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MANAGEMENT ACCOUNTING

and Interpretation of Financial

SYLLABI-BOOK MAPPING TABLE Management Accounting Syllabi Mapping in Book Accounting: Introduction, Importance and Scope, Concepts & Conventions: Introduction, Generally Accepted Accounting Principles. Double Entry Framework: The Accounting Equation. Accounting Cycle: Journals, Ledgers, Purchase Book, Sales Book, Cash Book, Petty Cash Book, Trial Balance.

60%	MATCHING BLOCK 1/3	W	
Preparation of Financial Statements: Profit and Loss Account and Balance Sheet with Necessary Adjustments. Analysis			

Statement: Meaning and Significance. Tools of Financial Analysis: Ratio Analysis, Trend Analysis, Common Size and Comparative Financial Statement, Fund Flow Statement and Cash Flow Statement, Marginal Costing, Break Even Analysis, Applications of Marginal Costing.

76%	MATCHING BLOCK 2/3	W
Unit 1: Acco	unting: Meaning, Scope and Princip	oles (Pages: 5-34) Unit 2: Journalising Transactions (Pages: 35-50) Unit
3: Ledger Posting and Trial Balance (Pages: 51-94) Unit 4:		

Subdivision of a Journal (

	57%	MATCHING BLOCK 3/3	W		
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Pages: 95-124) Unit 5: Company Financial Statements (Pages: 127-162) Unit 6: Financial Statements: Analysis and Interpretation (Pages: 163-218) Unit 7: Cash and Funds Flow Statements (Pages: 219-301)

Unit 8: Marginal Costing and Cost Volume Profit Analysis (Pages: 303-359)

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INTRODUCTION

Good accountants make good finance managers. This is wholly true since accounting is one of the important tools for modern managers providing quantitative information, primarily of financial nature, necessary for making vital economic decisions. Both accounting and finance are growing and developing subjects and as such, accounting and financial concepts, procedures and techniques are also constantly being reviewed and revised. A clear exposition of these concepts, procedures and techniques is a must for every business executive. The universities and professional institutions which prepare young men and women for careers in business and industry have, therefore, a solemn duty to perform. Their courses must be constantly updated so that they meet the growing and dynamic demands of business and industry. Keeping the above objective in mind, most of the universities all over the country have incorporated a paper in accounting in the Course Curriculum of their Distance Learning Programmes. The book has several distinctive features. These include the following: ? The subject matter has been divided into convenient units, as required by the course curriculum. ? Written in simple and straight style. ? Gives a lucid explanation of the basic concepts of accounting and finance with plenty of illustrative material.? The book does not presuppose the basic knowledge of accountancy and finance and hence makes learning of both accounting and finance for managers a painless exercise. ? Provides unit objectives at the beginning of each unit to tell the students what they will learn after studying the unit. ? Defines key terms at the end of each unit for recapitulation and better grasp over the subject. ? Will prove a refreshing guide for business executives. We are confident that with all these PLUS features the readers will find the book extremely useful and rewarding for them. Their constructive and helpful suggestions for improvement in the book will be gratefully acknowledged. Self-Instructional Material 1 Introduction NOTES MODULE - 1

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Self-Instructional Material 5 Accounting: Meaning, Scope and Principles NOTES UNIT 1

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INTRODUCTION The role of the accountant has undergone a revolutionary change with the passage of time. Traditionally, accounting was considered solely a historical description of financial activities. This view is no longer acceptable.

Accounting is now considered as a service activity and an important tool of management for decision making. This unit attempts to analyze the role of accounting and the accountant keeping this perspective in view.

Accounting is the language of business through which normally a business house communicates with the outside world. In order to make this language intelligible and commonly understood by all, it is necessary that it should be based on certain uniform scientifically laid down standards. These standards are termed as accounting principles. The present unit deals with such principles. They are known by different names such as concepts, postulates, prepositions, basic assumptions, underlying principles, fundamental rules etc. Different authors have given them loose and overlapping meanings. For the purpose of this unit, we putting them as Accounting Principles.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES 1.1

UNIT

OBJECTIVES

After going through this unit, you will be able to: ? Appreciate the

need of accounting ?

Perceive the

development of

accounting?

Explain the meaning of accounting ?

Name the

persons interested in accounting disclosures ? Identify the objectives of accounting ? Explain the relationship of accounting with other disciplines ? Appreciate the role of the accountant in society ? Explain the meaning of accounting principles ? Differentiate between accounting concepts and conventions ? Appreciate the importance of different accounting concepts and conventions ? Name

the accounting standards issued by the Institute of Chartered Accountants of India ?

Describe the different systems of accounting 1.2 NEED FOR ACCOUNTING Accounting

has rightly been termed

as

the language of the

business. The basic function of a language is to serve as a means of communication.

Accounting also serves this

function. It communicates

the result of business operations to various parties who have some stake in the business viz., the proprietor, creditors, investors, Government and other agencies. Though accounting is

generally associated with business, it is not only business which makes use of accounting. Persons like housewives, Government and other individuals also make use of accounting. For example, a housewife has to keep a record of the money received and spent by her during a particular period. She can record here receipts of money on one page of her 'household diary', while payments for different items such as milk, food, clothing, house, education etc. on some other page or pages of her diary in a chronological order. Such a record will help her in knowing about: (i) The sources from which she received cash and the purposes for which it was utilised (ii) Whether her receipt are more than her payments or vice-versa (iii) The balance of cash in hand or deficit, if any at the end of a period If the housewife records her transactions regularly, she can collect valuable information about the nature of her receipts and payments. For example, she can find out the total amount spent by her during a period (say a year) on different items, say milk, food, education, entertainment, etc. Similarly she can find the sources of her receipts such as salary of her husband, rent from property, cash gifts from her near relations, etc. Thus, at the end of a period (say a year) she can see judge her own

financial position i.e. what she owns and what she owes. This will help her in planning her future income and expenses (or making out a budget) to a great extent. The need for accounting is all the more greater for a person who is running a business. He know: (i) What he owns; (ii) What he owes; (iii) Whether he has earned a profit or suffered a loss on account of running a business; (iv) What his financial position is, i.e. whether he will be in a position to meet all his commitments in the near future or is he

in the process of becoming bankrupt. 1.3 DEVELOPMENT OF ACCOUNTING Accounting is as old as money itself.

In India, Chanakya in his Arthashastra emphasized the existence and need of proper accounting and auditing. However, the modern system

Self-Instructional Material 7 Accounting: Meaning, Scope and Principles NOTES

of accounting owes its origin to Pacoili, who lived in Italy in the 18th century. In those early days business organisations and transactions were not so complex due to their being small and easily manageable by the proprietor himself. Things have changed vastly during the last fifty years. The advent of the

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Industrial Revolution resulted in large scale production, cut-throat competition and widening of the market. This has also reduced the effectiveness of personal supervision resulting in the decentralisation of authority and responsibility. Today there is a greater need for co- ordination and control. Old technique of management by intuition is no longer considered dependable in the situation in which the modern firm operates. Accounting today, therefore, cannot be the same as it used to be about half a century back. It has also grown in importance and change in its structure with the evolution of complex and giant industrial organisations. In the early stages accounting developed as a result of the need of the business firms to keep track of their relationship with outsiders, listing of their assets and liabilities. In recent years changes in technology have also brought a

remarkable change in the field of accounting. The whole concept of accounting has changed. 'It has come to be recognized as a tool for mastering the various economic problems which a business organisation may have to face. It systematically writes the economic history of the organisation. It provides information that can be drawn upon by those responsible for decisions affecting the organisation's future. This history is written mostly in quantitative terms. It consists partly of files of data, partly of reports summarising various portions of these data, and partly of the plans established by management to guide its operations.' 1 1.4 DEFINITION AND FUNCTIONS OF ACCOUNTING

From the above discussion it is clear that over a period of time

the concept of accounting and the role of the accountant have undergone a revolutionary change.

The change has been particularly noticeable during the last fifty years. Earlier accounting was considered simply a process of recording business trans- actions and the role of accountant was that of record-keeper. However, accounting is now considered to be a tool of management providing vital information concerning the organisation's future. Accounting today is thus more of an information system rather than a mere recording system.

It will be useful here to give in a chronological order the definitions given by some of the well-established accounting bodies which show how the concept of accounting has undergone a change over a period of time. In 1941,

the American Institute of Certified Public Accountants (AICPA) defined accounting as follows: '

Accounting is

the

art of recording, classifying and summarising in 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'.

In 1966,

the American Accounting Association (AAA) defined accounting as

follows: '

Accounting is

the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by

users of the information'.

In 1970, the

Accounting

Principles Board (APB) of

the

American Institute of Certified Public Accountants (AICPA) enumerated the functions of accounting as

follows: 'The function of accounting is to provide quantitative information, primarily of financial nature, about economic entities,

that is needed to be useful in making

economic

decisions'.

Thus, accounting may be defined

as the process of

recording, classifying, summarising, analysing and interpreting financial transactions and

communicating the results thereof to persons interested in such information. 1

Mryon J. Gordon Shillinglaw, 'Accounting: A Management Approach', p.3, 4th edition.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

An analysis of the definition brings out the following functions of accounting: 1. Recording. This is the basic function of accounting. It is essentially concerned with not only ensuring that all business transactions of financial character are in fact recorded but also that they are recorded in an orderly manner.

Recording is done in the book 'Journal'. This book may be further sub-divided into various subsidiary books such as Cash Journal (for recording cash transactions), Purchases Journal (for recording credit purchase of goods), Sales Journal (for recording credit sales of goods), etc. The number of subsidiary books to be maintained will be according to the nature and size of the business. 2. Classifying. Classification is concerned with the systematic analysis of the recorded data, with a view to group transactions or entries of one nature at one place. The work of classification is done in the book termed as 'Ledger'. This book contains on different pages

individual account heads under which all financial transactions of similar nature are collected. For example,

there may be separate account heads for Travelling Expenses, Printing and Stationery, Advertising etc. All expenses under these heads, after being recorded in the Journal, will be classified under separate heads in the Ledger. This will help in finding out the total expenditure incurred under each of the above heads. 3. Summarising. This involves presenting the classified data in a manner which is understandable and useful to the

internal as well as external end-users of accounting statements. This process leads to the

preparation of the following statements: (i) Trial Balance, (ii) Income Statement, and (iii) Balance Sheet. 4. Dealing with financial transactions. Accounting records only those transactions

and events in terms of money which are of a financial character. Transactions which are not of a financial character are not recorded in the books of account. For example, if a company has got a team of dedicated and trusted employees, it is of great use to the business but since it is not of a financial character and capable of being expressed in terms of money, it will not be recorded in

the books of the business. 5. Analysing and Interpreting. The recorded financial data is analysed and interpreted in a manner that the end-users can make a meaningful judgement about the financial condition and profitability of the business operations. The data is also used for preparing the future plan and framing of policies for executing such plans. A distinction here can be made between the two terms—'Analysis' and 'Interpretation'. The term 'Analysis' means methodical classification of the data given in the financial statements. The figures given in the financial statements will not help one unless they are put in a simplified form. For example, all items relating to 'Current Assets' are put at one place while all items relating to 'Current Liabilities' are put at another place. The term 'Interpretation' means explaining the meaning and significance of the data so simplified. However both 'Analysis' and 'Interpretation' are complementary to each other. Interpretation requires Analysis, while Analysis is useless without Interpretation. 6.

Communicating. The accounting information after being meaningfully analysed and interpreted has to be communicated in a proper form and manner to the proper person. This is done through preparation and distribution of accounting reports, which include, besides the usual income statement and the balance sheet, additional information in the form of accounting ratios, graphs, diagrams, funds flow statements, cash flow statements etc. The initiative, imagination and innovative ability of the accountant are put to test in this process. 1.5 BOOKKEEPING AND ACCOUNTING Some people take bookkeeping and accounting as synonymous terms, but they are different from each other.

Self-Instructional Material 9 Accounting: Meaning, Scope and Principles NOTES BookKeeping (i) Bookkeeping is mainly concerned with recording of financial data relating to business operations in a significant and orderly manner. (ii) A bookkeeper may be responsible for keeping all the records of a business or only of a minor segment, such as a position of the Customers' accounts in a departmental store. (iii) A substantial portion of the bookkeeper's work is of a clerical nature and is increasingly being accomplished through the use of mechanical and electronical devices. Accounting (i) Accounting is primarily concerned with designing systems for recording, classifying and summarising the recorded data and interpreting them for internal and external

end-users. (ii) Accountants often direct and review the work of the bookkeepers. The larger the firm, the greater is the responsibility of the accountant. (iii)The work of an accountant in the beginning may include some bookkeeping. An accountant is required to have a much higher level of knowledge, conceptual understanding and analytical skill than what is required for a book-keeper. The difference between bookkeeping and accounting can be well understood with the help of the following example: If A sells goods to B on credit, the only fundamental principle involved is of 'dual aspect' and to give a true picture of the transaction, both the aspects must be considered. On the one hand, A has lost one assets i.e. good and

on the other hand, he has obtained another asset i.e. a 'debt due from B'. The book-keeper should debit B's account in A's books and credit the sales account. However, if at the end of a year, A has got some stock of goods with him, it should be properly valued in order to ascertain the true profit of the business. The principle to be followed in valuing the stock and making adjustment will have to be made before the books of account can be closed so that true profit or loss can be ascertained;

these

are all matters of accounting. Thus, book-keeping is more of routine work and a book- keeper, if instructed properly, can record the routine transactions quite efficiently even if he does not know much

of

accounting principles. 1.6 IS ACCOUNTING A SCIENCE OR AN ART? Any organised knowledge based on certain basic principles is a 'science'. Accounting is also a science. It is an organised knowledge based on scientific principles which have been developed as a result of study and experience. Of course, accounting cannot be termed as a 'perfect science' like physics or chemistry where experiments are carried out and perfect conclusions drawn. It is a social science depending much on human behaviour and other social and economic factors. Thus, perfect conclusions cannot be drawn. Some people therefore, though not very correctly, do not take accounting as a science. Art is the technique which helps us in achieving our desired objective. Accounting is definitely an art.

The American Institute of Certified Public Accountants also

defines accounting as 'the art of recording, classifying and summarising

the financial transactions'. Accounting helps in achieving our desired objective of maintaining proper accounts, i.e.,

to know the profitability and the financial position of the

business, by maintaining proper

accounts.

Check Your Progress 1. State whether each of the following statement is 'True or False' (a)

Accounting is the language of business. (b) Accounting can be useful only for recording business transactions. (c) Accounting records only transactions which are of a financial character. (d) Book-keeping and accounting are synonymous terms. (e) Accounting is as old as money itself.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES 1.7

END-USERS OF ACCOUNTING INFORMATION Accounting is of primary importance to proprietors and the managers. However, other persons such as creditors, prospective investors, employees, etc. are also interested in the accounting information. 1. Proprietors. A business is done with the objective of making profit. Its profitability and financial soundness are, therefore, matters of prime importance to the proprietors who have invested their money in the business. 2. Managers. In a sole proprietary business, usually the proprietor is the manager. In case of a partnership business either some or all the partners participate in the management of the business. They, therefore, act both as managers as well as owners. In case of joint stock companies, the relationship between ownership and management becomes all the more remote. In most cases the shareholders act merely as renters of capital and the management of the company passes into the hands of professional managers. The accounting disclosures greatly help them in knowing about what has happened and what should be done to improve the profitability and financial position of the enterprise in the period to come. 3. Creditors. Creditors are the persons who have extended credit to the company. They are also interested in the financial statements because they will help them in ascertaining whether the enterprise will be in a position to meet its commitment towards them regarding both payment of interest and principal. 4. Prospective Investors. A person who is contemplating an investment in a business will like to known about its profitability and financial position. A study of the financial statements will help him in this respect. 5. Government. The Government is interested in the financial statements of business enterprise on account of taxation, labour and corporate laws. If necessary, the Government may ask its officials to examine the accounting records of a business. 6. Employees. The employees are interested in the financial statements on account of various profit sharing and bonus schemes. Their interest may further increase in case they purchase shares of the companies in which they are employed. 7. Citizen. An ordinary citizen may be interested in the accounting records of the institutions with which he comes in contact in his daily life, e.g., bank, temple, public utilities such as gas, transport and electricity companies. In a broader sense, he is also interested in the accounts of a Government Company, a public utility concern etc., as a voter and a tax payer. 1.8 ACCOUNTING AND OTHER DISCIPLINES Accounting is closely related with other disciplines. It is, therefore, necessary for the accountant to have a working knowledge of these disciplines for effective performance of his job. The relationship between accounting and some of the other disciplines is discussed in the following pages: Accounting and Economics Economics is concerned with rational decision making regarding efficient use of scarce resources for satisfying human wants. The efficient utilisation of resources, particularly when they are scarce, is important both from the view point of a business firm and of the country as a whole. Accounting is considered to be a system which provides appropriate information to the Management for taking rational decisions. Of course, some non-accounting information is also useful for decision making. However, accounting provides a major and dependable data base for decision making. The basic objective of management of a business organisation is to maximise the wealth of its owners. This is also the Self-Instructional Material 11 Accounting: Meaning, Scope and Principles NOTES

objective of economics. Efficient use of scarce resources results in maximising the wealth of the nation. Thus, accounting and economics both have a similarity in the sense that both seek optimum utilisation resources of the firm or the nation, as the case may be. Moreover, the accountants have learnt about the value of assets, income, capital maintenance etc. from economists. Of course, accountants have suitably adapted these ideas keeping in view their own requirements and limitations. For instance, according to economists the value of an asset is the present value of all future earnings that can be derived from the asset. However, it is a real difficult or almost impossible task for one to estimate correctly

the

future earnings, particularly when an asset has a very long life—say 50 years or more. Accountants have therefore adopted a realistic basis for valuation of asset—the cost or the price paid for the acquisition of the asset. Similarly, the accountant's concept of marginal cost is different from the economist's concept of marginal cost. According to the accountants the marginal cost represents the variable cost, i.e., the cost which varies in direct proportion of output. Such cost remains fixed per unit of output. However, according to economists, the marginal cost refers to the cost of the producing one additional unit. Such cost per unit may increase or decrease depending upon the law of returns. For example, in the case of the law of increasing returns, the cost per unit would decrease, while in the case of the law of decreasing returns, the cost per unit would increase. Accounting and Statistics Statistics is the science of numbers. It is concerned with numerical data as well as various statistical techniques are now increasingly used for managerial decision making. Accounting is an important information tool. It provides significant information about the working of a business firm to the outsiders viz. shareholders, creditors, financial institutions, etc. and the insiders, i.e., the management. Accounting has a close relationship with statistics. A number of statistical techniques are used in collection, analysis and interpretation of the accounting data. For instance, computation of accounting ratios is based on

statistical method, particularly averaging. Similarly the technique of regression is being increasingly used for forecasting, budgeting and cost control. The techniques of standard deviation, co-efficient of variation are used for capital budgeting decisions. The technique of index numbers is used for computation of the present value of an asset in case of accounting for price level changes. Accounting and Mathematics Accounting bears a close relationship with mathematics too. As a matter of fact the dual aspect concept which is the basic concept of accounting is expressed in the form of a mathematical equation. It is popularly termed as 'accounting equation'. The knowledge of mathematics is now considered to be a prerequisite for accounting computations and measurements. For example, computation of depreciation, ascertaining the cash price in case of hire purchase and instalment systems, determination of the loan instalment, settling of lease rentals—all require use of mathematics for accountants. Accountants are now increasingly making

the

use of statistics and econometric models for decision making. The use of the technique of operation research has made accounting all the more mathematical. In view of these developments, it would not be incorrect to say that a good accountant has to be a good mathematician too. Accounting and Law A business entity operates within a legal framework. An accountant records, classifies, summarises and presents the various transactions. Naturally these transactions have to be in accordance with the rules and regulations applicable to such business entities. There are laws which are applicable in general to all business transactions, e.g., the 12

Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

Check Your Progress 2. The prime function of accounting is to: (a) record economic data (b)provide the informational basis for action (c) classifying and recording business transactions (d) attain non-economic goals. 3. The basic function of financial accounting is to: (a) record all business transactions (b) interpret the financial data (c) assist the management in performing functions effectively 4. Management Accounting provides invaluable services to management in performing: (a)all management functions. (b) interpreting the financial data. (c) controlling functions. 5.Bookkeeping is mainly concerned with: (a) recording of financial data relating to business operations (b) designing the systems in recording, classifying, summarising the recorded data. (c) interpreting the data for internal and external end- users.

Indian Contract Act, the Sale of Goods Act, the Negotiable Instruments Act, etc. There are laws governing specific business entities, e.g., the Companies Act is applicable to joint stock companies, the Banking Regulation Act is applicable to banking companies, the Insurance Act is applicable to insurance companies etc. While preparing the accounts of different business entities, the accountant has to be keep in mind the specific provisions given by the specific Acts applicable to the specific business entities. Similarly, there are a number of industrial laws such as the Factories Act, the Payment of Wages Act, the Minimum Wages Act, the Employees Provident Fund and Misc. Provisions Act, etc. governing payment of wages, salaries or other benefits to employees. The accountant has to abide by the provisions of these Acts and prepare and maintain appropriate records keeping in mind their provisions. 1.9 ROLE OF THE ACCOUNTANT Accountants are the persons who practise the art of accounting. The Accounting System and the Accountants who maintain it, provide useful services to Society. Accountants in Public Practice Accountants in public practice offer their services for conducting financial audits, cost audits, designing of accounting systems and rendering other professional services for a fee. Such accountants are usually members of professional bodies. In our country there are two recognised professional bodies for this purpose. They are (i)

the Institute of Chartered Accountants of India and (ii) the Institute of Cost and Works Accountants of India. The accountants in public practice are also known as professional accountants. Such accountants are the members of professional accounting bodies. These accounting bodies usually require

the following from their members: (i) Getting

themselves trained in the prescribed manner over a prescribed period. (ii) Passing the examination conducted by the professional bodies. (iii) Undertaking to observe the generally accepted accounting principles enun- ciated by the professional bodies concerned. (iv) Observing the Code of Ethics laid down by the concerned accounting body. (v) Subjecting themselves to disciplinary proceedings whenever it is alleged that the member has violated the Code of Ethics laid down by the concerned body. Accountants in Employment These are accountants who are employed in non-business entities or business entities. Non-business entities are a diverse set of organisations including Educational Institutions, Government, Churches, Museums, Hospitals, etc. Their object is not to earn profit. The accountants employed by business entities are frequently called Management Accountants since they report to, and are the

part of, the entity's management. These accountants provide information for the tax returns of the business, budgeting, routine operating decisions, investment decisions, performance evaluation and external financial reporting. Most of these accountants are also members of a professional Accounting Body.

Of course it

is not necessary. Accountants' Services The services rendered by accountants to society can be summarised as follows: 1. Maintenance of Books of Accounts. An accountant keeps a systematic record of the transactions entered by a business firm or an institution in the normal course of its operation. This helps the organisation in ascertaining the profit or loss made for a particular period and also the financial position of the organisation as on a particular date.

Self-Instructional Material 13 Accounting: Meaning, Scope and Principles NOTES

The advantages derived through maintenance of a systematic record of all transactions can be summarised as follows: (a) Help to Management. Accounting is an important managerial tool since it provides the management adequate information for its effective functioning. The basic functions of the management are planning, controlling, co-ordinating, motivating and communicating. Accounting helps the management in planning by making available the relevant data after pruning and analysing it suitably for effective planning and decision-making. Controlling involves evaluation of performance keeping in view that the actual performance coincides with the planned one and remedial measures are taken in the event of variation between the two. The techniques of budgeting control, standard costing and departmental operating statements greatly help in performing these func- tions. Co-ordinating involves interlinking different divisions of the business enterprise in a way so as to achieve the objectives of the organisation as a whole. Thus, perfect coordination is required among production, purchase, finance, personnel and sales departments. Effective coordination is achieved through departmental budgets and reports which form the nucleus of Management Accounting. Motivating involves maintenance of a high degree of morale in the organisation. Conditions should be such that each person gives his best to realise the goals of the enterprise. The superior should be in a position to find out whom to promote or demote or to reward or penalise. Periodical departmental profit and loss accounts, budgets and reports go a long way in achieving these objectives. Communicating involves transmission of data results etc., both to the insiders as well as the outsiders. Accounting provides information both to the insiders, i.e., management and the outsiders i.e. the creditors, prospective investors, shareholders, etc. (b) Replacement of memory. A person cannot remember everything about his business transactions since human memory has its own limitations. It is, therefore, necessary that the transactions are recorded in the books of account at the earliest. This considerably relieves strain on one's memory. (c) Comparative study. A system of recording the business transactions will help a business entity to make a comparative study and evaluation of its performance. (d) Acceptance by tax authorities. Properly maintained accounting records are accepted by Income Tax or Sales Tax authorities. (e) Evidence in court. Properly maintained accounting records are often taken as good evidence by the court of law. (f) Sale of business. Properly maintained accounting records will help a business entity to fetch a proper price in the event of sale of the business. 2. Auditing of Accounts. The function of auditing is also performed by

the

accountants. Auditing is concerned with verification of accounting data for determining the accuracy and reliability of accounting statements and reports. It may be classified into two categories: (i) Statutory Audit, and (ii) Internal Audit. Statutory Audit. Statutory Audit is required to be done because of the provisions of law. For example, under the Companies Act every company has to get its accounts audited by a qualified Chartered Accountant. The Statutory Auditor has to report whether in his opinion the profit and loss account shows the true profit or loss for the year and the balance sheet shows

a true and fair view of the state of affairs of the

business on the balance sheet date.

Internal Audit. Internal audit is a review of various operations of the company of its records by the staff specially appointed for this purpose. Many large organisations have a system of internal audit within the organisation as an integral part of internal

14 Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

control. They have a separate internal audit department for this purpose. Generally the internal audit department is also headed by a professionally qualified accountant. 3. Taxation. Accountants also handles taxation matters of a person or a business organisation. Since an accountant has a comprehensive knowledge about the

different accounting matters, he is in a position to present the case of his client before the Tax Authorities in the proper perspective. He also assists his client/organisation in reducing tax burden and

making proper tax planning. 4. Financial Services. An accountant being well

familiar with legal, accounting and taxation matters, can properly advise individual firms with regard to managing their financial affairs. For instance, he can assist his clients in selecting the most appropriate investment or insurance policy. Professional accountants have also

these days started management consultancy services. Such services include designing of Management Information Systems, Corporate Planning, Conducting of Feasibility Studies, Executive Selection Services, etc. In conclusion it can be said that the accountant is almost a caretaker of the society's resources. He sees that not only proper accounting is kept of the society's resources, but they are also used in the optimum manner. As a matter of fact, accountants will be presented with many opportunities for innovative actions in the global economic environment. In addition to their role of recording business transactions, providing accurate timely and relevant information, they will also be accepted to participate as business consultants and partners with management in the strategic planning process. Thus, there are tremendous possibilities for the accountants to shine as a professional group in the years to come. To fit into this role it is necessary that

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accountants develops effective communication abilities, adopt a structured approach, flexibility and keep themselves aware

of

the latest evolving technologies in the profession. 1.10

BRANCHES OF ACCOUNTING In order to satisfy needs of different people interested in accounting information, different branches of accounting have developed.

They can broadly be classified into two categories. ACCOUNTING

FINANCIAL ACCOUNTING MANAGEMENT ACCOUNTING COST ACCOUNTING (i)

Financial Accounting. It is the original form of accounting. It is mainly confined to the preparation of financial statements for the use of outsiders like shareholders, debenture holders, creditors, banks and financial institutions.

The financial statements, i.e., the Profit and Loss Account

and the Balance Sheet,

show them the manner in which operations of the business have been conducted during a specified period. (ii) Management Accounting. It is

accounting for the management, i.e., accounting which provides necessary information to the management for discharging its functions.

According to the Chartered Institute of Management Accountants, London, 'Man- agement

accounting

is

the application of professional information in such a way as to assist

the

management

in the formation of policies and in the

planning and control of the operations of the undertaking."

It covers all arrangements and combinations or adjustments of the orthodox information to provide the Chief Executive with the information from which he can control the business, e.g., information about funds, costs, profits, etc.

Management accounting covers various areas such as cost accounting, budgetary control, inventory control, statistical methods, internal auditing etc.

Self-Instructional Material 15 Accounting: Meaning, Scope and Principles NOTES 1.11

DIFFERENCE BETWEEN MANAGEMENT ACCOUNTING AND FINANCIAL ACCOUNTING Financial accounting and management accounting are closely interrelated since man- agement accounting is to a large extent rearrangement of the data provided by financial accounting. Moreover, all accounting is financial in the sense that all accounting systems are in monetary terms and the management is responsible for the contents of the financial accounting statements. In spite of such a close relationship between the two, there are certain fundamental differences. These differences can be laid down as follows: 1. Objectives. Financial accounting is designed to supply information in the form of Profit and Loss Account and Balance Sheet to external parties like shareholders, creditors, banks, investors and Government. Information is supplied periodically.

Management accounting is designed principally for internal use by the management. 2. Analysing performance. Financial accounting portrays the position of business as a whole.

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financial statements like income statement and balance sheet report on overall performance or status of the business. On the other hand management accounting directs its attention to the various divisions, departments of the business and reports about the profitability, performance etc., of each of them. Financial accounting deals with the aggregates and therefore cannot reveal what part of the management action is going wrong and why. Management accounting provides detailed analytical data for these purposes. 3. Data used. Financial accounting is concerned with the monetary record of past events. It is a post-mortem analysis of past activity and therefore out of date for management action. Management accounting for future and, therefore, it supplies data both for present and future duly analysed and in detail

in 'management language' so that it becomes a basis for management action. 4. Monetary measurement. In financial accounting only such economic events find a place which can be described in money. However the management is equally interested in non-monetary economic events viz. technical innovations, personnel in the organisation, changes in the value of money, etc. These events affect the management's decisions and therefore management accounting cannot afford to ignore them. For example, change in the value of money may not find a place in financial accounting on account of 'going concern concept', but while effecting an insurance policy on an asset or providing for replacement of an asset, the management will have to take into account this factor. 5. Periodicity of reporting. The period of reporting is much longer in financial accounting as compared to management accounting. The Income Statement and the Balance Sheet are usually prepared yearly or in some cases half-yearly. Management requires information at frequent intervals, and, therefore, financial accounting fails to cater to the needs of the management. In management accounting there is more empha- sis on furnishing information quickly and at comparatively short intervals as per the requirements of the management. 6. Precision. There is less emphasis on precision in case of management accounting account- ing

as compared to financial accounting since the information is meant for internal consumption. 7. Nature. Financial accounting is more objective while management accounting is more subjective. This is because management accounting is fundamentally based on judgement rather than on measurement. 8. Legal compulsion. Financial accounting has more or less become compulsory for every business on account of the legal provisions of one or the other Act. However, a business is free to install or not to install, a system of management accounting. The above points of difference between financial accounting and management accounting prove that management accounting has a flexible approach as compared to

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rigid approach in the case of financial accounting. In brief, financial accounting simply shows how the business has moved in the past, while management accounting shows how the business has to move in the future. 16

Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES 1.12

IMPORTANCE OF ACCOUNTING Accounting has gained immense importance due to increase in the size of business, divorce of ownership from management and increase in globalization and competition. It has now become an important information tool providing recourse to various individuals

and

groups about the economic activities of the organization. It is the means by which most business information is communicated to different stakeholders, viz., owners, creditors, employees, prospective investors, etc. The importance of accounting can be judged from the following services provided by accounting: 1. It keeps systematic records. Accounting is done to keep a systematic record of financial transactions. In the absence of accounting there would have been terrific burden on human memory which

is most cases would have been

impossible to bear. 2. It protects business properties. Accounting provides protection to business properties from unjustified and unwarranted use. This is possible on account of accounting supplying the following information to the manager or the proprietor. (i) The amount of the propreitor's funds invested in the business (ii) How much the business has to pay to others (iii) How much the business has to recover from others (iv) How much the business has in the form of (a) fixed assets, (b), cash in hand, (c) cash at

bank, (d) stock of raw materials, work-in-progress and finished goods

Information about the above matters helps the proprietor in assuming that the funds of the business are not

unnecessarily kept idle or underutilised. 3. It ascertains the operational profit or loss. Accounting helps in ascertaining the net profit earned or loss suffered

on account of carrying on with the business.

This is done by keeping a proper record of revenues and expenses of a particular period. The Profit and Loss Account is prepared at the end of

a period and if the amount of revenue for the period is more than the expenditure incurred in earning that revenue, there is a profit. In case the expenditure exceeds the revenue, there is a loss. Profit and Loss Account will help the

management, investors, creditors, etc. in knowing whether running of the business has proved to be remunerative or not. In case it has not proved to be remunerative or profitable, the cause of such a state of affairs will be

inves- tigated

and necessary remedial steps will be taken. 4. It ascertains the financial position of business. The Profit and Loss Account gives the amount of

profit or loss made by the business during a particular period.

How- ever, it is not enough. The businessman must know about his financial position, i.e., where he stands, what he owes and what he owns.

This objective is

served by the Balance Sheet or Position Statement. The

Balance sheet is a statement

of assets and liabilities of

the business on a particular date.

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serves as a barometer for ascertaining the financial health of the business. 5. It facilitates rational decision making. Accounting these days has taken upon itself the task of collection, analysis and reporting of information at the required points of time to the required levels of authority in order to facilitate rational decision making. The American Accounting Association has also stressed this point while defining the term 'accounting' when it says that accounting is, '

the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by

users of the information."

Of course, this is by no means an easy task. However,

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accounting bodies all over the world and particularly the International Accounting Stan- dards Committee, have been trying to grapple with this problem and have achieved success in laying down some basic postulates on the basis of which accounting statements have to be prepared. These postulates have been explained in the next chapter.

Self-Instructional Material 17 Accounting: Meaning, Scope and Principles NOTES 1.13

MEANING OF ACCOUNTING PRINCIPLES

Accounting principles 1 may be defined as those rules of action adopted by accountants universally while recording accounting transactions.

They are a

body of doctrines commonly associated with the theory and procedures of accounting,

serving as an explanation of current practices and as a guide for selection of conventions or procedures where alternatives

exist'.

These

principles can be classified into two categories: (i) Accounting Concepts 2 (

ii) Accounting Conventions Accounting Concepts

The term 'concepts' includes

those basic assumptions or conditions

upon which the science of accounting is based. The following are

the important accounting concepts: (i) Separate

Entity

Concept (ii) Going Concern Concept (iii)

Money Measurement Concept (iv)

Cost Concept (v) Dual Aspect Concept (

vi)

Accounting Period Concept (

vii) Periodic Matching of Cost and Revenue Concept (

viii) Realisation Concept Accounting Conventions The term 'conventions' includes

those customs or traditions which guide the accountant

while preparing the accounting statements. The following are the important accounting conventions. (i) Convention of Conservatism (

ii) Convention of Full Disclosure (iii) Convention of Consistency (

iv) Convention of Materiality ACCOUNTING

PRINCIPLES ACCOUNTING ACCOUNTING CONCEPTS CONVENTIONS Perio- dic Money mat- Con- Full Sepa- Going mea- Dual Accou- ching Real- serva- disclo- Consis- Mate- rate con- sure- Cost aspect nting of cost isation tism sure tency riality entity cern ment period and revenue

Each of the above concepts and conventions are being explained below. 1.14 ACCOUNTING CONCEPTS 1. Separate entity concept. In accounting business is considered to be a separate entity from the proprietor(s). It may appear to be ludicrous that one person can sell 1

Also termed as 'Accounting Standards'. 2 Also termed as 'Accounting Postulates'.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

goods to himself but this concept is extremely helpful in keeping

business affairs strictly free from the effect of private affairs of the proprietor(s). Thus, when one person invests Rs 10,000 in business, it will be deemed that the proprietor has given that much

of

money to the business which

will be shown as a 'liability'

in the books of the business.

In case the proprietor withdraws Rs 2,000 from the business, it will be charged to him and the net amount payable by the business will be shown only as Rs 8,000. The concept of separate entity is applicable to all forms of business

organisations. For example, in case of a partnership business or sole proprietorship business, though the partners or sole proprietor are not considered as separate entities in the eyes of law, but for accounting purposes they will be considered as separate entities. 2.

Going concern concept. According to this concept it is assumed

that the business will continue for a fairly long time to come.

There is neither the intention nor the necessity to liquidate the particular business venture in

the foreseeable future. On account of this concept, the accountant, while valuing the assets, does not take into account forced sale value of assets. Moreover, he charges depreciation on fixed assets on the basis of their expected lives rather than on their market value.

It should be noted that

the 'going concern concept' does not imply permanent continuance of the enterprise. It rather

presumes that the enterprise will continue in operation long enough to charge against income, the cost of fixed assets over their useful lives, to amortize over

an

appropriate period other costs which have been deferred under the actual or matching concept, to pay liabilities when they become due and to meet

the

contractual commitments. Moreover, the concept applies to the business as a whole.

When an enterprise liquidates a branch or one segment of its operations, the ability of the enterprise to continue as a going concern is normally not

impaired. The enterprise will not be considered as a going concern when it has gone into liquidation or it has become insolvent. Of course, the receiver or the liquidator may endeavour to carry on business operations for some period pending arrangement with the creditors or final buyer for the sale of the business as a going concern; the going concern status of the concern will stand terminated from the date of his appointment or will be at least regarded as suspended, pending the results of his efforts. 3.

Money measurement concept. Accounting records only monetary transactions.

Events or transactions which cannot be expressed in money do not find place in the books

of accounts though they may be very useful for the business. For example, if a business has got a team of dedicated and trusted employees, it is definitely an asset to the business but since their monetary measurement is not possible, they are not shown in the books of the business. Measurement of business in money helps in understanding the state of affairs of the business in a much better way. For example, if a business owns Rs 10,000 of cash, 600 kg of raw materials, two trucks, 1,000 square feet of building space etc., these amounts cannot be added together to produce a meaningful total of what the business owns. However, if these items are expressed in monetary terms such as Rs 10,000 of cash, Rs 12,000 of raw materials, Rs 2,00,000 of trucks and Rs 50,000 of building, all such items can be added and a much more intelligible and precise estimate about the assets of the business will be available. 4. Cost concept. The concept is closely related to

going concern concept. According to this concept: (a) an asset is ordinarily entered in the accounting records at the price paid to acquire it, and (b)

this cost is the basis for all subsequent accounting for the

assets. If a business buys a plot of land for Rs 50,000, the asset would be recorded in the books at Rs 50,000 even if its market value at that time happens to be Rs 60,000. In case a year later the market value of this assets

comes down to Rs 40,000, it will ordinarily continue to be shown at Rs 50,000 and not at Rs 40,000.

Self-Instructional Material 19 Accounting: Meaning, Scope and Principles NOTES

The cost concept does not mean that the asset will always be shown at cost.

It has also been stated above that cost becomes the basis for all future accounting for the asset. It means that an asset is recorded at cost at the time of its purchase, but it may systematically be reduced in its value by charging depreciation. Cost concept has the advantage of bringing objectivity in the preparation and presentation of financial statements. In the absence of this concept

the figures shown in the accounting records would have depended on the subjective views of a person. However, on account of continued

inflationary tendencies the preparation of financial statements on the basis of historical costs has become largely irrelevant for judging the financial position of the business.

This is the reason for the growing importance of inflation accounting. 5. Dual aspect concept. This is the basic concept of accounting. According to this concept every business transaction has a dual effect. For example, if A starts a business with a capital of Rs 10,000, there are two aspects of the transaction. On the one hand the business has assets of Rs 10,000, while on the other hand, the business has to pay

to the proprietor a sum of Rs 10,000 which is taken as proprietor's capital.

This expression can be shown in the form of following equation: Capital (Equities) = Cash (Assets) 10,000 = 10,000 The term 'assets' denotes the resources owned by a business while the term 'Equities' denotes the claims of various parties against the assets. Equities are of two types. They are: owners' equity and outsiders' equity. Owners' equity (or capital) is the claim of owners against the assets of the business while outsiders' equity (for liabilities) is the claim of outside parties, such as creditors, debenture-holders etc., against the assets of the business. Since all assets of the business are claimed by someone (either owners or outsiders),

the total assets will be equal to total

of

liabilities, Thus: Equities = Assets or Liabilities + Capital = Assets In

the example given above, if the business purchases furniture worth Rs 5,000 out of the money provided by A, the situation will be as follows: Equities = Assets Capital Rs 10,000 = Cash Rs 5,000 + Furniture Rs 5,000 Subsequently, if the business borrows Rs 30,000 from a bank, the new position would be as follows: Equities = Assets Capital Rs 10,000 + Bank Loan Rs 30,000 = Cash 35,000 + Furniture Rs 5,000. The term 'accounting equation' is also used to denote the relationship of equities to assets. The equation can be technically stated as 'for very debit, there is an equivalent credit'. As a matter of fact the entire system of double entry bookkeeping is based on this concept. This has been explained in detail later in the unit. 6.

Accounting period concept. According to this concept, the life of the business is divided into

appropriate segments for studying the results shown by the business after each segment. This is because though the life of the business is considered to be indefinite (according to going concern concept), the measurement of income and studying the financial position of the business after a very long period would not be helpful in taking proper corrective steps at the appropriate time. It is, therefore, absolutely necessary that after each segment or time interval the businessman must 'stop' and 'see back', how things are going. In accounting, such a segment or time interval is called 'accounting period'. It is usually of a year.

At the end of each accounting period an Income Statement and a Balance Sheet are prepared. The Income Statement discloses the profit or loss made by

the

business

during the accounting period, while the Balance Sheet depicts the financial

position of the business

as on

the last day of the

accounting period. While preparing these statements a proper distinction has to be made between capital and revenue expenditure.

Check Your Progress 6. State whether each of the following statement is 'True' or 'False': (a) Accounting principles are

rules of action or conduct which are adopted by the accountants universally while recording accounting transactions. (b) It is on the basis of the going concern concept that the assets are always valued at market price. (c) The convention of disclosure implies that all material information should be disclosed in the accounts. (d) The convention of conservatism takes into account all prospective profits but leaves out all prospective losses. (e) Since the life of the business is assumed to be indefinite, the financial statements of the business should be prepared only when it goes into liquidation. (f) In accounting all business transactions are recorded as having a dual aspect.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES 7.

Periodic matching of costs

and revenue concept. This is based on the accounting period concept. The paramount objective of running a business is to earn profit. In order to ascertain the profit made by the business during a

period, it is necessary that 'revenues' of the period should be matched with the costs (expenses) of the period.

The term matching, means appropriate association of related revenues and expenses.

In other words income made by the business during a period can be measured

only when the revenue earned during a period is compared with the expenditure incurred for earning that revenue. The

question when the payment was received or made is 'irrelevant'.

For example, if a salesman is paid commission in January, 1999, for sales made by him in December, 1998, the commission paid to the salesman in January, 1999 should be taken as the cost for sales made by him in December, 1998. This means that revenues of December, 1998 (i.e., sales) should be matched with the costs incurred for earning that revenue (i.e., salesman's commission) in December, 1998 (though paid in January, 1999).

On account of this concept, adjustments are

made for all outstanding expenses, accrued incomes, prepaid expenses and unearned incomes, etc., while preparing the final accounts at the end of the accounting period. 8. Realisation concept.

According to this concept

revenue is recognised when a sale is made. Sale is considered to be made at the point when the property in goods passes to the buyer and he becomes legally liable to pay. This can be well understood with the help of following example: A places an order with B for supply of certain goods yet to be manufactured. On receipt of order, B purchases raw materials, employs workers, produces the goods and delivers them to A. A makes payment on receipt of goods. In this case the sale will be presumed to have been made not at the time of receipt of the order for the goods but at the time when goods are delivered to A. However, there are certain exceptions to this concept: (i) In case of hire purchase the ownership of the goods passes to the buyer only when the last instalment is paid, but sales are presumed to have been made to the extent of instalments received and instalments outstanding (i.e. instalments due but not received). (ii) In case of contract accounts, though the contractor is liable to pay only when the whole contract is completed as per terms of the contract, the profit is calculated on the basis of work certified year after year as per certain accepted accounting norms. 1.15

ACCOUNTING CONVENTIONS 1. Conservatism. In the initial stages of accounting, certain anticipated profits which were recorded, did not materialise. This resulted in less acceptability of accounting figures by the end-users. On account of this reason,

the accountants follows the rule 'anticipate no profit but provide for all possible losses' while recording business transactions. In other words, the accountant follows the policy of 'playing safe'. On account

of this convention, the inventory

is valued 'at cost or market price whichever is less'.

Similarly

a provision is made for possible bad and doubtful debts out of

the

current year's profits. This concept principally affects the category of current assets. The convention of conservatism has become

the

target of serious criticism these days, especially on the ground that it goes against the convention of full disclosure. It encourages the accountant to create secret reserves (e.g., by creating excess provision for bad and doubtful debts, depreciation etc.), and the financial statements do not deficit

a true and fair view of state of affairs of the

business. The

Income Statement shows a lower net income, the Balance Sheet understates assets and overstates liabilities. The research studies conducted by the American Institute of Certified Public Accountants have indicated that conservatism concept needs to be applied with much more caution and care if the results reported are not to be distorted. Self-Instructional Material 21 Accounting: Meaning, Scope and Principles NOTES 2.

