from the ICAI Ind-AS 32 document.

[^74]:    ${ }^{13}$ This section draws from the ICAI Ind-AS 102 document

[^75]:    ${ }^{14}$ This section draws from the ICAI Ind-AS 103 document.

[^76]:    ${ }^{15}$ This section draws from the ICAI Ind-AS 107 document.

[^77]:    ${ }^{16}$ Source: American Institute of CPAs, aicpa.org, Web, 21 Feb., 2015.
    URL: http://www.aicpa.org/interestareas/frc/accountingfinancialreporting/pcfr/downloadabledocuments/frf-sme/commentletters/ comment_letters.pdf has illustration of confusing definitions. For example, pages 73 and 111 of the document.

[^78]:    ${ }^{17}$ Source: BSE India: Marico Ltd Annual Reports, BSE India, Web, 18 Feb, 2015.

[^79]:    ${ }^{18}$ Source: BSE India: Siemens Ltd. Annual Reports, BSE India, Web, 19 Feb, 2015.

[^80]:    ${ }^{19}$ Many of the terms mentioned in ICICI Bank's provisions and contingent liabilities statements would be tough to understand not only for a first timer but also for many seasoned finance executives (in fact, scary would be a better word). The idea is not to scare a reader but to make them aware of some of the items used by the modern day complicated financial services firms. In fact, first-time readers may like to leave this case (and revisit it after covering other courses in finance).
    ${ }^{20}$ Source: BSE India: ICICI Bank Ltd. Annual Reports, BSE India, Web, 19 Feb, 2015.

[^81]:    ${ }^{1}$ Includes fringe benefit tax amounting to Nil for the year ended March 31, 2010 (March 31, 2009: ₹ 342.0 million) and creation of net deferred tax asset amounting to ₹ (2,804.4) million for the year ended March 31, 2010 (March 31, 2009: ₹ $(4,716.7)$ million).

[^82]:    ${ }^{21}$ Source: BSE India: Hexaware Technologies Ltd. Annual Reports, BSE India, Web, 19 Feb, 2015.

[^83]:    ${ }^{1}$ This section is co-authored by CA Kamlesh Thakkar.

[^84]:    ${ }^{2}$ Source: "A preferred option for you," The Hindu Business Line, 10 May 2015, print.

[^85]:    ${ }^{3}$ Reference: ASCI Journal of Management - volume 27-1998 Article by Shri. KRS Murthy, Corporate Governance: A sociological perspective
    ${ }^{4}$ This case is authored by Professor Santosh Kumar Sangem (Finance Area, XLRI Jamshedpur), Shaniya Khanam (Research Associate, XLRI Jamshedpur) and Siddhartha Saran (BM Alumnus, XLRI Jamshedpur). An earlier version of the case has been published by the author(s) in the Case Center http://www.thecasecentre.org/educators/products/view?id=102405
    ${ }^{5}$ In the rest of this document, ' $\$$ ' refers to US dollar only.

[^86]:    ${ }^{6}$ Source: BSE India: Silverline Technologies Limited, BSE India, Web, 18 Dec, 2011.
    ${ }^{7}$ MECON Limited, a consultant firm in Metallurgical Engineering field, is a Public Sector Undertaking under the Ministry of Steel of the Government of India. It is headquartered in Ranchi, India.

[^87]:    ${ }^{8}$ This was considered the best available commercial bandwidth speed at that time.
    ${ }^{9}$ Prior to 1997 , Silverline Industries had an authorized share capital of $60,000,000$ equity shares of ₹ 10 each, out of which $37,949,970$ equity shares were subscribed and paid up. Subra Holdings Inc., USA after the above transaction had control over 19,354,954 equity shares (SIL Annual Report and SEBI filings, 1997-98).

[^88]:    ${ }^{10}$ The operations of Silverline Mecon Limited had not commenced since incorporation and the company had incurred a loss of ₹ 2.3 million on this subsidiary. The entire stake ( $99 \%$ ) was sold off at ₹ 1.5 million.
    ${ }^{11}$ Infosys was the first Indian company to be listed on an American stock exchange. It got listed on NASDAQ on March 11, 1999 when it sold its ADR at a price of $\$ 34$ per ADR.
    ${ }^{12}$ Source: BSE India: Silverline Technologies Limited, BSE India, Web, 18 Dec, 2011.