Full disclosure. According to this convention accounting reports should disclose fully and fairly the information they purport to represent. They should be honestly prepared and sufficiently disclose information which is of material interest to proprietors, present and potential creditors and investors. The convention is gaining more importance because most big businesses are run by joint stock companies where ownership is divorced from management. The Companies Act, 1956, not only requires that

the

Income Statement

and

Balance Sheet of a company must

give a true and fair view of the state of

affairs

of the company

but it also gives the prescribed forms in which these statements are to be prepared. 3 The practice of appending notes to the accounting statements (such as about contingent liabilities or market value of investments) is pursuant to the convention of full disclosure. 3. Consistency. According to this convention

accounting practices should

remain unchanged from one period to another. For example, if

stock is

valued at 'cost or market price whichever is less',

this principle should

be

followed year after year. Similarly, if depreciation is charged on fixed assets according to

a diminishing

balance method, it should be done year after year. This is necessary for the purposes of comparison. However, consistency does not mean inflexibility. It does not forbid introduction of improved accounting techniques. However, if adoption of such a technique results in inflating or deflating the figures of profit as compared to the previous period, a note to that effect should be given in the financial statements. 4. Materiality.

According to this convention the accountant should attach importance to material details and ignore insignificant details. This is because otherwise accounting will be unnecessarily overburdened with minute details. The question of what

constitutes a material detail, is left to the discretion of the accountant. Moreover, an item may be material for one purpose while immaterial for another. For example, while sending each debtor 'a statement of his account', complete details

up

have to be given. However, when a statement of outstanding debtors is prepared for sending to top management, figures may be rounded to the nearest ten or hundred. The Companies Act also permits ignoring of 'paise' while preparing financial statements. Similarly for tax purposes, the income has to be rounded to the

nearest ten. Thus, the term 'materiality' is a subjective term. The accountant should regard an item as material if there is reason to believe that

knowledge of it would influence the decision of the informed investor. According to Kohler, 'Materiality means the characteristic attaching to a statement, fact or item whereby its disclosure or method of giving it expression would be likely to influence the judgement of a reasonable person.'

It should be noted that accounting is a man-made art designed to help man in achieving certain objectives. 'The accounting principles, therefore, cannot be derived from or proven by laws of nature. They are rather in the category of conventions or rules developed by man from experience to fulfill the essential and useful needs and proposes in establishing reliable financial and operating information control for business entities. In this respect, they are similar to principles of commercial and other social disciplines.' 1.16 ACCOUNTING

PRINCIPLES AND THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA

In order to bring about uniformity in terminology, approach and presentation of accounting results, the Institute of Chartered Accountants of India was established on 22 April, 1977, an Accounting Standards Board (ASB). The main function of the ASB is to 3

American Institute of Certified Public Accountants, 'Inventory of Generally Accepted Principles for Business Enterprises.' 22

Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

formulate accounting standards so that such standards will be established by the Council of the Institute of Chartered Accountants. While formulating the accounting standards, the ASB will give due consideration to the International Accounting Standards and try to integrate them to the extent possible. It will also take into consideration the applicable laws, customs, usages and the business environments prevailing in India. Preface to the Statements of Accounting Standards (Revised 2004) The following are the specific features of the Preface to the Statements of Accounting Standards (Revised 2004), issued by the Council of the Institute of Chartered Accountants of India. With the issuance of this revised Preface, the Preface to the Statements of Accounting Standards, issued in January 1979, stands superseded. 1.

Formation of the Accounting Standards Board (1) The Institute of Chartered Accountants of India (ICAI), recognising the need to harmonise the

diverse accounting policies and practices in use in India, constituted the Accounting Standards Board (ASB) on 21 April, 1977. (2)

The composition of the ASB is fairly broad-based and ensures participation of all interest-groups in the standard-setting process. Apart from the elected members of the Council of the ICAI nominated on the ASB, the following are represented on the ASB: (i)

Nominee of the Central Government representing the Department of Company Affairs on the Council of the ICAI (ii) Nominee of the Central Government representing the Office of the Comptroller and Auditor General of India on the Council of the ICAI (iii) Nominee of the Central Government representing the Central Board of Direct Taxes on the Council of the ICAI (iv) Representative

of the Institute of Cost and Works Accountants of India (v) Representative of the Institute of Company Secretaries of India (

vi) Representatives of

Industry Associations, 1 from Associated Chambers of Commerce and Industry (ASSOCHAM), 1 from Confederation of Indian Industry (CII), and 1 from Federation of Indian Chambers of Commerce and Industry (FICCI) (vii) Representative of Reserve Bank of India (viii) Representative of Securities and Exchange Board of India (ix) Representative of Controller General of Accounts (x) Representative of Central Board of Excise and Customs (xi) Representatives of Academic Institutions (1 from Universities and 1 from Indian Institutes of Management) (xii) Representative of Financial Institutions (

xiii) Eminent professionals co-opted by the ICAI (they may be in practice or in industry, government, education, etc.) (xiv) Chairman of the Research Committee and the Chairman of the Expert Advisory Committee of the ICAI, if they are not otherwise members of the Accounting Standards Board (xv) Representative(s) of any other body, as considered appropriate by the ICAI 2. Objectives and Functions of the Accounting Standards Board The following are the objectives of the Accounting Standards Board: (i) To conceive and suggest areas in which Accounting Standards need to be developed *

The Chartered Accountant, p. 972, March 2006.

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ii) To formulate Accounting Standards with a view to assisting the Council of the ICAI in evolving and establishing Accounting Standards in India (iii) To examine how far the relevant International Accounting Standard/International Financial Reporting Standard can be adapted while formulating the Accounting Standard and to adapt the same (iv) To review, at regular intervals,

the

Accounting Standards from the point of view of acceptance or changed conditions, and, if necessary, revise the same (v) To provide, from time to time, interpretations and guidance on Accounting Standards (vi) To carry out such other functions relating to Accounting Standards

The Accounting Standards are issued under the authority of the Council of the ICAI. The ASB has also been entrusted with the responsibility of propagating the Accounting Standards and of persuading the concerned parties to adopt them in the preparation and presentation of financial statements. The ASB will provide interpretations and guidance on issues arising from Accounting Standards. The ASB will also review the Accounting Stan- dards at periodical intervals and, if necessary, revise the same. 3. General Purpose Financial Statements (1) For discharging its functions, the ASB will keep in view the purposes and limitations of financial statements and the attest function of the auditors. The ASB will enumerate and describe the basic concept to which accounting principles should be oriented and state the accounting principles to which the practices and procedures should conform. (2) The ASB will clarify the terms commonly used in financial statements and suggest improvements in the terminology wherever necessary. The ASB will examine the various current alternative practices in vogue and endeavour to eliminate or reduce alternatives within the bounds of rationality. (3) Accounting Standards are designed to apply to the general purpose financial statements and other financial reporting, which are subject to the attest function of the members of the ICAI. Accounting Standards apply in respect of any enterprise (whether organised in corporate, co-operative or other forms) engaged in commercial, industrial or business activities, irrespective of whether it is profit oriented or it is established for charitable or religious purposes. Accounting Standards will not, however, apply to enterprises only carrying on the activities which are not of commercial, industrial or business nature (e.g., an activity of collecting donations and giving them to flood affected people). Exclusion of an enterprise from the applicability of the Accounting Standards would be permissible only if no part of the activity of such enterprise is commercial, industrial or business in nature. Even if a very small proportion of the activities of an enterprise is considered to be commercial, industrial or business in nature, the Accounting Standards would apply to all its activities including, those which are not commercial, industrial or business in nature. (4) The term 'General Purpose Financial Statements' includes balance sheet, statement of profit and loss, a cash flow statement (wherever applicable) and statements and explanatory notes which form part thereof, issued for the use of various stakehold- ers, Governments and their agencies and the public. References to financial

state- ments

in the

Preface and in the standards issued from time to time will be construed to refer to General Purpose Financial Statements. (5) Responsibility for the preparation of financial statements and for adequate disclo- sure

is that of the management of the enterprise. The auditor's responsibility is to form his opinion and report on such financial statements. 4. Scope of Accounting Standards (1) Efforts will be made to issue Accounting Standards which are in conformity with the provisions of the applicable laws, customs, usages and business environment in India. However, if a particular Accounting Standard is found to be not in conformity 24

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with law, the provisions of the said law will prevail and the financial statements should be prepared in conformity with such law. (2) The Accounting Standards by their very nature cannot and do not override the local regulations which govern the preparation and presentation of financial statements in the country. However, the ICAI will determine the extent of disclosure to be made in financial statements and the auditor's report thereon. Such disclosure may be by way of appropriate notes explaining the treatment of particular items. Such explana- tory

notes will be only in the nature of clarification and therefore need not be treated as adverse comments on the related financial statements. (3) The Accounting Standards are intended to apply only to items which are material. Any limitations with regard to the applicability of a specific Accounting Standard will be made clear by the ICAI from time to time. The date from which a particular Standard will come into effect, as well as the class of enterprises to which it will apply, will also be specified by the ICAI. However, no standard will have retroactive application, unless otherwise stated. 5.

Procedure for Issuing an Accounting Standard Broadly, the following procedure is adopted for formulating Accounting Standards: (1) The ASB determines the broad areas in which Accounting Standards need to be formulated and the priority in regard to the selection thereof. (2) In the preparation of Accounting Standards, the ASB will be assisted by Study Groups constituted to consider specific subjects. In the formation of Study Groups, provision will be made for wide participation by the members of the Institute and others. (3) The draft of the proposed standard will normally include the following: (a) Objective of the Standard, (b) Scope of the Standard, (c) Definitions of the terms used in the Standard, (d) Recognition and measurement principles, wherever applicable, (e) Presentation and disclosure requirements. (4) The ASB will consider the preliminary draft prepared by the Study Group and if any revision of the draft is required on the basis of deliberations, the ASB will make the same or refer the same to the Study Group. (5) The ASB will circulate the draft of the Accounting Standard to the Council members of the ICAI and the following specified bodies for their comments: (i) Department of Company Affairs (DCA) (ii) Comptroller and Auditor General of India (C&AG) (iii) Central Board of Direct Taxes (CBDT) (iv)

The Institute of Cost and Works Accountants of India (ICWAI) (v) The Institute of Company Secretaries of India (ICSI) (vi) Associated Chambers of Commerce and Industry (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI) (vii) Reserve Bank of India (RBI) (viii) Securities and Exchange Board of India (SEBI) (ix) Standing Conference of Public Enterprises (SCOPE) (x) Indian Banks' Association (IBA) (xi) Any other : body considered relevant by the ASB keeping in view the nature of the Accounting Standard (6) The ASB will hold a meeting with the representatives of specified bodies to ascer- tain their views on the draft of the proposed Accounting Standard. On the basis of comments received and discussion with the representatives of specified bodies, the ASB will finalise the Exposure Draft of the proposed Accounting Standard.

Self-Instructional Material 25 Accounting: Meaning, Scope and Principles NOTES (7) The

Exposure Draft of the proposed Standard will be issued for comments by the members of the Institute and the public. The Exposure Draft will specifically be sent to specified bodies (as listed above), stock exchanges, and other interest groups, as appropriate. (8) After taking into consideration the comments received, the draft of the proposed Standard will be finalised by the ASB and submitted to the Council of

the ICAI. (9) The Council of the ICAI will consider the final draft of the proposed Standard, and if found necessary, modify the same in consultation with the ASB. The Accounting Standard on the relevant subject will then be issued by the ICAI. (10) For a substantive revision of an Accounting Standard, the procedure followed for formulation of a new Accounting Standard, as detailed above, will be followed. (11) Subsequent to issuance of an Accounting Standard, some aspect(s) may require revision which are not substantive in nature. For this purpose, the ICAI may make limited revision to an Accounting Standard. The procedure followed for the limited revision will substantially be the same as that to be followed for formulation of an Accounting Standard, ensuring that sufficient opportunity is given to various interest groups and general public to react to the proposal for limited revision. 6. Compliance with the Accounting Standards (1) The Accounting Standards will be mandatory from the respective date(s) mentioned in the Accounting standards(s). The mandatory status of an Accounting Standard implies that while discharging their attest functions, it will be the duty of the members of the Institute to examine whether the Accounting Standard is complied within the presentation of financial statements covered by their audit. In the event of any

devia- tion

from the Accounting Standard, it will be their duty to make adequate disclosures in their

audit reports so that the users of financial statements may be aware of such deviation. (2) Ensuring compliance with the Accounting Standards while preparing the financial statements is the responsibility of the management of the enterprise. Statutes govern- ing certain enterprises require of the enterprises that the financial statements should be prepared in compliance with the Accounting Standards, e.g., the Companies Act, 1956 (section211), and the Insurance Regulatory and Development Authority (Prepa- ration of Financial Statements and Auditor's Report of Insurance Companies) Regula- tions, 2000. (3) Financial Statements cannot be described as complying with the Accounting Stan- dards unless they comply with all the requirements of each applicable Standard. Issue of

Accounting Standards. The ASB has so far issued twenty-nine definitive standards. The standards are given on the next page.

Besides the twenty-nine Accounting Standards, the ASB had issued the 'Accounting Terminology' and also prepared a 'Framework for the Preparation and Presentation of Financial Statements'. It has also specified, in consultation with the RBI, modifications with which the Accounting Standards will be applicable to bank and other financial institutions. ASB also carries out the task of revising the Accounting Standards, issue of clarification and guidance notes. In March 2004, ASB issued clarifications interpreting applicability of AS 9, AS 17, AS 18, AS 21, AS 23, and AS 25. An exposure draft of

the revised AS 15 'Employee Benefits' was issued in September 2004 on which the comments were to be received by 30 October, 2004. The revised AS 15 has already been issued. A Guidance Note on ESOP has also been issued. ASB is thus on the move. Its efforts are directed at establishing accounting standards which will be adopted by management of different enterprises and will definitely result in the improvement of quality of presentation of financial statements in our country.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

AS: 1 Disclosure of Accounting Policies The main features of the Standard AS: 1 announced by the ASB, regarding Disclosure of Accounting Policies, are as follows: (1) Fundamental Accounting Assumptions (i) Certain fundamental accounting assumptions underlie the preparation and presentation of financial statements. They are usually not specifically stated because their acceptance and use are assumed. (ii) Fundamental

accounting assumptions are: (a) Going concern The enterprise is normally viewed as a going concern, i.e., as continuing in operation for the foreseeable future. It is assumed that the enterprise has neither the intention nor the necessity of liquidation or of curtailing materially the scale of its operations. (b) Consistency It is assumed that accounting policies are consistent from one period to another. (c) Accrual Revenue and costs are accrued, i.e., recognised as they are earned or incurred (and not as money is received or paid), and recorded in the financial statements of the periods to which they relate (the considerations affecting the process of matching costs with revenues under the accrual assumption are not dealt within this statement). In case any of the above fundamental accounting assumptions is not followed, the fact should be disclosed in the financial statements together with reasons.

No. Title Mandatory from accounting period beginning on or after

AS 1 Disclosure of Accounting Policies 1.4.1991 AS 2 (Revised) Valuation of Inventories 1.4.1999 AS 3 (Revised) Cash Flow Statements 1.4.2001 * AS 4 (Revised) Contingencies and Events 1.4.1995 occurring after Balance Sheet Date AS 5 (Revised) Prior Period and Extraordinary

Items and 1.4.1996 Changes in Accounting Policies AS 6 (Revised) Depreciation Accounting 1.4.1995 AS 7 Accounting for Construction Contracts 1.4.2003 AS 8 Accounting for Research and Development 1.4.1991 * AS 9 Revenue Recognition 1.4.1991 AS 10

Accounting for Fixed Assets 1.4.1991 AS 11 (Revised Accounting for the Effect of Changes in 1.4.2004 2003) Foreign Exchange Rates AS 12 Accounting for Government Grants 1.4.1995 AS 13 Accounting for Investments 1.4.1995 AS 14 Accounting for Amalgamations 1.4.1994 AS 15 Accounting for Retirement Benefits in 1.4.1995 the Financial Statements of Employers AS 15 (Revised Employee Benefits to be notified 2005) AS 16 Borrowing Costs 1.4.2000 AS 17 Segment Reporting 1.4.2001 AS 18 Related Party Disclosures 1.4.2001 AS 19 Leases 1.4.2001 AS 20 Consolidated Financial Statements 1.4.2001 AS 21 Earnings per share 1.4.2001 AS 22 Accounting for Taxes on Income 1.4.2001 AS 23 Accounting for Investments in 1.4.2002 Consolidated Finance Statements

AS 24 Discontinuing Operations 1.4.2004 AS 25 Interim Financial Reporting 1.4.2002 AS 26 Intangible Assets 1.4.2003 AS 27 Financial Reporting of Interest in Joint

Ventures 1.4.2002

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AS 28 Impairment of Assets 1.4.2004** AS 29 Provisions, Contingent Liabilities and Contingent Assets 1.4.2004 * discontinued w.e.f. 1.4.2003 since subject is covered by AS 26: Intangible Assets ** mandatory (i) for enterprises whose debt or securities are listed on a recognised stock exchange in India

and (ii) all other commercial or industrial enterprises whose turnover for the accounting period exceeds Rs 50 crores. (2) Accounting Policies (i) Accounting policies refer to the specific accounting principles and methods of applying those principles adopted by enterprises in the preparation and presentation of financial statements. There is no single list of accounting policies which are applicable to all circumstances. The different circumstances in which the enterprises operate in a situation of diverse and complex economic activity make alternative accounting principles and methods of applying those principles acceptable. The choice of appropriate accounting principles in the specific circumstances of each enterprise calls for considerable judgement by the management of the enterprise. (ii) The following are the examples of the areas in which different accounting policies may be adopted by different enterprises: (a) Methods of depreciation, depletion and amortisation. (b) Treatment of expenditure during the construction. (c) Conversion or

translation of foreign currency items. (d) Valuation of inventories. (e) Treatment of goodwill. (f) Valuation of investments. (g) Treatment of retirement

ben- efits. (

h)Recognition of profit on long-term contracts. (i) Valuation of fixed assets. (j) Treatment of contingent liabilities. The above list of example is not intended to be exhaustive. (iii) The primary consideration in the selection of accounting policies by an enterprise is that the financial statements prepared and presented on the basis of such accounting policy, should represent

a true and fair view of the state of affairs of the

enterprise, as on the

balance sheet date and for the period ended on that date. For this purpose, the major considerations governing the selection of and application of accounting policies are: (a) Prudence Uncertainties inevitable surround many transactions. This should be recognised by exercising prudence in preparing financial statements. Prudence does not, however, justify the creation of secret or hidden reserves. (b) Substance over form Transactions

and other events should be accounted for and presented in accordance with their substance and financial reality and not merely with their legal form. (c) Materiality Financial statements should disclose all items which are material enough to affect evaluation or decisions. (iv) To ensure proper understanding of financial statements, all significant accounting policies adopted in the preparation should be disclosed. (v) The disclosure of the significant accounting policies as such should form a part of the financial statements and the significant accounting policies should normally be disclosed at one place. (vi) Any change in the accounting policy which has a material effect in the current period or which is reasonably expected to have a material effect in the later periods should be disclosed. In the case of a change in the accounting policy which has a material effect in the current period, the amount by which an item, in the financial statement is affected by such a change, should be disclosed, to the extent ascertainable. Where such an amount is not ascertainable wholly or in part, the fact should be indicated.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES

Difference between fundamental accounting presumptions and accounting policies It is clear from whatever has been stated above

that

IASC has made distinctions between Fundamental Accounting Assumptions and Accounting Policies. The distinctions are as follows: 1. Fundamental accounting presumptions are assumed to have been used and accepted in the preparation of financial statements while no such presumption can be made in respect of accounting policies. 2. In case of fundamental accounting assumptions, the management has no discretion. They have to be necessarily followed. However, in the case of accounting policies, the management may make a choice. It should use its judgement in selecting and applying such policies which are best suited to the business. 3. In case

the

fundamental assumptions are not followed, the fact has to be disclosed together with reasons. In case of accounting policies, disclosure has to be made about the policy which has been followed by the management. In case the policy is changed in subsequent years, the reasons for change and the resulting financial consequences have also to be disclosed. 1.17

SYSTEMS OF BOOKKEEPING Bookkeeping,

as explained earlier, is the

art of recording pecuniary or business transactions in a regular and systematic manner. This

recording of transactions may be done according to any of the following two systems: 1. Single entry system.

An incomplete double entry system

can be termed as a single

entry system. According to Kohler, '

It is a system of bookkeeping in which as a rule only records of cash and personal accounts are maintained, it is always incomplete

double entry, varying with circumstances'.

This system has been developed by some business houses, who for their convenience, keep only some essential records. Since all records are not kept, the system is

not reliable and can be used only by small firms.

The working of this system has been discussed in detail later in a separate chapter. 2. Double entry system.

The system of 'double entry' bookkeeping which is believed to have originated with the venetian merchants of the fifteenth century, is the only system of recording the twofold aspect of the transaction.

This has been, to some extent, explained while discussing the 'dual aspect concept' earlier in this chapter. The system recognizes that every transaction have a twofold effect. If someone receives something, then either some other person must have given it, or the first mentioned person must have lost something, or some service etc. must have been rendered by him.

Accounting

Equation The system of double entry system of bookkeeping can very well be explained by the 'accounting equation' given

below: Assets = Equities The properties owned by business are called 'assets'. The rights to the properties are called 'Equities'. Equities may be subdivided into two principal types: the rights of the creditors and the rights of the owners. The equity of creditors representing debts of the business and are called 'liabilities'. The equity of owners is called 'capital', or proprietorship or owner's equity. Thus: Assets = Liabilities + Capital or Assets – Liabilities = Capital The accounting equation can be understood with the help of the following trans- actions:

Check Your Progress 7. Accounting principles are generally based on (a) practicability (b) subjectivity (c) convenience in recording. 8. The system of recording transactions based on dual aspect concept is called (a) double account system (b) double entry system (c) single entry system. 9. The practice of appending notes regarding contingent liabilities in accounting statements is pursuant to: (a) convention of consistency (b) money measurement concept (c) convention of conservatism (d) convention of disclosure.

Self-Instructional Material 29 Accounting: Meaning, Scope and Principles NOTES

Transaction 1. A starts business with a capital of Rs 10,000. There are two aspects of the transaction. The business has received cash of Rs10,000. It is its asset but on the other hand it has to pay a sum of Rs 10,000 to A, the Proprietor. Thus: Capital and Liabilities Rs Assets Rs Capital 10,000 Cash 10,000 Transaction 2. A purchases furniture for cash worth Rs 2,000. The position of his business will be as follows: Capital and Liabilities Rs Assets Rs Capital 10,000 Cash 8,000 Furniture 2,000 10,000 10,000 Transaction 3. A purchases cotton bales from B for

Rs 5,000 on credit. He sells for cash cotton bales costing Rs 3,000 for Rs 4,000 and Rs 1,000 for Rs 1,500 on credit to P. As a result of these transactions the business makes a profit of Rs 1,500 (i.e. Rs 5,500–Rs 4,000) this will increase A's Capital from Rs 10,000 to Rs 11,500. The business will have a liability of Rs 5,000 to B and two more assets in the form of a debtor P for Rs 1,500 and stock of cotton bales of Rs 1,000. The position of his business will now be as follows: Capital and Liabilities Rs Assets Rs Creditor (B) 5,000 Cash (Rs 8,000 + 4,000) 12,000 Capital 11,500 Stock of Cotton Bales 1,000 Debtor (P) 1,500 Furniture 2,000 16,500 16,500 Transaction 4. A withdraws cash of Rs 1,000 and cotton bales of Rs 200 for his personal use. The amount and the goods withdrawn will decrease relevant assets and A's capital. The position will be now as follows: Capital and Liabilities Rs Assets Rs Creditor (B) 5,000 Debtor (P) 1,500 Cash (Rs 12,000 – Rs 1,000) 11,000 Capital Stock of Cotton Bales 800 (Rs 11,500 – Rs 1,200) 10,300 Debtor (P) 1,500 Furniture 2,000 15,300 The above type of statement showing the financial position of a business on a certain date is termed as balance sheet. The result of applying the system of double entry system may be summarised in the form of following rule: 'For every debit there must be equivalent credit and vice versa.' The rules, of Debit and Credit have been explained in the succeeding unit. Illustration 2.1. Anil made the following transactions. Use an accounting equation to show their effect on his assets, liabilities and capital:

Rs 1. Started business with cash 5,000 2. Purchased goods on credit 400 3. Purchased goods for cash 100 4. Purchased furniture 50 5. Withdrew for personal use 70

Check Your Progress 10. According to the money measurement concept, the following will be recorded in the books of account of the business: (a) health of Managing Director of the company (b) quality of company's goods (c) value of plant and machinery. 11. The convention of conservatism is applicable: (a) in providing for discount on creditors (b) in making provision for bad and doubtful debts (c) providing for depreciation. 12. The convention of conservatism, when applied to the balance sheet, results in: (a) understatement of assets (b) understatement of liabilities (c) overstatement of capital. 30

Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES 6.

Paid rent 20 7. Received Interest 10 8. Sold goods costing Rs 50 on credit for 70 9. Paid to creditors 40 10. Paid for salaries 20 11. Further capital invested 1,000 12. Borrowed from P 1,000 Solution: Accounting Equation: Assets = Liabilities + Capital No. Transaction Assets = Liabilities + Capital Rs Rs Rs 1. Anil started

business with cash Rs 5,000 5,000 = 0 + 5,000 2. Purchased goods on credit for Rs 400 400 = 400 + 0 New Equation 5,400 = 400 + 5,000 3. Purchase goods for cash Rs 100 +100 -100 = 0 + 0

New Equation 5,400 = 400 + 5,000 4. Purchased furniture Rs 50 +50 -50 = 0 + 0 New Equation 5,400 = 400 + 5,000 5. Withdrew for personal use Rs 70 -70 = 0 - 70

New Equation 5,330 = 400 + 4,930 6. Paid rent -20 = 0 + -20 New Equation 5,310 = 400 + 4,910 7. Received interest Rs 10 +10 = 0 + 10 New Equation 5,320 = 400 + 4,920 8. Sold goods consisting Rs 50 on credit +70 for Rs 70 -50 = 0 + 20 New Equation 5,340 = 400 + 4,940 9. Paid to creditors

Rs 40 - 40 = -40 + 0 New Equation 5,300 = 360 + 4,940 10. Paid for salaries Rs 20 - 20 = 0 - -20 New Equation 5,280 = 360 + 4,920 11. Further capital Invested 1,000 = 0 + 1,000 New Equation 6,280 = 360 + 5,920 12. Borrowed from P Rs 1,000 1,000 = 1,000 + 0 New Equation 7,280 = 1,360 + 5,920

Double Entry System and Single Entry System The difference between the double entry system and single entry system can be

explained as follows: (a) Recording of transactions. In case of a

double entry system, the dual aspect concept is completely followed while recording business transactions. In case of a single entry system, the dual aspect concept is not followed for all transactions. In case of some transactions both the aspects are recorded, while for some only one aspect is recorded, while in case of some other transactions, no recording is at all done. (b) Maintenance of books.

In case of double entry system, various subsidiary books viz. sales book, purchases book, returns book, cash book etc. are maintained.

While in case of single entry system, no subsidiary books except the cash book is maintained. (c) Maintenance of books of account. In case of double entry system, all major accounts real, nominal and personal, are maintained. However, in case of single entry system, only personal accounts are maintained.

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d) Preparation of trial balance. In case of double entry system, trial balance is prepared to check arithmetical accuracy of the books of account. While in case of single entry system trial balance cannot be prepared. Hence, it is not possible to check the accuracy of books of account. (e) Accuracy of profits and financial position. In case of double entry system, Trading and Profit and Loss Account gives

the true profit of the business while Balance Sheet shows the true and fair financial position of the business. While in case of

single entry system only a rough estimate of profit or loss can be made. The Statement of

Affairs prepared in single entry system also does not show the true financial position of the business. (f) Utility. Single entry system is used only by very small business units. It has no utility for large business units. As a matter of fact, they have to compulsorily adopt the double entry system. 1.18

SYSTEMS OF ACCOUNTING There are basically two systems of accounting: (i) Cash system of accounting. It is a system in which

accounting entries are made only when cash is received or paid. No entry is made when

a payment or receipt is merely due. Government system of accounting is mostly on the cash system. Certain professional people record their income on cash basis, but while recording expenses they take into account the outstanding expenses also. In such a case, the financial statement prepared by them for determination of their income is termed as Receipts and Expenditure Account. (ii) Mercantile or accrual system of accounting. It is a system in which ac- counting entries are made on the basis of amounts having become due for payment or receipt. This system recognises the fact that if a transaction or an event has occurred, its consequences cannot be avoided and therefore, should be brought into books in order to present a meaningful picture of profit earned or loss suffered and also of the financial position of the firm concerned. The difference between Cash System and Mercantile System of accounting will be clear with the help of the following example: A firm closes its books on 31

st

December each year. A sum of Rs 500 has become due for payment on account of rent for the year 2000. The amount has, however, been paid in January, 2001. In this case, if the firm is following the cash system of accounting, no entry will be made for the rent having become due in the books of accounts of the firm in 2000. The entry will be made only in January 2000 when the rent is actually paid. However, if the firm is following the mercantile system of accounting, two entries will made: (i) on 31

st

December, 2000, rent account will be debited while the landlord's account will be credited by the amount of outstanding rent; (ii) In January, 2000 landlord's account will be debited while the cash account will be credited with the amount of the rent actually paid. (This has been discussed in detail later while dealing with adjustments relating to final accounts.) The 'mercantile system' is considered to be better since it takes into account the effects of all transactions already entered into. This system is followed by most of the industrial and commercial firms. 1.19 KEY TERMS ?

Accounting:

The process of identifying, measuring and communicating economic information to permit informed judgements and

decisions by the users of in- formation. 32 Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES ? Financial Accounting: The art of recording, classifying and summarising in a significant manner and in terms of money, transactions and events which are at least in part of a financial character and interpreting the results.? Management Accounting: The presenting of accounting information in such a way as to assist management in the creation of the policy and in the day- to-day operations of the undertaking.? Accounting Principles: Rules of action or conduct adopted by the accountants universally while recording accounting transactions. ? Accounting Concepts: Basic assumptions or conditions upon which the science of accounting is based.? Accounting Conventions: Customs and traditions which guide the accountants while preparing the accounting statements.? Cash System of Accounting: A system in which accounting entries are made only when cash is received or paid.? Mercantile System of Accounting: A system in which accounting entries are made on the basis of amounts having become due for payment or receipt. It is also termed as Accrual System of Accounting, 1.20 SUMMARY In this unit, you have learned that: ? The concept of accounting and the role of the accountant have undergone a revolutionary change. Accounting today is more of an information system than a mere recording system. ? Accounting is considered to be both a science and an art. ? Accounting is closely related with other disciplines like economics, statistics, law, financial management, etc. ? Accounting aims at providing enough information necessary for the stakeholders to know the profitability and financial position of the business. It also facilitates rational decision making by the management.? Accounting principles are scientifically laid down accounting standards. ? Accounting principles can be classified as accounting concepts and accounting conventions. ? The Institute of Chartered Accountants of India (ICAI) lays down the accounting standards (principles) in India. It has, so far, issued 29 Accounting Standards. ? Recording of business transactions can be done either according to single entry system or double entry system. While adopting these systems, the concern may follow either cash system of accounting or mercantile system of accounting. ? The double entry system of book keeping with mercantile system of accounting is considered better and reliable for ascertaining the profitability and financial position of the business. 1.21 ANSWERS TO 'CHECK YOUR PROGRESS' 1. (a) T, (b) F, (c) T, (d), F, (e) T 2. (c) 3. (a) 4. (a) 5. (a) 6. (a) T, (b) F, (c) T, (d) F, (e) F, (f) T 7. (a) 8. (b) 9. (d) 10. (c) Self-Instructional Material 33 Accounting: Meaning, Scope and Principles NOTES 11. (b) 12. (a) 1.22 QUESTIONS AND EXERCISES 1. Define Accounting. State its functions. How does it differ from bookkeeping? 2. State the persons who should be interested in accounting information. 3. Explain the role of

the accountant in the present-day economy. 4. Why is accounting regarded as an aid to management? 5.

Discuss briefly the basic accounting concepts and fundamental accounting assumptions. 6. What are the accounting concepts and conventions? Name them and explain any two accounting concepts in detail. 7. Explain any three of the following accounting concepts: (a) Money measurement concept. (b) Business entity concept. (c) Going concern concept. (d) Realisation concept. (e) Cost concept. 8. Differentiate between Cash and Mercantile Systems of Accounting. 9. Write short notes on (a) Accounting Equation. (b) Dual Aspect Concept. (c) Periodic Matching of Cost and Revenue Match Concept. 10. Explain the term, convention of conservations. 11. Explain the term Convention of Materiality. 12. Explain the term Convention

of Disclosure. 13. Distinguish between 'Double Entry 1.30 System and Single Entry System'. 14. Explain the Principles of Accounting. 15. What is meant by the term Generally Accepted Accounting Principles? Explain the meaning and significance of any two of the following: (i) The Going concern principle (ii) Convention of consistency of (iii) Matching principle (v) Substance over form. 16. What do you understand by 'Dual Aspect Concept' of accounting. Explain briefly. 1.23 PRACTICAL PROBLEMS 1. Show the effect of the following transactions on the assets, liabilities and capital of Mr.Abhay Kumar through the accounting equation: 1. He started business with cash of Rs 20,000. 2. He purchased goods for cash for Rs 10,000. 3. Purchased goods on credit from Mr. Mohan Lal for Rs 8,000. 4. Sold goods for cash costing Rs 8,000 for Rs 10,000. 5. Withdrew Rs 1,000 from business in cash to pay for his private expenses. 6. Electricity bills paid for Rs 100. 7. He sold goods on credit costing Rs 5,000 to Mr. Surendra for Rs 6,000. 8. Rent outstanding Rs 400. 9. He borrowed Rs 5,000 from Mr. Lalit. 10. Purchased goods for cash Rs 2,000. 2. From the following transactions relating to Mr. Anil Kumar, show the effect on his assets, liabilities and capital by using the accounting equation: 1.

Started business with cash Rs 10,000. 2. Purchased goods on credit Rs 8,000. 3. Plant purchased for cash Rs 2,000. 4. Sold goods

costing Rs 1,000 for Rs 2,000 for cash.

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Self-Instructional Material Accounting: Meaning, Scope and Principles NOTES 5.

Sold goods on credit to Mahendra costing Rs 800 for Rs 1,500. 6. Drew for personal use Rs 500. 7. Paid for salaries Rs 300. 8. Received cash from Mahendra Rs 700. 3. Show an accounting equation on the basis of the following transactions: 1. Laxman started business with cash of Rs 20,000. 2. He purchased goods on credit of

Rs 8,000. 3. He sold

goods for cash Rs 2,500 for Rs 3,000. 4. He purchased furniture for cash Rs 2,000. 5. He sold goods

to Hari costing Rs 400 for Rs 800

on credit. 6. He received cash from

Hari Rs 500 towards payment of the price of the goods. 7. He received dividend on securities Rs 200. 8. He paid life insurance premium on his life policy Rs 400. 9. He purchased goods from Mukesh for cash Rs 300. 4. Show the dual effect of the following transactions on the assets and liabilities of business: (i) Purchased goods for cash Rs 8,000. (ii) Purchased delivery van on credit for Rs 4,00,000. (iii) Paid Rs 5,000 to a supplier of goods on credit (iv) The proprietor withdrew Rs 2,000 from the bank account of business for personal expenses. (v) Purchased goods from Hamid a credit for Rs 5,000. 1.24 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

Self-Instructional Material 35 Journalising Transactions

NOTES

UNIT 2 JOURNALISING TRANSACTIONS Structure 2.0 Introduction 2.1 Unit Objectives 2.2 Journal 2.3 Rules of Debit and Credit 2.4 Compound Journal Entry 2.5 Opening Entry 2.6

Key Terms 2.7 Summary 2.8

Answers to '

Check Your Progress' 2.9 Questions and Exercises 2.10 Practical Problems 2.11 Further Reading 2.0 INTRODUCTION Accounting

is

the art of recording, classifying and summarising financial transactions and

interpreting the results therefore. Thus, the accounting process or cycle involves the following stages: 1. Recording of transactions. This is done in the book termed as 'Journal'. 2. Classifying the transactions. This is done in the book termed as 'Ledger'. 3. Summarising the transactions. This includes preparation

of the trial balance, profit and loss account and balance sheet of the

business. 4. Interpreting the results. This involves computation of various accounting ratios, etc., to know about the liquidity, solvency and profitability of business. The recording of transactions in the Journal is being explained in this unit. 2.1 UNIT

OBJECTIVES

After going through this unit, you will be able to: ? Identify the stages of the accounting cycle? Appreciate the role of the Journal in recording business transactions? Understand the rules of debit and credit applicable to different types of business transactions? Describe the various categories of accounts ? Pass appropriate entries for recording transactions in the Journal 2.2 JOURNAL The Journal records all daily transactions of a business in the order in which they occur. A Journal may therefore be defined as a book containing a chronological record of transactions. It is the book in which the transactions are recorded first of all under the double entry system. Thus, the Journal is the book of original record. A Journal does not replace but precedes the Ledger. The process of recording transactions in a Journal, is termed as Journalising. A pro forma of a journal is given below: JOURNAL Date Particulars L.F. Debit Credit Rs Rs (1) (2) (3) (4) (5) 36 Self-Instructional Material Journalising Transactions NOTES 1. Date. The date on which the transaction was entered is recorded here. 2. Particulars. The two aspects of transaction are recorded in this column, i.e., the details regarding accounts which have to be debited and credited. 3. L.F. It means Ledger Folio. The transactions entered in the Journal are later on posted to the ledger. The relevant ledger folio is entered here. Procedure regarding posting the transactions in the Ledger has been explained in the next chapter. 4. Debit. In this column, the amount to be debited is entered. 5. Credit. In this column, the amount to be credited is shown. 2.3 RULES OF DEBIT AND CREDIT The transactions in the Journal are recorded on the basis of the rules of debit and credit. For this purpose business transactions have been classified into three categories: (i) Transactions relating to persons (ii) Transactions relating to properties and assets (iii) Transactions relating to incomes and expenses On this basis, it becomes necessary for the business to keep an account of: (i) Each person with whom it deals (ii) Each property or asset which the business owns (iii) Each item of income or expense The accounts falling under the first heading are called as ' Personal Accounts'. The accounts falling under the second heading are termed as ' Real Accounts'. The accounts falling under the third heading are termed as 'Nominal Accounts'. The classification of the accounts, as explained above, can be put in the form of the following chart: ACCOUNTS PERSONAL REAL NOMINAL EXPENSES INCOMES NATURAL ARTI- REPRESEN- TANGIBLE INTAN- AND AND FICIAL TATIVE GIBLE LOSSES GAINS Each of the above categories of accounts and the relevant rule for 'debit and credit' have been explained in detail in the following pages: Personal accounts. Personal accounts include the accounts of persons with whom the business deals. These accounts can be classified into the

three categories: 1. Natural Personal Accounts. The term 'Natural Persons' means

persons who are the creation of God, e.g., Mohan's Account, Sohan's Account, Abha's Account etc. 2. Artificial Personal Accounts. These accounts include

accounts of corporate bodies or institutions which are recognised as persons in business dealings, for example, the

account of a Limited Company, the account of a Co-operative Society, the account of a Club, the account of Government, the account of an Insurance Company etc. 3.

Representative Personal Accounts. These are accounts which represent a certain

person or group of persons.

For example, if the rent is due to

the landlord, an outstanding rent account will be opened in the books. Similarly, for salaries due to the employees (not paid), an outstanding salaries account will be opened. The

outstanding rent account represents the account of the landlord to whom the rent is

to be paid while the outstanding salaries account represents the accounts of the persons to whom the salaries have to be paid. All such accounts are therefore termed as 'Representative Personal Accounts'.

Self-Instructional Material 37 Journalising Transactions NOTES The rule is: DEBIT THE RECEIVER CREDIT THE GIVER For example, if cash has been paid to Ram, the account of Ram will have to be debited. Similarly, if cash has been received from Keshav, the account of Keshav will have to be credited.

Real accounts.

Real accounts may be of the following types: 1. Tangible Real Accounts. Tangible Real Accounts are those which relate to such things

which can be touched, felt, measured

etc. Examples of such accounts are cash account, building account, furniture account, stock account, etc. It should be noted that bank account is a personal account; since it represents the account of the banking company—an artificial person. 2.

Intangible Real

Accounts. These accounts represent such things which cannot be touched.

Of course, they can be measured in terms of money, for example, patents account, goodwill account, etc. The rule is:

DEBIT IS WHAT COMES IN CREDIT IS WHAT GOES OUT

For example, if a building has been purchased for cash, the building account should be debited (

since it is coming in the business) while the cash account should be credited (since cash is going out the business). Similarly when furniture is purchased for cash, furniture account should be debited while the cash account should be

credited.

Nominal accounts. These

accounts are opened in the books to simply explain the nature of the transactions. They do not really exist. For example,

in a business, salary is paid to the manager, rent is paid to the landlord, commission is paid to the salesman, cash goes out of the business and it is something real; while salary, rent or commission as such do not exist. The accounts of these items are opened simply to explain how the cash has been spent. In the absence of such information, it may difficult for the person concerned to explain how the cash at his disposal was utilised. Nominal Accounts include accounts of all expenses, losses, incomes and gains. The examples of such accounts are rent, rates lighting, insurance, dividends, loss by fire, etc. The rule is:

DEBIT ALL EXPENSES AND LOSSES CREDIT ALL GAINS AND INCOMES

Tutorial Note. Both Real Accounts and Nominal Accounts fall in the category of Impersonal Accounts. The student should note that when some prefix or suffix is added to a Nominal Account, it becomes a Personal Account. A table is being given to explain the above rule:

Nominal Account Personal Account 1. Rent account Rent prepaid account, Outstanding rent account. 2. Interest account Outstanding interest account, Interest received in advance account,

Prepaid interest account. 3. Salary account Outstanding salaries account, Prepaid salaries account. 4. Insurance account Outstanding insurance account, Prepaid insurance account. 5. Commission account Outstanding commission account, Prepaid commission account. Illustration 2.1. From the following transactions find out

the nature of account and also state

which account should be debited and which account should be credited. (

a) Rent paid. (

g) Outstanding for salaries. (b) Salaries paid. (h) Telephone charges paid.

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Self-Instructional Material Journalising Transactions NOTES (

c) Interest received. (i) Paid to Suresh. (d) Dividends received. (j) Received from Mohan (the proprietor). (e) Furniture purchased for cash. (k) Lighting. (f) Machinery sold. Solution: Transaction Accounts involved Nature of Accounts Debit/Credit (a) Rent paid Rent A/c Nominal A/c Debit Cash A/c Real A/c Credit (b) Salaries paid Salaries A/c Nominal

A/c Debit Cash A/c Real A/c Credit (c) Interest received

Cash A/c Real A/c

Debit Interest

A/c Nominal A/c

Credit (d) Dividends received

Cash A/c Real A/c Debit Interest A/c Nominal A/c

Credit (e) Furniture purchased Furniture

A/

c Real A/c Debit Cash A/c Real A/c

Credit (f) Machinery sold Cash A/c Real A/c Debit

Interest A/c Real A/c

Credit (g) Outstanding for salaries Salaries

A/

c Nominal A/c Debit Outstanding Personal A/c

Credit Salaries A/c (

h) Telephone charges paid Telephone Charges

A/c Nominal A/c Debit

Cash A/c Real A/c Credit (i) Paid to Suresh Suresh Personal

A/c Debit Cash A/c Real A/c

Credit (j) Received from Mohan

Cash A/c Real A/c

Debit (the proprietor) Capital

A/c Personal A/c Credit (k) Lighting Lighting A/c Nominal A/c Debit Cash A/c Real A/c

Credit

The journalising of the various transactions is explained now with the help of the following illustration: Illustration 2.2. Ram starts a business with capital of Rs 20,000 on 1 January, 2000. In this case there are two accounts involved. They are: (i) The account of Ram. (ii) Cash Account. 1. Ram is

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natural person and, therefore, his account is a Personal Account. Cash Account is a tangible asset and, therefore, it is a Real Account. As per the rules of Debit and Credit, applicable to Personal Accounts, Ram is the giver and, therefore, his account, i.e., Capital Account should be credited. Cash is coming into the business and, therefore, as per the rules applicable to Real Accounts, it should be debited. The transaction will now be entered in the Journal as follows:

JOURNAL Date Particulars L.F. Debit Credit Rs Rs 2000 Jan. 1 Cash Account Dr. 20,000 To Capital Account 20,000 (Being commencement of business) The words

put within brackets, 'Being commencement of business', constitute the narration for the entry passed, since they narrate the transaction.

Self-Instructional Material 39 Journalising Transactions NOTES 2.

He purchased furniture for cash for Rs 5,000 on 5 January, 2000. The two accounts involved in this transaction are the Furniture Account and the Cash Account. Both are Real Accounts. Furniture is coming in and, therefore, it should be debited while cash is going out and, therefore, it should be credited. The Journal entry will, therefore, be as follows: JOURNAL Date Particulars L.F. Rs Rs 2000 Jan. 5 Furniture Account Dr. 5,000 To Cash Account 5,000 (Being purchase of furniture) 3. He paid rent for business premises

Rs 2,000

on 10 January, 2000. In this transaction, two accounts involved are the Rent Account and the Cash Account. Rent Account is Nominal Account. It is an expense and, therefore, it should be debited. Cash Account is a Real Account. It is going out of the business and, therefore, it should be credited. The journal entry will, therefore, be as follows: JOURNAL Date Particulars L.F. Rs Rs 2000 Jan. 10 Rent Account Dr. 2,000 To Cash Account 2,000 (Being payment of rent) 4. He purchased goods on credit of Rs 2,000 from Suresh on 20 January, 2000. The two accounts involved in the transaction are those of Suresh and Goods. The account of Suresh is a Personal Account while that of Goods is a Real Account. Suresh is the giver of goods and, therefore, his account should be credited while Goods are coming in the business and, therefore, Goods Account should be debited. JOURNAL Date Particulars L.F. Rs Rs 2000 Jan. 20 Goods Account Dr. 2,000 To Suresh 2,000 (Being purchase of goods on credit) Classification of Goods Account. The term goods include articles purchased by the business for resale. Goods purchased by the business may be returned to the supplier. Similarly, goods sold by the business to its customers can also be returned by the customers to the business due to certain reasons. In business, it is desired that a separate record be kept of all sale, purchase and return of goods. Hence, Goods Accounts can be classified into the following categories: (i) Purchases Account. The account is meant for recording all purchases of goods. Goods 'come in' on purchasing of goods and, therefore, the Purchases Account is debited on purchase of goods. (ii) Sales Account. The account is meant for recording of selling of goods. The goods 'go out' on selling of goods, and therefore, on sale of goods, the Sales Account is credited. (iii) Purchases Returns Account. The account is meant for recording return of goods purchased. The goods 'go out' on returning of goods to the suppliers and, therefore, the account should be credited on returning goods purchased. (iv) Sales Returns Account. The account is meant for recording return of goods sold, by the customers. The goods 'come in' and, therefore, the Sales Returns Account should be debited on return of goods.

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Self-Instructional Material Journalising Transactions NOTES

The above classification of Goods Account can be shown in the form of the following chart: GOODS ACCOUNT Purchases A/c Sales A/c Purchases Returns A/c Sales Returns A/c (Goods come (Goods go (Goods go out...Cr.) (Goods come in....Dr.) out...Cr.) in ...Dr.) 2.4

COMPOUND JOURNAL ENTRY Sometimes there are a number of transactions on the same date relating to one particular account or of one particular nature. Such transactions may be recorded by means of a single journal entry instead of passing several journal entries. Such entry regarding recording a number of transactions is termed as a 'Compound Journal Entry'. It

may be recorded in any of the following three ways: (i) One particular account may be debited while several other accounts may be credited. (

ii) One particular account may be credited while several other accounts may be debited. (

iii) Several accounts may be debited and several other accounts may also be credited. This has been explained in the following illustration: Illustration 2.3.

Pass a compound journal entry in each of the following cases: 1. Payment made to Ram Rs 1,000. He allowed a

cash discount of Rs 50. 2. Cash received from Suresh Rs 800 and allowed him Rs 50 as discount. 3. A running business was purchased

by Mohan with

following assets and liabilities: Cash Rs 2,000, Land Rs 4,000, Furniture Rs 1,000, Stock Rs 2,000, Creditors Rs 1,000, Bank Overdraft Rs 2,000.

Solution: JOURNAL SI.

No.

Particulars L.F. Debit Credit Rs Rs 1. Ram

Dr. 1,050 To Cash A/c 1,000 To Discount A/c 50 (

Being payment made to Ram Rs 1,000, and he allowed Rs 50 as discount) 2.

Cash A/c Dr. 800 Discount A/c

Dr. 50 To Suresh 850 (Being cash received

from

Suresh Rs 800, and discount allowed

Rs 50) 3.

Cash

A/c Dr. 2,000 Land A/c Dr. 4,000 Furniture A/c Dr. 1,000 Stock A/c

Dr. 2,000 To

Creditors 1,000 To Bank Overdraft 2,000 To Capital A/c 6,000 (

Being

commencement of business by Mohan by taking over a running business)

Check Your Progress 1. State under what heading (Personal, Real or Nominal) would you classify each of the following accounts: (i) Salary Prepaid Account (ii)Salary Outstanding Account (iii) Rent Account (iv) Bank Account (v) Insurance Unexpired (vi) Proprietor's Account (vii) Bad Debts Account (viii) Furniture Account (ix) Goodwill Account (x) Patents Account

Self-Instructional Material 41 Journalising Transactions NOTES

Notes: 1. The total of payment due to Ram was Rs 1,050. A payment of Rs 1,000 has been made to him and

he allowed a discount of Rs 50. This means by paying Rs 1,000, a full credit for Rs 1,050 has been obtained. The account of Ram is a Personal Account, and therefore, it has been debited as he is the receiver. The cash has gone out of the business and, therefore, Cash Account being a Real Account, has been credited. Discount Account is a Nominal Account, getting discount is a gain to the business and, therefore, it has been credited. 2. Suresh was to pay a

sum of Rs 850. He paid Rs 800 and he was allowed a discount of Rs 50. It means by paying Rs 800 only, Suresh could get a full credit of Rs 850. The Cash Account is a Real Account and, therefore, it has been debited since cash is coming in. Discount Account is a Nominal Account, it has been debited since it is a loss to the business. Suresh is the giver. His account being a Personal Account, it has been credited by Rs 850. 3. It is not necessary that a person should start a

business only with cash. He may bring the assets into the business or he may purchase a running business. In the present case Mohan has purchased the assets of some other business. The net assets (i.e. assets — liabilities taken over) will be the capital of Mohan.

The business is getting various assets and, therefore, the assets accounts have been debited. The business creates certain liabilities in the form of creditors, bank overdraft, and, therefore, these accounts have been credited. Mohan's Account i.e., his Capital Account has been credited by the balance since it represents the capital brought in by him. Illustration 2.4. Journalise the following transactions. Also state the nature of each account involved in the Journal entry. 1. Dec. 1, 2000, Ajit started business with Cash Rs 40,000. 2. Dec. 3, he paid into the Bank Rs 2,000. 3. Dec. 5, he purchased goods for cash Rs 15,000. 4. Dec. 8, he sold goods for cash Rs 6,000. 5. Dec. 10, he purchased furniture and paid by cheque Rs 5,000. 6. Dec. 12, he sold goods to Arvind Rs 4,000. 7. Dec. 14, he purchased goods from Amrit Rs 10,000. 8. Dec. 15, he returned goods to Amrit Rs 5,000. 9. Dec. 16, he received from Arvind Rs 3,960 in full settlement. 10. Dec. 18, he withdrew goods for personal use Rs 1,000. 11. Dec. 20, he withdrew cash from business for personal use Rs 2,000. 12. Dec. 24, he paid telephone charges Rs.1,000. 13. Dec. 26, cash paid to Amrit in full settlement Rs 4,900. 14. Dec. 31, paid for stationary Rs 200, rent Rs 500 and salaries to staff

Rs 2,000. 15. Dec. 31, goods distributed by way of free samples Rs 1,000. Solution: JOURNAL SI. Date Particulars Nature of L.F. Debit Credit

No. Account Rs Rs 1. Dec. 1 Cash A/c Dr. Real A/c 40,000 To Capital A/c Personal A/c 40,000 (Being commencement of business) 2. Dec. 3 Bank A/c Dr. Personal A/c 20,000 To Cash A/c Real A/c 20,000 (Being cash deposited in the bank) 3. Dec. 5 Purchases A/c Dr. Real A/c 15,000 To Cash A/c Real A/c 15,000 (Being purchase of goods for cash) 4. Dec. 8 Cash A/c Dr. Real A/c 6,000 To Sales A/c Real A/c 6,000 (Being goods sold for cash) (Contd) 42 Self-Instructional Material Journalising Transactions NOTES Sl. Date Particulars Nature of L.F. Debit Credit No. Account Rs Rs 5. Dec.10 Furniture A/c Dr. Real A/c 5,000 To Bank A/c Personal A/c 5,000 (Being purchase of furniture, paid by cheque) 6. Dec. 12 Arvind Dr. Personal A/c 4,000 To Sales

A/c Real A/c 4,000 (Being sale of goods) 7. Dec. 14 Purchases A/c Dr. Real A/c 10,000 To Amrit Personal A/c 10,000 (Beina purchase of goods from Amrit) 8. Dec.15 Amrit Dr. Personal A/c 5,000 To Purchases Returns A/c Real A/c 5,000 (Being goods returned to Amrit) 9. Dec. 16 Cash A/c Dr. Real A/c 3,960 Discount A/c Dr. Nominal A/c 40 To Arvind Personal A/c 4,000 (Being cash received from Arvind in full settlement and allowed him Rs 40 as discount) 10. Dec. 18 Drawings A/c Dr. Personal A/c 1,000 To Purchases A/c Real A/c 1,000 (Being withdrawal of goods for personal use) 11. Dec. 20 Drawings A/c Dr. Personal A/c 2.000 To Cash A/c Real A/c 2,000 (Being cash withdrawal from the business for personal use) 12. Dec.24 Telephone Expenses A/c Dr. Nominal A/ c 1,000 To Cash A/c Real A/c 1,000 (Being telephone expenses paid) 13. Dec. 26 Amrit Dr. Personal A/c 5,000 To Cash A/c Real A/c 4,900 To Discount A/c Nominal A/c 100 (Being cash paid to Amrit and he allowed Rs 100 as discount) 14. Dec.31 Stationary Expenses Dr. Nominal A/c 200 Rent A/c Dr. Nominal A/c 500 Salaries A/c Dr. Nominal A/c 2,000 To Cash A/c Real A/c 2.700 (Being expenses paid) 15. Dec. 31 Advertisement Expenses A/c Dr. Nominal A/c 1,000 To Purchases A/c Real A/c 1,000 (Being distribution of goods by way of free samples) Total 1,21,700 1,21,700 Self-Instructional Material 43 Journalising Transactions NOTES Notes: Transaction 9. Ajit was to receive Rs 4,000 from Arvind. He accepts only Rs 3,960 in full settlement. It means, he allows Rs 40 as discount to Arvind. The journal entries will be: (i) Cash A/c Dr. 3,960 To Arvind 3,960 (ii) Discount A/c Dr. 40 To Arvind 40 A single entry may be passed in place of two entries stated above. Cash is a Real Account and, therefore, it should be debited. Discount is a Nominal Account and, therefore, it should also be debited. The account of Arvind is a Personal Account and he is entitled to get a full credit of Rs 4,000 by paying only Rs 3,960. His account should, therefore, be credited by Rs 4,000. It may be remembered that cash or bank account and discount account go together. It means if cash is debited, the discount account should also be debited. In case the cash is credited, the discount account should also be credited. This is because when cash is received, discount is allowed to debtors. Cash Account is a Real Account and, therefore, it should be debited by the amount of cash actually received. The discount account is a Nominal Account and, therefore, on receipt of cash when discount is allowed, this is a loss which should be debited. Similarly, when cash is paid, discount is earned from the creditors. On payment of cash, therefore, Cash Account should be credited (since cash is a Real Account and it is going out of the business) and Discount Account should be credited (since Discount Account is a Nominal Account and discount received is a gain to the business). Transaction 10. When goods are withdrawn by the proprietor of the business for his personal use, he is

to be charged for them since business and the proprietor are two different persons as per separate entity concept. The problem is at what price should he be charged. He cannot be charged at the selling price for the goods. It will not be fair. He has to be charged with only the cost price of the goods withdrawn by him. It will be, therefore, appropriate to reduce the purchase of the business by the amount of goods withdrawn by the proprietor for his personal use as if the goods were purchased partly for the business and partly for him. The same rule applies in those cases, where the goods purchased by the business are used for the purpose of business itself. For example in case of a stationery business, some stationery may be used for the business itself. In such case, the following journal entry will be passed: Stationery Expenses Account Dr. To Purchases

Account

The same rule has been followed in case of the last entry given in the illustration. Transaction 11. In case of this transaction two entries could have been passed as under: (i) Amrit Dr. 4,900 To Cash A/c 4,900 (ii) Amrit Dr. 100 To Discount A/c 100 In place of passing the above two entries a single compound entry has been passed. Transaction 12. Three entries could have been based as follows: (i) Stationary

Expenses

A/c Dr. 200 To Cash A/c 200 (ii) Rent A/c Dr. 500 To Cash A/c 500 (iii) Salaries A/c Dr. 2,000 To Cash A/c 2,000 In place of these three entries, a single compound entry has been passed.

Check Your Progress 2. The amount brought in by the proprietor in the business should be credited to (a) Cash Account (b) Capital Account (c) Drawing Account 3. The amount of salary paid to Suresh should be debited to (a) The account of Suresh (b) Salaries Account (c) Cash Account 4. The return of goods by a customer should be debited to (a) Customer's Account (b) Sales Returns Account (c) Goods Account 5. Sales made to Mahesh for cash should be debited to (a) Cash Account (b) Mahesh (c) Sales Account

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Self-Instructional Material Journalising Transactions NOTES 2.5

OPENING ENTRY In case of a running business, the assets and liabilities appearing in the previous year's balance sheet will have to be brought forward to the current year. This is done by means of a journal entry which is termed as 'Opening Entry'. All Assets

Accounts are debited while all Liabilities Accounts

are credited. The excess of assets over liabilities is the proprietor's capital and is credited to his Capital Account. This

will be clear with the help of the following illustration:

Illustration 2.5.

Pass the Opening Entry on 1 January, 1999 on the basis of the following information

taken from the business of Mr.

Sunil:

Rs (i) Cash in Hand 2,000 (ii) Sundry Debtors 6,000 (iii) Stock of Goods 4,000 (iv) Plant 5,000 (v) Land and Buildings 10,000 (vi) Sundry Creditors 10,000

Solution: JOURNAL

JOURNAL

Date Particulars L.F.RsRs 1999

Cash

A/c Dr. 2,000 Jan.1

Sundry Debtors A/c Dr. 6,000

Stock A/c Dr. 4,000 Plant A/c Dr. 5,000

Land and Buildings A/c

Dr. 10,000 To

Sundry Creditors 10,000 To Capital A/c (

balancing figure) 17,000 (Being balances brought forward from the last year) 25,000 29,000

Illustration 2.6. Journalise the following transactions in the books of a trader.

Debit Balances on 1 Jan., 1999: Cash in hand Rs 8,000, Cash at Bank Rs 25,000, Stock of Goods Rs 20,000, Furniture Rs 2,000,

Building Rs 10,000. Sundry Debtors : Vijay Rs 2,000, Anil Rs 1,000, and Madhu Rs, 2,000. Credit Balances on 1 Jan., 1999: Sundry Creditors: Anand Rs 5,000, Loan from Bablu Rs 10,000 Following were further transactions in the month of January 1999: 2. Jan. 1. Purchased goods worth Rs 5,000 for cash less 20% trade discount and 5% cash discount. 3. Jan. 4, Received Rs 1,980 from Vijay and allowed him Rs 20 as discount. 4. Jan. 6, Purchased goods from Bharat Rs 5,000. 5. Jan. 8, Purchased plant from Mukesh for Rs 5,000 and paid Rs 100 as cartage for bringing the plant to the factory and another Rs 200 as installation charges. 6. Jan.12, Sold goods to Rahim on credit Rs 600. 7. Jan.15, Rahim became insolvent and could pay only 50 paise in a rupee. 8. Jan.18, Sold goods to Ram for cash Rs 1,000. 9. Jan.20, Paid salary to Ratan Rs 2,000. 10. Jan.21, Paid Anand Rs 4,800 in full settlement. 11. Jan.26, Interest received from Madhu Rs 200. 12. Jan.28. Paid to Bablu interest on loan Rs 500.13. Jan.31, Sold Goods for cash Rs 500. 14. Jan.31, Withdrew goods from business for personal use Rs 200. Self-Instructional Material 45 Journalising Transactions NOTES Solution: JOURNAL SL. Date Particulars L.F. Debit Credit No. Rs Rs 1. 1999 Jan. 1 Cash A/c Dr. 8,000 Bank A/c Dr. 25,000 Stock A/c Dr. 20,000 Furniture A/c Dr. 2.000 Building A/c Dr. 10,000 Vijay Dr. 2,000 Anil Dr. 1,000 Madhu Dr. 2,000 To Anand 5,000 To Bablu's Loan A/c 10,000 To Capital A/c 55,000 (Being balances brought forward from last year) 2. Jan. 1 Purchases A/c Dr. 4,000 To Cash A/c 3.800 To Discount A/c 200 (Being purchase of goods for cash worth Rs 5.000 allowed 20% trade discount and 5% cash discount on Rs 4.000) 3. Jan. 4 Cash A/c Dr. 1,980 Discount A/c Dr. 20 To Vijay 2,000 (Being cash received from Vijay, allowed Rs 20 as cash discount) 4. Jan. 4 Purchases A/c Dr. 5,000 To Bharat 5,000 (Being purchases of goods from Bharat) 5. Jan. 8 Plant A/c Dr. 5,300 To Mukesh 5,000 To Cash 300 (Being purchase of plant for Rs 5,000 and payment of Rs 100 as cartage and Rs 200 as installation charges) 6. Jan. 12 Rahim Dr. 600 To Sales A/c 600 (Being sale of goods to Rahim) 7. Jan. 15 Cash A/c Dr. 300 Bad Debts A/c Dr. 300 To Rahim 600 (Being cash received from Rahim after his being declared as an insolvent. 50% of the amount due has been received and the rest has been taken as a bad debt) 8. Jan. 18 Cash A/c Dr. 1,000 To Sales A/c 1,000 (Being cash sales) 9. Jan. 20 Salary A/c Dr. 2,000 To Cash 2,000 (Being salary paid) 10. Jan 21 Anand Dr. 5,000 To Cash 4,800 To Discount 200 (Being cash paid to Anand and

he allowed Rs 200 as discount) Check Your Progress 6. The rent paid to the landlord be credited to (a) Landlord's Account (b) Rent Account (c) Cash Account 7. The Cash Discount allowed to a debtor should be credited to (a) Discount Account (b) Customer's Account (c) Sales Account 8 In case of a debt becoming bad, the amount should be credited to (a) Debtor's Account (b) Bad Debts Account (c) Sales Account 46 Self-Instructional Material Journalising Transactions NOTES SL Date Particulars L.F. Debit Credit No. Rs Rs 11 Jan. 26 Cash A/c Dr. 200 To Interest 200 (Being receipt of interest) 12. Jan. 28 Interest on Loan Dr. 500 To Cash 500 (Being payment of interest on loan) 13. Jan. 31 Cash A/c Dr. 500 To Sales A/c 500 (Being goods sold for cash) 14. Jan. 31 Drawings A/c Dr. 200 To Purchases A/c 200 (Being goods withdrawn for personal use) Total 96,900 96,900 Illustration 2.7. Journalise the following transactions: 1. Purchased goods from Mukesh & Co. on credit Rs 10,000. 2. On obtaining delivery of goods, it was found that the goods have been damaged to the extent of Rs 1,000. 3. Mukesh & Co. admitted the claim for breakage to the extent of Rs 800. Solution: JOURNAL SI.No. Particulars L.F. Rs Rs 1. Purchases A/c Dr. 10,000 To Mukesh & Co. 10,000 (Being goods purchased from Mukesh & Co.) 2. Loss in Transit A/c Dr. 1,000 To Purchases A/c 1,000 (Being damage to the goods purchased in transit) 3. Mukesh & Co. Dr. 800 To Loss in Transit A/c 800 (Being claim admitted for loss in transit by Mukesh & Co.) Note: The entries show that against a loss of Rs 1,000, Mukesh & Co. has admitted a claim of only Rs 800. The loss of Rs 200 will have to be suffered by the proprietor of the business. He will transfer this loss to the Profit and Loss Account at the end of the accounting year: 2.6 KEY TERMS ? Journal: A book containing a chronological record of business transactions. It is the book of original records. ? Compound Journal Entry: A journal entry recording more than one business transaction. ? Nominal Accounts: These are accounts opened in the books simply to explain the nature of the transaction. They include accounts of all incomes/gains and expenses/losses. ? Opening Journal Entry: A journal entry passed for bringing forward balances of assets and liabilities of the previous period to the current period. ? Journalising: The process of recording transactions in the journal.? Personal Accounts: These are accounts of persons with whom the business deals.? Real Accounts: These are accounts of tangible objects or intangible rights owned by an enterprise and carrying probable future benefits. Self-Instructional Material 47 Journalising Transactions NOTES 2.7 SUMMARY In this unit, you have learned that: ? Journal is the book of prime entry since all transactions are recorded first of all in the journal. ? Business transactions may be of three types: (i) Relating to persons; (ii) Relating to Properties and Assets; and (iii) Relating to Income and Expense. ? The rules for journalising are as under: o Personal Accounts - Debit the receiver, Credit the giver o Real Accounts - Debit what comes in, Credit what goes out 0 Nominal Accounts - Debit all expenses and losses, Credit all gains and incomes 2.8

ANSWERS TO 'CHECK YOUR PROGRESS' 1. (i) Personal, (ii) Personal, (iii) Nominal, (iv) Personal, (v) Personal, (vi) Personal, (vii) Nominal, (viii) Real, (ix) Real, (x) Real 2. (b) 3. (b) 4. (b) 5. (a) 6. (c) 7. (b) 8. (a) 2.9 QUESTIONS AND EXERCISES 1. Explain the different categories in which accounting transactions can be classified. Also state the rule of 'debit and credit' in this connection. 2.

Explain the different rules for journalising the transaction with appropriate illustrations. 3. Explain the meaning of the term 'Real Accounts'. 4. Explain the term Accounting Cycle. 5. What is an opening entry? 6. Briefly explain the difference between: (i) Personal and Impersonal Accounts. (ii) Real Accounts and Nominal Accounts. 2.10

PRACTICAL PROBLEMS 1. Enter

the following transactions in the journal of Arun for

the month of

December 2000: Dec. Rs 1 Arun commenced his business with

a capital of 10,000 1 Bought machinery 300 2 Bought goods for cash from Ram 500 2 Sold goods for cash to Hari 4,000 3 Purchased goods from Jai on credit 2,200 4 Cash sales to Hari 2,000 5 Bought goods from Sunder on credit 1,920 5 Credit sales to Hari 3,200 6 Bought goods from Jai on credit 2,300 8 Bought office furniture for cash from A Ltd. 3,050 12 Paid cartage to Golden Transport Co. 70 15 Paid carriage-outward to Hanuman 20 17 Paid trade expenses 10 18 Paid advertisement expenses to Sunil Agencies 200 19 Received interest from Anil 50 20 Deposited cash into bank 1,000 22 Paid rent 150

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Self-Instructional Material Journalising Transactions NOTES 27

Paid insurance premium 30 29 Paid salary to Nagendra, a clerk 325 2. Journalise the following transactions: 2000 Rs Jan. 1 Girdhari commenced business with cash 7,500 Jan. 3 Goods purchased for cash 1,000 Jan. 4 Bought of Hari 250 Jan. 8 Furniture purchased from Murari 250 Jan. 12 Cash paid to Hari in full settlement of his account 240 Jan. 15 Goods purchased from Anil and he allowed us 10% trade discount 350 Jan. 20 Cash paid to Anil in full satisfaction 300 Jan. 21 Prince Behari bought from us 115 Jan. 22 Cash paid by Price Behari 15 Jan. 25 Prince Behari became insolvent, a final composition of 50 P in the rupee received from his official receiver out of a debit of Rs 100 50 Jan. 26 Paid for Miscellaneous Expenses 25 Jan. 28 Withdrawn by Girdhari for his personal use 100 Pass an opening entry in the Journal on the basis of the following information on April1, 2000: Cash in hand 2,000 Sundry Debtors 6,000 Stock of Goods 4,000 Machinery 11,000 Furniture 5,000 Sundry Creditors 1,000 3. Surendra commenced business on 1st January, 1999. His transactions for the month are given below. Journalise them. 2000 Rs

Jan. 1 Commenced business with a cash capital 20,000 Jan. 2 Paid into Bank 10,000 Jan. 3 Bought goods from Ramesh & Co. 5,000 Jan. 3 Sold goods to Rajesh 4,000 Jan. 7 Bought goods of Ram Chand 6,000 Jan. 8 Paid wages in cash 200 Sold goods to Mahesh Chand 5,000 Jan. 10 Received cheque from Rajesh (discount allowed Rs 200)3,800 Jan. 10 Paid into bank 4,000 Jan. 11 Paid to Ramesh & Co. (discount received Rs 200) 4,000 Jan. 12 Paid rent for three months to March 400 Jan. 13 Bought goods from C. Khare 7,400 Jan. 15 Wages paid in cash 80 Jan. 15 Paid office expenses in cash 70 Jan. 16 Sold goods to Jagdish 3,200 Jan. 17 Sold goods to Rajesh 1,600 Jan. 21 Sold goods to Mahesh Chand 2,500 Jan. 21 Payment received by cheque from Jagdish 3,200 Jan. 22 Paid wages in cash 80 Jan. 22 Paid office expenses in cash 50 Jan. 25 Paid Ram Chand by cheque (discount Rs 200) 5,800 Jan. 26 Received cheque from Mahesh Chand (discount Rs 200) 4,800 Jan. 27 Mahesh Chand returned goods not up to the sample 200 Jan. 29 Paid wages in cash 80 Jan. 31 Paid office expenses in cash 40 Jan. 31 Paid salaries for the month 300 Jan. 31 Cash used at home 400 4. From the following transactions of M/s Read and Write, write up the Journal in proper form: 1999 Jan. 1 Assets:

Cash in hand Rs 2,000 Cash at Bank Rs 68,000, Stock of goods Rs 40,000, Machinery Rs 1,00,000, Furniture Rs 10,000,

M/s Surya Bros. owe Rs 15,000, M/s Babu Bros. owe Rs 25,000. Liabilities: Loan Rs 50,000, Sum owing to Jain Ltd. Rs 20,000.

Self-Instructional Material 49 Journalising Transactions NOTES

Rs Jan. 2 Bought goods on credit from Samuel & Co. 10,000 Jan. 3 Sold goods for cash to Dhiraj & Co. 4,000 Jan. 4 Sold goods to Surya Bros. on credit 10,000 Jan. 5 Received from Surya Bros. in full settlement of amount due on Jan. 1 14,500 Jan. 6 Payment made to Jain Bros. Ltd. by cheque 9,750 They allowed discount 250 Jan. 9 Old furniture sold for cash 1,000 Jan. 10 Bought goods for cash 7,500 Jan. 11 Babu Bros. pay by cheque; Cheque deposited in Bank 25,000 Paid for repairs to machinery 1,000 Jan. 13 Bought goods of Jain Bros. Ltd. 10,000 Paid carriage on these goods 500 Jan. 16 Received cheque from Surya Bros., cheque deposited in bank 9,500 Discount allowed to them 500 Jan. 17 Paid cheque to Jain Bros. Ltd. 10,000 Jan. 18 Bank intimates that cheque of Surya Bros. has been returned unpaid Jan. 19 Sold good for cash to Key Bros. 6,000 Jan. 21 Cash deposited in bank 5,000 Jan. 24 Paid Municipal Taxes in cash 1,000 Jan. 25 Borrowed from Maheshwari Investment Co. Ltd for constructing own premises. Money deposited with bank for the time being 10,000

Jan. 26 Old

newspapers sold 200 Jan. 28 Paid for advertisements 1,000 Jan. 31 Paid rent by cheque 1,500 Paid salaries for the month 3,000 Drew out of bank for private use 2,500 Surya Bros. becomes insolvent, a dividend of 50 P in the rupee is received. An old amount, written off as bad debt in 1997 is recovered 1,500 5. The following entries have been passed by a student. You have to state whether these entries are correctly passed. If not so, pass the correct journal entries. (i) Cash Account Dr. 7,000 To Interest Account 7,000 (Being interest paid) (ii) Mohan Dr. 10,000 To Purchases Account 10,000 (Being purchase of goods from Mohan) (iii) Hari Dr. 5,000 To Sales Account 5,000 (Being credit sales of goods to Hari) (iv) Mukesh Dr. 1,000 To Bank Account 1,000 (Being salary paid to Mukesh) (v) Freight

Account Dr. 1,000 To Cash Account 1,000 (Being freight paid) (vi) Repairs Account Dr. 1,000 To Cash Account 1,000 (Being

charges paid for overhauling an old machine purchased) (vii) Cash Account Dr. 200 To Rakesh 200 (Being an amount of debt which was written off as bad debt last year, is received during the year) (viii) Purchases Account Dr. 1,000 To Hari 1,000 (Being goods sold to returned by him)

50 Self-Instructional Material Journalising Transactions NOTES [

Ans. (

i) Wrong, reverse should have been done, (ii) Wrong, reverse should have been done, (iii) Correct, (iv) Wrong, Salary Account should have been debited in place of Mukesh, (v) Correct, (vi) Wrong, Machine Account should have been debited in place of Repairs Account, (vii) Wrong, the amount should have been credited to Bad Debts Recovered account in place of Rakesh (viii) Wrong, the amount should have been debited to Sales Returns account in place of Purchases Account] 2.11 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

Self-Instructional Material 51 Ledger Posting and Trial Balance

NOTES UNIT 3

LEDGER POSTING AND TRIAL BALANCE Structure 3.0 Introduction 3.1 Unit Objectives 3.2 Ledger 3.3 Posting 3.4 Relationship between Journal and Ledger 3.5

Rules Regarding Posting 3.6

Trial Balance 3.7 Voucher System 3.8 Key Terms 3.9 Summary 3.10 Answers to 'Check Your Progress' 3.11 Questions and Exercises 3.12 Practical Problems 3.13 Further Reading 3.0

INTRODUCTION It has already been explained in an

earlier unit that accounting involves recording classifying and summarising the financial transactions. Recording is done in

the Journal. This has already been explained in the preceding unit. Classifying of the recorded transactions is done in the Ledger. This is being explained in the present unit. 3.1 UNIT

OBJECTIVES

After going through this unit, you will be able to: ?

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the

role of

the

Ledger in recording business transactions ? Understand the meaning and rules regarding posting ? Describe the meaning and the objects of preparing a trial balance ?

Make

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posting and prepare a trial balance 3.2 LEDGER A ledger is a book which contains various accounts. In other words, a ledger

is a set of accounts.

It contains all accounts of the business enterprise whether Real, Nominal or Personal.

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may be kept in any of the following two forms: (i) Bound Ledger,

and (

ii)

Loose Leaf Ledger.

It is common to keep the Ledger in the form of loose-leaf cards these days. This helps in posting transactions particularly when

a mechanised system of accounting is used. 3.3 POSTING The term '

Posting' means

transferring the debit and credit items from the Journal to their respective accounts in the Ledger.

It should be noted that the exact names of accounts used in the Journal should be carried to the Ledger.

For example, if in the Journal, Expenses Account has been debited, it would not be correct to debit the Office Expenses Account in the Ledger.

Though, in the Journal, it might have been indicated clearly in the narration that it is an item of office expenses. The correct

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Self-Instructional Material Ledger Posting and Trial Balance NOTES

course would have been to record the amount to the Office Expenses Account in the Journal as well as in the Ledger. Posting may be done at any time. However, it should be completed before the financial statements are prepared. It is advisable to keep the more active accounts posted

to

date. The examples of such accounts are

the cash account, personal accounts of various parties etc. The

posting may be done by the bookkeeper from the Journal to the Ledger by any of the following methods: (i) He may take a particular side first. For example, he may take the debits first and make the complete postings of all debits from the Journal to the Ledger. (ii) He may take a particular account and post all debits and credits relating to that account appearing on one particular page of the Journal. He may then take some other accounts and follow the same procedure. (iii) He may complete postings of each journal entry before proceeding to the next journal entry. It is advisable to follow the last method. One should post each debit and credit item as it appears in the Journal.

The Ledger Folio (L.F.) column in the Journal is used at the time when debits and credits are posted to

the Ledger. The page number of the Ledger on which the

posting has been done is mentioned in the L.F. column of the Journal.

Similarly, a folio column in the Ledger can also be kept where the page from which posting has been done from the Journal

may be mentioned.

Thus, there are cross references in both the Journal and the Ledger. A proper index should be maintained in the Ledger giving the names of the accounts and the page

numbers. 3.4 RELATIONSHIP BETWEEN JOURNAL AND LEDGER Both the Journal and the Ledger are the most important books used under the Double Entry System of bookkeeping. Their relationship can be expressed as follows: (i) The transactions are recorded first of all in the Journal and then they are posted

in

the Ledger. Thus, the Journal is the book of first or original entry, while the Ledger is the book of second entry. (ii) The journal records transactions in a chronological order, while the Ledger records transactions in an analytical order. (iii) The journal is more reliable

as compared to

the Ledger since it is

the book in which the entry is passed first of all. (iv) The process of recording transactions is termed as 'Journalising' while the process of recording transactions in the

Ledger is called 'Posting'. 3.5

RULES REGARDING POSTING The following rules should be observed

while posting transactions in the Ledger from the Journal: (

i) Separate accounts should be opened in the Ledger

for posting transactions relating to different accounts recorded in the Journal. For example, separate accounts may be opened for sales, purchases, sales returns, purchases returns, salaries, rent, cash, etc. (ii) The concerned account which has been

debited in the Journal should also be debited in the Ledger.

However, a reference should be made of the other account which has been credited in the Journal. For example, for salaries paid, the salaries account should be debited in the Ledger, but reference should be given of the Cash Account which was been credited in the Journal.

Self-Instructional Material 53 Ledger Posting and Trial Balance NOTES (iii)

The concerned account, which has been credited in the Journal should also be credited in the Ledger, but reference should be

given of the account, which has been debited in the Journal. For example, for salaries paid, Cash Account has been credited in the Journal. It will be credited in the Ledger also, but reference will be given of the Salaries Account in the Ledger.

Thus, it may be concluded that while making a

posting in the Ledger, the concerned account which has been debited or credited in the Journal should also be debited or credited in the Ledger, but reference has to be given of the other account which has been credited or debited in the Journal, as the case may be.

This will be clear with the following example. Suppose salaries of Rs 10,000 have been paid in cash, the following entry will be passed in the Journal: Salaries Account (i) Dr. 10,000 To Cash Account (ii) 10,000 In the Ledger two accounts will be opened (i) Salaries Account, and (ii) Cash Account. Since Salaries Accounts

has been debited in the Journal, it will also be debited in the Ledger. Similarly Cash Account has been credited in the Journal

and, therefore,

it will also be credited in the Ledger, but reference will be given of the other account

involved. Thus the accounts will appear as follows in the Ledger: Dr. SALARIES ACCOUNT Cr. Particulars Rs Particulars Cash A/c (ii) 10,000 CASH ACCOUNT Particulars Rs Particulars Rs Salaries A/c (i) 10,000

Use of the words 'To' and 'By' It is customary to use words 'To' and 'By' while making

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posting in the Ledger. The word 'To' is used with the accounts which appear on the debit side

of a Ledger Account. For example, in the Salaries Account, instead of writing only 'Cash' as shown above, the words 'To Cash' will appear on the debit side of the account. Similarly, the word 'By' is used

with accounts which appear on the credit side of a Ledger Account. For example, in the above case, the words 'By Salaries A/c' will appear on the credit side of the Cash Account instead of only 'Salaries A/c'. The words 'To' and 'By' do not have any specific meanings. Modern accountants are, therefore, ignoring the use of these words.

The procedure of posting from the Journal to the Ledger will be clear with the help of the illustrations given in the following pages:

Illustration 3.1.

Journalise the following transactions and post them into the Ledger: 1. Ram started business with

a capital of

Rs 10,000. 2. He purchased furniture for cash Rs 4,000. 3. He purchased goods from Mohan on credit Rs 2,000. 4. He paid cash to Mohan Rs 1,000. JOURNAL Date Particulars L.F. Debit Credit Rs Rs 1 Cash Account Dr. 10,000 To Capital Account 10,000 5 2 Furniture Account Dr. 4,000 To Cash Account 4,000 6 3 Purchases Account Dr. 2,000 To Mohan 2,000 7 4 Mohan Dr. 1,000 To Cash Account 1,000 8 54 Self-Instructional Material Ledger Posting and Trial Balance NOTES Ledger CASH ACCOUNT 1 To Capital A/c 10,000 By Furniture A/c 4,000 6 By Mohan 1,000 8 CAPITAL ACCOUNT By Cash A/c 10,000 5 FURNITURE ACCOUNT 2 To Cash A/c 4,000 PURCHASES ACCOUNT 3 To Mohan 2,000 MOHAN 4 To Cash A/c 1,000 By Purchases A/c 2,000 7

Balancing of An Account In business, there may be several transactions relating to one particular account. In a Journal, these transactions appear on different pages in a chronological order while they appear in a classified form under that particular account in the Ledger. At the end of a period (say a month, a quarter or a year), the businessman will be interested in knowing the position of a particular account. This means, he should total the debits and credits of the account separately and find out the net balance. This

technique of finding out the net balance of an account, after considering the totals of both debits and credits appearing in the account is known as '

Balancing

the Account'. The balance is put on the side of the account

which is smaller and a reference is given that it has been carried forward or carried down (c/f or c/d) to the next period. On the other hand, in the next period a reference is given that the opening has been brought the forward or brought down (b/f or b/d) from the previous

period. This

will be clear with the help of the following illustration.

Illustration 3.2.

Journalise the following transactions, post them in the Ledger and balance the accounts on 31 January. 1.

Ram started business with a capital of Rs 10,000. 2. He purchased goods from Mohan on credit Rs 2,000. 3. He paid cash to Mohan Rs 1,000. 4. He sold goods to Suresh Rs 2,000. 5. He received cash from Suresh Rs 3,000. 6. He further purchased goods from Mohan Rs 2,000. 7. He paid cash to Mohan Rs 1,000. 8. He further sold goods to Suresh Rs 2,000. 9. He received cash from Suresh Rs 1,000. Solution: JOURNAL Debit Credit Particulars L.F. Amount Amount Rs Rs Cash Account Dr. 10,000 To Capital

Account 10,000 (Being commencement of business) Purchases

Account Dr. 2,000 To Mohan 2,000 (Being purchase of goods on credit) (Contd.)

Self-Instructional Material 55 Ledger Posting and Trial Balance NOTES Debit Credit Particulars L.F. Amount Amount Rs Rs Mohan

Dr. 1,000 To Cash 1,000 (Being payment of cash to Mohan) Suresh Dr. 2,000 To Sales 2,000 (Being goods sold to Suresh) Cash Account Dr. 3,000 To Mohan 3,000 (Being cash received from Suresh) Purchases

Account

Dr. 2,000

To Mohan 2,000 (Being purchase of goods from Mohan) Mohan Dr. 1,000 To Cash Account 1,000 (Being payment of cash to Mohan) Suresh

Dr. 2,000 To Sales Account 2,000 (Being goods sold to Suresh) Cash Account Dr. 1,000 To Suresh 1,000 (Being cash received from Suresh) Total 24,000 24,000

Ledger Dr. CASH ACCOUNT Cr Date Particulars Amount Date Particulars Amount Rs Rs To Capital A/c 10,000 Βv Mohan 1,000 To Suresh 3,000 By Mohan 1,000 To Suresh 1,000 Jan. 31 By Balance c/d 12,000 14,000 14,000 Feb. 1 To Balance b/d 12,000 Dr CAPITAL ACCOUNT Cr Date Particulars Amount Date Particulars Amount Rs Rs Jan.31 To Balance c/d 10,000 By Cash A/c 10,000 10,000 10,000 Feb. 1 By Balance b/d 10,000 PURCHASES ACCOUNT Date Particulars Rs Date Particulars Rs To Mohan 2,000 Jan. 31 By Balance c/d 4,000 То Mohan 2,000 4,000 4,000 Feb.1 To Balance b/d 4,000 MOHAN

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Date Particulars **Rs Date Particulars** Rs To Cash 1.000 By Purchases 2,000 To Cash 1,000 By Purchases 2,000 To Balance c/d 2,000 4,000 4,000 Feb. 1 By Balance b/d 2,000 Check Your Progress 1. State whether each of the following statements is True or False: (a) The 'Posting' is done in the Journal. (b) Ledger is a set of accounts. (c) Transactions are recorded first of all in the Ledger. (d) Journal records transactions in a chronological order. (e) Ledger records transactions in an analytical order. (f) While posting transactions in the ledger, if the account is debited in the Journal, it will be credited in the Ledger. (q) The word 'To' is used with the accounts which appear on the Debit side of a ledger account. (h) Trial Balance helps in knowing the arithmetical accuracy of the accounting entries. 56 Self-Instructional Material Ledger Posting and Trial Balance NOTES SURESH Date Particulars Rs Date Particulars Rs To Sales 2,000 By Cash A/c 3,000 To Sales 2,000 By Cash A/c 1,000 4,000 4,000 SALES ACCOUNT Date Particulars Rs Date Particulars Rs Jan.31 To Balance c/d 4.000 Bv Suresh 2,000 By Suresh 2,000 4,000 4,000 Feb. 1 By Balance b/d 4,000 It is to be noted the balance of an account is always known by the side which is greater. For example, in the above illustration, the debit side of the Cash Account is greater than the credit side by Rs 12,000. It will be, therefore, said that Cash Account is showing a debit balance of Rs 12,000. Similarly, the credit side of the Capital Account is greater than debit side by Rs 10,000. It will be, therefore, said that the Capital Account is showing a credit balance of Rs 10,000. Illustration 3.3. Journalise the following transactions and post them into Ledger: 2006 Sept. 1 Started business with Rs. 50,000 out of which paid into Bank Rs. 20,000. ,, 2 Bought furniture for Rs. 5,000 and machinery for Rs. 10,000. " 3 Purchased goods for Rs. 14,000. " 6 Sold goods for Rs. 8,000. " 8 Purchased goods from Malhotra and Co. Rs. 11,000. ,, 10 Paid telephone rent for the year by cheque Rs. 500. ,, 11 Bought one typewriter for Rs. 2,100 from Universal Typewriter Co. on credit. ,, 15 Sold goods to Keshav Ram for Rs. 12,000. ,, 17 Sold goods to Rajesh Kumar for Rs. 2,000 for cash. ,, 19 Amount withdrawn from bank for personal use Rs. 1,500. ,, 21 Received cash from Keshav Ram Rs. 11,900 discount allowed Rs. 100. ,, 22 Paid into bank Rs. 5,800. ,, 23 Bought 50 shares in X Y & Co. Ltd. at Rs. 60 per share, brokerage paid Rs. 20. ,, 25 Goods worth Rs. 1,000 found defective were returned to Malhotra & Co. and the balance of the amount due to them settled by issuing a cheque in their favour. ,, 28 Sold 20 shares of XY & Co. Ltd. at Rs. 65 per share, brokerage paid Rs. 20. ,, 28 Bought goods worth Rs. 2,100 from Ramesh and supplied them to Suresh at Rs. 3,000. ,, 30 Suresh returned goods worth Rs. 100, which in turn were sent to Ramesh. ,, 30 Issued a cheque for Rs. 1,000 in favour of the landlord for rent for September. ,, 30 Paid salaries to staff Rs. 1,500 and received from travelling salesman Rs. 2,000 for goods sold by him, after deducting the travelling expenses Rs. 100. " 30 Paid for : Charity Rs. 101 Stationery Rs. 450 Postage Rs. 249 Self-Instructional Material 57 Ledger Posting and Trial Balance NOTES Solution: JOURNAL Date Particulars L.F. Debit Credit Rs. Rs. 2006 Sept. 1 Cash A/c Dr. 30,000

https://secure.urkund.com/view/158520595-658188-972436#/sources

Bank

A/ c Dr. 20.000 To Capital A/c 50.000 (Being commencement of business) ,, 2 Furniture A/c Dr. 5,000 Machinery A/c Dr. 10.000 To Cash A/c 15,000 (Being purchase of furniture and machinery) ,, 3 Purchases A/c Dr. 14,000 To Cash A/c 14,000 (Being purchase of goods),, 6 Cash A/cDr. 8,000 To Sales A/c 8,000 (Being goods sold) ,, 8 Purchases A/c Dr. 11.000 То Malhotra & Co. 11,000 (Being purchase of goods from Malhotra & Co.) ,, 10 Telephone Rent A/c Dr. 500 To Bank 500 (By payment of telephone rent), , 11 Typewriter A/c Dr. 2,100 To Universal Typewriter Co. 2,100 (Being purchase of typewriter) ,, 15 Keshav Ram Dr. 12,000 To Sales A/c 12,000 (Sold goods to Keshav Ram) ,, 17 Cash A/cDr. 2.000 To Sales A/c 2,000 (Sold goods for cash to Rajesh Kumar) ,, 19 Drawings A/c Dr. 1,500 To Bank A/c 1,500 (Withdrawn for personal use) ,, 21 Cash A/cDr. 11,900 Discount A/c Dr. 100 To Keshav Ram 12,000 (Cash recd. from Keshav Ram) ,, 22 Bank A/cDr. 5,800 To Cash A/c 5,800 (Paid into bank) 23 Investments A/c Dr. 3,020 To Bank A/c 3,020 (Purchase of shares for Rs. 3,000 and brokerage Rs. 20) ,, 25 Malhotra & Co. Dr. 1,000 To Purchase Returns A/c 1,000 (Defective goods returned to Malhotra & Co.), 25 Malhotra & Co. Dr. 10,000 To Bank A/c 10,000 (Beina settlement of account of Malhotra & Co.) Contd... 58 Self-Instructional Material Ledger Posting and Trial Balance NOTES Date Particulars L.F. Debit Credit Rs. Rs., 28 Cash A/c Dr. 1,280 To Investments A/c 1,208 To Profit on sale of Investments A/c 72 (Sold shares in XY & Co. Ltd. @ Rs. 60 per share brokerage Rs. 20) ,, 28 Purchases A/c Dr. 2,100 To Ramesh 2,100 (Purchase of goods) ,, 28 Suresh Dr. 3,000 To Sales A/c 3,000 (Goods sold to Suresh) ,, 30 Sales Return A/c Dr. 100 To Suresh 100 (Goods returned by Suresh) ,, 30 Ramesh Dr. 70 To Purchases Returns 70 (Goods returned by Suresh sent to Suresh at $cost : 100 \times 21/30 =$ Rs. 70) ,, 30 Rent A/ c Dr. 1,000 To Bank A/c 1,000 (Rent paid to landlord) ,, 30 Salaries A/c Dr. 1,500 To Cash 1,500 (Salaries paid) Cash A/cDr. 2,000 To Sales A/c 2,000 (Cash sales by travelling salesmen) Travelling Expenses A/c Dr. 100 To Cash 100 (Travelling expenses paid) ,, 30 Charity A/c Dr. 101 Stationery A/ c Dr. 450 Postage A/c Dr. 249 To Cash A/c 800 (Paid for charity, stationery, postage etc.) Ledger Dr. CASH ACCOUNT Cr. **Date Particulars**