[^89]:    ${ }^{13}$ NASSCOM stands for "National Association of Software and Services Companies". It is India's premier trade body and the chamber of commerce of the IT-BPO industries.
    ${ }^{14}$ Source: Business Wire, web, 25 May 2000.
    ${ }^{15}$ For example 'Is there a Silverlining for Silverline?' Express Computers Magazine, web, 11 August 2003.
    ${ }^{16}$ Rajkumar Koneru was the chairman \& president of SeraNova Inc. He held a masters degree in management from BITS Pilani, India (Source: Bitsianwings, BITS Pilani Blog, web, 31 August 2011).
    ${ }^{17}$ The deal also involved the issue of optionally convertible debentures of $\$ 10 \mathrm{mn}$ by STL to the creditors of SeraNova for discharge of the liability on account of two promissory notes, thus strengthening SeraNova's financial position.
    ${ }^{18}$ Source: BSE India: Silverline Technologies Limited, BSE India, Web, 18 Dec, 2011. and SEC filings during 2000-2001.

[^90]:    ${ }^{19}$ Source: Silverline: Impressive results but..., Equitymaster, Web, 31 Aug. 2011. and SeraNova deal buoys Silverline, rediff.com, Web, 31 Aug. 2011. It may be further pointed out that a merger using issue of ADS may not have any control implications for the promoters (of STL) but it surely leads to decrease in future cash flow benefits to them (in terms of dividends being shared with a larger base of equity holders) - and hence creating a decision tree type of future agency problem.
    ${ }^{20}$ SEI-CMM stands for Software Engineering Institute Capability Maturity Model. It is a Carnegie Mellon University (CMU) indicator to measure maturity of processes in software organizations.
    ${ }^{21}$ Source: Information Week Magazine, web, 31 Aug. 2011.

[^91]:    ${ }^{22}$ Source: "Silverline, Palm in mobile venture," The Hindu Business Line 12 Feb. 2001, web.
    ${ }^{23}$ For example, please see, Smita Shukla and Kavita Laghate, "Silverline Technologies: Fight for Revival", International Journal of Technology Marketing, Volume 5(1), 2010, pp 44-58
    ${ }^{24}$ The 11th September 2001 terror strikes on the USA (especially its World Trade Center, New York) also led to a slowdown in the IT industry and a crash in technology stocks.

[^92]:    ${ }^{25}$ We have also provided the key financial numbers of Infosys Technologies Limited (industry's best) and Polaris Software (nearest peer, similar sized company) for the period.
    ${ }^{26}$ \#FY1998: 3 brothers, 1 related, 2 promoters, 1 other; \# FY1999: 3 brothers, 1 related, 2 promoters, 1 other; \# FY2000: 3 brothers, 1 related, 2 promoters, 3 others; \# FY2001: 3 brothers, 1 related, 2 promoters, 3 others; \# FY2002: 3 brothers, 1 related, 2 others; \# FY2003: Information not available in public domain, \# FY2004: 3 brothers, 1 related, 2 others.
    ${ }^{27}$ Source: Compiled from BSE filings of STL, 2001-02.
    ${ }^{28}$ In India, preferential allotments required a 10 per cent down payment (also known as, warrants application money) at the time of approval by the preferential investor.
    ${ }^{29}$ For example, see Silverline: Back to basics, Equitymaster, Web, 31 Aug. 2011. and Silverline: Lackluster numbers, Equitymaster, Web, 31 Aug. 2011.
    ${ }^{30}$ For example, see: findarticles, Web, 31 Aug. 2011. Table 3 also gives the year-wise names of auditors.

[^93]:    Note: (a) All figures in ₹ millions; (b) Source: CMIE PROWESS database except for FY2003 of STL; (c) Figures for FY2003 for STL have been taken from the FY2004 annual report of the same; (d) Surprisingly, the FY2003 annual report of STL is not available in the public domain (or even with database providers); (e) 'WoS Acct Receivables' stands for "Accounts Receivables from Wholly Owned Subsidiaries"; (f) All Financial Years are for a period of 12 months, except for STL's FY2002 - it is of 15 months period.

[^94]:    $\overline{{ }^{31} \text { Data regarding trading volumes and prices taken from BSE and NYSE. }}$
    ${ }^{32}$ Source: STL's Annual Report for FY2002.
    ${ }^{33}$ In 2001, STL announced the creation of the office of the CEO to remove the image of a family managed firm and make the organization look more professionally driven. So, Ravi Singh was appointed co-CEO. Shankar Iyer, a family member, was also appointed co-CEO for three months to ensure a smooth transition.
    ${ }^{34}$ Source: STL's Annual Report for FY2002.