Date Particulars Rs. 2006 2006 Sept. 1 To Capital A/c 30,000 Sept. 2 By Furniture A/c 5,000 ,, 6 To Sales A/c 8,000 By Machinery A/c 10,000 ,, 17 To Sales A/c 2,000 ,, 3 By Purchases A/c 14,000 ,, 21 То Keshav Ram 11,900,, 22 By Bank A/c 5,800 ,, 28 To Investments A/c 1,208 ,, 30 By Salaries A/c 1,500 То Profit on sale of ,, 30 By TravellingExpenses 100 Investments A/c 72 By Charity A/c 101,, 30 To Sales A/c 2,000 ,, 30 By Stationery A/c 450 By Postage A/c 249 By Balance c/d 17,980 55,180 55,180 Self-Instructional Material 59 Ledger Posting and Trial Balance NOTES BANK ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 1 To Capital A/c 20,000 Sept.10 By Telephone Rent 500,, 22 To Cash A/c 5,800 ,, 19 By Drawing A/c 1,500 ,, 23 By Investments A/c 3,020 ,, 25 By Malhotra & Co. 10,000 ,, 30 By Rent A/c 1,000 ,, 30 By Balance c/d 9,780 25,800 25,800 CAPITAL ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept.30 To Balance c/d 50,000 Sept. 1 By Cash A/c 30,000 By Bank A/c 20,000 50,000 50,000 FURNITURE ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 2 To Cash A/c 5,000 Sept.30 By Balance c/d 5,000 5,000 5,000 MACHINERY ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 2 To Cash A/c 10,000 Sept.30 By Balance c/d 10,000 10,000 10,000 Dr. PURCHASES ACCOUNT Cr. Date Particulars Rs. Date Particulars Rs. Sept. 3 To Cash A/c 14,000 Sept. 30 By Balance c/ d 27,100 ,, 8 То Malhotra & Co. 11,000 ,, 28 To Ramesh 2,100 27,100 27,100 SALES ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 To Balance c/d 27,000 Sept. 6 By Cash A/c 8,000 ,, 15 By

Rs

Keshav Ram 12,000 ,, 17 By Cash A/c 2,000 ,, 28 By Suresh 3,000 ,, 30 By Cash A/c 2,000 27,000 27,000 MALHOTRA & CO. Date Particulars Rs. Date Particulars Rs. Sept. 25 To Purchase Returns 1,000 Sept. 8 By Purchases A/c 11,000 ,, 25 То Bank A/c 10,000 11,000 11,000 60 Self-Instructional Material Ledger Posting and Trial Balance NOTES TELEPHONE RENT ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 10 To Bank 500 Sept. 30 Βv Balance c/d 500 500 500 TYPEWRITER ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 11 To Universal 2,100 Sept. 30 By Balance c/d 2,100 Typewriter Co. 2,100 2,100 UNIVERSAL TYPEWRITER CO. Date Particulars Rs. Date Particulars Rs. Sept. 30 To Balance c/d 2,100 Sept. 11 By Typewriter A/ c 2,100 2,100 2,100 Dr. KESHAV RAM Cr. Date Particulars Rs. Date Particulars Rs. Sept. 15 To Sales A/c 12,000 Sept. 30 By Cash A/c 11,900 By Discount A/c 100 12,000 12,000 DRAWINGS ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 19 To Bank A/c 1,500 Sept. 30 By Balance c/d 1,500 1,500 1,500 DISCOUNT ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 21 To Keshav Ram 100 Sept. 30 By Balance c/d 100 100 100 **INVESTMENTS** ACCOUNT **Date Particulars** Rs. Date Particulars Rs. Sept. 23 To Bank A/c 3,020 Sept. 28 By Cash 1,208 By Balance c/ d 1,812 3,020 3,020 PRUCHASES RETURNS ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 To Balance c/ d 1,070 Jan. 25 By Malhotra & Co. 1,000 Sept. 30 By Ramesh 70 1,070 1,070 (Contd.) Self-Instructional Material 61 Ledger Posting and Trial Balance NOTES PROFIT ON SALES ON INVESTMENTS ACCOUNT **Date Particulars** Rs. Date Particulars Rs. Sept. 30 To Balance c/d 72 Sept. 30 By Cash A/c 72 72 72 RAMESH Date Particulars Rs. Date Particulars Rs. Sept. 30 To Purchases Returns 70 Sept. 28 By Purchases 2,100 " 30 То Balance c/ d 2,030 2,100 2,100 Dr. SURESH

Date Particulars Rs. Date Particulars Rs. Sept. 30 To Sales A/c 3,000 Sept. 30 By Sales Returns A/c 100 " 30 By Balance c/d 2,900 3,000 3,000 SALES RETURNS ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 To Suresh 100 Sept. 30 By Balance c/d 100 100 100 **RENT ACCOUNT Date** Particulars Rs. Date Particulars Rs. Sept. 30 To Bank A/ c 1.000 Sept. 30 By Balance c/d 1,000 1,000 1,000 **SALARIES** ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 To Cash A/c 1,500 Sept. 30 By Balance c/d 1,500 1,500 1,500 TRAVELLING EXPENSES ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 To Cash A/c 100 By Balance c/d 100 100 100 CHARITY ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 To Cash A/c 101 Sept. 30 By Balance c/d 101 101 101 **STATIONERY** ACCOUNT Date Particulars Rs. Date Particulars Rs. Sept. 30 То Cash A/c 450 Sept. 30 By Balance c/d 450 450 450 62 Self-Instructional Material Ledger Posting and Trial Balance NOTES Dr. POSTAGE ACCOUNT Cr. Date Particulars Rs. Date Particulars Rs. Sept. 30 To Cash A/c 249 Sept. 30 By Balance c/d 249 249 249 3.6 TRIAL BALANCE In case, the various debit balances and the credit balances of the different accounts are taken down in a statement, the statement so prepared is termed as a Trial Balance. In other words, Trial Balance is a statement containing the various ledger balances on a particular date. For example, with the balances of the ledger accounts prepared in Illustration 3.2, the Trial Balance can be prepared as follows: TRIAL BALANCE as on 31st January Particulars Debit Credit Rs Rs Cash Account 12,000 Capital Account 10,000 Purchases Account 4,000 Mohan 2,000 Sales Account 4,000 16,000 16.000 Thus. the two sides of the Trial Balance tally. It means the books of accounts are arithmetically accurate. Objects of Preparing A Trial Balance 1. Checking of the arithmetical accuracy of the accounting entries. As indicated above, the Trial Balance helps in knowing the arithmetical accuracy of the accounting entries. This is because according to the dual

aspect concept for every debit, there must be an equivalent credit. Trial Balance

represents a summary of all ledger balances and, therefore, if the two sides of

the Trial Balance tally, it is an indication of this fact that the books of account are arithmetically accurate. Of course, there may be certain errors in the books of account in spite of an agreed Trial Balance. For example, if a transaction has been completely omitted from the books of account, the two sides of the Trial Balance will tally, in spite of the books of account being wrong. This has been discussed in detail later in a separate unit. 2. Basis for financial statements. Trial Balance forms the basis for preparing financial statements such as the Income Statement and the Balance Sheet. The Trial Balance represents all transactions relating to different accounts in a summarised form for a particular period. In case, the Trial Balance is not prepared, it will be almost impossible to prepare the financial statements as stated above to know the profit or loss made by the business during a particular period or its financial position on a particular date. Self-Instructional Material 63 Ledger Posting and Trial Balance NOTES 3.

Summarised ledger. It has already been stated that a Trial Balance contains the ledger balances on a particular date. Thus, the entire ledger is summarised in the form of a Trial Balance. The position of a particular account can be judged simply by looking at the Trial Balance. The Ledger may be seen only when details regarding the accounts are required. Methods of

preparing Trial Balance. A trial balance may be prepared according to any of the two methods: (

a) Totals method. In case of

this method, the totals of debit and credit of the accounts are shown in the trial balance. Trial balance is prepared before ledger accounts are balanced.

The totals of the debit and credit columns of the trial balance must be equal.

This method is not popular. (b) Balance

method. In case of

this method, the balances of the ledger accounts are shown in the respective debit and credit columns of the trial balance. The total of the balance of the

debit column must be equal to the total balance of credit column. This is the most common method of preparing a trial balance.

Illustration 3.4. Prepare the Ledger Accounts and the Trial Balance on the basis of transactions given in Illustration 3.6. Solution:

Dr. CASH ACCOUNT Cr Date Particulars L.F. Amount Date Particulars L.F. Amount Rs Rs 1989 1989 Jan. 1 To Balance b/d 8,000 Jan. 1 By Purchases A/c 3,800 Jan. 4 To Vijay 1,980 Jan. 8 By Plant A/c 300 Jan. 15 To Rahim 300 Jan. 20 By Salary A/c 2,000 Jan. 18 To Sales A/c 1,000 Jan. 21 By Anand 4,800 Jan. 26 To Interest A/c 200 Jan. 28 By Interest on Loan A/ c 500 Jan. 31 To Sales A/c 500 Jan. 31 By Balance c/d 580 11,980 11,980 Feb. 1 То Balance b/d 580 INTEREST ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 31 To Balance c/d 200 Jan. 26 By Cash A/c 200 200 200 Feb. 1 By Balance b/d 200 BANK ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Balance b/d 25,000 Jan. 31 By

Balance c/d 25,000 25,000 25,000 Feb. 1 То Balance b/d 25,000 64 Self-Instructional Material Ledger Posting and Trial Balance NOTES STOCK ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 То Balance b/d 20,000 Jan. 31 By Balance c/d 20,000 20,000 20,000 Feb. 1 To Balance b/d 20,000 FURNITURE ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Balance b/d 2,000 Jan. 31 Βv Balance c/d 2,000 2,000 2,000 Feb. 1 To Balance b/d 2,000 BUILDING ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Balance b/d 10.000 Jan. 31 By Balance c/d 10,000 10,000 10,000 Feb. 1 To Balance b/d 10,000 VIJAY Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Balance b/d 2,000 Jan. 4 By Cash A/c 1,980 By Discount A/c 20 2,000 2,000 ANIL Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Balance b/d 1,000 Jan. 31 By Balance c/d 1,000 1,000 1,000 Feb. 1 To Balance b/d 1,000 MADHU Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Balance b/d 2,000 Jan. 31 By Balance c/d 2,000 2,000 2,000 Feb. 1 To Balance b/d 2,000 ANAND Date Particulars Amount Date Particulars Amount Rs Rs Jan. 21 To Cash A/c 4,800 Jan. 1 By Balance b/d 5,000 Jan. 21 То Discount A/c 200 5,000 5,000 Self-Instructional Material 65 Ledger Posting and Trial Balance NOTES CAPITAL ACCOUNT **Date Particulars** Amount Date Particulars Amount Rs Rs Jan. 31 To Balance c/d 55,000 Jan. 1 By Balance b/d 55,000 55,000 55,000 Feb. 1 By Balance b/d 55,000 BABU'S LOAN ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 31 To Balance c/d 10,000 Jan. 1 By Balance b/d 10,000 10,000 10,000 Feb. 1 By Balance b/d 10,000 PURCHASES ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 1 To Cash

A/c 3,800 Jan. 31 By Drawings A/c 200 Jan. 1 То Discount A/c 200 Jan. 31 By Balance c/d 8,800 Jan. 6 To Bharat 5,000 9,000 9,000 Feb. 1 To Balance b/d 8.800 DISCOUNT ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 4 To Vijay 20 Jan. 1 By Purchases A/ c 200 Jan. 31 To Balance c/d 380 Jan. 21 By Anand 200 400 400 Feb. 1 By Balance b/d 380 BHARAT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 31 To Balance c/d 5,000 Jan. 6 By Purchases A/c 5,000 5,000 5,000 Feb. 1 By Balance b/d 5.000 PLANT ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 8 To Mukesh 5.000 Jan. 31 By Balance c/d 5,300 Jan. 8 То Cash A/c 300 5.300 5.300 Feb. 1 To Balance b/d 5,300 INTEREST ON LOAN ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 28 To Cash A/c 500 Jan. 31 Βv Balance c/d 500 500 500 Feb. 1 To Balance b/d 500 66 Self-Instructional Material Ledger Posting and Trial Balance NOTES MUKESH Date Particulars Amount Date Particulars Amount Rs Rs Jan. 31 To Balance c/d 5,000 Jan. 8 By Plant A/c 5,000 5,000 5,000 Feb. 1 By Balance d/d 5,000 SALES ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 31 To Balance c/d 2,100 Jan. 21 By Rahim 600 Jan. 18 By Cash A/c 1,000 Jan. 31 By Cash A/c 500 2,100 2,100 Feb. 1 By Balance b/d 2,100 Dr. RAHIM Cr. Date Particulars Amount **Date Particulars** Amount Rs Rs Jan. 12 To Sales A/c 600 Jan. 15 By Cash A/c 300 Jan. 15 By Bad Debts A/c 300 600 600 **BAD DEBTS** ACCOUNT Date Particulars Amount

Date Particulars Amount Rs Rs Jan. 15 To Rahim 300 Jan. 31 By Balance c/d 300 300 Feb. 1 To Balance b/d 300 SALARY ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 20 To Cash A/c 2,000 Jan. 31 By Balance c/d 2,000 2,000 2,000 Feb 1 To Balance b/d 2,000 DRAWINGS ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs Jan. 31 To Purchases A/c 200 Jan. 31 Bv Balance c/d 200 200 200 Feb. 1 To Balance b/d 200 TRIAL BALANCE (as on 31 st January, 1999) Particulars Debit Rs Credit Rs Cash Account 580 Interest 200 Bank Account 25,000 Stock Account 20,000 Furniture Account 2,000 (Contd...) Self-Instructional Material 67 Ledger Posting and Trial Balance NOTES Building Account 10,000 Anil 1,000 Madhu 2,000 Capital Account 55,000 Babu's Loan Account 10,000 Purchases Account 8,800 Discount Account 380 Bharat 5,000 Plant Account 5,300 Interest on Loan Account 500 Mukesh 5,000 Sales Account 2,100 Bad Debts Account 300 Salary Account 2,000 Drawings Account 200 77,680 77,680 Illustration 3.5. On 1st January, 2006, the following were the ledger balances of Rajan & Co.: Cash in hand Rs. 900; Cash at bank Rs. 21,000; Soni (Cr.) Rs. 3,000; Zahir (Dr.) Rs. 2,400; Stock Rs. 12,000; Prasad (Cr.) Rs. 6,000; Sharma (Dr.) Rs. 4,500; Lall (Cr.) Rs. 2,700; Ascertain capital. Transactions during the month were: Date Particulars Rs. 2006 Jan. 2 Bought goods of Prasad 2,700, "3 Sold to Sharma 3,000 ,, 5 Bought goods of Lall for cash payment made by cheque 3,600 ,, 7 Took goods for personal use 200 ,, 13 Received from Zahir in full settlement 2,350 ,, 17 Paid to Soni in full settlement 2,920 ,, 22 Paid cash for stationery 50 ,, 29 Paid to Prasad by cheque 2,650 Discount allowed by him 50,, 30 Provide interest on capital 100,, 30 Rent due to landlord 200 Journalise the above transactions and post to the Ledger and prepare a Trial Balance. Solution: JOURNAL **Date Particulars** L.F. Debit Credit Rs. Rs. 2006 Jan. 1 Cash A/c Dr. 900 Bank A/c Dr. 21.000 Zahir Dr. 2,400 Stock Dr. 12,000 Sharma Dr. 4,500 To Soni 3,000 To Prasad 6,000 To Lall 2,700 To Capital A/c 29,100 (Balances brought forward from last year) ,, 2 Purchases A/c Dr. 2,700 To Prasad 2,700 (Purchase of goods) (Contd.) 68 Self-Instructional Material Ledger Posting and Trial Balance NOTES Date Particulars L.F. Debit Credit Rs. Rs.,, 3 Sharma Dr. 3,000 To Sales A/c 3,000 (Sold goods to Sharma) ,, 5

Purchases A/c Dr. 3,600 To Bank A/c 3,600 (Bought goods from Lall for cash, paid by cheque) ,, 7 Drawings A/ c Dr. 200 To Purchases A/c 200 (Took goods for personal use) Jan. 13 Cash A/c Dr. 2,350 Discount A/c Dr. 50 To Zahir 2,400 (Received in full settlement) ,, 17 Soni Dr. 3,000 To Cash A/c 2.920 To Discount A/c 80 (Paid in full settlement and earned discount) ,, 22 Stationery A/c Dr. 50 To Cash A/c 50 (Paid for stationery) ,, 30 Interest on Capital A/c Dr. 100 To Capital A/c 100 (Interest on capital provided),, 30 Rent A/c Dr. 200 To Outstanding Rent A/c 200 (Rent due to landlord) Ledger Dr. CASH ACCOUNT Cr. Date Particulars Rs. Date Particulars Rs. 2006 2006 Jan. 1 To Balance b/d 900 Jan. 5 By Soni 2,920 ,, 13 To Zahir 2,350 ,, 22 By Stationery A/c 50 ,, 31 By Balance c/d 280 3.250 3.250 BANK ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance c/d 21,000 Jan. 5 By Purchases 3,600 ,, 29 By Prasad 2,650 ,, 31 By Balance c/d 14,750 21,000 21,000 Dr. ZAHIR Cr. Date Particulars Rs. Date Particulars Rs. Jan. 1 То Balance b/d 2,400 Jan. 13 By Cash A/c 2,350 ,, 13 By Discount A/c 50 2,400 2,400 (Contd.) Self-Instructional Material 69 Ledger Posting and Trial Balance NOTES Dr. STOCK ACCOUNT Cr. **Date Particulars** Rs. Date Particulars Rs. Jan. 1 To Balance b/d 12,000 Jan. 31 By Balance c/d 12,000 12,000 12,000 SHARMA Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance b/d 4,500 Jan. 31 By Balance c/d 7,500 " 3 To Sales A/c 3,000 7,500 7,500 SONI Date Particulars Rs. Date Particulars Rs. Jan.17 To Cash A/c 2,920 Jan. 1 By Balance b/d 3,000 To Discount A/c 80 3,000 3,000 PRASAD Date Particulars Rs. Date Particulars Rs. Jan.29 To Bank

A/c 2,650 Jan. 1 By Balance b/d 6,000 ,, 29 To Discount A/c 50 ,, 2 By Purchase A/c 2,700 ,, 31 To Balance c/d 6,000 8,700 8,700 LALL Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 2.700 Jan. 1 By Balance b/d 2,700 2,700 2,700 CAPITAL ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.31 То Balance c/d 29,200 Jan. 1 By Balance b/d 29,100 ,, 30 By Interest on Capital A/c 100 29,200 29,200 Dr. PURCHASES ACCOUNT Cr. **Date Particulars** Rs. Date Particulars Rs Jan. 2 To Prasad 2,700 Jan. 7 By Drawings A/c 200 ,, 5 To Bank A/c 3,600 ,, 31 By Balance c/d 6,100 6,300 6,300 SALES ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 3,000 Jan. 3 By Sharma 3,000 3,000 3,000 70 Self-Instructional Material Ledger Posting and Trial Balance NOTES DRAWINGS ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 7 To Purchases A/c 200 Jan. 31 By Balance c/d 200 200 200 DISCOUNT RECEIVED ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 130 Jan. 17 By Soni 80 By Prasad 50 130 130 DISCOUNT ALLOWED ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.13 To Zahir 50 Jan. 31 By Balance c/d 50 50 50 **STATIONERY** ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.22 То Cash A/c 50 Jan. 31 By Balance c/d 50 50 50 INTEREST ON CAPITAL ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.30 To Capital A/c 100 Jan. 31 By Balance c/d 100 100 100 Dr. RENT ACCOUNT Cr. Date Particulars Rs. Date Particulars Rs. Jan.30 To Outstanding Rent A/c 200 By Balance c/d 200 200 200 OUTSTANDING RENT ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/ d 200 Jan. 30

By

Rent A/c 200 200 200

TRIAL BALANCE (

as on 31st January, 1996) Particulars Dr. Cr. Rs. Rs. Cash Account 280 Bank Account 14,750 Stock Account 12,000 Sharma 7,500 Prasad 6,000 Lall 2,700 Capital Account 29,200 Purchases Account 6,100 (Contd.)

Self-Instructional Material 71 Ledger Posting and Trial Balance NOTES Particulars Dr. Cr. Rs. Rs. Sales Account 3,000 Drawings Account 200 Discount Allowed Account 50 Discount Received Account 130 Stationery Account 50 Interest on Capital Account 100 Rent Account 200 Outstanding Rent

Account 200 41,230 41,230 Illustration 3.6.

Journalise the following transactions, post them in the Ledger and

prepare a Trial Balance: January 1, 1996 Assets : Furniture Rs. 5,000; Machinery Rs. 10,000; Stock Rs. 4,000; Cash in Hand Rs. 550; Cash at Bank Rs. 7,450; Amount due from Ramesh & Co. Rs. 1,000 and Amount due from Suresh Rs. 2,000. Liabilities : Amount due to Rama Rs. 4,500; Amount due to Ranjeet Rs. 2,000; and Amount due to Shyam Rs. 1,500. 1996 Particulars Rs. Jan. 1 Purchased goods from Ajay 4,500 ,, 3 Sold goods for cash 1,500 ,, 5 Paid to Himanshu by cheque 5,500 ,, 10 Deposited in bank 2,800 ,, 13 Sold goods on credit to Mukesh 1,700 ,, 15 Paid for postage 100 ,, 16 Received cash from Rakesh 2,200 ,, 17 Paid telephone charges 250 ,, 18 Cash Sales 1,500 ,, 20 Purchased Govt. Securities 500 ,, 22 Purchased goods worth Rs. 1,600 less 20% trade discount and 5% cash discount from Mahesh & Co. for cash and supplied them to Ramesh & Co. at list price less 10% trade discount ,, 25 Cash Purchases 1,650 ,, 27 Goods worth Rs. 500 were damaged in transit; a claim was made on the railway authorities for the same ,, 28 Suresh is declared insolvent and a dividend of 50 paise in rupee is received from him in full settlement,

by cheque. ,, 28 Bought a horse for Rs. 2,600 and a carriage for Rs. 1,200 for delivering goods to customers ,, 30 The horse bought on Jan. 28 dies, and carriage was sold for Rs. 1,000 ,, 31 Allowed interest on capital @ 10% p.a. for one month ,, 31 Paid for: Salaries Rs. 150 Rent Rs. 60

72 Self-Instructional Material Ledger Posting and Trial Balance NOTES Solution. JOURNAL Date Particulars L.F. Debit Credit Rs. Rs. 1996 Jan. 1 Furniture A/ c Dr. 5,000 Machinery A/c Dr. 10,000 Stock A/c Dr. 4,000 Cash A/c Dr. 550 Bank A/c Dr. 7.450 Ramesh & Co. Dr. 1,000 Suresh Dr. 2,000 To Rama 4,500 To Ranjeet 2,000 To Shyam 1,500 To Capital A/c 22,000 (Balance brought forward) ,, 1 Purchases A/c Dr. 4,500 To Ajay 4,500 (Purchase of goods) ,, 3 Cash A/ c Dr. 1,500 To Sales A/c 1,500 (Cash Sales) ,, 5 Himanshu Dr. 5,500 To Bank 5,500 (Paid to Himanshu) ,, 10 Bank A/c Dr. 2,800 To Cash A/c 2,800 (Deposited in bank) ,, 13 Mukesh Dr. 1,700 To Sales A/c 1,700 (Sold goods) ,, 15 Postage A/c Dr. 100 To Cash 100 (Paid for postage) Jan.16 Cash A/c Dr. 2,200 To Rakesh 2,200 (Cash Received),, 17 Telephone Charges A/c Dr. 250 To Cash A/c 250 (Paid telephone charges) ,, 18

Cash A/c Dr. 1,500 To Sales A/c 1,500 (Cash sales) ,, 20 Investments A/c Dr. 500 To Cash A/c 500 (Purchased government securities),, 22 Purchases A/c Dr. 1,200 To Cash A/c 1,200 (Purchased goods worth Rs. 1,600 less 20% trade and 5% cash discount) ,, 22 Ramesh & Co. Dr. 1,440 To Sales A/c 1,440 (Sold goods for 1,600 less 10% trade Discount) (Contd.) Self-Instructional Material 73 Ledger Posting and Trial Balance NOTES Date Particulars L.F. Debit Credit Rs Rs. .. 25 Purchases A/ c Dr. 1,650 To Cash A/c 1,650 (Cash purchases) ,, 27 Loss in Transit A/c Dr. 500 To Purchases A/c 500 (Goods damaged in transit), 28 Cash A/c Dr. 1,000 Bad Debts Dr. 1,000 To Suresh 2,000 (Suresh pays 50 p. in rupee) ,, 28 Horse & Carriage A/ c Dr. 3,800 To Bank A/c 3,800 (Purchase of a horse for Rs. 2,600 and carriage Rs. 1,200) ,, 30 Cash A/c Dr. 1,000 Abnormal Loss A/c Dr. 2,800 To Horse & Carriage A/c 3,800 (Horse dies and carriage sold for Rs. 1,000) ,, 31 Interest on Capital A/c Dr. 183 To Capital A/c 183 (Allowed interest on capital for one month at 10% p. a.) ,, 31 Salaries A/c Dr. 150 Rent A/c Dr. 60 To Cash A/c 210 (Paid for salaries and rent) Ledger Dr. FURNITURE ACCOUNT **Date Particulars** Rs. Date Particulars Rs. Jan. 1 Balance b/d 5,000 Jan. 31 By Balance c/d 5,000 5,000 5,000 MACHINERY ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance b/d 10,000 Jan. 31 By Balance c/d 10,000 10,000 10,000 STOCK ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance b/d 4,000 Jan. 31 By Balance c/d 4,000 4,000 4,000 CASH ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance

b/d 550 Jan. 10 By Bank A/c 28,000 ,, 3 To Sales A/c 1,500 ,, 15 By Postage A/c 100 ,, 16 To Rakesh A/c 2,200 ,, 17 By Telephone Charges 250 ,, 18 To Sales A/c 1,500 ,, 20 By Investments A/c 500 ,, 28 To Suresh 1,000 ,, 22 By Purchases A/c 1,200 ,, 30 To Horse & Carriage A/c 1,000 ,, 25 By Purchases A/c 1,650 ,, 31 By Salaries A/c 150 ,, 31 By Rent A/c 60 ,, 31 By Balance c/d 1.040 7.750 7.750 74 Self-Instructional Material Ledger Posting and Trial Balance NOTES BANK ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance b/d 7,450 Jan. 5 By Himanshu 5,500 ,, 10 To Cash A/c 2,800 ,, 28 By Horse & Carriage A/ c 3,800 ,, 31 By Balance c/d 950 10,250 10,250 RAMESH & CO. Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance b/d 1,000 Jan. 31 By Balance c/d 2,440 ,, 22 To Sales A/c 1,440 2,440 2,440 SURESH Date Particulars Rs. Date Particulars Rs. Jan. 1 To Balance b/d 2,000 Jan. 28 By Cash A/c 1,000 By Bad Debts A/c 1,000 2,000 2,000 RAMA Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 4,500 Jan. 1 By Balance c/d 4,500 4,500 4,500 RANJEET Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 2,000 Jan. 1 By Balance b/d 2,000 2,000 2,000 SHYAM Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 1,500 Jan. 1 By Balance b/d 1,500 1,500 1,500 Dr.CAPITAL ACCOUNT Cr. Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 22,183 Jan. 1 By Balance b/d 22,000 ,, 31 By Interest on Capital 183 22,183 22,183 PURCHASES ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan. 1 To Ajay 4,500 Jan. 27 By Loss-in transit 500 ,, 22 То Cash A/c 1,200 ,, 31 By Balance c/d 6,850 ,, 25 To Cash A/c 1,650 7,350 7,350 (Contd.)

Self-Instructional Material 75 Ledger Posting and Trial Balance NOTES AJAY Date Particulars Rs Date Particulars Rs. Jan. 1 To Balance c/d 4,500 Jan. 1 By Purchases A/ c 4,500 4,500 4,500 SALES ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 6,140 Jan. 3 By Cash A/c 1,500 ,, 13 By Mukesh 1,700 ,, 18 By Cash A/c 1,500 ,, 22 By Ramesh & Co. 1,440 6,140 6,140 HIMANSHU Date Particulars Rs. Date Particulars Rs. Jan. 5 To Bank A/c 5,550 By Balance c/d 5,550 5,550 5,550 POSTAGE ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.15 То Cash A/c 100 Jan. 31 By Balance c/d 100 100 100 RAKESH Date Particulars Rs. Date Particulars Rs. Jan.31 To Balance c/d 2,200 Jan. 16 By Cash A/c 2,200 2,200 2,200 Dr.TELEPHONE CHARGES ACCOUNTCr. Date Particulars Rs. Date Particulars Rs. Jan.17 To Cash A/c 250 Jan. 31 By Balance c/d 250 250 250 INVESTMENTS ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.20 To Cash A/c 500 By Balance c/d 500 500 500 LOSS IN TRANSIT ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.27 To Purchases A/c 500 Jan. 31 By Balance c/d 500 500 500 **BAD DEBTS ACCOUNT** Date Particulars Rs. Date Particulars Rs. Jan.28 To Suresh 1,000 Jan. 31 By Balance c/d 1,000 1,000 1,000 76 Self-Instructional Material Ledger Posting and Trial Balance NOTES HORSE & CARRIAGE ACCOUNT **Date Particulars** Rs. Date Particulars Rs Jan.28 To Bank A/c 3,800 Jan. 30 By Cash A/c 1,000 By Abnormal Loss A/c 2,800 3,800 3,800 ABNORMAL LOSS ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.30 To Horse & Carriage A/c 2,800 Jan. 31 By Balance c/d 2,800 2,800 2,800 INTEREST ON CAPITAL ACCOUNT Date Particulars Rs. Date Particulars Rs. Jan.31 To Capital A/c 183 Jan. 31 By Balance c/d 183 183 183 SALARIES ACCOUNT **Date Particulars** Rs. Date Particulars Rs. Jan.31 To Cash A/c 150

Jan. 31 Βv Balance c/d 150 150 Dr. RENT ACCOUNT Cr. Date Particulars Rs. Date Particulars Rs. Jan.31 To Cash A/c 60 Jan. 31 By Balance c/d 60 60 60 TRIAL BALANCE (as on Jan. 31, 2006) Particulars Dr. Cr. Rs. Rs. Furniture Account 5,000 Machinery Account 10,000 Stock Account 4,000 Cash Account 1,040 Bank Account 950 Ramesh & Co. 2,440 Rama 4,500 Ranjeet 2,000 Shyam 1,500 Capital Account 22,183 Purchases Account 6,850 Ajay 4,500 Sales Account 6,140 Himanshu 5,500 Mukesh 1,700 Postage Account 100 Rakesh 2,200 Telephone Charges Account 250 Investment Account 500 Loss-in-Transit Account 500 Bad Debts Account 1,000 Abnormal Loss Account 2.800 Interest on Capital Account 183 Salaries Account 150 Rent Account 60 43.023 43.023 Self-Instructional Material 77 Ledger Posting and Trial Balance NOTES Illustration 3.7. Record the following transactions in various subsidiary books and post them into Ledger and prepare a Trial Balance: 2000 June 1 Cash in hand Rs 15,700, Cash at Bank Rs. 25,400 and Capital Account Rs. 41,100. June 3 Bought goods for cash Rs. 4,100. June 4 Purchased goods from Mahesh & Co. for Rs. 5,800 less 10% trade discount. June 7 Sold goods to Bindia & Co. for Rs. 8,900 less 20% trade discount. June 9 Withdrew Rs. 500 from Bank for private use. June 12 Sold goods to Amjad for Rs. 6,400. June 15 Rs. 5,000 paid to Mukesh & Co. in full settlement of their account. June 18 Goods worth Rs. 400 returned by Amjad. June 20 Received Rs. 4,000 from Amjad. June 21 Purchased goods from Shiv & Co. for Rs. 8,700. June 23 Rs. 6,000 paid to Shiv & Co. by cheque; discount allowed Rs. 300. June 24 Purchased furniture for Rs. 800 from Surjeet Furniture House on credit. June 26 Paid into Bank Rs. 2,200. June 28 Amjad declared insolvent; a first and final dividend of 50 paise in a rupee is received from him. June 29 Goods worth Rs. 600 returned to Shiv & Co. June 30 Interest on capital provided Rs. 411. June 30 Goods worth Rs. 400 taken by the proprietor for his personal use. June 30 Paid salaries to staff Rs. 1,800. June 30 Paid into Bank Rs. 20,000. June 30 Cash sales Rs. 21,800 June 30 Brought 100 shares in Hind Mills Ltd. at Rs. 11 per share brokerage paid Rs. 25. June 30 Received Rs. 5,900 from Bindia & Co.; discount allowed Rs. 100. Solution: JOURNAL PROPER Date Particulars L.F. Debit Credit 2000 Rs. Rs. June 24 Furniture Account Dr. 800 To Surjeet Furniture House 800 (Being furniture purchased on credit) June 28 Bad Debts Account Dr. 1,000 To Amjad 1,000 (Being 50% amount the written off as bad debt on Amjad becoming insolvent) June 30 Interest on Capital Account Dr. 411 To Capital Account 411 (Being interest on Capital provided) June 30 Drawings Account Dr. 400 To Purchases Account 400 (Being goods taken for personal use of the proprietor) June 30 Capital Account Dr. 900 To Drawings Account 900 (Being transfer of balance of Drawings Account) 3,511 3,511 78 Self-Instructional Material Ledger Posting and Trial Balance NOTES SALES BOOK Date Particulars L.F. Debit Credit 2000 Rs. Rs. June 7 Bindia & Co. Goods sold 8,900 Less: 20% Trade discount 1,780 7,120 June 12 Amjad 6,400 June 30 Sales Account Cr. 13,520 PURCHASE BOOK Date Particulars L.F. Debit Credit 2000 Rs. Rs. June 4 Mahesh & Co. Goods Purchased 5,800 Less: 10% Trade discount 580 5,220 June 21 Amjad 8,700 June 30 Purchases Account Dr. 13,920 SALES RETURNS BOOK Date Particulars L.F. Debit Credit 2000 Rs. Rs. June 28 Amjad 400 June 30 Sales Returns Account Cr. 400 PURCHASE RETURNS BOOK Date Particulars L.F. Debit Credit 2000 Rs. Rs. June 29 Shiv & Co. 600 June 30 Purchase Returns Account Cr. 600 Ledger Dr. CAPITAL ACCOUNT Cr. Date Particulars Amount Date Particulars Amount 2000 Rs. Rs. June 30 To Drawings A/c 900 June 1 By Balance b/d 41,000 June 30 To Balance c/d 40,611

https://secure.urkund.com/view/158520595-658188-972436#/sources

June 30 By

Interest on Capital 411 41,511 41,511 July 1 By Balance b/d 40,611 FURNITURE ACCOUNT 2000 Rs. Rs. June 24 To Surjeet Furniture June 30 By Balance b/d 800 House 800 800 800 June 1 To Balance b/d 800 SURJEET FURNITURE HOUSE 2000 Rs. Rs. June 30 To Balance c/d 800 June 24 By Furniture A/c 800 800 800 July 1 By Balance b/d 800 Self-Instructional Material 79 Ledger Posting and Trial Balance NOTES Dr. BAD DEBITS ACCOUNT Cr. Date Particulars Amount Date Particulars Amount 2000 Rs. Rs. June 28 To Amjad 1,000 June 30 By Balance c/d 1,000 1,000 1,000 July 1 To Balance b/d 1,000 Dr. AMJAD Cr. 2000 Rs. Rs. June 12 To Sales A/ c 6.400 June 18 Bv Sales Returns A/c 400 June 20 By Cash A/c 4,000 June 28 By Cash A/c 1.000 June 28 By Bad Debts A/c 1,000 6,400 6,400 INTEREST ON CAPITAL ACCOUNT 2000 Rs. Rs. June 30 To Capital A/c 411 June 30 By Balance c/d 411 411 411 July 1 To Balance b/d 411 DRAWINGS ACCOUNT 2000 Rs. Rs. June 9 To Bank A/c 500 June 30 By Capital A/c 900 June 30 To Purchase A/c 400 900 900 PURCHASE ACCOUNT 2000 Rs. Rs. June 4 To Cash A/c 4,100 June 30 By Drawings 400 June 30 To Sundries (as per June 10 By Balance c/d 17,620 Purchases Book) 13,920 18,020 18,020 July 1 To Balance b/d 17,620 BINDIA & CO. 2000 Rs. Rs. June 7 To Sales A/c 7,120 June 30 By Cash A/c 5,900 June 30 By Discount A/c 100 June 30 By Balance c/d 1,120 7,120 7,120 July 1 To Balance b/d 7,120 SALES ACCOUNT 2000 Rs. Rs. June 30 To Balance c/d 35,320 June 30 By Sundries (amount as per Sales Book) 13,520 June 30 By Cash A/c 21,800 35,320 35,320 July 1 By Balance b/d 35,320 80 Self-Instructional Material Ledger Posting and Trial Balance NOTES Dr. THE COLUMNAR CASH BOOK Cr. Date Particulars L.F. Discount Cash Bank Date Particulars L.F. Amount Cash Bank 2000 Rs. Rs. Rs. 2000 Rs. Rs. Rs. June 1 To Balance b/d 15,700 25,400 June 3 By Purchases A/c 4,100 June 20 To Amjad 4,000 June 9 By Drawings A/c 500 June 26 To Cash C 2,200 June 15 By Mahesh & Co. 220 5,00 June 28 To Amjad 1,000 June 23 By Shiv @ Co. 300 6,000 June 30 To Sales A/c 21,800 June 26 By Bank C 2,200 June 30 To Cash C 20,000 June 30 By advertisement 500 June 30 To Bindia & Co. 100 5,900 June 30 By Salaries

A/c 1,800 June 30 By Bank C 20,000 By Investment in Shares A/c 1.125 June 30 by Balance c/d 14,175 40,600 100 48,400 47,600 520 48,400 47,600 July 1 To Balance b/d 14.175 40.600 Self-Instructional Material 81 Ledger Posting and Trial Balance NOTES MUKESH & CO. Date Particulars Amount Date Particulars Amount 2000 Rs Rs June 4 To Purchase A/c 5,220 June 15 By Cash A/c 5,000 June 15 By Discount A/c 220 5,220 5,220 SHIV & CO. 2000 Rs. Rs. June 23 To Bank A/c 6,000 June 21 By Purchases A/c 8,700 June 23 To Discount A/c 300 June 29 To Purchases Returns A/c 600 June 30 To Balance c/d 1.800 8.700 8.700 July 1 By Balance b/d 1,800 Dr. SALES RETURNS ACCOUNT Cr. 2000 Rs. Rs. June 30 To Sundries (amount June 30 Bv Balance c/d 400 as per Returns Book) 400 400 400 July 1 To Balance b/d 400 PURCHASES RETURNS ACCOUNT 2000 Rs. Rs. June 30 To Balance c/d 600 June 30 By Sundries (amount as per Purchases Returns Books) 600 600 600 July 1 By Balance b/d 600 ADVERTISEMENT ACCOUNT 2000 Rs. Rs. June 30 To Bank A/c 500 June 30 By Balance c/d 500 500 500 July 1 To Balance b/d 500 SALARIES ACCOUNT 2000 Rs. Rs. June 30 To Cash A/c 1,800 June 30 By Balance b/d 1,800 1,800 1,800 July 1 To Balance b/d 1,800 INVESTMENT IN SHARES ACCOUNT 2000 Rs. Rs. June 30 To Cash A/c 1,125 June 30 By Balance b/d 1,125 1,125 1,125 July 1 To Balance b/d 1,125 82 Self-Instructional Material Ledger Posting and Trial Balance NOTES DISCOUNT ACCOUNT Date Particulars Amount Date Particulars Amount 2000 Rs. Rs. June 30 To Sundries (Amount June 30 By Sundries (Amount as per (Cash Book) 100 as per Cash Book) 520 June 30 By Balance c/d 420 520 520 July 1 By Balance b/d 420

Illustration 3.8. Mr. Sanjay has two sons namely Ranjan and Ramesh. The elder son Ranjan had taken a B.Sc. degree in Computer Science from Delhi University while Ramesh had done B.Com. (Pass) through correspondence. Mr. Sanjay has retired from a govern- ment job and got a sum of Rs. 5,00,000 as his Provident Fund Money. Ranjan had started working with a computer firm on a salary of Rs. 5,000 per month while Ramesh got a job as a clerk in a small business house for Rs. 4,000 per month. Mr. Sanjay was not satisfied with the progress of his sons and wished that they should start some business of their own. In view of the fact that his elder son Ranjan had experience in the computer firm, Mr. Sanjay thought of computer business for his sons and asked them to make out a project for the same. The two sons suggested or setting up a Computer Centre with the name 'Young Informatics' providing the following services: ? Short-term courses for different age groups; ? Internet access facility at the prevailing market rates through VSNL; ? Computer games for small children? Typing and printing of documents on computer; ? Selling of computer stationary. Mr. Sanjay agreed with the proposal and the following arrangements were agreed upon: (i) Ranjan and Ramesh each would put Rs. 20,000 as their capitals from their savings made by them during their employment. (ii) Mr. Sanjay would provide a loan of Rs. 1,00,000 to the firm on nominal rate of interest of 5% p.a. (iii) The ground floor of the house would be sued as shop for the computer centre. The business would be charged a rent of Rs. 1,000 per month. (iv) A bank loan of Rs 2,00,000 would be arranged to finance the purchase of computer and peripherals. The total bank loan amount including interest of Rs. 50,000 would be returned in annual instalments as under: (a) At the end of 1st Year Principal Rs. 50,000 + Interest Rs. 20,000 (b) At the end of 2nd Year Principal Rs. 50,000 + Interest Rs. 15,000 (c) At the end of 3rd Year Principal Rs. 50,000 + Interest Rs. 10,000 (d) At the end of 4th Year Principal Rs. 50,000 + Interest Rs. 5,000 The two sons finally started their business on 1st January, 2002. All transactions were to be made through bank except petty expenses for which Rs. 5,000 were kept in the business and the balance Rs. 1,35,000 were deposited in the bank (comprising of capitals and loan from Mr. Sanjay). The following transactions took place during the year ending 31st December, 2002: Rs. 1. Furniture & Fixtures for the shop 20,000 2. Purchase of Computers 2,00,000

Self-Instructional Material 83 Ledger Posting and Trial Balance NOTES 3. Deposit with VSNL 15,000 4. Deposit with Electricity Board 2,000 5. Deposit with MTNL 1,000 6. Collection of fees from students 30,000 7. Purchase of Computer Stationary 1,00,000 8. Total Revenue from sale of computer stationary 3,00,000 9. Telephone Charges 6,000 10. Electricity Charges 4,000 11. Petty Expenses 3,000 12. Entertainment Expenses 2,000 13. Computer Maintenance Expenses 3,000 14. Salaries of employees 12,000 The two partners paid for rent and interest to their father. They also paid bank loan instalment. A sum of Rs. 1,000 p.m. was withdrawn by each one of them for their personal expenses. All payments were made by cheques and all collections were deposited in the bank the same day. Mr. Sanjay wants to know about the progress made by his sons and to decide whether to go for further expansion of the business. You are required to

journalise the above transactions, post them in the ledger, prepare a trial balance

after changing depreciation @ 20% on computers and 10% on furniure and fixtures. Solution: Young Informatics JOURNAL ENTRIES Date Particulars Debit Credit 1.1.2002 Rs. Rs. Cash A/c Dr. 40,000 To Ranjan's Capital A/c 20,000 To Ramesh's Capital A/c 20,000 (Being capital's brought in by Ranjan and Ramesh) Cash A/c Dr. 1,00,000 To Sanjay's Loan A/c 1,00,000 (Being loan received from Mrs. Sanjay) Bank A/ c Dr. 1,35,000 To Cash A/c 1,35,000 (Being cash deposited in bank) Bank A/c Dr. 2,00,000 To Bank Loan A/c 2,00,000 (Being loan taken from bank) 31.12.02 Furniture and Fixtures A/c Dr. 20,000 To Bank A/c 20,000 (Being furniture and fixtures purchases) Computers A/c Dr. 2,00,000 To Bank A/c 2,00,000 (Being computers purchased) Deposit with VSNL Dr. 15,000 To Bank A/c 15,000 (Being sum deposited with VSNL) Deposit with Electricity Board A/c Dr. 2,000 To Bank A/c 2,000 (Being money deposited with Electricity Board) (Contd.) 84 Self-Instructional Material Ledger Posting and Trial Balance NOTES Deposit and MTNL Dr. 1,000

To Bank A/c 1,000 (Being sum deposited with MTNL) Bank A/ c Dr. 30,000 To Students' Fees A/c 30,000 (Being fees collected from students) Purchases A/ c Dr. 1,00,000 To Bank A/c 1,00,000 (Being purchase of computer stationary Bank A/c Dr. 3,00,000 To Sales A/c 3,00,000 (Being sale of computer stationary) Telephone Charges A/ c Dr. 6,000 To Bank A/c 6,000 (Being telephone charges paid) Electricity Charges A/c Dr. 4,000 To Bank A/c 4,000 (Being electricity charges paid) Petty Expenses A/c Dr. 3,000 To Cash A/c 3,000 (Being petty expenses paid) Entertainment A/c Dr. 2,000 To Bank A/c 2,000 (Being entertainment expense paid) Computer Maintenance A/c Dr. 3,000 To Bank A/c 3,000 (Being computer maintenance expenses paid) Salaries A/c Dr. 12,000 To Bank A/c 12,000 (Beina salaries paid to the employees Rent A/c Dr. 12,000 To Bank A/c 12,000 (Being rent paid) Interest on Sanjay's Loan A/c Dr. 5,000 To Sanjay's Loan A/c 5,000 (Being interest due on loan from Mr. Sanjay Sanjay's Loan A/c Dr. 5,000 To Bank A/c 5,000 (Being payment of interest of Sanjay's Loan) Interest on Bank Loan A/c Dr. 20,000 To Bank Loan A/c 20,000 (Being interest due on bank loan) Bank Loan A/c Dr. 70,000 To Bank A/c 70,000 (Being payment of bank loan instalment) Ranjan's Drawings A/c Dr. 12,000 Ramesh's Drawings A/c Dr. 12,000 To Bank A/c 24,000 (Being drawings made) Depreciation A/c Dr. 42,000 To Computers A/c 40,000 To Furniture & Fixtures A/c 2,000 (Being depreciation on computers and furniture & fixtures written off

Self-Instructional Material 85 Ledger Posting and Trial Balance NOTES **PURCHASES** ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 1,00,000 **Bv** Balance A/c 1,00,000 1,00,000 1,00,000 SALES ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Balance c/d 3,00,000 By Bank 3,00,000 3,00,000 3,00,000 TELEPHONE CHARGES ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 6,000 By Balanced c/d 6,000 6,000 6,000 ELECTRICITY CHARGES ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 4.000 By Balanced c/d 4,000 4,000 4,000 ENTERTAINMENT EXPENSES ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs То Bank 2,000 By Balanced c/d 2,000 2,000 2,000 MAINTENANCE OF COMPUTER ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 3,000 By Balanced c/d 3,000 3,000 SALARIES ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 12,000 By Balanced c/d 12,000 12,000 12.000 PETTY EXPENSES ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Cash 3.000 By Balanced c/d 3,000 3,000 3,000 86 Self-Instructional Material Ledger Posting and Trial Balance NOTES RENT ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 12,000 By Balanced c/d 12,000 12,000 12,000 BANK ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Cash A/c 1,35,000 Βv Furniture & To Bank Loan A/c 2.00.000 Fixtures A/ c 20,000 To Students Fees A/c 30,000 By Bank Loan 70,000 To Sales A/c 3,00,000 By Computers A/c 2,00,000 By Deposit with VSNL A/c 15,000 By Deposit with Electricity Board A/c 2,000 By Deposit with MTNL A/c 1,000 Βv Purchases A/c 1,00,000 By

A/c 6,000 By Electricity Charges A/c 4,000 By Entertainment A/ c 2,000 By **Computer Maintenance** A/c 3,000 By Salaries A/c 12,000 By Rent A/c 12,000 Βv Sanjay's Loan A/c 5,000 By Ranjan's Drawings A/c 12,000 By Ramesh's Drawings A/c 12,000 By Balanced c/ d 1,89,000 6,65,000 6,65,000 DEPRECIATION ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Computers A/c 40,000 By Balanced c/d 42,000 То Furniture & Fixture 2.000 42.000 42.000 Self-Instructional Material 87 Ledger Posting and Trial Balance NOTES COMPUTERS ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 2,00,000 By Depreciation A/c 40,000 By Balanced c/d 1,60,000 2,00,000 2,00,000 DEPOSIT WITH VSNL ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 15,000 By Balanced c/d 15,000 15,000 15,000 DEPOSIT WITH ELECTRICITY BOARD ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 2,000 By Balanced c/d 2,000 2,000 2,000 DEPOSIT WITH MTNL ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 1,000 By Balanced c/d 1,000 1,000 1,000 STUDENT FEES ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. То Bank 30,000 By Bank 30,000 30,000 30,000 INTEREST ON SANJAY'S LOAN ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Sanjay's Loan A/c 5,000 By Balanced c/d 5,000 5,000 5,000 RANJAN'S DRAWINGS ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 12,000 By Balanced c/d 12,000 12,000 12,000 88 Self-Instructional Material Ledger Posting and Trial Balance NOTES RAMESH'S DRAWINGS ACCOUNT Date Particulars Amount Date Particulars Amount Rs. Rs. To Bank 12,000 By Balanced c/d 12,000 12,000 12,000 Young Informatics TRIAL BALANCE (As on 31st December, 2002) Particulars Debit Credit Rs. Rs. Bank

A/c 1,89,000 Cash A/c 2,000 Ranjan's Capital A/c 20,000 Ramesh's Capital A/c 20,000 Sanjay's Loan A/c 1,00,000 Bank Loan A/c 1,50,000 Furniture & Fixture A/c 18,000 Interest on Bank Loan A/c 20,000 Depreciation A/c 42,000 Computers A/c 1,60,000 Deposit with VSNL A/c 15,000 Deposit with Electricity Board A/c 2,000 Deposit with MTNL A/c 1,000 Student Fee A/c 30.000 Purchase A/c 1.00.000 Sales A/c 3,00,000 Telephone Charges A/c 6,000 Electricity Charges A/c 4,000 Entertainment Expenses A/c 2,000 Maintenance of Computers A/c 3.000 Salary A/c 12,000 Petty Expenses A/c 3,000 Rent A/c 12,000 Interest on Sanjay's Loan A/c 5,000 Ranjan's Drawing A/c 12,000 Ramesh's Drawings A/c 12,000 Total 6,20,000 6,20,000 Self-Instructional Material 89 Ledger Posting and Trial Balance NOTES 3.7 VOUCHER SYSTEM In a small organisation, it is possible for the proprietor to supervise personally all important matters. However, in case of large organisations, delegation of authority is required and therefore, it is necessary to have a proper internal check system for prevention of errors and frauds in recording the transactions and receiving or making final cash payments. The chances of frauds in case of cash payments are all the more. It is almost impossible for the disbursing official to have all information regarding the goods and services in respect of which he is required to make payments. This is because even in case of organisations of moderate size, the responsibility for issuing purchase orders, inspecting commodities received, verifying contractual and arithmetical details of invoices is divided among the employees of the various departments. The disbursing official should have, therefore, assurance of all concerned officials before making payments that the terms of the contract have been complied with and he is paying the exact amount of obligation. This is possible only when all the activities mentioned above are properly coordinated and linked with ultimate issuance of cheques to the creditors. One of the most effective systems employed for this purpose is termed as Voucher System. The Voucher System may therefore be defined as 'a plan and method of procedure for the verification, recording and payment of all items (other than items to be paid from petty cash) which require the disbursement of cash.' As a matter fact, it is mainly a plan of internal check for all cash disbursement items. There are three basic requirements of the Voucher System: (a) A Voucher is to be prepared for each item of expenditure. (b) No payment shall be made without a properly verified and authorised voucher. (c) Development of a proper and efficient system for determining the amount to be paid on each day. This helps the disbursing official in determining the amount to be paid and the management in conveniently and continuously forecasting the amount of the cash required to meet maturing obligations. The following documents are used in the Voucher System: 1. Vouchers. In general terms, a Voucher means a documentary evidence in support a business transaction. It is a documentary evidence by which the accuracy of an entry made in the books of account can be substantiated. It may be a receipt, a counterfoil of a receipt book, an invoice or even correspondence with the concerned parties. The term Voucher has a narrower meaning when applied to the Voucher System. It is a special form on which pertinent data about a liability and the particulars of its payments are recorded. Vouchers are generally prepared by the accounting department on the basis of invoices or returns that serve as the evidence of expenditure. This is done after the following comparisons and verifications have been completed and noted on the invoices: (i) Comparison with the copy of Purchase Order to verify the quantities, prices and terms. (ii) Comparison with the Goods Received Returns to determine the receipt of items recorded in the invoices. (iii) Verification

of the arithmetical accuracy of the invoices. After making the above verifications and comparisons, the invoices or other supporting evidence is attached to the voucher and is presented to the concerned official for his final approval. 2. Voucher Register. The Voucher Register is a columnar journal giving the details about the Voucher Nos., and different items of expenses in respect of which payments have to be made. A pro forma of a Voucher Register is given later. The Vouchers are recorded in a numerical sequence. The credit is given to the accounts payable while debit is given to the account or accounts to be charged for

Check Your Progress 2. Fill in the blanks: (a)

The process of transferring the debit and credit items from

a Journal

to their respective accounts in the Ledger is termed as........... (b) Journal is the book of......entry, while Ledger is the book of......entry. (c) The word 'By' is used with an account while making posting on the.....side of an

account. (d) The technique of finding the net balance of an account after considering the totals of both debits and credits appearing in the account is known as....... (

e) The statement containing various ledger balances on a particular date is known as...... (f) If

the two sides of the trial balance tally, it is an indication of

the fact that the books of accounts are.....accurate.

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Self-Instructional Material Ledger Posting and Trial Balance

NOTES

expenditure. On making payment, the date of payment and the no. of cheques are inserted in the appropriate columns in the Voucher Register. The objective of such a recording is to provide ready information about determining the amount of individual unpaid vouchers. The total outstanding liability on account of vouchers unpaid at a particular date can be found out by adding up the individual amount of the unpaid vouchers as shown in the Voucher Register. 3. Unpaid Voucher File. After the vouchers have been prepared and recorded in the Voucher Register, they are filed in an Unpaid Voucher File. They remain there till they are paid. The amount due on each Voucher represents the credit balance of an account payable. Each Voucher in itself is comparable to an individual account in the Creditors Ledger. Hence, no separate Creditors Ledger is necessary. 4. Cheque Register. The payment of a Voucher is recorded in a Cheque Register, the

pro forma of which is given below: VOUCHER

REGISTER Date Payee Voucher Paid Credit Debit

No.

Date Cheque Voucher Purchases Wages Salaries Office Selling Sundries No. Payable

Expenses Expenses 1995 Rs Rs Rs Rs Rs Rs Rs Rs May 1 Mohan 501 May 5 430 250 250 Mav 8 Kishan 502 – – 300 300 May 15 David 503 May 20 431 500 – 500 1,050 550 500 CHEQUE REGISTER Date Cheque No. Payee Voucher No. Accounts Discount Bank Payable Cr. Cr. Dr. May 5 430 Mohan 501 250 10 240 May 15 431 David 503 500 5 495 750 15 735 The Cheque Register is

а

modified form of Cash Payment Journal and it is so called because it is a complete record of all cheques issued. It is customary to record all cheques in a Cheque Register in the order of their sequence to avoid any

mistake in their recording. When a Voucher is to be paid, it is removed from the Unpaid Voucher File. On issue of a cheque, the date, the number of cheque and amount are listed on the back of the Voucher. This helps in recording the payments in the Cheque Register. The paid vouchers and the supporting documents are cancelled through a cancelling stamp to prevent their accidental or intentional reuse. 5. Paid Voucher File. After payments, vouchers are generally filed in numerical sequence in the Paid Voucher File. They are

then readily available for examination by employees or independent auditors who may require information about a specific expenditure. The paid vouchers are finally destroyed in accordance with the firm's policy concerning the retention of records. 6. Vouchers Payable Account.

The Vouchers Payable Account is similar to the

Total Creditors Account. It is credited with the total amount payable on account of different vouchers and is debited with the amount of payments made. The balance of the Vouchers Payable account should agree with the total of the Unpaid Vouchers File and also with the sum of unpaid vouchers as shown in the Voucher Register. A pro forma of a Vouchers Payable Account is given below:

Self-Instructional Material 91 Ledger Posting and Trial Balance NOTES

VOUCHERS PAYABLE ACCOUNT Date Particulars Amount Date Particulars Amount Rs Rs 1986 1986 May 31 To Cheque Register 735 May 31 By Voucher Register 1,050 To Discount 15 To Balance c/d 300 1,050 1,050 Advantages of the Voucher System

The

Voucher System offers the following advantages: (i) Safeguards cash disbursements. Voucher System provides for a Systematic plan for the verification and approval of all invoices, bills and other items requiring disbursement of cash. Thus, it safeguards all cash disbursements. (ii) Reduces bookkeeping work. Voucher System considerably reduces the book- keeping work. The voucher itself works as an account of the creditor and total amount due to the creditors can be found out with the help of the Unpaid Vouchers File. (iii) Recording of all current liabilities. The Voucher System provides for the

imme- diate recording of all current liabilities. It is generally found in case of firms which do not use the Voucher System and

fail to record bills for items such services and expenses till they are actually paid. As a matter of fact, it is desirable to show all

liabilities in the books of the business from the time they are incurred. (iv) Strengthening of internal check system. The placing of responsibilities for

verifi- cation and

approvals strengthens the system of internal check. (v) Planning . future cash requirements. Voucher System provides continuous infor- mation for planning the future cash requirements. This enables the management to make maximum use of cash resources. Invoices in respect of which cash discounts are allowed can be paid within the discount period. Other invoices can be paid in accordance with the credit items. This helps in minimising cost and maintaining a favourable credit standard. Moreover, seasonal borrowings for working capital can also be planned more effectively, resulting in saving interest cost. Limitations of the Voucher System Voucher System has the following limitations: (i) Unsuitable for small concerns. Voucher System is neither suitable nor necessary for small business enterprises, particularly those with a high degree of proprietary supervi- sion and control. (ii) Proper personnel and finances required. Voucher System requires sufficient per- sonnel as well as finances for its successful operation. It will be a cumbersome exercise especially for an enterprise which is not well organised. If an enterprise which uses Voucher System does not have sufficient cash and is not in a position to pay

the approved vouchers according to schedule, it may develop an unwieldy file of approved unpaid vouchers. (

iii) Fails to provide overall creditor's account position. The system does not

pro- vide

for giving an overall position of a creditor's account. (iv) Difficulties in case of partial payments, returns etc. The system proves a

hin- drance rather than a help in case

of concerns which have many returns of goods and other corrections after approving and recording of purchase invoices. Such concerns have to make many partial payments of approved vouchers. In some cases, they have to defer payments too. From the above, it may be concluded that Voucher System is suitable only for an enterprise which is well equipped both in respect

of personnel and finances. It is not suitable for small concerns. Moreover, suitable modifications may have also to be made in the operation of the system as to meet the specific needs of a particular enterprise.

Check Your Progress 3. State the difference between journal and ledger. 4. Furniture Account will indicate a balance. 92 Self-Instructional Material Ledger Posting and Trial Balance NOTES 3.8

KEY TERMS ? Ledger: A book containing different accounts of an entity. ? Posting:

Transferring the debit and credit items from the Journal to the respective accounts in the Ledger. ?

Trial Balance: A statement containing the various ledger balances on a particular date. ? Voucher System:

A plan and method of procedure for the verifications, recording and payment of all items (other than items to be paid from petty cash) which require disbursement of cash. 3.9

SUMMARY In this unit, you have learned that: ?

Ledger posting involves clarification of recorded transactions under appropriate ac- counting heading. ? Trial Balance is a summary of various ledger balances. It helps in checking arithmeti- cal accuracy of the accounting entries. ? Voucher system ensures that no payment, except that from petty cash is made with- out a properly made and authorized voucher. ? Voucher system reduces the possibility of unauthorized payments by strengthening the internal check system. 3.10

ANSWERS TO 'CHECK YOUR PROGRESS' 1. (a) F, (b) T, (c) F, (d) T, (e) T, (f) F, (g) T, (h) T 2. (a) posting, (b) first, second, (c) credit, (d) balancing of an account, (e) trial balance, (f) arithmetically 3. (

a)

Journal is the book of first or original entry while the ledger is the book of second entry. (

b) A journal records transactions in chronological order while the ledger records transac- tions in an analytical order. (c) The journal is more reliable as compared to the ledger. (d)

The process of recording transactions is termed as "Journalizing" while the process of recording transactions in the ledger is called "posting". 4.

Debit. 3.11

QUESTIONS AND EXERCISES 1.

Explain the rules regarding posting of transactions into the Ledger. 2. What is a trial balance? Explain its objectives. 3.12 PRACTICAL PROBLEMS 1. Journalise the following transaction and post them into the Ledger. 1999 Rs Jan. 1 Surendra started business with cash 5,000

Jan. 2 Goods purchased from Prasad on credit 200 Jan 3 Goods sold to Prem 500 Jan. 4 Good purchased from Sohan for cash 400 Jan. 5 Paid for wages 50 Jan. 15 Goods purchased from Prem 100 Jan. 17 Goods sold to Om 50 Jan. 21 Goods purchased from Charanjit 300

Self-Instructional Material 93 Ledger Posting and Trial Balance NOTES

Jan. 23 Paid for interest 15 Jan. 24 Goods purchased from Om 200 Jan. 28 Cash received from Prem 100 Jan. 31 Cash paid to Charanjit 300 Jan. 31 Paid for Rent 10 2. Give journal entries of the following posting in the ledger accounts# (a) DIVIDENDS By Cash 1,500 (b) INSURANCE To A 2,000 (c) DISCOUNT To Bank 20 (d) RENT To Cash 1,200 (e) PLANT To Cash 20,000 To Manohar 40,000 (f) SALES By Cash 54,000 By Naresh 37,000 3.

Journalise the following transactions and post them into Ledger: 1999 Sep. 1 Started business with

Rs 50,000, out of which paid into Bank Rs 20,000. Sep. 2 Bought furniture for Rs 5,000 and machinery for Rs 10,000. Sep. 3 Purchased goods for Rs 14,000. Sep. 6 Sold goods for Rs 8,000. Sep. 8 Purchased goods from Malhotra & Co. Rs 11,000. Sep. 10 Paid telephone rent for the year by cheque

Rs 500. Sep. 11 Bought one typewriter for Rs 2,100 from Universal Typewriter Co. on credit. Sep. 15 Sold goods to Keshav Ram for Rs 12,000. Sep. 17 Sold goods to Rajesh Kumar for Rs 2,000 for cash. Sep. 19 Amount withdrawn from bank for personal use Rs 1,500. Sep. 21 Received cash from Keshav Ram 11,900, discount allowed Rs 100. Sep. 22 Paid into bank Rs 5,800. Sep. 23 Bought 50 shares in XY & Co. Ltd at Rs 60 per share, brokerage paid Rs 20. Sep. 25 Goods worth Rs 1,000 found defective were returned to Malhotra & Co. and the balance of the amount due to them settled by issuing a cheque in their favour. Sep. 28 Sold 20 shares of XY & Co. Ltd at Rs 65 per share, brokerage paid Rs 20. Sep. 28 Bought goods worth Rs 2,100 from Ramesh and supplied them to Suresh at Rs 3,000. Sep. 30 Suresh returned goods worth Rs 100, which in turn were sent to Ramesh. Sep. 30 Issued a cheque for Rs 1,000 in favour of the landlord for rent for September. Sep. 30 Paid salaries to staff Rs 1,500 and received from travelling salesman Rs 2,000 for goods sold by him, after deducting the travelling expenses Rs 100. Sep. 30 Paid for: Charity Rs 101 Stationery Rs 450 Postage Rs 249 4. On 1st January, 1999, the following were the ledger balances of Rajan & Co.: Cash in hand Rs 900; Cash at Bank Rs 21,000; Soni (Cr.)

Rs 3,000; Zahir (Dr.) Rs 2,400; Stock Rs 12,000; Prasad (Cr.) Rs 6,000, Sharma (Dr.) Rs 4,500; Lall (Cr.) Rs 2,700; Ascertain Capital. Transactions during the month were:

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Self-Instructional Material Ledger Posting and Trial Balance NOTES 1999

Rs Jan. 2 Bought goods of Prasad 2,700 Jan. 3 Sold to Sharma 3,000 Jan. 5 Bought goods of Lall for cash, paid by cheque 3,600 Jan. 7 Took goods for personal use 200 Jan. 13 Received from Zahir in full settlement 2,350 Jan. 17 Paid to Soni in full settlement 2,920 Jan. 22 Paid cash for stationery 50 Jan. 29

Paid to Prasad by cheque 2,650 Discount allowed by him 50 Jan. 30 Provided interest on capital 100

Rent due to landlord 200 Journalise the above transactions and post to

the ledger and prepare a Trial Balance. 5.

Journalise the following

transactions, post them in the ledger and

prepare a Trial Balance: January 1, 1999 Assets: Furniture Rs 5,000; Machinery Rs 10,000; Stock Rs 4,000; Cash in hand Rs 550; Cash at bank Rs 7,450; Amount due from Ramesh & Co. Rs 1,000 and amount due from Suresh Rs 2,000. Liabilities: Amount due to Rama Rs 4,500; Amount due to Ranjeet Rs 2,000; and amount due to Shyam Rs 1,500. 1999 Rs Jan. 1 Purchased goods from Ajay 4,500 Jan. 3 Sold goods for cash 1,500 Jan. 5 Paid to Himanshu by cheque 5,500 Jan. 10 Deposited in bank 2,800 Jan. 13 Sold goods on credit to Mukesh 1,700 Jan. 15 Paid for postage 100 Jan. 16 Received cash from Rakesh 2,200 Jan. 17 Paid telephone charges 250 Jan. 18 Cash sales 1,500 Jan. 20 Purchased Govt. Securities 500

Jan. 22 Purchased goods worth Rs 1,600 less 20% trade discount and 5% cash discount

from Mahesh and Co. for cash and supplied them to Ramesh and Co. at list price less trade discount 1 Jan. 25 Cash purchases 16,500 Jan. 27 Goods worth Rs 500 were damaged in transit; a claim was made on the railway authorities for the same 2 Jan. 28 Suresh is declared insolvent and a dividend of 50 paise in the rupee is received from him in full settlement Jan. 28 Bought a horse for Rs 2,600 and a carriage for Rs 1,200 for delivering goods to customers. Paid by cheque Jan. 30 The horse bought on Jan. 29, dies and the carriage was sold for Rs 1,000 Jan. 31 Allowed interest on capital @ 10% p.a. for one month Jan. 31 Paid for: Salaries Rs 150, Rent Rs 60 3.13 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

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Subdivision of a Journal NOTES UNIT 4 SUBDIVISION OF A JOURNAL Structure 4.0 Introduction 4.1 Unit Objectives 4.2 Subdivisions of a Journal 4.3 Cash Journal 4.4 Petty Cash Book 4.5 Purchases Journal 4.6 Sales Journal 4.7 Sales Returns Journal 4.8 Bills Receivable and Payable Books 4.9

Key Terms 4.10 Summary 4.11 Answers to '

Check Your Progress' 4.12 Questions and Exercises 4.13 Practical Problems 4.14 Further Reading 4.0 INTRODUCTION Journal is the

book

of prime entry. This means all business transactions are

to be first recorded in the Journal. However,

in a big business, recording of all transactions in one Journal will not only be inconvenient but also

cause delay in collecting information required. The Journal is, therefore, subdivided into many subsidiary books. This subdivision

results in the following advantages: (i) Convenience. As stated above maintenance of one Journal only will make it quite bulky and difficult to handle. Subdivisions of a Journal, will result in reducing the size of the Journal and making it convenient to handle. (ii) Division of labour. Subdivisions of a Journal helps in division of labour since different persons can write different Journals. (iii) Classified information. Each Journal

provides information relating to a particular aspect of the business.

For example, a Purchases Journal gives information about the total credit purchases made by the business. Similarly a Sales Journal gives information about the total credit sales made by the business. Thus, the businessman gets the information relating to different aspects of the business in a classified form in the shortest possible time. 4.1 UNIT

OBJECTIVES

After going through this unit, you will be able to: ? Appreciate the

importance of

subdivision of

a journal ? Name the different types of Journals ? Record transactions in different Journals ? Explain the meaning of certain key terms 4.2 SUBDIVISIONS OF A JOURNAL

The subdivision of a Journal can be explained with the help of the following chart.

Each of the Journals has been explained as follows: 1. Special Journal. The term 'Special Journal' means a Journal which is meant for a special purpose. The following are the various types of Special Journals:

96 Self-Instructional Material Subdivision of a Journal NOTES (i) Cash Journal. Cash Journal is meant for recording all cash transactions. It may be further classified into Cash Receipts Journal and Cash Payments Journal. Cash Receipts Journal records all cash receipts while Cash Payments Journal records all cash payments. (ii) Goods Journal. The Journal is meant for recording all transactions relating to goods. It may further be classified into following categories: (a) Purchases

Journal. The Journal is meant for recording all credit purchases of goods.

Cash purchases are to be recorded in the Cash Journal. Moreover, only purchases of goods are to be recorded in this Journal. The term 'goods' means articles purchased for resale.

JOURNAL GENERAL JOURNAL SPECIAL JOURNAL CASH JOURNAL GOODS JOURNAL BILLS JOURNAL PURCHASES CASH RECEIPTS CASH

PAY- PURCHASES SALES RETURNS SALES RETURNS JOURNAL MENTS JOURNAL JOURNAL JOURNAL JOURNAL JOURNAL JOURNAL JOURNAL JOURNAL BILLS RECEIVABLE BILLS PAYABLE JOURNAL JOURNAL (b) Sales Journal. The Journal is meant for recording all credit sales of goods. Cash sales of the goods are to be recorded in the Cash Journal. (c) Purchases Returns Journal. It is meant for recording all returns of goods purchased on credit. It is also known as Returns Outward Journal. (d) Sales Returns Journal. It is meant for recording all return of goods sold on credit. It is also known as Returns Inward Journal. (iii) Bills Journal. The Journal is meant for recording all bills of exchange or promissory notes received or issued by the business. It can be classified into two categories: (a) Bills Receivable Journal. It is meant for recording all bills of exchange or promissory notes received by the business from its debtors. (b) Bills Payable Journal. It is meant for recording all bills of exchange or promissory notes received by the business in favour of its creditors. Transactions relating to bills of exchange and promissory notes have been explained later in a separate unit. 2. General Journal. It is also known as Journal Proper. It is meant for recording all such transactions for which no special journal has been kept by the business. As a matter of fact, it is meant for recording such transactions which do not occur frequently in the business and, therefore,

do not warrant setting up of special journals. Examples of such transactions are

as follows: (i) Opening entries. When a new set of books is started, the old accounts have to be brought forward at the beginning of the year from last year's books. The opening entry is meant for recording these transactions. The entries are made from the balance sheet of the last year. (ii) Closing entries. At the end of the accounting year, the nominal accounts are closed by transferring them to a trading account or profit and loss account. The entries passed for this purpose are termed as 'Closing Entries'. (iii) Adjustment entries. At the end of the accounting year, adjustment entries are to be passed for outstanding/prepaid expenses, accrued/outstanding income etc. Entries for all these adjustments are passed in the General Journal. (iv) Transfer entries. Transfer entries are required for transferring one account to the other. Entries for such transfer are passed in the General Journal.

Self-Instructional Material 97 Subdivision of a Journal NOTES (v) Rectification entries. Rectification entries are passed for rectifying the errors which might have been committed in the books of account. For example, the account of Mohan might have been debited in place of the account of Sohan. The necessary rectifying entry will be passed in he General Journal. (vi) Purchases of fixed assets. The entries for purchases of fixed assets such as plant, machinery, furniture, etc., on credit are also passed in this Journal. In the following pages, we explain the method of recording business transactions in each Journal and their posting into the ledger. 4.3 CASH JOURNAL Cash Journal or Cash book is meant for recording all cash transactions. It is a very important Journal of business on account of the following reasons: (i) The number of cash transactions is quite large in every business. The business has to pay for salaries, rent, lighting, insurance, purchase of goods and it has to receive cash for sales of goods and capital assets. (ii) The chances of fraud being committed regarding cash are higher as compared to other assets. A strict control is, therefore, required. A properly maintained cash book helps in achieving this objective. (iii) Cash is the nerve centre of the business. Timely payments to its creditors increases the reputation of the business. Similarly timely payments from its debtors improves the financial position of the business.

The cash book can be any

of the following types: (i) Simple Cash Book (ii) Two Columnar Cash Book (iii) Three Columnar Cash Book (iv) Multi Columnar Cash Book (

v) Cash Receipts Book (vi) Cash Payments Book (i) Simple (Single Column) Cash Book. A simple Cash Book is like an ordinary cash account. Its pro forma is given below: Dr. SIMPLE

CASH BOOK

Cr. Date Particulars L.F. Amount Date Particulars L.F. Amount

The recording of the transactions in the Simple Cash Book and their posting in

the Ledger can be understood with the help of the following illustration:

Illustration 4.1.

Record the following

transactions in the Cash Book and post them in the ledger:

Jan. 1

Opening Cash balance Rs 5,000. Jan. 4 Rent paid

Rs 2,000. Jan. 6 Interest received Rs 3,000. Jan.15 Cash purchases Rs 4,000. Jan.25 Cash sales Rs 8,000. Jan.31 Salaries paid Rs 2,000.

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Solution:

Dr.

CASH BOOK

Cr. Date Receipts L.F. Amount Date Particulars L.F. Amount Rs

Rs

Jan. 1

To Balance b/d 5,000

Jan. 4 By Rent 2,000 Jan. 2 To Interest 3,000 Jan. 15

Ву

Purchases A/c 4,000

Jan. 25 To Sales 8,000 Jan. 31

By Salaries

A/c 2,000

Jan. 31

By Balance c/d 8,000 16,000 16,000 To

Balance b/d 8,000

Ledger Dr. INTEREST ACCOUNT Cr.

Cash

```
A/c 3,000 SALES ACCOUNT By Cash A/c 8,000 RENT ACCOUNT To Cash A/c 2,000 1 PURCHASES ACCOUNT To Cash
A/c 4.000 2
SALARIES ACCOUNT To Cash A/c 2,000 3
It should be noted that in the ledger no separate cash account will be opened. The Cash Book functions both as a book
as well as an account as shown in the illustration above. (ii) Two (Double) Columnar Book. Such a Cash Book has two
columns: (i) Cash Column, and (ii) Discount Column. Cash column is meant for recording cash receipts and payments
while discount column is meant for recording discount received and the discount allowed. The discount column on the
debit side represents the discount allowed while discount column on the credit side represents the discount received. It
should be noted that while the cash column of the cash book serves both the functions of a book as well as an account
but discount column does not serve the function of a discount account. A separate discount account has to be opened
in the ledger in which total debits and credits from the Cash Book are posted. Sometimes, two separate discount
accounts are kept in the ledger—one for discount allowed and the other for discount received. The recording of
transactions in a two columnar cash book
will be clear with the help of the following illustration:
Illustration 4.2.
Record
the following transactions in the
Cash Book and post them in the
ledger: 1.
Jan. 1
Cash Balance Rs 5.000, 2, Jan. 6 Sold goods to Mahesh Rs 4.000, 3, Jan. 8 Purchased goods from Mukesh Rs 3.000, 4,
Jan. 15 Cash received from Mukesh Rs 3,900 in full satisfaction. 5. Jan. 20 Paid to
Mukesh Rs 2,830 in full satisfaction. 6. Jan. 25 Sold goods to Suresh Rs 3,000. 7. Jan. 31 Received cash from Suresh Rs
2.900 in full satisfaction. 1 2 3
Self-Instructional Material 99 Subdivision of a Journal NOTES Solution: Dr. CASH BOOK Cr. Disc- Cash Dis- Cash
Date
Particulars L.F. count Rs Date Particulars L.F. count Rs. Rs Rs Jan. 1
```

To Balance b/d 5,000 Jan. 20 By Mukesh 150 2,850

Jan. 25 To Mahesh 100 3.900

Jan. 31

By

Balance c/d 8,950 Jan. 31 To

Suresh 100 2,900 200 11,800 150 11,800 Ledger MAHESH

Date

Particulars Amount Date Particulars Amount

Rs Rs

Jan. 6 To Sales A/c 4,000 Jan. 15 By Cash

A/c 3,900 Jan. 15 By Discount A/c 100

SURESH Date Particulars Amount Date Particulars Amount Rs Rs Jan. 25 To

Sales A/c 3,000 Jan. 31 By

Cash 2.900 Jan. 31 By

Discount 100 MUKESH

Date Particulars Rs Date Particulars Rs Jan. 20 To Cash 2,850 Jan. 8 By

Purchases A/c 3,000

Jan. 20

То

Discount 150 DISCOUNT ALLOWED ACCOUNT Date Particulars Rs Date Particulars Rs Jan 31 To Sundries 200 DISCOUNT RECEIVED ACCOUNT Date Particulars Rs Date Particulars Rs

Jan 31

By Sundries 150 Notes: 1. Transactions 2 and 6 relate to credit sales of goods and, therefore, they have not been recorded in the cash book. They will be recorded in the Sales Book and the posting will be done in the personal accounts of Mahesh and Suresh from there as shown in the Ledger. 2. Transaction 3 relates to credit purchase of goods. It has, therefore, not been recorded in the Cash Book. It will be recorded in the Purchases Book from where posting will be done in the personal account of mukesh as shown in the Ledger. 3. The total of the debit side of the discount column has been taken to the 'Discount Allowed Account' in the ledger. The word 'sundries' has been put in the 'particulars' column. Any person who is interested in knowing the person to whom the discount has been allowed can find it out from the Cash Book. 4.

The total of the discount column appearing on the credit side of the

cash book has been taken to 'Discount Received Account' in the ledger. The word 'sundries' has been put in the 'particulars' column. Any person who is interested in knowing the names of the persons form whom the discount has been received can find it out from the cash book. (iii) Three Columnar Cash Book. This type of cash book contains the following three columns on each side: (i) Cash column for cash received and cash paid. (ii) Discount column for discount received and discount allowed. (iii) Bank column for money deposited and money withdrawn from the bank. Check Your Progress 1. State whether each of the following statements is 'True' or 'False'. (

a)

Purchase Journal is meant for recording all purchases of goods. (b)

Posting is done in the personal accounts from the Purchases Book

daily. (c) Sales Journal is meant for recording all cash sales of goods. (d) Sales Returns Journal is also known as Returns Inward Journal. (e) Purchases Returns Journal is meant for recording all returns of goods purchased. (f) Credit Note is sent to a customer when goods sold are returned by him. (g) Debit Note is sent to the supplier of the goods when the goods are returned. (h) Office equipment purchased on credit will be recorded in the Purchases Book. (i) The balance in the petty cash book represents amount spent. (j) The Purchase day book is a part of the ledger.

100 Self-Instructional Material Subdivision of a Journal NOTES The proforma of such a Cash

Book is as follows: Dt.

Particulars L.F Discount Cash Bank Dt. Particulars L.F. Discount Cash Bank

The recording of transactions in a three-columnar cash book

will be clear with the help of the following Illustration.

Illustration 4.3.

Jan. 1

Opening Balance :Cash Rs 3,000. Bank Rs 4,000 Jan. 4 Rent paid by cheque Rs 2,000 Jan. 6 Received on account of cash sales Rs 3,000. Jan. 8 Paid to Mehta Bros. by cheque Rs 2,000 and earned Rs 200 as cash discount. Jan.10 Received from Suresh by cheque Rs 2,000 and allowed him Rs 100 as cash discount. Jan.12 Cash sales Rs 20,000. Jan.20 Cash Purchases Rs 15,000. Jan.31 Salaries paid Rs 5,000. Solution:

CASH BOOK Dt. Particulars L.F. Dis.

Cash Bank Dt. Particulars L.F. Dis. Cash Bank Rs Rs Rs Rs Rs Rs Jan. Jan. 1 То Balance b/d 3,000 4,000 6 Βv Rent A/c 2,000 6 To Sales A/c 3,000 8 By Mehta Bros. 200 2,000 10 To Suresh 100 2,000 20 By Purch. A/c 15,000 12 To Sales A/c 20,000 31 By Salaries A/ c 5,000 31 By

Balance c/d 6.000 2.000 100 26.000 6.000 200 26.00 6.000 To Balance b/ d 6.000 2.000 Ledger Dr. SALES ACCOUNT Cr. Date Particulars Amount Rs Date Particulars Amount Rs Jan.1 By Cash A/c 3,000 Jan.10 By Cash A/c 20,000 SURESH Jan.10 By Bank A/c 2,000 Βv Discount A/c 100 RENT ACCOUNT Jan.4 To Bank A/c 2.000 METHA BROS Date Particulars Amount Rs Date Particulars Amount Rs Jan.8 To Bank A/c 2,000 Jan.8 To Discount A/c 100 PURCHASES ACCOUNT Date Particulars Amount Rs Date Particulars Amount Rs Jan.20 To Cash A/c 15.000 SALARIES ACCOUNT Date Particulars Amount Rs Date Particulars Amount Rs Jan.31 To Cash A/c 5.000 Self-Instructional Material 101 Subdivision of a Journal NOTES DISCOUNT ALLOWED ACCOUNT Date Particulars Amount Rs Date Particulars Amount Rs Jan.31 To Sundries A/c 100 DISCOUNT RECEIVED ACCOUNT Date Particulars Amount Rs Date Particulars Amount Rs Jan.31

Ву

Sundries 200 Contra Entry As explained above, a three columnar cash book contains columns both for cash and bank transactions. An accounting transaction involves two accounts and there may be a transaction where both the Cash Account and Bank Account are involved. Since in the ledger, there are no separate Cash Accounts and Bank Accounts, therefore, no posting will be done from the Cash Book to the Ledger in case of such a transaction. The transaction will be recorded on both sides of the Cash Book. For example, if cash is withdrawn from the bank, the two accounts involved are the Cash Account and the Bank Account. In the Cash Book, on the debit side, the amount will be put in the cash column against the words 'To Bank', while on the credit side of the Cash Book, the amount will be written in the bank column against the words 'By Cash'. Such an accounting entry which is recorded on both the debit and credit sides of the cash book is known as a Contra Entry. In order to give a hint to the ledger- keeper that no posting is required for such an

entry, the word 'C' is put in the ledger folio column on both the sides of the Cash Book.

Special points regarding cheques. A business may receive cheques from its customers or it can issue cheques in favour of its customers or other creditors. Following are some special points which should be kept in view while making accounting entries in the Cash Book regarding such cheques received or issued. 1. Receipt of cheques. There can be two situations: (a) A cheque may be received by the business and sent to the Bank the same day for collection. In such a case, it will be better to put the cheque received in the debit side of the bank column as soon as it is received. For example, if on 10 January, a cheque is received from A for Rs 10,000 and is sent to the Bank for collection on the same day, the entry for receipt of the cheque will appear in the Cash Book as follows: CASH BOOK (RECEIPTS SIDE) Date Particulars Discount Cash Rs Bank Rs Jan. 10 To A 10,000 (b) In case, a cheque received from a party is sent to the Bank at a later date, it will be better to take the cheque as receipt of cash when it is received and deposit of cash in the bank when the cheque is sent for collection to the Bank. For example, if on 10 January, a cheque received from A for Rs 10,000 and is sent to the Bank at a later date, it will be better to take the cheque as receipt of cash when it is received and deposit of cash in the bank when the cheque is sent for collection on January 14, the entries in the Cash Book will appear as follows: Dr. CASH BOOK (CASH AND BANK COLUMNS)

Cr.

Date Particulars L.F. Cash Bank Date Particulars L.F Cash Bank Rs

Rs Rs Rs Jan 10 To A 10,000 Jan.14 By Bank C 10,000 Jan. 14 To

Cash C 10,000 Tutorial Note.

In the absence of any specific instructions in the question,

the students should presume that the cheque received from a party was sent to the Bank the same day for collection. 2. Endorsement of cheques received. A cheque received by the business may not be sent by it to the Bank for collection, but may be endorsed by the business in favour of a creditor of the business. In such a case, the cheque received 102 Self-Instructional Material Subdivision of a Journal NOTES will be taken as a receipt of cash. Similarly, the cheque endorsed, will be taken as payment of cash. For example if on 10 January, cheque was received from A for Rs 10,000 and it was endorsed on 14 January in favour of B, a creditor of the business, the entries in the Cash Book will appear as follows:

CASH BOOK (CASH COLUMN ONLY)

Date Particulars L.F. Amount Date Particulars L.F. Amount Rs

Rs Jan.10 To A 10,000

Jan 14 By

B 10,000 3.

Dishonour of cheques. The term 'dishonour of cheque' means non-payment of the cheque by the drawee Bank on its being presented for payment. There can be two different situations. (i)A cheque received by a business and sent to the Bank for collection may be dishonoured on presentation for payment. In such a case, the party from whom the cheque was received

should be debited while the account of the Bank should be credited. For example, if

a cheque received from, 'A' for Rs 10,000 on 10 January, is dishonoured by his bankers on presentation for payment on 14 January, entries in the Cash Book will appear as follows:

Dr

CASH BOOK (BANK COLUMN)

Cr. Date Particulars L.F. Amount Date Particulars L.F. Amount

Rs

Rs Jan.10 To A 10,000

Jan.14 By

A 10,000 Similarly

when a cheque received from a customer and endorsed in favour of a creditor

is dishonoured, the entries to be passed in the Cash Book can be well understood on the basis of the following journal entries: (a) On receipt of cheque Cash A/c Dr To Customer (b) On endorsement of cheque Creditor Dr. To Cash (c) On dishonour of the cheque Customer Dr. To Creditor Thus, it is clear that no entries will be passed in the Cash Book in the event of dishonour of

a cheque received from a customer and endorsed in favour of a creditor.

Entries (a) and (b) will be passed through the Cash Book while entry (c) will be passed through the Journal Proper. (ii) Cheques issued by the business in favour of third parties may be dis- honoured by the Bank. In such a case, the entry to be passed on the Cash Bank can be understood by passing the following journal entries: (a) On issue of the cheque in favour of a creditor Creditor Dr. To Bank (b) On dishonour of the cheque issued by the Bank Bank Dr. To Creditor Thus, when the cheque is issued in favour of a creditor, the creditor is debited and the Bank Account is credited. The entry will appear in the Cash Book on the credit side in the Bank column. On return of the cheque by the creditor on account of its non payment, the Creditor's Account which was previously debited, would now be credited while the Bank Account, which was previously credited, would now be debited. The entry for dishonour will wherefore, appear in the Cash Book in the Bank column.

Self-Instructional Material 103 Subdivision of a Journal NOTES The recording of transactions in a three-columnar cash book and from there posting into

the ledger

will be clear with the help of the following illustration.

Illustration 4.4.

Enter the following transactions in the

appropriate type of the cash books,

and post the same to the relevant ledger accounts: 1999

July 1 Started business with an investment of Rs 9,000. July 2 Deposited in Bank of India, Rs 7,000. July 4 Acquired a building by issuing a cheque of Rs 5,000. July 10 Paid the bill of the furniture by cheque Rs 1,000. July 15 Purchased Rs 800 of merchandise by cheque. July 18 Withdrew Rs 100 from the bank. July 20 Sold merchandise for Rs 1,200. July 22 Deposited Rs 2,000 into the bank. July 25 Bought Rs 1,000 merchandise. July 26 Sold Rs 1,500 merchandise by crossed cheque. July 27 Paid Rs 100 by cheque as the premium for insuring building against fire. July 28 Paid freight Rs 50. July 30 Withdrew from bank for personal use Rs 500. July 31 Cleared electricity bill Rs 90. July 31 Paid to Mahesh Rs, 1,080 in full satisfaction by cheque. We owed to Mahesh Rs 1,100 for goods purchased. July 31 Received from Suresh a cheque for Rs 1,480, in full satisfaction of the debt of Rs 1,510. Solution: Dr. CASH BOOK Cr. Date Particulars L.F. Dis. Bank Cash Date Particulars L.F. Dis. Bank

Cash Rs Rs Rs Rs Rs Rs 1999 1999 Jul. 1 To Capital 9,000 Jul. 2 By Bank C 7,000 Jul. 2 To Cash C 7,000 Jul. 4 By Building 5,000 Jul. 18 To Bank C 100 Jul. 10 By Furniture 1,000 Jul. 20 To Sales 1,200 Jul. 15 By Purchases 800 Jul. 22 To Cash C 2,000 Jul. 18 By Cash C 100 Jul. 26 To Sales 1,500 Jul. 22 By Bank C 2,000 Jul. 31 To Suresh 30 1,480 Jul. 25 By Purchases 1,000 Jul. 27

By Insurance Premium 100 Jul. 28 By Freight 50 Jul. 30 By Drawings 500 Jul. 31 By Electricity 90 Jul. 31 By Mahesh 20 1,080 Jul. 31

By Bal. c/d 3,400 160 30 11,980 10,300 20 11,980 10,300

Aug. 1 To Bal.

b/d 3,400 160 Ledger

Dr. CAPITAL ACCOUNT Cr. Date Particulars Amount Date Particulars

Amount

Rs

Rs July 1 By Cash 9,000

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Self-Instructional Material Subdivision of a Journal NOTES Dr. BUILDING ACCOUNT Cr. July 4 To Bank 5,000 PURCHASES ACCOUNT July 15 To Bank 800 July 25 To Cash 1,000 FREIGHT ACCOUNT July 28 To Cash 50 ELECTRICITY ACCOUNT July 31 To Cash 90 SALES ACCOUNT July 20 By Cash 1,200 July 26 By Bank 1,500 FURNITURE ACCOUNT July 10 To Bank 1,000 INSURANCE PREMIUM ACCOUNT July 27 To Bank 100 DRAWINGS ACCOUNT July 30 To Bank 500 DISCOUNT ACCOUNT July 31 To Sundries 35 July31 BY Sundries 20 Notes: (i) Cash and Bank columns in the cash book serve the purpose of prime as well as final entries. Hence, in the ledger no Cash and Bank Accounts have been opened. (ii) Cash Account never shows a credit balance, since, a person cannot spend more then what he has. While, the Bank Account may show a credit balance, since a bank may permit a customer to overdraw his account (i.e. withdraw more money than what he has in his account). In such a case, it will be said that the customer has an overdraft with the Bank. (iii) Postings to the discount Account are done at the end of the period with Total Discount Received and Total Discount Allowed. Cash Receipts and Payments Journal It is common practice these days to keep separate Cash books for receipts and payments. Thus, the business maintains two Cash Journals: (i) Cash Receipts Journal, and (ii) Cash Payments Journal. (i) Cash Receipts Journal. The Journal is meant for recording all cash receipts. The posting is done daily from the Cash Receipts Book to the Journal. The concerned accounts are all credited with the amount mentioned in the Cash Receipts Journal. The total cash received as shown by the Cash Receipts Journal is debited to the Cash Account at the end of a period usually at the end of a week. (ii) Cash Payments Journal. The book is meant for recording all cash payments. The posting is done daily from this book to the ledger and the concerned accounts are debited. At the end of a period (usually at the end of the week), the cash account is credited with the total cash paid during the period. 4.4 PETTY CASH BOOK

Petty Cash Book is maintained by the business to record petty cash expenses of the business,

such as postage, cartage, stationery, cleaning charges etc. In every business, there are many payments like the above which are of small amounts. In case all these transactions are recorded in the Main Cash Book, their recording will not only be inconvenient but also consume a lot of valuable time of the Cashier and the posting clerk. A Petty Cashier is appointed by the business to make payments of all such petty expenses. He works under the supervision of the Chief Cashier, who advances money at the beginning of every month/quarter to meet petty expenses. At the end Self-Instructional Material 105 Subdivision of a Journal NOTES of the month/quarter, the Petty Cashier submits a statement of account of the expenses incurred by him during the month/quarter and gets a fresh advance. The Petty Cash Book is usually maintained on the basis of the Imprest System. According to this system, a fixed amount is advanced to the Petty Cashier at the beginning of the period by the Chief Cashier. He submits his accounts at the end of the period and the Chief Cashier after examining his accounts, gives him a fresh advance equivalent to the amount spent by him, during the period. Thus, at the beginning of the each period (month or quarter as the case may be), the Petty Cashier has a fixed balance. The amount so advanced to him is termed as 'Imprest' or 'Float'. The recording of transactions in a Petty Cash Book

will be clear with the help

of the following Illustration.