[^95]:    ${ }^{35}$ Source: "Silverline CEO Ravi Singh resigns," The Hindu Business Line 10 April 2002, web.
    ${ }^{36}$ See for example, Silverline: Lackluster numbers, Equitymaster, Web, 31 Aug. 2011.
    ${ }^{37}$ TAIB Bank is an international investment and merchant bank based in Bahrain and is listed on the Bahrain Stock Exchange. It had earlier made a private equity investment in SIL and had exited with impressive returns in 1999 (Source: taib.com, web, 31 Aug. 2011.
    ${ }^{38}$ Excerpts from the article 'TAIB Bank to help recast Silverline Tech', The Financial Express Newspaper, June 6, 2002.

[^96]:    ${ }^{39}$ See for example, "Silverline Puts Key Assets On The Block To Stay Afloat," The Financial Express 31 Aug. 2011.
    ${ }^{40}$ The Indian credit rating agency, CARE (Credit Analysis and Research Limited) downgraded the short-term debt rating of STL from 'PP1+' to 'PR2'.

[^97]:    ${ }^{41}$ Source: STL’s Profile at India Infoline, IIFL, web, 7July -2011
    ${ }^{42}$ Source: "Cognizant Acquires American Express," The Financial Express, 12 March 2016, web.
    ${ }^{43}$ Source: "Punjab National Bank serves notice to Silverline Technologies news," domain-b.com, 06 Jan. 2003, web. (accessed on 31 August, 2011). The Punjab National Bank served this notice using the provisions of the 'Securitization and Reconstruction of Financial Assets and Enforcement of Security Act, 2002'. STL was the first IT Company to be served notice under the new act.
    ${ }^{44}$ See for example, "The summit beckons," The Hindu Business Line, 14 Aug. 2002, web.
    ${ }^{45}$ See for example, Silverline Technologies, Money Control, Web, 31 Aug. 2011.
    ${ }^{46}$ For example check the annual report FY2002 of STL for details on litigations against the company.

[^98]:    ${ }^{47}$ See for example, "Promoter Holding In Silverline Technologies Down to $2.74 \%$," The Financial Express, 31March 2003, web. (accessed on 31 August, 2011) Possibly, existing equity shareholders felt that there was a transfer of wealth from their hands to the ADR holders.
    ${ }^{48}$ He was finally convicted in 2008 for involvement in the Indian stock market manipulation scam in late 1999-2001. Among other punishments, he has been barred from operating in Indian capital markets till 2017.
    ${ }^{49}$ See Report of the Joint Committee on Stock Market Scam and Matters Relating Thereto,_Lok Sabha Secretariat, Government of India, December 2002.
    ${ }^{50}$ Source: Quinn, William T., A Pioneer Stumbles, New Jersey Business News, 2 June 2003.
    ${ }^{51}$ See for example, Silverline shuts US subsidiaries, rediff.com, Web, 31 Aug. 2011.

[^99]:    ${ }^{52}$ As per NYSE norms, STL determined that it would not be possible for it to affirm intent to cure this deficiency within the Exchange's prescribed timeframes.
    ${ }^{53}$ Source: "Soffia buys Silverline's European business," The Hindu Business Line, 12 Sept. 2013, web.

[^100]:    ${ }^{54}$ Authored by CA Kamlesh Thakker, XLRI Jamshedpur.

[^101]:    ${ }^{55}$ Source: "Vehicles worth more than roads," The Hindu Business Line, 15 March 2015, print.
    ${ }^{56}$ Source: "SEBI slaps ₹10 lakh fine on Vijaya Bank for violating norms," The Hindu Business Line, 04 Jan. 2016, print.

[^102]:    ${ }^{57}$ Source: "'The ugly, the bad and the not so good' of Indian IT sector," The Hindu Business Line, 28 March 2014, print.

[^103]:    ${ }^{58}$ This case is co-authored by Dr. Vivek Kumar, FPM, XLRI Jamshedpur

[^104]:    ${ }^{59}$ Source: India: Mukesh Shah trading in FTIL shares, Scribd, Web, 18 Dec, 2010.; "Ernst \& Young associate escapes ICAI scrutiny," The Economic Times 02 Oct. 2013 web.; "IGL Finance moves contempt petition against CA body," Business Standard 15 Nov. 2015 web. And "ICAI director finds NSEL auditor guilty of misconduct," Business Standard, web, 24 Nov. 2015.

[^105]:    ${ }^{60}$ This case has been co-authoured by Ms Itika Ganguly, Research Associate, XLRI Jamshedpur.