Illustration 4.5.

Enter the following transactions in the

Petty Cash Book (maintained on Imprest system) for the months of January, 1999. Jan. 1 Cash received from the Chief Cashier Rs 200. Jan. 3 Typing paper Rs 8 Jan. 6 Office cleaning Rs 4. Jan. 8 Postage Rs 2. Jan.10 Cartage Rs 2. Jan.15 Postage Rs 6 Jan.18 Ink Rs 3, Typing paper Rs 10. Jan.20 Typewriter ribbon Rs 10. Jan.22 Telephone charges Rs 7. Jan.24 Office cleaning Rs 2. Jan.25 Nails polish Rs 27. Jan.27 Telegrams Rs 25. Jan.29 Typing paper Rs 30. (For Solution please see page 76) Postings from

the Petty Cash Book. Postings in the Ledger from the Petty Cash Book are done at the end of the period, i.e., month or quarter as the case may be. There are two alternative ways of making postings from the Petty Cash Book. 1. Petty Cash Book maintained as a Memorandum Book only. In such a case, the total of the various expenses from the Petty Cash Book is debited, to the concerned accounts at the end of the period and credit is given to the Cash Account with the actual expenditure incurred. The amount advanced by the Chief Cashier to the Petty Cashier is recorded by him as a memorandum by way of a note in the Cash Book itself.

This method is usually not followed. 2.

Where Petty Cash Book is taken as a part of the Double Entry System. This method is quite popular. The recording is done regarding the petty cash transactions on the basis of the following entries: (i) When money is advanced to the Petty Cashier: Petty Cash Account Dr. To Cash Account (The Petty Cash Account is debited with the actual amount of money advanced) (ii) On submission of accounts by the Petty Cashier; Expenses Accounts Dr. To Petty Cash Account (Each expense is to be debited separately with the expenditure incurred during the period as shown by the Petty Cash Book.) Thus, in the Ledger, there is a Petty Cash Account as well as separate Expenses Accounts for each of the expenses. 106

Self-Instructional Material Subdivision of a Journal NOTES Solution (Illustration 5.5): PETTY CASH BOOK Receipts Payments Date Particulars Cash Total Date Particulars Voucher Stationery Postal Cartage Cleaning Miscell- Total Book Rs Nos. Rs charges Rs aneous Rs Folio etc. Rs Rs 1999 Jan. 1 To

Cash from Chief 3 Typing paper, postage 1,2 8 4 12 Cashier 200 6 Office cleaning 3 4 4 8 Postage, office cleaning 4,5 2 2 4 10 Cartage 6 2 2 15 Postage 7 6 6 18 Ink, typing paper 8,9 13 13 20 Typewriter ribbon 10 10 10 22 Telephone charges 11 7 7 24 Cleaning 12 2 2 25 Nails Polish 13 27 27 27 Telegrams 14 25 25 29 Typing paper 15 30 30 200 61 44 2 8 27 142 Feb. 1 To Balance b/d 58 Ledger Folio 2 3 4 5 6 Balance c/d 58 Feb. 1 To Cash from Chief 200 Cashier 142 Note: Voucher nos., Ledger Folio nos. are imaginary.

Self-Instructional Material 107 Subdivision of a Journal NOTES Taking the figures as given in the preceding illustration, the various ledger accounts according to the second method will appear as follows: Dr. PETTY CASH ACCOUNT Cr.

Date Particulars Amount

Rs. Date Particulars Amount Rs. Jan. 1 To Cash 200 Jan. 3

By Stationery 61 By Postal Charges 44 By Cartage 2 By Cleaning 27 By Miscellaneous 27 By Balance c/d 58 200 200 Feb. 1 To Balance b/d 58

STATIONERY ACCOUNT

Jan. 31

To Petty Cash A/c 61 POSTAL CHARGES ACCOUNT Jan. 31 To Petty Cash

A/c 71 CARTAGE ACCOUNT Jan. 31 To Petty Cash A/c 2 CLEANING ACCOUNT Jan. 31 To Petty Cash A/c 8

MISCELLANEOUS ACCOUNT Jan. 31 To Petty Cash A/c 27 4.5

PURCHASES

JOURNAL

The Purchases Journal is meant for recording credit purchases of goods. It is also known as

the Purchases or Bought Day Book. It has columns for date of purchase, invoice number, name of the party, ledger folio and the amount of purchases.

It should be noted that

the book records only purchase of good on credit. Purchases of items other than goods on credit

is

recorded in the General Journal. Similarly, cash purchases are recorded in the Cash book. Posting. The posting is done in the Personal Accounts daily from the Purchases Book. At the end of a week/month,

the total of the Purchases Book is debited to the Purchases Account in the ledger.

The

following illustration will make clear the recording of transactions in the Purchases Journal and their subsequent posting in the ledger. Illustration 4.6.

Record the following transactions in the Purchases Journal and post them in the Ledger. 1998 Jan. 1. Purchased from Ram & Co. on credit: 38 Immersion Heaters@ Rs 10. 20 Philips Tubelights @ Rs 20. Jan. 4 Purchased from Shyam & Co. on credit: 40 Immersion Heaters@ Rs 10. 20 E.C.E. Tubelights @ Rs 15. Jan. 8 Purchased from Bajaj & Co. on credit: 20 Electric Irons @ Rs 40. 3 Electric Mixers @ Rs 100. Jan. 24 Purchased from K.C. & Co. on credit: 30 Electric Kettles @ Rs 20. 40 Table Fans @ Rs 200.

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Self-Instructional Material Subdivision of a Journal NOTES Solution:

PURCHASES JOURNAL Date Invoice Particulars L.F. Amount Amount No. Rs Rs 1992 Jan. 1 50 Ram & Co.: 4 30 Immersion Heaters @ Rs 10 300 20 Philips Tubelights @ Rs 20 400 700 Jan.4 55 Shyam & Co.: 8 40 Immerson Heaters @ Rs 10 400 20 E.C.E., Tubelights @ Rs 15 300 700 Jan. 8 62 Bajaj & Co.: 12 20 Electric Irons @ Rs 40 800 3 Electric Mixers @ Rs 100 300 1,100 Jan. 24 65 K.C. & Co.: 13 30 Electric Kettle @ Rs 20 600 40 Table Fans @ Rs 200 8,000 8,600 Jan. 31 Purchases Account Dr 14 11,100 Ledger RAM & CO. (Folio 4) Date Particulars Amount Date Particulars Amount Jan. 1 By Purchases 700 SHYAM & CO. (Folio 8) Jan. 4 By Purchases 700 BAJAJ & CO. (Folio 12) Jan. 8 By Purchases 1,100 K.C. & Co. (Folio 13) Jan. 24 By Purchases 8,000 PURCHASES ACCOUNT (Folio 14)

Jan. 31 To Sundries 11,100 Notes: (i) Folio Nos. are all imaginary. (ii) Purchases Account has been debited with the total purchases made during the month. This has been done at the end of the month. A firm may make the posting in the Purchases Account weekly also. (iii) Posting is done in the Personal Accounts daily. 4.6 SALES JOURNAL The Journal is meant for recording all sales of goods on credit. This is also known as Sales or Sold Day Book. It should be noted that Cash Sales are recorded in the Cash Book while sales of articles other than goods on credit are to be recorded in the General Journal. Posting is done in the Personal Accounts daily from the Sales Book.

They are debited with individual amounts. The Sales Account is credited with the total sales made during the period (i.e. a week or month) at the end of the period. The

recording of transactions in the Sales Book and their posting in

the Ledger

will be clear with the help of the following illustration.

Illustration 4.7.

Record the following transactions in the

Sales Day Book and post them into the ledger.

Self-Instructional Material 109 Subdivision of a Journal NOTES 1998 Jan. 1 Sold to Mukesh & Co.: 10 Electric Heaters @ Rs 20. 10 Table Lamps @ Rs 30. Jan. 10 Sold to Suresh & Brothers: 10 Table Fans @ Rs 250. 20 Philips Tubelights @ Rs 30 Jan. 25 Sold to Ramesh & Co.: 10

Electric Kettles @ Rs 50 20 Philips Tubelights @ Rs 30 Solution: SALES JOURNAL Date Invoice Particulars L.F. Amount Amount No. Rs Rs 1998 Jan. 1 101 Mukesh & Co.: 4 10 Electric Heaters @ Rs 20 200 10

Table Lamps @ Rs 30 300 500 Jan. 10 102 Suresh & Brothers: 6 To Table Fans @ Rs 250 2,500 20 Philips Tubelights @ Rs 30 600 3,100 Jan. 25 103 Ramesh & Co.: 8 10 Electric Kettles @ Rs 50 500 20 E.C.E. Tubelights @ Rs 30 600 1,100 Sales A/c Cr. 10 4,700 Ledger MUKESH &

CO. (Folio 4)

Date Particulars Amount. Date Particulars Amount Rs Rs Jan. 1 To Sales 500 SURESH & BROTHERS (Folio 6) Date Particulars Amount Date Particulars Amount Rs Rs Jan.10 To

Sales 3,100 RAMESH & CO. (Folio 8)

Date Particulars Amount Date Particulars Amount Rs Rs Jan25 To Sales 1,100 SALES ACCOUNT (Folio 10) Date Particulars Amount Date Particulars Amount Rs Rs. Jan.31

Bу

Sundries 4,700

Notes: (i) Folio Nos., Invoice Nos. are all imaginary. (ii) Posting is done is the Personal Accounts daily. The total sales are posted at the end of the month (or week) on the credit side of the Sales Account, against the word 'Sundries'. Any person interested in finding out the names of the parties to whom the sales have been made can do so by looking at the Sales Book.

110 Self-Instructional Material Subdivision of a Journal NOTES 4.7

SALES RETURNS JOURNAL The Journal

is meant for recording return of goods sold on credit. The goods which are sold for cash, if returned, are either exchanged for new goods or

the parties are paid in respect of them, depending upon the circumstances. In case the goods returned are not immediately exchanged for the other goods or not paid for in cash, they are recorded in a memorandum book only. Thus, goods sold for cash and returned do not find a place in the Sales Returns Journal. They are recorded in the

Cash Book in the case cash is paid for them or no entry is passed in case they have been recorded in a memorandum book only.

A pro forma of the Sales Returns Journal is as follows: SALES RETURNS JOURNAL Date Credit Particulars L.F. Amount Amount Note No. Rs. Rs Jan. 10 202 Ram & Co.: 5 Electric Heaters @ Rs 20 100 3 Philips Tubelights @ Rs 30 90 190 Sales Returns A/c Dr. 190

The posting from the Sales Returns Journal will be done daily in the personal

accounts. For example, in the above case, the account of Ram & Co. will be credited with a sum of Rs 190 on 10 Jan. The total of the Sales Returns Journal will be posted to the debit of Sales Returns Account at the end of the period, say a week or month.

Credit Note. The customer who returns the goods, gets credit for the value of the goods returned. A Credit Note is sent to him intimating that his account has been credited with the value of the goods returned.

The Note is prepared in duplicate. Its Pro forma is as under: MAHESHWARI BROTHERS 3, Strand Road, CALCUTTA No. 202 Date Jan. 10, 1998 To Ram & Co., 21, Shri Ram Road, Delhi. We have credited your account in respect of the following goods returned by you: Rs Rs (i) 5 Electric Heaters @ Rs 20 100 (ii) 3 Philips Tubelights @ Rs 30 90 190 For Maheshwari Brothers Sunil Manager

PURCHASES RETURNS JOURNAL The

book is meant for recording return of goods purchased on credit. The goods purchased for cash and returned are not recorded in this book.

They are recorded in a memorandum book only. On receipt of cash in respect of the goods returned, the entry will be passed through cash book. In case, the goods are exchanged for other goods of the same value, no entry will be required. The entry in the memorandum book will be cancelled on getting cash or goods for goods returned. A proforma of the Purchases Returns Journal is given:

Self-Instructional Material 111 Subdivision of a Journal NOTES PURCHASES RETURNS JOURNAL Date Debit Particulars L.F. Amount Amount Note No. Rs Rs Jan. 12 301 Shyam & Co. 3 Electric Irons @ Rs 40 120 Jan. 21 302 Bajaj & Co. 3 Electric Mixers @ Rs 300 900 Purchases Returns A/c Cr. 1,020 Note:

The entries in the Personal Accounts are done daily from the

Purchases Returns Book. They are debited with the respective amounts. The total of the Purchases Returns Book is posted to the credit of Purchases Returns Account at the

end of the period

say a week or a month, as the case may be.

Debit Note. When the goods are returned to the supplier, a debit note is sent to him indicating that this account has been debited with the amount mentioned in the Debit Note.

Its pro forma is given as under: MAHESHWARI BROTHERS 3, Strand Road CALCUTTA No. 301 Date Jan. 12, 1998 To Shyam & Co. 3, Clive Road, Calcutta. Dear Sir. We have debited your account for the goods returned by us as under: 4 Electric Irons @ Rs 30 Rs 120 For Maheshwari Brothers Sunil Manager Thus, in case of purchases returns or sales returns of goods, the flow of Debit Note or Credit Note can be put as follows: (i) The Debit Note is sent by the Purchaser of goods to the Seller of goods on return of goods by the Purchaser to the Seller. (ii) The Credit Note is sent by the Seller of goods to the Purchaser of goods on return of goods to the Seller by the Purchaser. 4.8 BILLS RECEIVABLE AND PAYABLE BOOKS Where dealings in bills are numerous, to save, time separate books are kept both for bills received and bills issued, with complete details. These books are - (i) Bills Receivable Book, and (ii) Bills Payable Book. These books have two advantages: (i) they help in finding out details regarding each bill at a glance and (ii) they reduce clerical work since there is no need of journalising each receipt of bill or issue of bill. Of course other transactions such as endorsement, dishonour or renewal of a bill will have to be journalised. When a bill is discounted, the entry will be made in the discount (for discount allowed) and Bank (for cash received) columns of the Cash book. In case of bills payable, the total of the amount column will be credited to Bills Payable Account at the end of a period, and debited to individual creditors accounts in the ledger daily. Similarly, the total of the amount column of Bills Receivable Book will be debited to Bills Receivable Account at the end of a period, and credited individually to debtors account daily. Illustration 4.8. Make entries in proper books of account on the basis of the following particulars on 1 December 1998.

112 Self-Instructional Material Subdivision of a Journal NOTES Balances Rs Bank (Dr.) 1,500 Debtors A 500 B 800 C 1,350 D 1,400 Creditors E 500 F 1,200 G 600 Following transactions took place in the month of December 1998: Dec. 3 Drew on A (Bill No.85) at two months after date for Rs 480 in full settlement. A accepts the bill and returns on December 5. Dec. 6 Bill No.85 discounted for Rs 470. Dec. 9 B sends a Promissory Note for Rs 800 payable three months after date. Dec.10 B's promissory note discounted with the bank for Rs 780. Dec.12 Accepted F's draft for Rs 1,200 payable two months after date (No.100). Dec.20 D sends his promissory note for Rs 600 towards payment of a past loan, payable two months after date. Dec.21 D's promissory note transferred to G. Dec.25 Accepted E's draft for Rs 500 payable three months after date. Dec.31 C sends Rs1,000 in cash and a promissory note for the balance payable three months after date in full settlement of his account. Solution: CASH BOOK Date Particulars Discount Bank Date Particulars Discount Bank 1998 1998 Dec.1 To Balance b/d 1,500 Dec.31 By Balance c/d 3,750 Dec.6 To B/ R 10 470 Dec.10 To B/R 20 780 Dec.31 To C — 1,000 30 3,750 — 3,750 BILLS RECEIVABLE BOOK SL. Date From Whom Acceptor Date of Term Maturity Rs L.F. Disposal No. Received Bill 1998 1998 85 Dec.6 A A Dec.6 2 months Feb.6 480 Discounted on Dec.6, 1998 86 Dec.9 B B Dec.9 3 months Mar.12 800 Discounted on Dec.10,1998 87 Dec.20 D D Dec.20 2 months Feb.23 600 Endorsed to Gon Dec.21,1998 88 Dec.31 C C Dec.31 3 months April 3 350 Total 2,230 BILLS PAYABLE BOOK SI.No. Date Drawn by Payee Term Maturity Rs L.F. Payable at Disposal 1998 1998 100 Dec.12 F F2 months Feb.15 1,200 – – – 101 Dec.25 E E3 months March 28 500 - - - Total 1,700 Self-Instructional Material 113 Subdivision of a Journal NOTES JOURNAL Date Particulars Dr. Rs Cr. Rs Dec.3 Discount A/c Dr. 20 To A 20 (For discount allowed to A on the bill received from him) Dec.21 G Dr. 600 To Bills Receivable A/c 600 (Endorsement in favour of G of D's acceptance) LEDGER ACCOUNTS Dr. A Cr. Date Particulars Rs Date Particulars Rs 1998 Dec.1 To Balance b/d 500 Dec.3 By Bills Receivable A/c 480 By Discount A/c 20 500 500 B Date Particulars Rs Date Particulars Rs 1990 Dec.1 To Balance b/d 800 By Bills Receivable A/c 800 800 800 C Date Particulars Rs Date Particulars Rs Dec.1 То Balance b/d 1,350 By Bills Receivable A/c 1,000 By Bills Receivable 350 1,350 1,350 D Date Particulars Rs Date Particulars Rs Dec.1 To Balance b/d 1,400 Dec.20 By Bills Receivable A/c 600 Dec.31 By Balance c/d 800 1,400 1,400 F Date Particulars Rs Date Particulars Rs Dec.1 To Bills Payable A/c 500 Dec.1 By Balance b/d 500 500 500 F Date Particulars Rs Date Particulars Rs Dec.12 To Bills Payable A/c 1,200 Dec.1 By Balance b/d 1,200 1,200 1,200 G Date Particulars Rs Date Particulars Rs Dec.31 To Bills Receivable A/c 600 Dec.1 By Balance b/d 600 600 600 **BILLS RECEIVABLE ACCOUNT Date Particulars Rs Date Particulars** Rs Dec.31 To Sundries 2,230 Dec.6 By Cash A/c 480 (Total from B/R book) Dec.10 By Cash A/c 800 Dec.31 By Balance c/d 950 2,230 2,230 Jan.1 To Balance b/d 950

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Self-Instructional Material Subdivision of a Journal NOTES BILLS PAYABLE

ACCOUNT

Date Particulars Rs Date Particulars Rs Dec.31 To Balance c/d 1,700 Dec.31 By Sundries 1,700 (Total from B/P book) 1,700 1,700 Jan.1

By Balance b/d 1,700 DISCOUNT ACCOUNT Date Particulars Rs Date Particulars

Rs Dec.3 To A 20

Dec.31 By Balance c/d 50 Dec.2 To

Sundries (Total from cash book) 30 50 50 Jan.1 To Balance b/d 50

A comprehensive illustration is given below for explaining the recording of transactions in the various Journals, their posting into the Ledger and finally preparation of the Trial Balance.

Illustration 4.9. Record the following transactions in various subsidiary books and

post them into Ledger and prepare a Trial Balance: 1999 June 1 Cash in hand, Rs 15,700, Cash at bank Rs 25,400 and Capital Account Rs 41,100. June 3 Bought goods for cash Rs 4,100. June 4 Purchased goods from Mahesh & Co. For Rs 5,800 less 10% trade discount. June 7 Sold goods to Bindia & Co. for Rs 8,900 less 20% trade discount. June 9 Withdrew Rs 500 from bank for private use. June 12 Sold goods to Amjad for Rs 6,400. June 15 Rs 5,000 paid to Mahesh & Co. in full settlement of their account. June 18 Goods worth Rs 400 returned by Amjad. June 20 Received Rs 4,000 form Amjad. June 21 Purchased goods from Shiv & Co. for Rs 8,700. June 23 Rs 6,000 paid to Shiv & Co. by cheque; discount allowed Rs 300. June 24 Purchased furniture for Rs 800 from Surjeet Furniture House on credit. June 26 Paid into bank Rs 2,200. June 28 Amjad declared insolvent; a first and final dividend of 50 paise in a rupee is received from him. June 29

Goods worth

Rs 600 returned to Shiv & Co. June 30 Interest on capital provided Rs 411. June 30

Goods worth Rs 400 taken by the proprietor for his personal use.

June 30 Paid Rs 500 for advertisement by cheque. June 30 Paid salaries to staff, Rs 1,800. June 30 Cash Sales Rs 21,800. June 30 Paid into bank Rs 20,000 June 30 Bought 100 shares in Hind Mills Ltd. at Rs 11 per share brokerage paid Rs25.

June 30 Received Rs 5,900 from Bindia & Co.; discount allowed Rs 100.

Self-Instructional Material 115 Subdivision of a Journal NOTES Solution: JOURNAL PROPER Date Particulars Debit Credit L.F. Amount Amount Rs Rs 1999 June 24 Furniture Account Dr. 800 To Surjeet Furniture House 800 (Being furniture purchased on credit) June 28 Bad Debts Account

Dr. 1,000

To Amjad 1,000 (Being 50% amount due written off as bad debt on Amjad becoming insolvent) June 30 Interest on Capital Account Dr. 411 To Capital Account 411 (Being interest on capital provided) June 30 Drawings Account Dr. 400

To Purchases Account 400 (Being goods taken for personal use of the proprietor)

June 30 Capital Account Dr. 900 To Drawings Account 900 (Being transfer of balance of Drawings Account) 3,511 3,511 SALES BOOK Date Particulars L.F. Amount Amount Rs Rs 1999 June 7 Bindia and Co.: Goods sold 8,900 Less: 20% Trade Discount 1,780 7,120 June 12 Amjad 6,400 June 30 Sales Account Cr. 13,520 PURCHASES BOOK Date Particulars L.F. Amount Amount Rs Rs 1999 June 4 Mahesh & Co.: Goods Purchased 5,800 Less: 10% Trade Discount 580 5,220 June 21 Shiv

and

Co. 8,700 June 30 Purchases Account Dr. 13,920 SALES RETURNS BOOK Date Particulars L.F. Amount. Amount Rs Rs 1999 June 28 Amjad 400 June 30 Sales Returns Account Dr. 400 PURCHASES RETURNS BOOK Date Particulars L.F. Rs Rs 1999 June 29 Shiv and Co. 600 June 30 Purchases Returns Account Cr. 600

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Self-Instructional Material Subdivision of a Journal NOTES Ledger

Dr.

CAPITAL ACCOUNT Cr. Date Particulars Rs Date Particulars Rs 1999 June 30 To Drawings A/c 900 June 1 By Balance b/d 41,100

June 30

То

Balance c/d 40,611 June 30 By Interest on Capital 411 41,511 41,511 July 1 By Balance b/d 40,611 FURNITURE ACCOUNT Date Particulars Rs Date Particulars Rs June 24 To Surjeet June 30 By Balance c/d 800 Furniture House 800 800 800 July 1 To Balance b/d 800 SURJEET FURNITURE HOUSE Date Particulars Rs Date Particulars Rs June30 To Balance c/d 800 June 24 Bv Furniture A/c 800 800 July 1 By Balance b/d 800 BAD DEBTS ACCOUNT Date Particulars Rs. Date Particulars Rs June 28 To Amjad 1,000 June 30 By Balance c/d 1,000 1,000 1,000 July 1 To Balance b/d 1,000 AMJAD Date Particulars Rs Date Particulars Rs June 12 To Sales A/c 6,400 June 18 By Sales Returns A/c 400 June 20 By Cash A/c 4,000 June 28 By Cash A/c 1,000 June 28 By Bad Debts 1,000 6,400 6,400 INTEREST ON CAPITAL ACCOUNT **Date Particulars** Rs Date Particulars Rs June 3 To Capital A/c 411 June 30 By Balance c/d 411 411 411 July 1 To Balance b/d 411 DRAWINGS ACCOUNT Date Particulars Rs Date Particulars Rs June 9 To Bank A/c 500 June 30 By Capital A/c 900 June 30 To Purchases A/c 400 900 900 PURCHASES ACCOUNT Rs Rs June 4 To Cash A/c 4,100 June 30 By Drawings A/c 400 June30 To Sundries June 30 By Balanced c/d 17,620 (as per Purchases Book) 13,920 18,020 18,020 July 1 To Balance b/d 17.620 Check Your Progress 2. Fill in the blanks: (a) The Purchase Journal records only purchase of goods. (b) The Sales Journal records all sales of goods. (c) A is sent to a customer when he returns the aoods. (d) When the goods are returned to the supplier a is sent to him. (e) give item-wise information about the goods purchased, sold or returned during a particular period. (f) Total purchases are posted to the at the end of a week or a month. (g) Goods Outward Journal is meant for recording all returns of goods on credit. Self-Instructional Material 117 Subdivision of a Journal NOTES THREE COLUMNAR CASH BOOK Dr. Cr. Date Particulars L.F. Discount Cash Bank Date Particulars L.F. Discount Cash Bank Rs Rs Rs Rs Rs Rs 1999 1999 June 1 To Balance b/d 15,700 25,400 June 3 By Purchases A/c 4,100 June 20 To Amjad 4,000 June 9 By Drawings A/c 500 June 26 To Cash C 2,200 June 15 By Mahesh & Co. 220 5,000 June 28 To Amjad 1,000 June 23 By Shiv & Co. 300 6,000 June 30 To Sales A/c 21,800 June 26 By Bank C 2,200 June 30 To Cash C 20,000 June 30 By Advertisement A/c 500 June 30 To Bindia and Co. 100 5,900 June 30 By Salaries A/c 1,800 June 30 By Bank C 20,000 June 30 By Investment in Shares

A/c 1.125 June 30 By Balance c/d 14,175 40,600 100 48,400 47,600 520 48,400 47,600 July 1 To Balance b/d 14,175 40,600 118 Self-Instructional Material Subdivision of a Journal NOTES BINDIA & CO. Date Particulars Rs Date Particulars Rs June 7 To Sales A/c 7,120 June 30 By Cash A/c 5,900 June 30 By Discount A/ c 100 June 30 By Balance c/d 1,120 7,120 7,120 July 1 То Balance b/d 1,120 SALES ACCOUNT Date Particulars Rs Date Particulars Rs June39 To Balance c/d 35,320 June 30 By Sundries13,520 (amount as per Sales Book) 13,520 June 30 By Cash A/c 21,800 35,320 35,320 July 1 By Balance b/d 35.320 MAHESH & CO. Date Particulars Rs Date Particulars Rs June 15 To Cash A/c 5,000 June 1 By Purchases A/c 5,220 June 15 To Discount A/ c 220 5,220 5,220 Dr. SHIV & CO. Cr. Date Particulars Rs Date Particulars Rs June 23 To Bank A/c 6,000 June 21 By Purchases A/c 8,700 June 23 To Discount A/c 300 June 29 To Purchases Returns A/c 600 June 30 То Balance c/d 1,800 8,700 8,700 July 1 By Balanced b/d 1,800 SALES RETURNS ACCOUNT Date Particulars Rs Date Particulars Rs June 30 To Sundries 400 June 30 By Balance c/d 400 (amount as per Returns Book) 400 400 July 1 To Balance b/d 400 PURCHASES RETURNS ACCOUNT Date Particulars Rs. Date Particulars Rs June 30 To Balance c/d 600 June 30 By Sundries 600 (amount as per Purchases Returns Book) 600 600 July 1 By Balanced b/d 600 ADVERTISEMENT ACCOUNT Date Particulars Rs. Date Particulars Rs. June 30 To Bank A/c 500 June 30 By Balance c/d 500 500 500 July 1 To Balance b/d 500 SALARIES ACCOUNT Date Particulars Rs Date Particulars Rs June 30 To Cash A/c 1,800 June 30 By Balance c/d 1,800 1,800 1,800

July 1 To Balance b/d 1.800 Check Your Progress 3. Cash book payment Self-Instructional Material 119 Subdivision of a Journal NOTES **INVESTMENT IN SHARES** ACCOUNT Date Particulars Rs Date Particulars Rs June 30 To Cash A/c 1,125 June 30 By Balance c/d 1,125 1,125 1,125 July 1 To Balance b/d 1,125 DISCOUNT ACCOUNT Date Particulars Rs Date Particulars Rs June 30 To Sundries June 30 Bv Sundries (Amount as per (Amount as per Cash Book) 100 Cash Book) 520 June 30 To Balance c/d 420 520 520 July 1 By Balance b/d 420 TRIAL BALANCE as at June 30, 1999 Sl. Name of the Account L.F. Debit Credit No. Balance Balance 1. Capital Account 40,611 2. Furniture Account 800 3. Surjeet Furniture House 800 4. Bad Debts Account 1,000 5. Interest on Capital Account 411 6. Purchases Account 17,620 7. Bindia and Co. 1,120 8. Sales Account 35,320 9. Shiv and Co. 1,800 10. Sales Returns Account 400 11. Purchases Returns Account 600 12. Advertisement Account 500 13. Salaries Account 1.800 14. Investment in Shares Account 1.125 15. Discount Account 420 16. Cash in hand (as per Cash Book) 14,175 17. Cash at Bank (as per Cash Book) 40,600 79,551 79,551 4.9 KEY TERMS ? Cash Journal: A journal meant for recording all cash transactions. ? Contra Entry: An accounting entry which is recorded on both the debit and credit sides of the Cash Book. ? Bills Journal: A journal meant for recording all transactions relating to bills of exchange or Promissory Notes received or issued by the business. ? General Journal: A journal meant for recording all such transactions for which no special journal has been kept by the business. ? Goods Journal: A journal meant for recording all credit transactions relating to goods. ? Imprest: The amount advanced to the petty cashier at the beginning of a period. It is also termed as float. ? Petty Cash Book: A book meant for recording all petty cash expenses of the business. ? Special Journal: A journal meant for recording transactions of a specific type. 120 Self-Instructional Material Subdivision of a Journal NOTES 4.10 SUMMARY In this unit, you have learned that: ? The Journal is divided into many subsidiary books for convenience, division for labour, grouping and classification relating to each business aspect at one particular place. ? Special journal means a journal meant for a special purpose. The various types of special Journals or books are cash journal, goods journal, bills journal, petty cash book, etc. ? General journal is also known as Journal Proper. It is meant for recording all transac- tions for which no special journal has been kept by the business. Examples of such transactions are opening, closing, rectification, adjustment entries, etc. 4.11 ANSWERS TO 'CHECK YOUR PROGRESS' 1. (a) False, (b) True, (c) False, (d) True, (e) False, (f) True, (g) True, (h) False, (i) False, (j) False 2. (a) credit, (b) credit, (c) credit note, (d) debit note, (e) Columnar journals, (f) purchases account, (g) purchased. 3. Petty Cash. 4. Prompt Payment. 4.12 QUESTIONS AND EXERCISES 1. What is a special purpose subsidiary book? Give a specimen of such a book showing at least five entries. 2. Explain the Imprest System of keeping a Petty Cash Book. 3. Explain the different types of Goods Journals with suitable examples. 4. What do you understand by subsidiary books? Describe the objectives of preparing them. 5. What do you mean by subdivision of a Journal? 4.13 PRACTICAL PROBLEMS Single Column Cash Book 1. Prepare a Cash Book (with cash column only)

of a Journal? 4.13 PRACTICAL PROBLEMS Single Column Cash Book 1. Prepare a Cash Book (with cash column only) from the following transactions: 1998 Rs March 1 Mr. Ganesh Lal commenced business with cash 65,000 March 3 Bought goods for cash 6,850 March 4 Paid Sharad cash 950 Discount allowed 60 March 6 Deposited in Bank 40,000 Paid for office furniture in cash 4,650 March 9 Sold goods for cash 30,000 March 12 Paid wages in cash 1,200 March 13 Paid for stationery 400 March 15 Sold goods for cash 25,000 March 16 Paid for miscellaneous expenses 450 March 19 Received cash from Mr.

Trilok Chand 4,850 Allowed him discount 150 March 21 Purchased a radio set 2,500 March 22 Paid salary 4,000 March 25 Paid rent 900 March 28 Paid electricity bill 350 March 29 Paid advertising 400 March 30 Paid to bank 25,000 [Ans. Cash Balance Rs. 37,200] Two Columnar Cash Book 2. Prepare a two columnar Cash Book from the following transactions of Shri R.K. Gupta. 1999 Rs Contd...

Self-Instructional Material 121 Subdivision of a Journal NOTES January 1 Cash in hand 2,000 January 6 Cash purchases 2,000 January 10 Wages paid 40 January 11 Cash sales 6,000 January 12 Cash received from Suresh 1,980 and discount allowed 20 January 19 Cash paid to Munna 2,470 and discount received 30 January 27 Cash paid to Radhey 400 January 28 Purchased goods for cash 2,070 Find out the total discount allowed and received [Ans: Cash Balance (closing) Rs 5,000, Discount Total Dr. Rs 20, Cr. Rs 30] Three Columnar Cash Book 3. From the following particulars, write out a Cash Book, with Cash, Bank and Discount columns of M/s. Ramji and Co., Calcutta for the month of January, 1998 and balance the Cash Book. January 1 Balance of cash in hand Rs 2,000 and overdraft with State Bank of India Rs 10,000. January 5 Received Cash from Chetty & Co. Rs 2,000 and allowed him discount Rs 60. January 7 Paid into bank Rs 3,500. January 15

Paid to Govind by cheque Rs. 520 in full settlement of his account for Rs. 550.

January 20 Received for cash sales; Cash Rs. 175 and cheque Rs. 100. January 22 Paid Ram & Co. by cheque Rs. 1,200 discount allowed Rs. 45. January 25 Paid by cheque to Shanti Kumar Stores, for private use of the proprietor Rs. 525. January 28 Drew for office use Rs. 500 January 31 Harish Paid directly into our Bank Account Rs. 600. [Ans. Cash in hand Rs 1,775; Bank overdraft Rs 8,545, Discount (Dr.) Rs. 60 (Cr.) Rs 75] 4. Record the following transactions in the Three columnar cash book 1999 January 1 Balances; Cash Rs 500, and Bank (Cr.) Rs 12,000 January 2 Investment additional capital of Rs 12,000. January 5 Deposited Rs. 8,000 in the bank. January 8 Received from Roy Rs 890, allowed him discount Rs 5 January 12 Paid Rs 1,200 to Ghose who allowed us discount of Rs 30. January 15 Bought merchandise for cash Rs 700. January 17 Sold merchandise for cash Rs 1,000 January 18 Purchased furniture by cheque Rs 1,500 January 19 Received a crossed cheque of Rs 230 from Sundram in full settlement of the debt of Rs 240. January 22 Paid Commission Rs 150 by cheque. January 25 Withdrew for personal use of Rs 300. January 26 Paid to krishanan Rs 700 by cheque; discount received Rs 20 January 27 Withdrew for personal use Rs 300. January 29 Received dividend by an order cheque Rs 30, deposited in the bank on the same day. January 30 Cleared telephone bill Rs 50 January 31 Paid manager's salary Rs 350, rent Rs 200, and wages Rs 150. [Ans. Discount (Dr. Rs 15, (Cr.) Rs 50, cash Balance, Rs 5,140, Bank Balance Rs. 3,910)] 5. Mr. Sadanand operates two Bank accounts both of which are maintained in the Columnar Cash Book itself. You are required to draw up a proforma of the cash book and show how the following transactions relating to 29th February, 1998 will appear therein and close the cash book for the day. (1) Opening Balance Rs Cash 150 122 Self-Instructional Material Subdivision of a Journal NOTES National Bank 11,240 (O/D) Overseas bank 35,460 (2) Received cheque for Rs 1,250 in respect of sales for realising which the National Bank charged Rs 1.50 and credited the balance. (3) Purchased goods for Rs 13,210 and a cheque issued on the Overseas Bank. The bank charged Rs 3 for collection of the cheque to the concerned party. (4) Paid office expenses: Rs 45 and Rs 15.50 for stationary. (5) Out of Cash sales of Rs 13,265 a sum of Rs 10,000 was, deposited in the NationalBank. (6) Credit purchases of Rs 15,000 were made from Mr. Smith who sent the documents relating to the goods through the Overseas Bank for 90 per cent of their value. The bank charged Rs 115 for releasing the documents. (7) Deposited Rs 5,000 in National Bank. (8) A "Bill Receivable" for Rs 10,000 was discounted with the Overseas Bank, which charges 1 per cent towards discounting. (9) Withdrew Rs 5,000 from the Overseas Bank. (10) A demand draft was purchased for Rs 3,000 from a bank after paying Rs 2 towards their charges and paid to the electricity Department as a deposit. (11) Interest of Rs. 122 and Rs 50 were credited and debited respectively by the Overseas Bank and National Bank. (12) An amount of Rs 1,500 was withdrawn from the Overseas Bank and salaries paid to that extent. (13) Manager's salary of Rs. 1,000 was paid by cheque drawn on the National Bank. (14) Overseas bank collected dividends of Rs 1,250 and sent a credit note. (15) An amount of Rs. 1,500 was transferred from the Overseas bank to the National bank. [Ans: Closing Balance: National Bank Rs 5,458,50; Overseas Bank Rs 11,907.00 and Cash Rs 352.50] Petty Cash Book 6. Shri Ramaswamy maintains a Columnar Petty Cash Book on the Imprest system. The imprest amount is Rs 500. From the following information, show how his petty cash book would appear for the week ended 12th September, 1999. Date Particulars Rs 7.91999 Balance in hand 134.90 Received cash reimbursement to make up the imprest Postage 12.30 Stationery 32.10 Entertainment 5.40 8.9.1999 Travelling and Conveyance 12.60 Miscellaneous Expenses 1.10 Entertainment 7.20 9.9.1999 Repairs 156.70 10.9.1999 Postage 17.40 Entertainment 12.70 Travelling 38.40 11.9.1999 Stationery 67.30 Entertainment 4.10 12.9.1999 Miscellaneous Expenses 1.20 Postage 5.10 Repairs 48.30 [Ans: Balance on September, 14: Rs 78.10] Goods Journals 7. Enter the following transactions in proper Subsidiary Books of Ram: 1999 Rs January 1 Sold goods to Ramesh 525 January 1 Bought of Hari Ram 780 January 2 Ramesh returned goods 75 January 2 Sold to Dina Nath 550 January 2 Purchased goods from Mangal 700 Contd...

Self-Instructional Material 123 Subdivision of a Journal NOTES January 4 Returned goods to Mangal 100 January 4 Bought of Devi Dayal 325 January 4 Sold to Zakir Hussain 350 January 5 Zakir Hussain returned goods 45 January 6 Sold to Ram Saran 500 January 6 Sold to Ghanshyam 300 January 7 Ram Saran returned goods 50 January 7 Bought of Devi Dayal 700 January 8 Returned Goods to Devi Dayal 75 January 9 Purchased goods from Raghunath subject to a trade discount of 10% 1,000 January 10 Sold to Raja Ram goods subject to trade discount of 5% 500 [Ans: Total of Purchases Book, Rs 3,405, Sales Book, Rs 2,700; purchases Returns Book, Rs 175; Sales Returns Book Rs 170] Comprehensive Problems 8. The following were the balances of account appearing in the book of Shyam Mohan, Iron and Steel Merchant on the 31st December, 1999 Debit Balances: Stock in Warehouse, Rs 21,000; Fixtures and Fittings, Rs 6,300, motor Lorries, Rs 35,000, Harish

Rs 9,600; Ramesh Rs 3,200; Sohan Rs 8,900; cash in hand Rs 2,500; cash at Bank Rs 17,300.

Credit Balance: Suresh Rs 17,900, Gyan Rs 9,900 Enter the above and the following transactions into proper books of account, post them into ledger and prepare a Trial balance. 1999 Rs. January 1 Sold to Sohan, 3 tonnes of steel angles per tonne 5,000 January 2 Paid Suresh by cheque on account 10,000 January 3 Received cheque from Ramesh in settlement of his account owing on 31st December, 1999 less 5% discount January 5 Bought of Hari 5 tonnes of J.C. Tube per tome 1,500 January 6 Allowed discount to Sohan on 3 tonnes angles invoiced 1st January these having been cut to wrong length per tonne 200 January 8 Sundry Cash Sales. 1,600 January 11 Drew and cashed cheque for office purposes 2,000 January 12 Paid cash for carriage charges 250 January 14 Sold to Ramesh 5 tonnes Steel Rounds-per tonne 1,900 January 16 Received cheque on account from Sohan 8,500 January 18 Received from Harish cheque on account 8,000 January 19 Bought of Suresh 6 tonnes steel frame per tonne. 1,800 Sent debit note to Ramesh for under charge on 5 tonnes Bar supplied to him on 14th January per tonne 100 January 21 Sold to Tara Chand 4 tonnes IC Tubes per tonne 2,000 January 22 Paid rent by cheque 2,500 Paid wages in cash 2,150 January 23 Received information that Harish had wound up the business and gone abroad. Wrote off balance of his account as a bad debt. January 25 Paid Suresh by cheque less 2% discount January 26 Paid cash for cleaning warehouse windows 70 January 29 Shyam Mohan withdrew cash for his own use 2,500 9. Enter the following transactions in the proper books of the Golden Tobacco Co. For January, 1999. 1999 Rs January 1 Assets: Leasehold Premises, Rs 18,000, Machinery Rs 27,600 Stock of Raw Tobacco Rs 51,900 Cash at Bank Rs 7,620; Cash in Hand Rs 860 Due from Mohan and Co. Rs 1,460; Due from Cavendish and Co. Rs 1,260 Furniture Rs 1,500 Liabilities: Loan @ 6% Rs. 20,000 due to Wilson and Grey Rs 6,000 January 3 Drawn from bank (for wages to be paid the following day) 1,500 January 4 Wages paid 1,435

124 Self-Instructional Material Subdivision of a Journal NOTES January 7 Bought of Wilson and Grey: 896 kg Boreneo Leaf @ Rs 4.00 per kg; 672 kg West Indian Leaf @ Rs 3.40 per kg Charges Rs. 47 January 9 Returned 128 kg of West Indian Leaf as not being up to guality January 12 Paid customs duty by cheque 6,860 January 17 Sold to Mohan and Co. 75 kg Royal Mixture @ Rs 20.00 per kg 20,000 Aromatic Cigarettes @ Rs. 50 per 1,000 40 kg Five Flakes @ Rs 80.00 per kg January 18 Paid Wilson and Grey by cheque in full settlement of amount due on January 1 5,850 January 18 Received from Cavendish and Co. by cheque in full settlement 1,235 January 19 Bought of Sharp Bros Co. advertising posters 1,100 January 24 Northern Engine Co. Ltd. Charges for repairing machinery, paid cash 250 January 24 Sold to Cavendish and Co. 10,000 Aromatic Cigarettes Rs. 50 per 1,000 January 25 Bought of Johan Barnes and Co. Indian Leaf 1,120 kg @ Rs 3.00 per kg January 26 Received from Mohanand Co. on account, cheque 2,000 January 27 Bank notifies that Cavendish and Co.'s cheque is dishonoured January 28 Bought of Dale and Sons: Bormeo Leaf 882 kg @ Rs 4.00 per kg and Indian Leaf 560 kg @ Rs 3.00 per kg, Charges Rs 7 January 29 Paid for advertisements 230 January 31 Paid for repairs to furniture 30 January 31 Paid Ground Rent 300 January 31 Drawn for Bank for private use 400 January 31 Bank charged interest for the month 35 January 31 Received intimation that Cavendish and Co. are insolvent, no possibility of recovering anything January 31 Allowed interest on capital @ 5% per annum January 31 Cigarettes taken for private use 10 January 31 Sold to Blunt & Co. 50 kg Five Flakes @ Rs 80.00; 10,000 Aromatic Cigarettes @ Rs 52.00 per 1,000, Packing Charges Rs. 30 [Ans: Cash Book, Cash Balance Rs 115: Bank Overdraft Rs 5.025, Purchases Book Total Rs 14,558; Sales Book Total Rs 10,750; Returns Outward Book.,

Total Rs 448] 4.14 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

MODULE - 2

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Statements NOTES

Self-Instructional Material 127 Company Financial Statements NOTES

UNIT 5

COMPANY FINANCIAL STATEMENTS Structure 5.0 Introduction 5.1 Unit Objectives 5.2 Meaning and Types of Financial Statements 5.3 Nature of Financial Statements 5.4 Limitations of Financial Statements 5.5 Preparation of Company Financial Statements 5.6 Profit and

Loss Account 5.7 Balance Sheet 5.8 Adjustment Entries 5.9 Key Terms 5.10 Summary 5.11 Answers to '

Check Your Progress' 5.12 Questions and Exercises 5.13 Practical Problems 5.14 Further Reading 5.0 INTRODUCTION In

the preceding

unit, we explained the preparation and presentation of financial statements for a

non-corporate entity. In the present

unit, we are explaining the preparation and presentation of financial statements for a corporate entity.

It may be noted that in the latter case, the financial statements are

prepared as per the requirements of Schedule VI to the Companies Act, 1956.

These requirements, along with appropriate illustrations, are being incorporated in

this unit. 5.1 UNIT

OBJECTIVES

After going through this unit,

you will be able to: ? Understand the

concept of

financial

statements ?

Identify the various types of financial statements ? Understand the nature and limitations of financial statements ? Learn the basic requirements and the formats of income statement and balance sheet of a company 5.2 MEANING AND TYPES OF FINANCIAL STATEMENTS A

financial statement is an organised collection of data according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm. It may show a position at a moment

in

time as in the case of a balance sheet, or may reveal a series of activities over a given period of time, as in the case of an Income Statement. 1

Thus, the term financial

statement

generally refers to two basic statements: (i) the Income Statement, and (ii) the Balance Sheet. Of course, a business may also prepare (

iii) a Statement of Retained Earnings, and (iv) a Statement of Changes in Financial Position

in addition to the above two statements. 1.

Hampton John J., Financial Decision Making, Ed. 1977, p. 62.

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Financial Statements NOTES The meaning and significance of each of these statements is briefly explained below: (i) Income statement : The Income Statement (also termed as Profit and Loss Account) is generally considered to be the most useful of all financial statements. It explains what has happened to a business as a result of operations between two balance sheet dates. For this purpose it matches the revenue and costs incurred in the process of earning revenues and shows the net profit earned or loss suffered during a particular period. (ii) Balance sheet : It is a statement of the

financial position of a business at a specified moment of time. It represents all the

assets owned by the business at a particular moment of time and the claims (or equities) of the owner and outsiders against those assets at that time. It is in a way, a snapshot of the financial condition of the business at that time. (iii) Statement of retained earnings : The term

retained earnings means the accumulated excess of earnings over losses and dividends. The balance shown by the Income Statement is transferred to the Balance Sheet through this statement, after making necessary appropriations. It is, thus, a connecting link between the Balance Sheet and the Income Statement. It is fundamentally a display of things that have caused the beginning-of-the-period retained earnings balance to be changed into the one shown in the endof-the-period retained earnings in the balance sheet. The statement is also termed as Profit and Loss Appropriation Account in case of companies. (iv) Statement of changes in

financial position : The Balance Sheet shows the financial condition of the business at a particular moment of time

while the Income Statement discloses the results of operations of business over a period of time. However, for a better understanding of the affairs of the business, it is essential to identify the movement of working capital or cash in and out of the business. This information is available in the statement of changes in financial position of the business. The statement may emphasize any of the following aspects relating to change in financial position of the business: (a) Change in the firm's working capital or Funds Flow Statement (b) Change in the firm's cash position or Cash Flow Statement The preparation and utility of these statements have been explained in detail later in the book. 5.3 NATURE OF FINANCIAL STATEMENTS

According to the American Institute of Certified Public Accountants, financial statements reflect 'a combination of recorded facts, accounting conventions and personal judgements and the judgements and conventions applied affect them materially.'

This implies that data exhibited in the financial statements is affected by recorded facts, accounting conventions and personal judgements. 1.

Recorded facts. The term recorded facts means facts which have been recorded in the accounting books.

Facts which have not been recorded in the financial books are

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not depicted in the financial statements, however material they might be.

For example, fixed assets are shown at cost irrespective of their market or replacement price since such price is not recorded in the books. 2.

Accounting conventions. Accounting conventions imply certain fundamental accounting principles which have been sanctified by long usage.

For example, on account of the convention of 'Conversatism', provision is made for expected losses but expected profits are ignored.

This means that the real financial position of the business may be much better than what has been shown by the financial statements. 3. Personal judgements. Personal judgements also have an important bearing on the financial statements. For example, the choice of selecting method of depreciation lies on the accountant. Similarly, the mode of amortisation of fictitious assets also depends on the personal judgement of the accountant. 5.4 LIMITATIONS OF FINANCIAL STATEMENTS

Financial statements are prepared with the objective of presenting a periodical review or report on the progress of

the business by the management and deal with the (i) status of the investments in the business and (it) results achieved during the period under review.

However, these objectives are subject to certain limitations as given below: 1. Financial statements are essentially interim reports. The profit shown by the Profit and Loss Account and the financial position as depicted by the Balance Sheet are not exact. The exact position can be known only when the business is closed down. Again, the existence of contingent liabilities, deferred revenue expenditure etc., make them more imprecise. 2. Accounting concepts and conventions. Financial statements

are prepared on the basis of certain accounting concepts and conventions.

On account of this reason, the financial position as disclosed by these statements may not be realistic. For example, fixed assets in the balance sheet are shown on the basis of 'going concern concept'. This means that the

value placed on fixed assets in the balance sheet may not be the same which may be realised on their sale. On account of convention of conservatism, the income statement may not disclose true income of the business since probable losses are considered while probable incomes are ignored. 3. Influence of personal judgement. Many items are left to the personal judgement of the accountant. For example, the method of depreciation, mode of amortisation of fixed assets,

treatment of deferred revenue expenditure—all depend upon the personal judgement of the accountant. The soundness of

such judgement will necessarily depend upon his competence and integrity. However, the convention of consistency acts as a controlling factor on making indiscreet personal judgements. 4. Disclose only monetary facts. Financial statements do not depict those facts which cannot be expressed in terms of money. For example, development of a team of loyal and efficient workers, enlightened management, the reputation and prestige of management with the public, are matters which are of considerable importance for the business, but they are nowhere depicted by financial statements. While relying on financial statements an investor must keep the above limitations in view. 5.5 PREPARATION OF COMPANY FINANCIAL STATEMENTS

The financial statements, as discussed above, basically comprise of two statements viz. income statement or profit and loss account and the balance sheet. They are usually prepared at the end of the accounting period, hence they are also termed as final

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accounts of the company. In case of companies, the final accounts have been termed as annual accounts and balance sheet. Section 210 of the Companies Act governs the preparation of the final accounts of a company. The important provisions regarding the preparation of the above accounts are as follows : (i) At every annual general meeting of the company, the Board of Directors of the Company shall lay before the company : (a) the balance sheet as at the end of the accounting period, and (b) a profit and loss account for that period. In the case of a company not carrying on business for profit, an income and expenditure account shall be laid before the company at its annual general meeting instead of profit and loss account. (ii) The profit and loss account (or the income and expenditure account) relate to the period— (a) in the case of first annual general meeting and (b) in the case of any subsequent annual general meeting, from the date immediately after the period for which account was last submitted to not more than 6 months before the meeting. The period for which the account has been prepapred is called the financial year. It may be less or more than a calendar year but it shall not exceed 15 months. However, with the permission of the Registrar, it may extend to 18 months. According to Section 211, the profit and loss account and the

balance sheet of a company must give a true and fair view of the state affairs of the company.

The balance sheet should

be in the form as given in Part I of Schedule VI or as near thereto as

the circumstances admit. The form has been given later in the unit. The profit and loss account should comply with the requirements of Part II of Schedule VI to the Companies Act. Part III to Schedule VI only interprets certain terms used in Schedule VI, Part I and Part II. Part IV has been added w.e.f. 15.5.1995. Part IV comprises of Balance Sheet Abstract an a Company's General Business Profile. According to Companies (Amendment) Act 1999 (w.e.f. 31.10.1998), every Profit & Loss Account and Balance Sheet has to comply with the accounting standards as issued by the Institute of Chartered Accountants of India in consulation with

the

National Advisory Committee on Accounting Standards established under the Companies Act. Where the profit and loss account and balance

sheets do not comply with the accounting standards, such companies shall disclose in their

profit and loss accounts and balance sheets the following: (a) deviations from the accounting standards, (b) the reasons for such deviations, and (c) the financial effects arising from such deviations. The balance sheet and profit and loss account of the company have to be duly signed on behalf of the company by persons

as per the provisions of Section 215 of the Companies Act.

They should be accompanied with the Directors' and Auditors' report. The Directors' report should contain besides other prescribed particulars,

the amount

if any which the board recommends to be paid by way of dividend and a statement showing the name of every employee of company who has been paid remuneration for that year at a rate which is not less than Rs. 2,00,000 per month.* A copy of the final accounts (i.e., the profit and loss account and the balance sheet together with Directors' and Auditors' reports) should be sent not less than 21 *

Raised from Rs. 1,00,000 p.m. w.e.f. 17.4.2002.

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days before the date of the annual general meeting to every member

of the company, every debenture- holder and every trustee for the debenture holders. Three copies of such accounts and reports must be filed with the Registrar within 30 days from the date on which they were so laid in the meeting. In the following pages, we are giving the particulars as required by Schedule VI both in respect of the profit and loss account and the balance sheet and the special points which the students must keep in mind while preparing them. 5.6 PROFIT AND LOSS ACCOUNT Requirements as to Profit & Loss Account :

The requirements as to profit and loss account can be put into two categories : 1. General Requirements; and 2. Special Requirements as per Schedule VI, Part II 1. General Requirements. These basically relate to three matters : (i) Heading. In case of companies; it is not necessary

to

split the profit and loss account into three sections viz. Trading Account, Profit and Loss Account and Profit & Loss Appropriation Account. Of course splitting up of the account into three sections is not forbidden and should be done to give a better view about the profit earned and distributed by the company during a particular period. The Profit & Loss Account can be prepared under two headings : (a) Profit & Loss Account giving details regarding the Gross Profit and the

Net Profit earned by the company during a particular period. (b) Profit & Loss Appropriation Account giving details regarding the balance of Profit & Loss A/c brought forward from the last year, the Net Profit (or loss) terned (or made) during the year and appropriations made duringthe year. Items which are shown in the Profit & Loss Account are popularly termed as items appearing "above the line". While the items which are shown in the Profit & Loss Appropriation Account are popularly termed as items appearing 'below the line'. (ii) Provision for Taxation. Companies are charged income tax at a high rate. Usually the tax rate is about 40% or more of the taxable profits. Though provision for taxation is an appropriation of profits, yet the common practice is to show it 'above the line' i.e., in the Profit & Loss Section and not in Profit & Loss Appropriation. In other words, profit after tax is

taken from 'Profit & Loss Account' to 'Profit & Loss Appropriation Account'. However, tax for a previous period not provided or refunded for is charged or credited to the

P&LAppropriation Account. (

iii) Accounting Year. Though the Companies Act permits a company to select any period of 12 months as its accounting year, on account of tax laws it has become almost obligatory for every company to close its

books of accounts on 31st March, every year. 2. Special Requirements as per Schedule VI, Part II. The Profit & Loss Account of a company must be prepared in accordance with the requirement of Part II of Schedule VI of the Companies Act, 1956. These requirements are summarised as follows : (i) The Profit & Loss Account should clearly disclose the result of the working of the company during the period covered by the account. It should disclose separately incomes and expenses of a non-recurring nature and exceptional transactions. The Profit & Loss Account should particularly disclose information in respect of the following items : (a) The turn-over of the company (b) Commission paid to sole-selling agents

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c) Commission paid to other selling agents (d) Brokerage and discount on sales other than the usual trade discount (e)
Opening and closing of goods, purchases made or cost of goods manufactured or value of services rendered during the period covered by the account. (f) Interest on company's debentures and other fixed loans (g) Amount charged as income tax (h) Remuneration payable to the managerial personnel (i) Amount paid to auditor for services rendered as – (a) auditor and (b) as advisor in any other capacity viz. taxation matters, company law matters, management services etc. (j) The details of licensed, installed and actual capacity utilized (k) Value of imports, earnings in foreign exchange and amounts remitted during the year in foreign currencies on account of dividends.

For the sake of convenience of the students, we are giving below

a format of Trading & Profit and

Loss Account of a company :Company Limited

TRADING &

PROFIT AND LOSS

ACCOUNT For the year.....

To Opening Stock By Sales (less returns) To Purchase (less returns) By Closing Stock

То

Wages

By Gross Loss (c/d)* To

Manufacturing Expenses

To Gross Profit (

c/d)* To

Gross Loss b/d* By Gross Profit b/d* To

Salaries By

Dividends To

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BALANCE SHEET According to Section 210 of the Companies Act, a company is required to prepare a balance sheet at the end of each trading period. Section 211 requires the balance sheet to be set up in the prescribed form. This provision is not applicable to banking, insurance, electricity and other companies governed by special Acts. The Central Government also has the power to exempt any class of companies from compliance with the requirements of the prescribed form if it deems so to be in public interest. The object of prescribing the form is to elicit proper information from the company

so as

to

give a 'true and fair' view of the state of

the company'

s affairs. As a matter of fact, both window dressing and creating secret reserves will be considered against the provisions of Section 211. Schedule VI, Part I gives the prescribed form of a company's balance sheet. Notes and instructions regarding various items have been given in brackets below each item. It may be noted that if information required to be given under any of the items or sub-items in the prescribed form cannot be conveniently given on account of lack of space, it may given in a separate schedule or schedules. Such schedules will be annexed to and form part of the balance sheet. Schedule VI, Part I permits presentation of the

balance sheet both in horizontal as well as vertical forms. The forms with necessary notes, explanations, etc. are given in the following pages: HORIZONTAL FORM OF BALANCE SHEET SCHEDULE VI PART I (See Section 211) Balance Sheet of (Here enter the name of the company) as on (Here enter the date as which the balance sheet is made out) Figures Figures Figures for the Liabilities for the for the Assets for the pre- current pre- current vious year

vious year year Rs. Rs. Rs. Rs. Rs. Share Capital Fixed -Assets Authorised: Distinguishing - as far as shares of Rs.... each possible between expen- diture upon Issued: (a) Goodwill (distinguishing between the (b) Land various classes of capital and (c) Building stating the particulars speci- (d) Leaseholds fied below, in respect of each (e) Railway Sidings class)... Shares of (f) Plant and Machinery Rs.... each (g) Furniture and Fittings (h) Development of Property Subscribed : (i) Patents, Trade Marks (distinguishing between the and Designs various classes of capital and (j) Livestock, and stating the particulars (k) Vehicles, etc.

specified below, in respect of each class) shares of Rs. called up. (Of the above shares... shares (

Under each head, the are allotted as fully paid up original cost and the pursuant to a contract without additions thereto and payment being received in deductions therefrom during cash. the year and the total Of the above shares... shares depreciation written off or are allotted as fully paid up provided up to the end of by way of bonus shares) the year is to be stated. (Contd.)

134 Self-Instructional Material Company Financial Statements NOTES Depreciation written off or Specify the source from provided shall be allotted which bonus shares are under the different asset issued, e.g., capitalisation of heads and deducted in profits or Reserves or from arriving at the value of Fixed Securities Premium Account. Assets. Less: Calls unpaid; In every case where the (i) By directors original cost cannot be (ii) By others ascertained, without unreasonable expense or Add: delay, the valuation shown by Forfeited Shares: the books is to be given. For (amount originally paid up) the purpose of this paragraph, (Any capital profit on reissue such valuation shall be the of forfeited shares should be net amount at which an asset transferred to Capital

stood in the company's books Reserves) at the commencement of this Act after deduction of the Note : amounts previously provided 1. Terms of redemption or or written off for depreciation conversion (if any) of any or diminution in value, and redeemable preference where any such asset is sold, capital are to be stated toge- the amount of sale proceeds ther with earliest date of rede- shall be shown as deduction. mption or conversion. Where sums have been written off on a reduction of 2.

Particulars of any option capital or a revaluation of on unissued Share Capital are assets, every balance sheet to be specified. (after the first balance sheet) subsequent to the reduction 3. Particulars of the different or revaluation shall show the classes of preference shares reduced figures with the date are to be given. of the reduction in place of the original cost. These particulars are to be Each balance sheet for the given along with Share first five years subsequent to Capital.

the date of the reduction, shall show also the amount In the

case of subsidiary of the reduction made. companies, the number of Similarly, where sums shares held by the holding have been added by writing company as well as by the up the assets, every balance ultimate holding company sheet subsequent to such and its subsidiaries shall be writing up shall show the separately stated in respect of increased figures with the Subscribed Share Capital. date of the increase in place (The auditor is not required to of the original cost. Each certify the correctness of balance sheet for the first such share-holdings as five years subsequent to certified by the the date of the writing up management). shall also show the amount of increase made).

Reserves and Surplus: Investments: (1) Capital Reserves Showing nature of invest- ment and mode of valuation, Figures Figures Figures Figures for the Liabilities for the for the Assets for the pre- current pre- current vious year vious year year year Rs. Rs. Rs. Rs. Rs. Rs. (Contd.) Check

Your Progress 1. State whether each of the following statements is ' True'

or 'False': (i) A company's Profit & Loss Account is to be prepared as per the requirements of Schedule VI, Part II. (ii) In case of companies gross profit and net

profit are required to be computed separately. (iii) The Profit $\boldsymbol{\vartheta}$

Loss Account should give separate details regarding remuneration paid to the auditors for audit and other services. (iv) Loose tools are shown as an item of current assets in a company's balance sheet. (v) Debit balance of the Profit & Loss Account is shown on the assets side of the company's balance sheet. (vi) Provision for taxation is shown below the line in the company's Profit & Loss Account.

Self-Instructional Material 135 Company Financial Statements NOTES (2) Capital Redemption for example, cost or market Reserves value, and distinguishing between : bet between: (3) Securities Premium (1) Investments in Account Government or Trust Securities. (showing detail of its utilisation in the manner (2) Investments in Shares, provided in Section 78 in the Debentures or Bonds. year of utilisation). (Showing separately shares (4) Other Reserves fully paid up and partly paid specifying the nature of each up and also distinguishing the Reserve and the amount in different classes of shares respect thereof. and showing also in similar details investments in shares, Less : Debit balance in profit debentures or bonds of and loss account (if any). subsidiary companies). (The debit balance in the (3) Immovable Properties. Profit and Loss Account shall (4) Investments in the Capital be shown as a deduction from of Partnership Firms. (Aggre- the uncommitted reserves, if gate amount of Company's any). quoted investments and also the market value thereof (5) Surplus, i.e. balance in shall be shown). profits and loss account after (Aggregate amount of providing for proposed company's unquoted invest- allocation, namely : ments shall also be shown). dividends, bonus and reserves. Current Assets, Loans and Advances (6) Proposed additions to Reserves. (A) CURRENT ASSETS: (7) Sinking Funds. Additions and deductions (1) Interest accrued on since last balance sheet to be Investments: shown under each of the (2) Stores and Spare Parts. specified heads. The word (3) Loose Tools. "fund" in relation to any (4) Stock-in-trade. "Reserve" should be used (5) Work-in-Progress.

only where such Reserve is specifically represented by earmarked investments. Secured Loans: (

In respect of (2) and (4) (1) Debentures

mode of valuation of stock shall be stated and the (2)

Loans and Advances from amount in respect of raw Banks. materials shall also be stated separately where practicable. (3) Loans and Advances from Mode of valuation of work- subsidiaries. in-progress shall be stated]. (4) Other Loans and (6) Sundry Debtors Advances. (Loans from directors (a) Debts outstanding for a and/or manager should be period exceeding six months. shown separately) (b) Other debts : Figures Figures Figures Figures for the Liabilities for the for the Assets for the pre- current pre- current vious year vious year year Rs. Rs. Rs. Rs. (Contd.)

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include the amounts due in respect of goods sold or

The nature of security to be services rendered or in specified in each case. respect of other contractual obligations but shall not Where loans have been include the amounts which guaranteed by managers are in the nature of loans and/or directors, a mention or advances). thereof shall also be made and also the aggregate

In regard to Sundry Debtors amount of such loans under particulars to be given each head. separately of: In case of Debentures, terms (a) debts considered good of redemption or conversion and in respect of which the (if any) are to be stated company is fully secured; together with earliest date of redemption or conversion. (

b) debts considered good for which the company holds no

Unsecured Loans: security other than the debtor's personal security; (1) Fixed Deposits, and (2) Loans and advances (from subsidiaries). (c) debts considered (3) Short-Term Loans and doubtful or bad.

Advances: (a) From Banks. (b) From Others. (Short-term loans Include

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of such loans under each head. This does not apply to

The provision to be shown Fixed Deposits). under this head should not Current Liabilities and exceed the amount of debts Provisions: stated to be considered A. Current Liabilities doubtful or bad and any (1) Acceptances. surplus of such provision, if (2) Sundry Creditors. already created, should be (i) Total dues to small scale shown at every closing undertakings (inserted w.e.f. under "Reserves and 2.2.1999) Surplus" (in the Liabilities (ii) Total dues of creditors side) under a separate sub- other than small scale head "Reserve for Doubtful industrial undertakings or Bad Debts.") (inserted w.e.f. 2.2.1999) (7A) Cash balance on hand. (3) Subsidiary Companies. (7B) Bank Balances: (4) Advance payments and (a) with Scheduled Banks. unexpired discounts for the (b) with others. portion for which value has (In regard to bank balances still still be given, e.g. in the particulars to be given case of the following separately of: companies: (a) the balance lying with Newspaper, Fire Insurance, Scheduled Banks on current Theatres, Clubs, Banking, accounts, call accounts and Steamship companies, etc. deposit accounts. (5) Unclaimed Dividends. (

b) the names of the bankers other than Scheduled Banks (6) Other Liabilities (if any) and the balances lying with each such banker on current (7)

Interest accrued but not account, call account and due on loans. deposit account and the (The names of small-scale maximum amount industrial undertakings to outstanding at any time whom the company owes during the year with each any sum including interest such banker, and which is outstanding for (c) the nature of the interest, more than 30 days, are to be if any, of any director or his disclosed (inserted w.e.f.

relative in each of the 22.5.2002) bankers other than Scheduled Banks referred to B.

Provisions in (b) above! (8) Provision for Taxation (B) Loans and Advances: (9) Proposed Dividends. (8) (a) Advances and loans to subsidiaries. (10) For Contingencies. (b) Advances and loans to partnership firms in which (11) For Provident Fund the company or any of its schemes. subsidiaries is a partner. (9) Bills of Exchange. (12)

For insurance, pension and similar staff benefit (10)

Advances recoverable schemes. in cash or in kind or for value to be received, e.g., (13)

Other provisions. A Rates, Taxes, Insurance, etc. foot-note to the balance Figures Figures Figures Figures for the Liabilities for the for the Assets for the pre- current pre- current vious year vious year year Rs. Rs. Rs. Rs. Rs. (Contd.)

138 Self-Instructional Material Company Financial Statements NOTES sheet may be added to show (11) Balance with Customs, separately: Port Trust, etc. (where (1) Claims against the payable on demand). company not acknowledged [The instructions regarding as debts. Sundry Debtors apply to (2) Uncalled liability on "Loans and Advances" shares partly paid. also. The amounts due from (3) Arrears of fixed other companies under the cumulative dividends.

same management within the meaning of sub-section (1-B) of Section 370 should also be (

The period for which the given with the names of the dividends are in arrears or if companies; the maximum there is more than one class amount due from every one of shares, the dividends on of these at any time during each such class that are in the year must be shown]. arrears, shall be stated. The

amount shall be stated before deduction of income- tax, except that in case of the tax-free dividends the amount shall be shown free of income tax and the fact that it is so shown shall be stated). (4) Estimated amount of Miscellaneous Expenditure contracts remaining to - be (to the extent not written off executed on capital account or adjusted). and not provided for. (1) Preliminary expense. (2) Expenses including (5) Other moneys for which commission or brokerage or the company is contingently underwriting or subscription liable. of shares or debentures. (3) Discount allowed on the (The amount of any issue of shares or debentures. guarantees given by the (4) Interest paid out of company on behalf of capital during construction directors or other officers of (also stating the rate of the company shall be stated interest). and where practicable, the (5) Development general nature and amount expenditure not adjusted. for each such contingent (6) Other sums (specifying liability, if material, shall nature). also be specified). Profit and Loss Account (Show here the debit balance of profit and loss account carried forward after deduction of the uncommitted reserves, if any).

Figures Figures Figures for the Liabilities for the for the Assets for the pre- current

pre- current vious year vious year year year Rs. Rs. Rs. Rs.

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VERTICAL FORM OF BALANCE SHEET* Name of the Company Balance Sheet as at Rupees in Lakhs Particulars Schedule Figures as Figures as No. at the end of at the end of the current the previous financial financial

year year I.

Sources of Funds (1) Shareholders' Funds (a) Capital I 2,700 2,700 (b) Reserves and Surplus

II 600 200 (2) Loan Fund (

a) Secured Loans III 6,000 5,000 (b) Unsecured Loans IV 200 – Total 9,500 7,900

II.Applications of Funds (1) Fixed Assets V (a)

Gross Block 10,000 8,000 (b) Less : Depreciation 1,500 800 (c) Net Block 8,500 7,200 (d) Capital Work-in-Progress 200 100 (2) Investments VI 8,700 7,300 (3) Current Assets, Loans and 80 80 Advances VII (a) Inventories 2,000 1,500 (b) Sundry Debtors 500 300 (c) Cash and Bank Balances 100 150 (d) Other Current Assets 400 100 (e) Loans and Advances 200 200 3,200 2,250 Less : Current Liabilities and Provisions VIII (a) Liabilities 2,000 1,200 (b) Provisions 480 530 2,480 1,730 Net Current Assets (VII) - (VIII) 720 520 (4) (a) Miscellaneous Expendi- ture to the extend not written off or adjusted - (b) Profit and Loss Account -

Total 9,500 7,900 Illustration 5.1. Mention the major headings under which the assets of a company are to be shown in the

Balance Sheet as per Schedule VI of the Companies Act. Solution : The major headings under which the assets of a company are to be shown as per Schedule VI are as follows : 1. Fixed Assets 2. Investments 3. Current Assets, Loans and Advances 4. Miscellaneous Expenses 5. Profit & Loss A/c (Debit Balance). Illustration 5.2. Mention the major headings under which the liabilities

of a company are to be displayed as per Schedule VI of the Companies Act.

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Solution : The major headings under which the liabilities

of a company are to be displayed as per schedule VI of the Companies Act

are as follows : 1. Share Capital 2. Reserves and Surplus 3. Secured Loans 4. Unsecured Loans 5. Current Liabilities & Provisions 6. Contingent Liabilities : They are to be shown in the inner column of the balance sheet or outside the balance sheet in the form of a foot-note. Illustration 5.3. Define Contingent Liability and state the items which are to be placed under the heading 'contingent liabilities' in a company's balance sheet. Solution : Contingent liability means 'an obligation relating to an existing condition or situation which arise in view of depending on the occurrence or nonoccurrence of one or more uncertain future events.' In other words, such a liability may or may not happen. The following are the items which are placed as Contingent Liabilities in a company's balance sheet : 1. Claims against the company not acknowledged as debts. 2. Uncalled amount on the partly paid shares held by the company. 3. Arrears of fixed cumulative dividends on preference shares. 4. Estimated amount of contracts remaining to be executed on capital accounts and not provided for. 5. Other monies for which the company is contingently liable. Illustration 5.4. Re-arrange the following items under appropriate heads: (a) Live stock, (b) Loose tools, (c) Goodwill, (d) Trade marks, (e) Bills Receivable, (f) Debtors, (g) Land, (h) Leasehold, (i) Stock-in-trade, (j) Stores and spate parts, (k) Furniture, (n) Vehicles, (m) Advance to subsidiary, (n) Cash with Bank, (o) Cash in hand, (p) Work-in-progress, (q) Plant, (r) Interest accrued, (s) Deposits with Port Trust and Electricity supply company.

Solution :

Fixed Assets Current Assets Loans and Advances Goodwill Interest accrued Advances to Subsidiary Land Store and spare parts Bills Receivable Leasehold Loose tools Deposits with Port Trust Plant Stock-in-trade and Electricity Supply Furniture Work-in-progress

Company Trade-marks Debtors Live stock

Cash in hand Vehicles Cash with bank Illustration 5.5. A Ltd. has an authorised capital of 10,000 shares of Rs. 10 each. It offers 8,000 shares to the public for subscription. The public subscribes for only 6,000 shares. A Ltd. calls Rs. 6 per share. All shareholders pay the amount called up except a holder of 100 shares who fails lo M the second call of Rs. 2 per share. Show the above transactions under the, head 'share capital' in the balance sheet of A Ltd.

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Solution : A Ltd. Extracts from Balance sheet as on ______ Liabilities Rs. Share Capital : Authorised: 10,000 shares of Rs. 10 each 1,00,000 Issued Capital: 6,000 shares of Rs. 10 each 60,000 Subscribed: 6,000 shares of Rs. 10 each Rs. 6 per share called up 36,000 Less : Calls in arrears on 100 shares @ Rs. 2 per share 200 35,800

Illustration 5.6. B Ltd. has an authorised capital of 10,000 equity shares of Rs. 10 each and 10,000 preference shares of Rs. 10 each. Out of these shares 5,000 equity shares were issued fully paid to the vendors towards payment of the assets purchased from them. The remaining equity shares and preference shares were offered to the public for subscription, which were fully subscribed. The equity shares were fully called up while only Rs. 8 per share was called on preference shares. All share holders paid the called up money except the following : (i) A shareholder holding 200 equity shares failed to pay the final call money of Rs. 2 per share. The shares were forfeited. (ii) A holder of 100 preference shares paid the final call of Rs. 2 per share with the first call on those shares. Show the above transactions in the company's balance sheet under the head 'share capital'. Solution: B Ltd. EXTRACTS FROM

BALANCE SHEET AS ON..... Liabilities

Rs. Share Capital : Authorised : 10,000

Equity shares of Rs. 10 each 1,00,000 10,000

Preference shares of Rs. 10 each 1,00,000

Issued : 10,000 Equity shares of Rs. 10 each 1,00,000 10,000

Preference shares of Rs. 10 each (of the above shares), 1,00,000 5,000 Equity shares of Rs. 10 each have been allotted as fully paid to vendors for consideration of other than cash) Subscribed : 9,800 Shares of Rs. 10 each fully called up 98,000 (Of the above, 5,000 shares have been issued for consideration other than cash) 10,000 Preference Shares of Rs. 10 each Rs. 8 per share called and paid up 80,000 1,78,000 Add : Forfeited shares (200 equity shares @ Rs. 8 each) 1,600 Add : Calls received in advance (on 100 Preference Shares at the rate of Rs. 2 each) 200 1,79,800 Illustration 5.7. Rearrange the following in

the form of a Company Balance Sheet as per Schedule VI Part I of the Companies Act, 1956:

Rs. Prepaid Rent 1,000 Underwriting Commission 1,500 Stores and Spares 6,000

Check Your Progress 2.

Select the most appropriate answer : (i) The Directors' Report must give details of employees who have been paid a monthly remuneration of not less than– (a)

Rs. 2,00,000; (b) Rs. 60,000; (c) Rs. 1,00,000 (

ii) Balance Sheet of a company is to be prepared in the format given in — (a) Schedule VI, Part I. (b) Schedule VI, Part II. (c) Table A. (

iii)The companies now prefer to close their account for the accounting your ending on — (a) 31st December (b) 31st March (c) 30

th June.

Self-Instructional Material 143 Company Financial Statements NOTES

Patents 2,000 Bills Payable 30,000 Unclaimed Dividend 12,000 Accounts Receivable 11,000 Shares in NTPC Ltd. 20,000 Deposits with ICICI Bank 50,000 Share Premium 75,000 Solution : COMPANY'S BALANCE SHEET Liabilities Amount Assets Amount Rs. Rs. Share Capital Fixed Assets

Authorised, Subscribed and Patents 2,000 Paid up Capital — Investments Reserves and Surplus : Shares in N.T.P.C. Ltd. 20,000 Share Premium 75,000 Current Assets, Loans Secured Loans — and Advances Unsecured Loans — (A) Current Assets Current Liabilities Stores & Spares 6,000 and Provisions : — Accounts Receivable 11,000 (A) Current Liabilities Deposits with ICICI Bank 50,000 Bills Payable 30,000 (B) Loans and Advances Unclaimed Dividends 12,000 Prepaid Rent 1,000 (B) Provisions — Miscellaneous Expenditure Underwriting Commission 1,500 P & L Account

Illustration 5.8. The following balances have been extracted from the books of Rama Ltd. on 31.12.19946 :

Share Capital Rs. 10,00,000; Share Premium

Rs. 1,00,000; 12% Rs. 5,00,000; Creditors Rs. 2,00,000; Proposed Dividend Rs. 50,000; Profit and Loss Account (Dr.) Rs. 50,000; Livestock Rs. 9,00,000; Government Bonds 4,00,000; Work-in-progress Rs. 4,00,000;

and Discount on Issue of 12% Debentures Rs. 1,00,000. Prepare the Balance Sheet of the Company as per Schedule VI Part 1

of the Companies Act 1956. Solution : Rama Ltd.

BALANCE SHEET As on 31st Dec. 1996 Liabilities Rs. Assets Rs. Share Capital :

Fixed Assets :

Illustration 5.9.

From the following balances, taken

from the Trial Balance of Shri Suresh, prepare

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Trading and Profit and Loss Account for the

year

ending 31

st

Dec., 1999: Particulars Dr. Cr. Rs Rs

Stock

on 1.1.1998 2,000 Purchases and Sales 20,000 30,000 Returns 2,000 1,000 Carriage 1,000 Cartage 1,000 Rent 1,000 Interest received 2,000 Salaries 2,000 General Expenses 1,000 Discount 500 Insurance 500 The Closing Stock on 31st December, 1998

is Rs 5,000. Solution: TRADING AND

PROFIT AND LOSS

ACCOUNT Dr.

for the year ending 31st December, 1998 Cr. Particulars Rs Particulars Rs To Opening Stock 2,000 By Sales 30,000

To

Purchases 20,000

Less: Returns 2,000 28,000 Less: Returns 1,000 19,000 By

Closing Stock 5,000

To Carriage 1,000 To Cartage 1,000 To

Gross Profit c/d 10,000 33,000 33,000

To Rent 1,000

By Gross Profit b/d 10,000

To Salaries 2,000 By Interest 2,000

То

General Expenses 1,000 By Discount 500 To

Discount 1,000 To Insurance 500 To Net Profit taken to

Capital

Account 8,000 12,500 12,500

Importance of Profit

and Loss Account The Profit and Loss Account Provides information regarding the following matters: (i) It provides information about the net profit or net loss earned or suffered by the business during a particular period. Thus, it is an index of the profitability or otherwise of the business. (ii)

The Profit figure disclosed by the Profit and Loss Account for a particular period can be compared with that of the other period. Thus, it helps in ascertaining whether the business is being run efficiently or not. (iii) An analysis of the various expenses included in the Profit and Loss Account and their comparison with the expenses of the previous period or periods helps in taking steps for effective control of the various expenses. (

iv)

Allocation of profit among the different periods or setting aside a part of the profit for future contingencies can be done. Moreover, on the basis for profit figures of the current and the previous period estimates about the profit in the year to come can be made. These projections will help the business in planning the future course of action. Illustration 5.10.

From the following details, prepare a Manufacturing and a Trading Account for the year ending 31st December, 1998. Rs Stock on 1.1.1998 Raw Materials 10,000 Work-in-process 5,000 Finished Goods 20,000

Self-Instructional Material 145 Company Financial Statements NOTES

Stock on 31.12.1998 Raw Materials 5,000 Work-in-process 15,000 Finished Goods 30,000 Purchase of Raw Materials 50,000 Direct Wages 10,000 Carriage Charges on

purchase of raw materials 5,000 Factory Power 5,000 Depreciation on Factory Machines 5,000 Purchase of Finished Goods 30,000 Cartage paid on Finished Goods purchased 2,000 Solution: MANUFACTURING ACCOUNT for the year ending 31.12.1998 Particulars Rs Particulars Rs To Work-in-process on

By Work-in-process on 1.1.1998 5,000 31.12.1998 15,000 To Raw Materials By Cost of Production consumed transferred to Trading

Stock on 1.1.1998 10,000 Account 70,000 Add : Purchases 50,000 60,000 Less : Closing Stock 5,000 55,000 To Direct Wages 10,000 To Carriage Charges 5,000 To Factory Power 5,000 To Depreciation on Factory Machines 5,000 85,000 85,000

TRADING ACCOUNT for the year ending 31.12.1998 Particulars Rs Particulars Rs To Stock of Finished

Goods By Stock of Finished Goods 1.1.1998 20,000 on 31.12.1998 30,000 To Cost of Production of By Sale of Finished Goods 1,00,000

finished goods transferred from Manufacturing Account 70,000 To Purchases of Finished Goods 30,000 To Cartage on Finished Goods purchased 2,000 To Gross Profit transferred to Profit and Loss

A/c 8,000 1,30,000 1,30,000 Tutorial Note. Following points may further be noted by students: (i) It is customary to give a separate heading to the Manufacturing Account as shown above. However, the Trading and Profit and Loss Account are not given separate headings. There will be a common heading for both these accounts

as shown below:

TRADING AND PROFIT AND LOSS ACCOUNT for the year

ending...... (

ii) In case in an examination question, a Manufacturing Account is not separately asked for, the examinees may show all items relating to the Manufacturing Account in the Trading Account itself. However, it will be advisable in such a case to prepare a Manufacturing Account, if possible. (iii) In case of Joint Stock Companies, the heading given is only, "

Profit and Loss Account for the year ending....." and not Trading and Profit and Loss Account.

However, the amount of Gross Profit and Net Profit may be calculated separately.

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Self-Instructional Material Company Financial Statements NOTES

Illustration 5.11. From the following balance extracted from the books of $\ensuremath{\mathsf{M/s}}$

Rajendra Kumar Gupta & Co., pass the necessary closing entries, prepare

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Trading and Profit and Loss Account and a Balance Sheet.

Particulars Rs Particulars Rs Opening Stock 1,250 Plant and

Machinery 6,230 Sales 11,800 Returns Outwards 1,380 Depreciation 667 Cash in hand 895 Commission (Cr.) 211 Salaries 750 Insurance 380 Debtors 1,905 Carriage Inwards 300 Discount (Dr.) 328 Furniture 670 Bills Receivable 2,730 Printing Charges 481 Wages 1,589 Carriage Outwards 200 Returns Inwards 1,659 Capital 9,228 Bank Overdraft 4,000 Creditors 1,780 Purchases 8,679 Bills Payable 541 Petty Cash in Hand 47 Bad Debts 180 The value of stock on 31st December, 1999 was Rs 3 700 Solution: JOURNAL Date Particulars Dr. Amount Cr. Amount Rs Rs Trading A/ С Dr. 13,477 To Opening Stock A/c 1.250 To Purchases A/c 8.679 To Wages A/c 1,589 To Returns Inward A/c 1,659 To Carriage Inward A/c 300 (For closing all accounts to be debited to Trading A/c) Sales A/c Dr. 11,800 Returns Outward A/c Dr. 1,380 To Trading A/c 13.180 (For closing all accounts to be credited to the Trading A/c) Trading A/c Dr. 3,403 To Profit and Loss A/c 3,403 (For transfer of Gross Profit) Profit and Loss A/c Dr. 2,986 To Depreciation A/c 667 To Insurance A/c 380 To Printing Charges A/c 481 To Carriage Outward A/c 200 To Salaries A/c 750 To Discount A/c 328 To Bad Debts A/c 180 (For closing all indirect and selling expenses accounts) Commission A/c Dr. 211 To Profit and Loss A/c 211 (For closing commission account) Profit and Loss A/c Dr. 628 To Capital A/c 628 (For transferring Net Profit to Capital Account) TRADING AND **PROFIT & LOSS** ACCOUNT for the year ending 31st December, 1999 Particulars Amount Rs Particulars Amount Rs To Opening Stock 1,250 By Sales 11,800 To Purchases 8,679 Less: Returns Less: Returns Outward 1,380 7,299 Inwards 1,659 10,141 To Wages 1,589 Closing Stock 3,700 То Carriage Inward 300 (

Contd) Self-Instructional Material 147 Company Financial Statements NOTES Particulars Amount Rs Particulars Amount Rs To Gross Profit c/d 3,403 13,841 13,841 To Depreciation 667 By Gross Profit b/d 3.403 To Insurance 380 By Commission 211 To Printing Charges 481 To Carriage Outwards 200 To Salaries 750 To Discount 328 To Bad Debts 180 To Net Profit 628 3,614 3,614 BALANCE SHEET as on 31st December, 1999 Liabilities Amount Rs Assets Amount Rs Bills Payable 541 Cash 895 Creditors 1,780 Petty Cash 47 Bank Overdraft 4,000 Bills Receivable 2,730 Capital 9,228 Debtors 1,905 Add: Net Profit 628 9,856 Closing Stock 3,700 Plant and Machinery 6,230 Furniture 670 16.177 16.177 Illustration 5.12. From the following Trial Balance prepare the Manufacturing Account, Trading and Profit and Loss Account for the year ending 31st March, 1999 and the Balance Sheet as on that date. Particulars Debit Rs Credit Rs Shri Banker's Capital Account 41,000 Shri Banker's Drawing Account 6,100 Mrs. Banker's Loan Account 4,000 Sundry Creditors 45,000 Cash in Hand 250 Cash at Bank 4,000 Sundry Debtors 40,500 Patents 2,000 Plant and Machinery 20,000 Land and Buildings 26,000 Purchases of Raw Materials 35,000 Raw Material as on 1.4.1998 3,500 Work-in-process as on 1.4.1998 2,000 Finished Stock as on 1.4.1998 18,000 Carriage Inwards 1,100 Wages 27,000 Salary of Works Manager 5,600 Factory Expenses 3,400 Factory Rent and Taxes 2,500 Royalties (paid on sales) 1,200 Sales (less Returns) 1,23,400 Advertising 3,000 Office Rent and Insurance 4,800 Printing and Stationery 1,000 Office Expenses 5,800 Carriage Outwards 600 Discounts 1.400 2.100 Bad Debts 750 2.15,500 2.25,500 The Stock on 31st March, 1999 was as follows: Rs 4,000 Raw Materials, Rs 4,500 Work-in-progress and Rs 28,000 Finished Goods. 148 Self-Instructional Material Company Financial Statements NOTES Solution: MANUFACTURING ACCOUNT for the year ending March 31, 1999 Particulars Rs Particulars Rs To Opening Work-in-process 2,000 By Transfer to Trading Account To Raw Materials used: (cost of finished goods produced) 71,600 Opening Stock 3,500 By Closing Work-in-process 4,500 Add: Purchases 35,000 38,500 Less: Closing Stock 4,000 34,500 To Carriage Inwards 1,100 To Wages 27,000 To Salary of Works Manager 5,600 To Factory Expenses 3,400 To Factory Rent and Taxes 2,500 76,100 76,100 TRADING AND **PROFIT & LOSS** ACCOUNT for the year ending March 31, 1999 Particulars Amount Rs Particulars Amount Rs To Opening Stock of By Sales 1,23,400 Finished Goods 18,000 By Closing Stock of To Manufacturing A/c Finished Goods 28,000 (cost of goods produced) 71,600 To Gross Profit c/d 61,800 1,51,400 1,51,400 To Royalties 1,200 By Gross Profit b/d 61,800 To Advertising 3,000 By Discount received 2.100 To Office Rent and Insurance 4,800 То Printing and Stationery 1,000

To Office Expenses 5,800 To Carriage Outwards 600 To Bad Debts 750 To Discount Allowed 1,400 To Net Profit carried to Capital Account 45.350 63.900 63.900 BALANCE SHEET as on 31st March, 1999 Liabilities Amount Rs Assets Amount Rs Sundry Creditors 45.000 Current Assets: Mrs. Banker's Loan 4,000 Cash in Hand 250 Capital Account Cash at Bank 4,000 Balance on Sundry Debtors 40,500 1.4.1998 41,000 Closing Stock: Profit 45,350 Raw Materials 4,000 86,350 Work-in-process 4,500 Less: Drawings 6,100 80,250 Finished goods 28,000 36,500 Fixed Assets: Patents 2,000 Plant and Machinery 20,000 Land and Buildings 26,000 1,29,250 1,29,250 Self-Instructional Material 149 Company Financial Statements NOTES 5.8 ADJUSTMENT ENTRIES In the preceding pages, we have explained the preparation of the Final Accounts, without any adjustments. We have presumed that the accountant has taken into consideration all important facts before closing the books of accounts and preparing the Final Accounts. However, it may not always happen. The accountant may come to know of certain adjust- ments to be made in the books of accounts to give a true picture of the state of affairs of the business after closing the books of accounts and preparing the Trial Balance. These adjustments usually relate to the following: 1. Closing stock 2. Outstanding expenses 3. Prepaid expenses 4. Outstanding or accrued income 5. Income received in advance or unearned income 6. Depreciation 7. Bad debts 8. Provision for bad debts 9. Provision for discount on debtors 10. Reserve for discount on creditors 11. Interest on capital 12. Interest on drawings Each of these adjustments are being explained in detail in the following pages: Closing Stock We have already explained about the treatment of the stock at the end of the account- ing year while explaining Final Accounts in the preceding pages. The following journal entry is passed for the unsold stock at the end of the accounting period: Closing Stock A/c Dr. To Trading Account The stock at the end appears in the Balance Sheet and its balance at the end of the accounting year is carried forward to the next year. It comes as opening stock in the Trial Balance of the next year from where it is transferred to the Trading Account on the debit side. The Trading Account is debited and the stock in the beginning of the accounting year (which was Closing Stock last year) is credited. Stock Account is thus closed. Sometimes the value of the stock at the end of the accounting year, is given in the Trial Balance. In such a case, the Closing Stock will be shown only in the Balance Sheet. This is because it means that the Closing Stock has already been taken into account while computing the cost of goods sold. This will be clear with the help of the following example: TRIAL BALANCE Particulars Dr. Amount Rs Cr. Amount Rs Opening Stock 10,000 Purchases 30,000 Sales 40,000 Stock at the end of the accounting year is Rs 15,000. In this case, the Closing Stock has been given outside the Trial Balance and, therefore, the different items will appear in the Final Accounts as follows: Dr. TRADING ACCOUNT Cr.

Particulars Amount

Rs

Particulars Amount To Opening Stock 10,000 By Sales 40,000 To Purchases 30,000 By Closing Stock 15,000 To Gross Profit taken to Profit and Loss Account 15.000 55.000 55.000 150 Self-Instructional Material Company Financial Statements NOTES BALANCE SHEET LiabilitiesAmount Rs Assets Amount Rs Closing Stock 15,000 The Opening and Closing Stock may both be adjusted with purchases and the cost of sales may be found out separately. In such a case, the items in the Trial Balance will appear as follows: TRIAL BALANCE Particulars Dr.Amount Rs Cr.AmountRs Adjusted Purchases or Cost of Sales 25,000 Sales 40,000 Closing Stock 15,000 The different items will now appear in the Final Accounts as follows: Dr. TRADING ACCOUNT Cr. Particulars Amount Rs Particulars Amount Rs To Adjusted Purchases 25,000 By Sales 30,000 To Gross Profit taken to Profit and Loss Account 15,000 40,000 40,000 BALANCE SHEET Liabilities Amount Rs Assets Amount Rs Closing Stock 40,000 Outstanding Expenses Outstanding Expenses refer to those expenses which have become due during the accounting period for which the Final Accounts have been prepared but have not yet been paid. This happens particularly regarding those expenses which accrue from day to day business but which are recorded only when they are paid. Examples of such expenses are rent, salaries, interest, etc. Some of these expenses may have remained unpaid at the end of the accounting period and, therefore, no entry might have been passed in the books of accounts. For example, if the salary for the month of December has not been paid, no entry might have been passed in the books for the salary remaining outstanding on 31st December. However, in order to ascertain the true profit or loss made during the accounting year ending 31st December, it is necessary that such outstanding salaries are taken into account. The following journal entry will be passed in case of such outstanding expenses: Salaries A/c Dr. To Outstanding Salaries A/c Salaries Account is a nominal account and, therefore, it should be charged to the Profit and Loss Account, while the Outstanding Salaries Account is a personal account representing the persons to whom the salary has to be paid. It is, therefore shown in the Balance Sheet on the liabilities side. Illustration 5.13. Following are the extracts from the Trial Balance of a firm as on 31st December, 1998: TRIAL BALANCE as on 31st December, 1998 Particulars Dr. Cr. Amount Amount Rs Rs Salaries A/c 10,000 Rent A/c 5,000 Additional Information (i) Salary for the month of December Rs 2,000 has not yet been paid. (ii) Rent amounting to Rs 1,000 is still outstanding. You are required to pass the necessary adjusting entries and show how the above items will appear in the Firm's Accounts: Self-Instructional Material 151 Company Financial Statements NOTES Solution: JOURNAL PROPER Date Particulars Dr. Amount Cr. Amount Rs Rs Salaries A/c Dr. 2,000 To Outstanding Salaries

A/c 2,000 (Being salaries due but not paid) Rent A/c

Dr. 1.000

To Outstanding Rent A/c 1,000 (Being

rent

Rs

due but not paid)

The items will appear in the Final Accounts as follows: Dr. PROFIT AND LOSS ACCOUNT Cr. Particulars Amount Particulars Amount

Rs Rs To Salaries 10,000 (as given in the Trial Balance) Add: Outstanding Salaries 2,000 12,000 To Rent 5,000 (as given in the Trial Balance)

Add: Outstanding Rent 1,000 6,000 BALANCE SHEET Liabilities Amount Assets Amount Rs Rs Outstanding Expenses: Outstanding Salaries 2,000 Outstanding Rent 1,000 3,000

It should be noted that any item given outside the Trial Balance will be recorded at two places on account of Dual Aspect Concept. For example, in the above illustration, the amount of outstanding salaries has been shown in the Profit and Loss Account and also in the Balance Sheet. However, if the accountant had come to know about these outstanding expenses before closing the books of accounts, the Salaries Account and Outstanding Salaries Account, Rent Account and Outstanding Rent Account would have appeared in the ledger as follows:

Dr. SALARIES ACCOUNT Cr. Liabilities Amount Particulars Amount Rs Rs To Bank 10,000 By Balance c/d 12,000 To Outstanding Salaries 2,000 12,000 Dr. OUTSTANDING SALARIES ACCOUNT Cr. Liabilities Amount Particulars Amount Rs Rs To Balance c/d 2,000 By Salaries 2,000 2,000 2,000 RENT

ACCOUNT Liabilities Amount Particulars Amount Rs Rs To Bank 5,000 By Balance c/d 6,000 To Outstanding Rent 1.000 6.000 6.000

152 Self-Instructional Material Company Financial Statements NOTES OUTSTANDING RENT ACCOUNT Liabilities Amount Particulars Amount Rs Rs To Balance c/d 1,000 By Rent A/c 1,000 1,000 1,000 The above balances would have appeared in

the Trial Balance as follows: TRIAL BALANCE as on 31st December, 1998 Particulars Dr. Amount Cr. Amount Rs Rs Salaries A/c 12,000 Rent A/c 6,000

Outstanding Salaries A/c 2,000 Outstanding Rent A/c 1,000 The above accounts would have appeared in the Final Accounts as follows:

PROFIT & LOSS

ACCOUNT for the year ending 31.12.1998 Particulars Amount Particulars Amount

Rs Rs To Salaries 12,000 To Rent 6,000 BALANCE SHEET as on 31.12.1998 Liabilities Amount Rs Assets Amount Rs Outstanding Salaries 2,000 Outstanding

Rent 1,000 Thus, the position in both the cases is the same. The point to be noted is that any item appearing in the Trial Balance is recorded at only one place in the Final Accounts while any item outside the Trial Balance is recorded at two places in the Final Accounts.

Prepaid Expenses Prepaid Expenses are those expenses which have been paid in advance. In other words, these are the expenses which have been paid during the accounting period for which the Final Accounts are bring prepared but they relate to the next period. For example, during the accounting year ending on 31st December, 1998, insurance premium for the year ending 31st March, 1999 might have been paid. It means insurance for three months has been paid in advance. In order to ascertain true profit or loss only expenses relating

to the accounting period should be charged to the Profit and Loss Account. Any expenses paid in advance should be carried forward to the

next year. The following journal entry is passed for an expense paid in advance: Prepaid Expense A/c Dr. To Expense A/c Expense A/count is a nominal account and, therefore, the amount should be credited to the Profit and

Loss Account preferably the amounts should be deducted from the relevant Expense Account in respect of which is

the payment has been made in advance. Prepaid Expense Account is a Personal Account, it represents the account of the person to whom payment has been made in advance. It is, therefore, shown on the Balance Sheet on the assets side. Illustration 5.14.

Following are the extracts from the Trial Balance of a firm as on 31st December, 1998:

Self-Instructional Material 153 Company Financial Statements NOTES TRIAL

BALANCE as on 31st December, 1998 Particulars Dr. Amount Cr. Amount Rs Rs Insurance 8,000 Rent 4,000 Additional Information (i) Insurance premium has been paid in advance amounting to

Rs 1,000

for the next year. (ii) Rent Rs 500 has been paid for the next year.

You are required to pass the necessary adjusting entries and show how the items will appear in the

firm's Final Accounts. Solution: JOURNAL PROPER Date Particulars Dr. Amount Cr.

Amount Rs Rs 1998

Prepaid Insurance

A/c Dr. 1,000 To Insurance A/c 1,000 (Being Insurance premium paid in advance) Prepaid Rent A/c Dr. 500 To Rent A/c 500 (Being

rent

paid in advance) PROFIT AND LOSS ACCOUNT as on 31st December, 1998 Particulars Amount Rs Particulars Amount Rs To Insurance 8,000 Less: Prepaid 1,000 7,000 To Rent 4,000 Less: Prepaid 500 3,500 BALANCE SHEET as on 31st December, 1998 Liabilities Amount Rs Assets Amount Rs Prepaid Insurance 1,000 Prepaid Rent 500 Illustration 5.15. Following are the extracts from the Trial Balance of a firm on 31st December, 1999. You are required to pass the necessary adjustment entries and show how the various will appear in the firm's Final Accounts. TRIAL BALANCE as on 31st December, 1999 Particulars Dr. Amount Cr. Amount Rs Rs Rent received for 12 months ending 31st March, 2000 1,200 Interest on Loan 2,000 Additional Information Interest on Loan has been received in advance to the extent of Rs 500. 154 Self-Instructional Material Company Financial Statements NOTES Solution: JOURNAL ENTRIES Date Particulars Dr. Amount Cr. Amount Rs Rs Rent A/ c Dr. 300 To Rent received in Advance A/c 300 (Being rent received in advance for three months) Interest A/c Dr. 500 To Interest received in Advance A/c 500 (Being interest received in advance) **PROFIT AND** LOSS ACCOUNT for the year ending 31st December, 1999 Particulars Amount Particulars Amount Rs Rs By Interest 2,000 Less: Received in advance 500 1,500 Bv Rent 1.200 Less: Received in advance 300 900 BALANCE SHEET as on 31st December, 1999 LiabilitiesAmount Assets Amount Rs Rs Rent received in advance 300 Interest received in advance 500 Illustration 5.16 Following are the extracts from the Trial Balance of a firm: TRIAL BALANCE as on 31st December, 1999 Particulars Rs Rs Sundry Debtors 30,000 Bad Debts 5,000 Additional Information (i) After preparing the Trial Balance, it is learnt that a debtor Ramesh has become insolvent and therefore, the entire amount of Rs 3,000 due from him was irre- coverable. (ii) Create 10% provision for bad and doubtful debts. You are required to pass necessary adjusting entries and show how the items will appear in the firm's Balance Sheet. Solution: ADJUSTING JOURNAL ENTRIES Date Particulars Dr. Amount Cr. Amount Rs Rs Bad Debts A/c Dr. 3,000 To Ramesh 3,000 (Being amount due from Ramesh proved to be bad) Profit & Loss A/c Dr. 2,700 То Provision for Bad and Doubtful Debts 2,700 (Being bad debts provision created) Self-Instructional Material 155 Company Financial Statements NOTES **PROFIT AND** LOSS ACCOUNT for the year ending 31st December, 1999 Particulars Amount Particulars Amount Rs Rs To Bad Debts 5,000 (as given in the Trial Balance) Add : Additional bad debts 3,000

Add :

Provision for bad debts 2,700 10,700 BALANCE SHEET as on 31st December, 1999 Liabilities Amount Particulars Amount Rs Rs Sundry Debtors 30,000 Less: Additional bad debts 3,000 27,000 Less: Provision for bad debts 2,700 24,300 The provision for bad debts created at the end of the accounting year is carried forward to the next year and the bad debts occurring during the course of the next year are met out of this provision. At the end of the next year, suitable adjusting entry is passed for keeping the provision for doubtful debts at an appropriate amount to be carried forward. Illustration 5.17. From the following figures extracted from the books of Shri Govind, you are required to prepare а Trading and Profit & Loss Account for the year ended 31st March, 1999 and a Balance Sheet as on that date after making the necessary adjustments: Particulars Amount Rs Particulars Amount Rs Shri Govind's Capital 2,28,800 Stock 1.4.1999 38,500 Shri Govind's Drawings 13,200 Wages 35,200 Plant and Machinery 99,000 Sundry Creditors 44,000 Freehold Property 66,000 Postage and Telegrams 1,540 Purchases 1,10,000 Insurance 1,760 Returns Outwards 1,100 Gas and Fuel 2,970 Salaries 13,200 Bad Debts 660 Office Expenses 2,750 Office Rent 2,860 Office Furniture 5,500 Freight 9,900 Discounts A/c (Dr.) 1,320 Loose Tools 2,200 Sundry Debtors 29,260 Factory Lighting 1,100 Loan to Shri Krishan @ Provision for D/D 880 10% p.a.-balance on 1.4.1999 44,000 Interest on loan to Shri Krishna 1,100 Cash at Bank 29,260 Cash in Hand 2,640 Bills Payable 5,500 Sales 2,31,440 Adjustments 1. Stock on 31st March, 1999 was valued at Rs 72,600. 2. A new machine was installed during the year costing Rs 15,400, but it was not recorded in the books as no payment was made for it. Wages Rs 1,100 paid for its erection have been debited to wages account. 3. Depreciate: Plant and Machinery by 33 1 3 %. Furniture by 10% Freehold Property by 5% 4. Loose tools were valued at Rs 1,760 on 31.3.1999. 5. Of the Sundry Debtors Rs 600 are bad and should be written off. 6. Maintain a provision of 5% on Sundry Debtors for doubtful debts. 7. The manager is entitled to a commission of 10% of the net profits after charging such commission. 156 Self-Instructional Material Company Financial Statements NOTES Solution: Shri Govind TRADING AND **PROFIT & LOSS** ACCOUNT for the year ended 31.3.1999 Particulars Amount Particulars Amount To Stock (1.4.99) 38.500 By Sales 2,31,440 To Purchases 1,10,000 By Closing Stock 72,600 Less: Returns 1,100 1,08,900 To Wages 35,200 Less: Erection of machinery 1,100 34,100 To Gas and Fuel 2,970 To Freight 9,900 To Factory Lighting 1,100 To Gross Profit c/d 1,08,570 3,04,040 3,04,040 To Salaries 13,200 By Gross Profit b/d 1,08,570 To Office Expenses 2,750 By Interest 1,100 To

Postage & Telegram 1,540 Add: Outstanding 3,300 4,400 То Insurance 1,760 To Office Rent 2,860 To Discounts 1,320 To Bad Debts 660 Add: Addl. Bad Debts 600 Add: New Provision 1,430 2,690 Less: Old Provision 880 1,870 To Depreciation: Machinery 38,500 Furniture 550 Freehold Property 3,300 Loose Tools 440 42,790 To Commission to Manager 4,080 To Net Profit taken to Balance Sheet 40,800 1,12,970 1,12,970 Shri Govind BALANCE SHEET as at 31.3.1999 Liabilities Amount Rs Assets Amount Rs Capital 2,28,800 Plant & Machinery 99,000 Add: Net Profit 40,800 Add : New Machinery 2,69,600 (15,400 + 1,100) 16,500 Less: Drawings 13,200 2,56,400 1,15,500 Bills Payable 5,500 Less: Depreciation 38,500 77,000 Sundry Creditors 59,400 Freehold Property 66,000 Manager's Commission Less: Depreciation 3,300 62,700 Outstanding 4,080 Office Furniture 5,500 Less: Depreciation 550 4,950 Loose Tools 2,200 Less: Depreciation 440 1,760 Closing Stock 72,600 Sundry Debtors: 29,260 Less: Addl. bad debts 600 28,600 Less: Provision for doubtful debts 1,430 27,170 Load to Sh. Krishna 44,000 Add: Interest accrued and outstanding 3,300 47,300 Cash at Bank 29,260 Cash in Hand 2,640 3,25,380 3,25,380 Self-Instructional Material 157 Company Financial Statements NOTES Illustration 5.18. The following is the Trial Balance of Shri Om, as on 31st March, 1999. You are requested to prepare the Trading and Profit and Loss Account for the year ended 31st March, 1999 and Balance Sheet as on that date after making the necessary adjustments: Particulars Debit Rs Credit Rs Sundry Debtors 5,00,000 Sundry Creditors 2,00,000 Outstanding Liability for Expenses 55,000 Wages 1,00,000 Carriage Outwards 1,10,000 Carriage Inwards 50,000 General Expenses 70,000 Cash Discounts 20,000 Bad Debts 10,000 Motor Car 2,40,000 Printing and Stationery 15,000 Furniture and Fittings 1,10,000 Advertisement 85,000 Insurance 45,000 Salesmen's Commission 87,500 Postage and Telephone 57,500 Salaries 1,60,000 Rates and Taxes 25,000 Drawings 20,000 Capital Account 14,43,000 Purchases 15,50,000 Sales 19,87,500 Stock on 1.4.99 2,50,000 Cash at Bank 60,000 Cash in Hand 10,500 36,30,500 36,30,500 The following adjustments are to be made: (1) Stock on 31st March, 1999 was valued at Rs 7.25.000. (2) A Provision for Bad and Doubtful Debts is to be created to the extent of 5 per cent on Sundry Debtors. (3) Depreciate: Furniture and Fittings by 10% Motor Car by 20% (4) Shri Om had withdrawn goods worth Rs 25,000 during the year. (5) Sales include goods worth Rs 75,000 sent out to Shanti & Company on approval and remaining unsold on 31st March, 1999. The cost of the goods was Rs 50,000. (6) The Salesmen are entitled to a Commission of 5% on total sales. (7) Debtors include Rs 25,000 bad debts. (8) Printing and Stationery expenses of Rs 55,000 relating to 1997-98 had not been provided in that year but was paid in this year by debiting outstanding liabilities. (9) Purchases include purchase of Furniture worth Rs 50,000. Solution: Shri Om TRADING AND PROFIT AND LOSS ACCOUNT for the year ended 31st March, 1999 Particulars

Amount

Rs Particulars Amount Rs To Opening Stock 2,50,000 By Sales 19,87,500 To Purchases 15,50,000 Less:

Goods sent on Less: Drawings 25,000 Approval 75,000 19,12,500 15,25,000 By Closing Stock 7,25,000 Less: Furniture 50,000 14,75,000 Add: Stock on To Wages 1,00,000 approval (at cost) 50,000 7,75,000 To Carriage Inwards 50,000 To Gross Profit c/d 8,12,500 26,87,500 26,87,500 (

Contd.)

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Particulars Amount

Rs Particulars Amount Rs

To Salaries 1,60,000 By Gross Profit b/d 8,12,500 To Rates and Taxes 25,000

То

Postage and Telephone 57,500 To Insurance 45,000 To Printing and Stationery 15,000 To General Expenses 70,000 To Depreciation: Furniture (11,000 + 5,000) 16,000 Motor Car 48,000 To Salesmen's Commission 95,625 (5% on Rs 19,12,500) To Advertisement 85,000 To Carriage Outwards 1,10,000 To Bad Debts 10,000 Add: Addl. Bad Debts 25,000 Add: Prov. for Bad Debts (5% on Rs 4,00,000: 20,000 55,000 See W.N. 3) To Cash Discount 20,000 To Net Profit 10,375 8,12,500 8,12,500 Shri Om

BALANCE SHEET as on 31.3.1991 Liabilities Amount Rs Assets Amount Rs Capital as on Rs

Furniture & Rs 1.4.98 14,43,000 Fittings 1,10,000 Add: Net Profit 10,375 Additions during the yr. 50,000 14,53,375 1,60,000 Less: Drawings Less: Depn. 16,000 1,44,000 (20,000 + 25,000) 45,000 Motor Car 2,40,000 14,08,375 Less: Depn. 48,000 1,92,000 Less: Printing & Stationery Closing Stock 7,75,000 of last year 55,000 13,53,375 (7,25,000 + 50,000) Sundry Creditors 2,00,000 Sundry Debtors 5,00,000 Salesmen's Commission Less: Goods sent on Outstanding 8,125 approval 75,000 (Rs 95,625 – Rs 87,530) 4,25,000

Less: Addl. Bad debts 25,000 4,00,000 Less: Provision for doubtful debts 5% on 4,00,000 20,000 3,80,000 Cash at Bank 60,000 Cash in Hand 10,500 15,61,500 15,61,500 Working Notes 1. Both Sales and Sundry Debtors have been reduced by Rs 75,000 representing invoice value of goods sent on approval. Rs 50,000 have been added to the closing stock being the cost of goods sent on approval. 2. Last year's short provision for Printing and Stationery has not been charged to the current year's Profit & Loss Account. It is preferable to charge it directly to in Capital Account. 3. Sundry Debtors = Rs 5,00,000 – (Rs 75,000 Goods on Approval + Rs 25,000 Bad Debt) = Rs 4,00,000.

Self-Instructional Material 159 Company Financial Statements NOTES 5.9 KEY TERMS ? Balance Sheet. A statement of the financial position of a

business at a specified moment of time. ?

Company Final Accounts. The term includes the profit and loss account (or income and expenditure account in cash of a company not carrying on business for profit) and balance sheet of a company prepared as per the requirements of Schedule VI to the Companies Act. ?

Financial Statement. Organised collection of data according to logical and consistent accounting procedures. ? Income Statement. A financial statement which presents the revenues and expenses of an enterprise for an accounting period and shows the excess of revenues over expenses (or vice-versa). It is also known as Profit & Loss Statement/Account. ? Profit & Loss Appropriation Account. An account showing distribution of earning durings a particular period. ?

Schedule VI. A schedule attached to the Companies Act consisting basically of two parts. Part I gives the form of company's balance sheet while part II specifies matters which are to be incorporated in the company's profit and loss account. 5.10

SUMMARY In this unit, you have learned that: ?

Final accounts of a corporate entity include an Income Statement (Profit & Loss Account), Profit & Loss Appropriation Account, Cash Flow Statement and Bal- ance Sheet. ? The Profit & Loss Account is to be prepared as per the requirements of Schedule VI Part II, while a balance sheet is to be prepared as per Schedule VI Part I to the Companies Act. 5.11

ANSWERS TO 'CHECK YOUR PROGRESS' 1. (i) T; (

ii) F; (iii) T; (iv) T; (v) T; (vi) 2. (i) (a); (ii) (a); (iii) (a) 3. Nominal Account. 4. Closing Stock. 5.12 QUESTIONS AND EXERCISES 1. Explain the term 'financial statements'. Discuss their various types. 2. Explain the requirements of Schedule VI, Part II, regarding the

items to be given in a company's profit & loss account. 3.

Give in a summarized form, the horizontal form of company's balance sheet as per Schedule VI, Part I of the Companies Act, 1956. 4. Give the main heads under which the various items appear in the

case of a vertical form of a company's balance sheet. 5. Draw up a pro forma Balance Sheet of a company. 6. Name the major headings into which the liabilities side of a company's balance sheet is organised and presented. 7. Mention the major heads (in the required serial order) under which various assets of a company are to be presented as per the requirements of the Indian Companies Act. 8. Prepare a layout of information required to be given under the heading 'Share Capital' on the liabilities

side of

a company's Balance Sheet. 9. State the major heads on the assets side of Balance Sheet of a company as per Schedule VI, Part I of the Indian Companies Act, 1956. 10. What is

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Contingent Liability? Where is it shown in the Balance Sheet? Give three examples of Contingent Liabilities. 160

Self-Instructional Material Company Financial Statements NOTES 11.

State any five items which are shown under the heading 'Miscellaneous Expenditure' in the Balance Sheet of a Company as per Schedule VI, Part I of the Companies Act, 1956. 12. State any five items which are shown under the' heading 'Reserves and Surplus' in the Balance Sheet of a company as per Schedule VI Part I of the Companies Act, 1956. 5.13 PRACTICAL PROBLEMS 1. Under what headings of Balance Sheet of a company will you classify the following items :- (i)

Sundry Debtors (ii) Share Premium (iii) Goodwill [Ans. (i) Current Assets, Loans & Advances; (ii) Reserves & Surplus; (iii) Fixed Assets] 2. How would you disclose the following items in the Balance Sheet of a limited company : (i) Loose Tools (ii) Stock (iii) Goodwill (iv) Discount on issue of debentures not yet written off (v) Bills Payable (vi) Preliminary Expenses (vii) Unclaimed Dividends (viii) Share

Premium Account [Ans. (i) Current Assets, Loans

and Advances; (ii) Current Assets, Loans and

Advances; (

iii) Fixed Assets; (iv) Miscellaneous Expenditure; (v) Current Liabilities

and Provisions; (vi) Miscellaneous Expenditure; (vii) Current Liabilities and Provisions; (viii) Reserves and

Surplus.] 3. Under what headings will you show the following

items in

the Balance Sheet of a company: (i) Securities Premium Account (ii) Preliminary Expenses (iii) Bills Receivable (iv) Goodwill (v) Authorised Capital [Ans. (i) Reserves

and Surplus (ii) Miscellaneous Expenditure (iii) Current Assets and Loans and

Advances (iv) Fixed Assets (v) Share Capital.] 4. State the relevant main headings under which the following items would be disclosed in the Balance Sheet of a limited company : (i) Goodwill (ii) Bills Receivable (iii) Authorised Capital (iv) Preliminary Expenses (v) Provision for Tax [Ans. (

i) Fixed Assets (ii) Current Assets

and Loans and

Advances (iii) Share Capital (iv) Miscellaneous Expenditure (v) Current Liabilities

and Provisions.] 5. Under what headings will

you show the following items in the Balance Sheet of a joint stock company? (i) Authorised Capital (ii) Share Forfeiture Account (iii) Capital Reserve (iv) Secured Debentures (v) Provision for Tax [Ans. Share Capital (ii) Share Capital (iii) Reserves and Surplus (iv) Second Loans (v) Current Liabilities and Provisions.] 6.

Under what major heads will

the following items on the Assets side of the Balance Sheet of a company be presented? (i) Furniture and Fixtures Account (ii) Discount on issue of debentures account [Ans. (i) Fixed Assets (ii) Miscellaneous Expenditure.] 7. Under what major heads

will

the following items on the liability side of de Balance Sheet of a company be presented? (i) Share Forfeited Account (ii) Securities Premium Account (iii) Unclaimed Dividends (iv) Debentures Account [Ans. (i) Share Capital (ii) Reserves & Surplus (iii) Current Liabilities

and

Provisions (iv) Secured Loans.] 8. From the following details compute the amount of current assets to be shown in the company's balance sheet as per Schedule VI : Rs. Cash 48,000 Debtors 50,000 Stock 60,000 Trade-Creditors 60,000

Self-Instructional Material 161 Company Financial Statements NOTES Land 20,000

Investments 40,000 Interest Accrued on Investments 5,000 Loose Tools 10,000 [Ans. Rs. 1,73,000] 9. Compute the amount of (a) Current liabilities; (b) Provision; and (c) Unsecured loans from the following details : Rs. Bills Payable 10,000. Sundry Creditors 20,000 Short-term loans from subsidiary companies 20,000 Amount due for purchases from subsidiary companies 10,000 Proposed Dividends 20,000 Unclaimed Dividends 10,000 Employees' Provident Fund 30,000 Provisions for Taxation 30,000 Loans from Bank 20,000 Fixed Deposits 10,000 [Ans. (a) Rs. 50,000 (b) Rs. 80,000 (

c) Rs. 50,000] 10. Y Udyog Ltd. has the authorised

capital of Rs. 1,00,000 divided into equity shares of Rs. 10

each.

The company invited applications for 5,000 shares. Applications for 4,000 shares were received. All calls were made and were duly received except the final call of

Rs. 2

per share on 100 shares. Out of the shares on which the final call was not received 75 shares were forfeited. Show how the share capital will appear in the Balance Sheet of the company as per Schedule VI, Part I of the Companies Act, 1956. [Ans. Total

of B/

S Rs. 39,800] 11. The following balances have been extracted from the books of Ramesh & Company : Share Capital Rs. 5,00,000; Share Premium Rs. 50,000; 12% Debentures Rs. 2,50,000; Creditors

Rs. 1,00,000; Proposed Dividend Rs. 25,000; Profit and Loss (Dr) Rs. 25,000; Freehold Property Rs. 4,50,000; Shares in ICICI Rs. 2,00,000; Work-in-Progress Rs. 2,00,000; Discount on Issue of Debentures Rs. 50,000.

Prepare the Balance Sheet of the Co. as per Schedule VI Part I of the Companies Act, 1956. [Ans. Balance Sheet Total Rs. 9,25,000] 12. Prepare a Balance Sheet of V.T. Ltd. as on March 31, 1995 as per provision of Part I, Schedule VI under Section 211 of the Companies Act, 1956 from the following information: Rs. General Reserve 3,000 Debentures 3,000 Profit & Loss A/c (Cr.) 1,200 Depreciation on Fixed Assets 700 Gross Fixed Assets 9,000 Current Liabilities 2,500 Preliminary Expenses 300 Preference Share Capital 5,000 Current Assets 6,100 [Ans. Balance Sheet Total Rs. 14,700] 13.

The following balances are supplied, on the basis of which you m required - to show the major appropriate heads under which the items given below will appear in the Balance Sheet of Veekay Ltd. as on 31st March, 1995 : Rs. Plant and Machinery 5,60,000 Building 10,00,000 Equity Share Capital (Authorised) 20,00,000 Equity Shares of Rs.100

each Rs. 70 called and paid up 14,00,000 10% Debentures 55,000 Discount on Issue of 10% Debentures 5,000 Furniture & Fixture 15,000 Long-Term Bank Loan (Secured) 1,25,000 [Ans. Balance Sheet Total

Rs. 1,58,000]

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Company Financial Statements NOTES 5.14 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

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Analysis and Interpretation NOTES

UNIT 6

FINANCIAL STATEMENTS: ANALYSIS AND INTERPRETATION Structure 6.0 Introduction 6.1 Unit Objectives 6.2 Relationship between Analysis and Interpretation 6.3 Steps Involved in the Financial Statements Analysis 6.4 Techniques of

Financial Analysis 6.5 Ratio Analysis 6.6 Classification of Ratios 6.7 Profitability Ratios 6.8 Turnover Ratios 6.9 Financial Ratios 6.10 Advantages of Ratio Analysis 6.11 Limitations of Accounting Ratios 6.12 Computation of Ratios 6.12.1 Computation of Items

of Financial Statements 6.12.2 Critical Analysis of Financial

Statements 6.13

Key Terms 6.14 Summary 6.15 Answers to 'Check Your Progress' 6.16 Questions and Exercises 6.17 Practical Problems 6.18 Further Reading 6.0

INTRODUCTION In the

preceding two units, we have explained the preparation and presentation of

financial statements. Financial statements are prepared with the objective of knowing the profit- ability

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and financial soundness of the business. This requires proper analysis and interpre- tation of financial statements. This aspect has been discussed in detail in this unit. 6.1 UNIT

OBJECTIVES

After going through this unit,

you will be able

to: ?

Understand the

concept of

financial

statement analysis ? Differentiate between analysis and interpretation of financial statements ? Understand the steps involved in

financial analysis ?

Appreciate the utility of ratio analysis as a tool for financial analysis ? Classify the accounting ratios in different categories ? Understand and compute different accounting ratios ? Make critical analysis of financial statements on the basis of accounting ratios ? Explain the meaning of certain key terms

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Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES 6.2

RELATIONSHIP BETWEEN ANALYSIS AND INTERPRETATION Financial statements, as stated earlier, are indicators of the two significant factors: 1. Profitability 2. Financial soundness Analysis and Interpretation of financial statements, therefore, refer to such a treatment of the information contained in the Income Statement and the Balance Sheet so as to

afford full diagnosis of the profitability and financial soundness of the business. A distinction here can be made between the two terms—'Analysis' and 'Interpretation'. The term 'Analysis' means methodical classification of the data given in the financial statements. The figures given in the financial statements will not help one unless they are put in a simplified form. For example, all items relating to 'Current Assets' are put at one place while all items relating to 'Current Liabilities' are put at another place. The term 'Interpretation' means 'explaining the meaning and significance of the data so simplified'. However, both 'Analysis' and 'Interpretation' are complementary to each other. Interpretation requires Analysis, while Analysis is useless without Interpretation. Most of the authors have used the term 'Analysis' only to cover the meanings of both analysis and interpretation, since analysis involves interpretation. According to Myers, 'Financial statement analysis is largely a study of the relationship among the various financial factors in a

business as disclosed by a single set of statements and a study of the trend of these factors as shown in a series of statements.'

For the sake of convenience, we have also used the term 'Financial

Statements

Analysis' throughout the unit to cover both analysis and interpretation. 6.3 STEPS INVOLVED IN THE FINANCIAL STATEMENTS ANALYSIS The analysis of financial statements requires: (1) Methodical classification of the data given in the financial statements. (2) Comparison of the various interconnected figures with each other which is popularly termed as '

Ratio Analysis'. Each of the above steps has been explained in the following pages: (1) Methodical classification. In order to have a meaningful analysis it is necessary that figures should be arranged properly. Instead of the two-column (T form) statements as ordinarily prepared, the statements are prepared in

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single (vertical) column form 'which should throw up significant figures by adding or subtracting.' This also facilitates showing the figures of a number of firms or number of years side by side for comparison purposes. OPERATING (INCOME) STATEMENT for the year ending Particulars

Rs Rs

Gross Sales Less: Sales Returns Sales Tax/Excise Net Sales (or sales) for the year (1) Less: Cost of Sales: (2) Raw Materials consumed (

Contd.)

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Direct Wages Manufacturing Expenses

Add:

Opening Stock of Finished Goods Less: Closing Stock of Finished Goods

Gross Profit (1) – (2) = (3) Less: Operating Expenses: (4) Administration Expenses Selling and Distribution Expenses Net Operating Profit (OPBIT) (3) – (4)= (5)

Add. Non-trading Income (such as dividends, interest received, etc.) Less:

Non-trading Expenses (such as discount on issue of shares written off) Income or Earning before Interest and Tax (EBIT) (6) Less: Interest on Debentures (7) Net Income or Earning before Tax (EBT) (8) Less: Tax (9) Income or Profit After Tax (PAT) (10) BALANCE SHEET as on...... Particulars Rs Cash in Hand Cash at Bank Bills Receivable Book Debts (less provision for bad debts) Marketable Trade Investments Liquid Assets (1) Inventories (stock of raw materials, finished goods, etc.) Prepaid Expenses Current Assets (2) Bills Payable Trade Creditors Outstanding Expenses Bank Overdraft Other Liabilities Payable within a year Current Liabilities (3) Provision for Tax Proposed Dividends Other Provisions Provisions (4) Current Liabilities and Provisions (3) + (4) = (5) Net Working Capital [Current Assets–Current Liabilities and Provisions (2) – (5)] (6) Goodwill at cost* Land and Building Plant and Machinery Loose Tools Furniture and Fixtures Investments in Subsidiaries Patents, Copyright, etc.** Fixed Assets (7) Capital Employed (6) + (7) = (8) Other Assets: (9) Investment in Government Securities, Unquoted

Investments, etc. Other Investments (non-trading) Advances

to

Directors Company's Net Assets (8) + (9) = (10) Debentures Other Long-term Loans (payable after a year)

Long-term Loans (11) Shareholders' Net Worth (10) – (11) = (12) (or total tangible net worth) (

Contd.)

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Preference

Share Capital (13) Equity Shareholders' Net Worth (12) – (13) = (14) Equity Shareholders' Net Worth is represented by:

Equity Share Capital Forfeited Shares Reserves Surplus Equity Shareholders'

Claims Less: Accumulated Losses Miscellaneous Expenditure (such as preliminary expenses, discount on issue of shares

or debentures not written off) Equity Shareholders' Net Worth *

Goodwill to be included only when it has been paid for and has the value. ** Patents, Copyrights, etc., should be shown only when they have the value. In case these assets are valueless, they should not be included here but should be written off against shareholders' claims with other losses. The process of methodical classification of the data will be clear with the help of the following illustration:

Illustration 6.1. Below is the Balance Sheet of Prospective Ltd. as on 31 March, 1996, together with the Profit and Loss Account.

BALANCE SHEET as on 31 March, 1996 (

Rs in thousands) Liabilities

Rs Assets Rs

Equity Share Capital 500

Trade Investments 200 Dividend Equilisation Reserve 70 Patents 30 General Reserve 110 Land and Building (at cost) 320 Profit and Loss A/c 190 Plant and Machinery (at cost) 650 6 per cent Debentures 250 Cash

at

Bank 88 Bank Overdraft 150 Stock: Staff Provident Fund 80 Materials 90 Creditors 210 Finished goods 160 Unpaid Dividend 10 Work-in-progress 60 310 Proposed Dividend 60 Sundry Debtors 230 Provision for Taxation 170 Less: Provision for Provision for Depreciation 250

doubtful debts 8 222 Bills Receivable 30 Staff provident fund investment 80 Deposits with Customs Authorities 20 Advance for Purchase of Machinery 60 Preliminary Expenses 30 2,050 2,050

PROFIT AND LOSS

ACCOUNT for the year ended 31 March, 1996 (Rs in

thousand) Particulars Rs Particulars Rs To

Stock:

Ву

Sales 2,000

Materials 90 By Stock:

Finished goods 120 Materials 90 Work-in-progress 40 250

Finished goods 160 To Purchase of Materials 850 Work-in-progress 60 310 To Wages 280 By Dividend on Investment 30 To Power 40 By Sales of Scrap 8

To Miscellaneous Factory Expenses 110 To Office Salaries 80 To Miscellaneous Expenses 90 To Selling and Distribution Expenses 120 To Advertisements 80 (

Contd.)

Self-Instructional Material 167 Financial Statements: Analysis and Interpretation NOTES

То

Preliminary Expenses 5 To Debenture Interest 15 To Depreciation: Plant 60 Land and Building 12 72 To Provision for Taxation 170 To Proposed Dividend 60 To Balance

of

Profit 126 2,348 2,348

You

are required to present the information suitably summarised in Single-Column Statements (Vertical Form) showing distinctly the following: (i) Total Capital employed (ii) Shareholders' Funds (iii) Gross Profit (iv) Net

Operating Profit (

v) Cost of goods sold. Solution: Prospective Limited BALANCE SHEET as on 31 March, 1996 (Rs in thousands) Cash at Bank 88 Book Debts (net) 222 Bills Receivable 30

Liquid Assets (1) 340

Deposit with Customs 30 Stock: Materials 90 Finished goods 160 Work-in-progress 60 310 Current Assets (2) 680 Bank Overdraft 150 Creditors 210 Unpaid Dividend 10 Current Liabilities (3) 370 Proposed Dividend 60 Provision for Taxation 170 Current

Liabilities and

Provisions (4) 600 Net Working Capital (2) – (4) = (5) 80 Land and Building (at cost) 320 Plant and Machinery (at cost) 650 Patents 30 Fixed Assets 1,000 Less: Provision for Depreciation (6) 250 Net Fixed Assets 750 Advance against Machinery 60 Trade Investments 200 Total Fixed Investment (7) 1,010 Staff Provident Funds Investments 80 Less: Staff Provident Funds 80 Nil

Total Capital

employed (8) 1,090 Less: 6 per cent Debentures (9) 250 Shareholders' Funds (10) 840 Represented by: Equity Share Capital 500 General Reserve 110 Dividend Equalisation Reserve 70 Profit and Loss A/c (Less: Preliminary Expenses) 160 840

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Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES

PROFIT AND LOSS ACCOUNT for the year ended 31 March, 1996 (Rs

in

thousands)

Sales 2,000 Less: Cost of goods sold 1,284 Gross Profit 716 Less: Operating Expenses:

Salaries 80 Miscellaneous Expenses 90 Selling and Distribution Expenses 120 Advertisements 80 370 Net

Operating Profit 346 Add: Non-operating Income (Dividends on Investments) 30

Less:

Non-operating Expenses (

interest on debentures) 15 15 361

Less: Preliminary Expenses written off 5 Profit before Tax 356 Less: Income Tax payable 170 Profit after Tax 186 Less: Proposed Dividend 60 Profit retained in the business 126

STATEMENT OF COST OF GOODS SOLD for the year ended 31 March, 1996 (Rs in thousands)

Cost of goods manufactured:

Work-in-progress on 1 April, 1995 40 Materials consumed: Opening stock 90 Purchases 850 940 Less: Closing Stock 90 850 Wages 280 Power 40 Miscellaneous Factory Expenses 110 Depreciation 72 1,392 Less: Sale of Scrap 8 Work-in-progress on 31 March, 1996 60 68

Cost of goods manufactured 1,324

Add: Opening stock of Finished Goods 120 1,444 Less: Closing Stock of Finished Goods 160 Cost of goods sold 1,284 6.4 TECHNIQUES OF FINANCIAL ANALYSIS A Financial analyst can adopt one or more of the following techniques/tools of financial analysis: Financial Analysis Techniques Comparative Financial Statements Common-size Financial Statements Trend Percentages Funds Flow Analysis Cash Flow Analysis CVP Analysis Ratio Analysis (a) Comparative Financial Statements Comparative financial statements are those statements which have been designed in a way so as to provide time perspective to the consideration of various elements of financial position embodied in such statements. In these statements

figures for two or more periods are placed side by side to facilitate comparison.

Self-Instructional Material 169 Financial Statements: Analysis and Interpretation NOTES Both the Income Statement and Balance sheet can be prepared in the form of Comparative Financial Statements. Comparative Income Statements. The Income Statement discloses Net Profit or Net Loss on account of operations. A Comparative Income Statement will show the absolute figures for two or more periods, the absolute change from one period to another and if desired the change in terms of percentages. Since the figures for two or more periods are shown side by side, the reader can quickly ascertain whether sales have increased or decreased, whether cost of sales has increased or decreased etc. Thus, only a reading of data included in Comparative Income Statements will be helpful in deriving meaningful conclusions. Comparative Balance Sheet. Comparative Balance Sheet as on two or more different dates can be used for comparing assets and liabilities and finding out any increase or decrease in those items. Thus, while in a single Balance sheet the emphasis is on present position, it is on change in the comparative Balance Sheet. Such a Balance Sheet is very useful in studying the trends in an enterprise. The preparation of comparative financial statements can be well

understood with the help of the following illustration. Illustration 6.2.

From

the following Profit and Loss Account and the Balance Sheet of Swadeshi Polytex

Ltd. for the

year ended 31st

December, 1997 and 1998,

you are required to prepare a

Comparative Income Statement and

a Comparative Balance Sheet. PROFIT AND LOSS ACCOUNT (In Lakhs of Rs.) Liabilities 1997 1998 Assets 1997 1998 To Cost of Goods sold 600 750 By Net Sales 800 1,000 To Operating Expenses: Administration Expenses 20 20 Selling expenses 30 40 To Net Profit 150 190 800 1,000 800 1,000 BALANCE SHEET

AS ON 31st DECEMBER (In Lakhs of

Rs.)

Liabilities 1997 1998 Assets 1997 1998 Bills Payable 50 75 Cash 100 140 Sundry Creditors 150 200 Debtors 200 300 Tax Payable 100 150 Stock 200 300 6% Debentures 100 150 Land 100 100 6% Preference Capital 300 300 Building 300 270 Equity Capital 400 400 Plant 300 270 Reserves 200 245 Furniture 100 140 1,300 1,520 1,300 1,520 Solution:

SWADESHI POLYTEX LIMITED Comparative Income Statement For the Years ended 31st December 1997 and 1998 (In Lakhs of Rs.) Absolute Percentage increase or increase or decrease decrease in in 1997 1998 1998 1998 Net Sales 800 1,00 +200 +25 Cost of Goods Sld 600 750 +150 +25 Gross Profit 200 250 +50 +25 Operating Expenses: Administration Expenses 20 20 – – Selling Expenses 30 40 +10 +33.33 Total Operating Expenses 50 60 10 +20 Oprating Profit 150 190 +40 +26.67

170 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES SWADESHI POLYTEX LIMITED Comparative Income Statement As on 31st December 1997, 1998 Fragures in lakhs of rupees Absolute Percentage increase or increase (+) decrease or decrease during (–) during

Assets 1997 1998 1998 1998 Current Assets: Cash 100 140 40 +40 % Debtors 200 300 100 +50 % Stock 200 300 100 +50 % Total Current Assets 500 740 240 +50 % Fixed Assets: Land 100 100 – – % Building 300 270 –30 –10 % Plant 300 270 +40 –10 % Furniture 100 140 +40 +40 % Total Fixed Assets 800 780 –20 –2.5 % Total Assets 1,300 1,520 220 +17 % Liabilities & Capital: Current Liabilities Bills Payable 50 75 +25 +50 % Sundry Creditors 150 200 +50 +33.33 % Tax Payable 100 150 +50 +50 % Total Current Liabilities 300 425 +125 +41.66 % Long-term Liabilities 6% Debentures 100 150 +50 +50 % Total Liabilities 400 575 +175 +43.75 %

Capital & Reserves 6% Pref. Capital 300 300 – – % Equity Capital 400 400 – – % Reserves 200 245 45 22.5 % Total Shareholders' Funds 900 945 45 5 % Total Liabilities and Capital 1,300 1,520 220 17 %

Comparative Financial Statements can be prepared for more than two periods or on more than two dates. However, it becomes very cumbersome to study the trend with more than two periods data. Trend percentages are more useful in such cases. The technique of computing trend percentage has been discussed later in the chapter. The American Institute of Certified Public Accountants has explained the utility of preparing the Comparative Financial Statements as follows: "The presentation of comparative financial statements in annual and other reports enhances the usefulness of such reports and brings out more clearly the nature and trend of current changes affecting the enterprise. Such presentation emphasises the fact that statement for a series of periods is far more significant than those of single period and that the accounts of one period are but an instalment of what is essentially a continuous history. In any one year, it is ordinarily desired that the Balance Sheet, the Income Statement and the Surplus Statement be given for one or more preceding years as well as for the current year." The utility of preparing the Comparative Financial Statements has also been realized in our country. The Companies Act, 1956, provides that companies should give figures for different items for the previous period, together with current period figures in their

Profit and Loss Account and Balance Sheet.

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NOTES (b) Common-size Financial Statements Common-size Financial Statements are those in which figures reported are converted into percentages to some common base.

In the Income Statement the sale figure is assumed to be 100 and all figures are expressed as a percentage of this total. Illustration 6.3. On the basis of data given in Illustration 6.2 prepare a Common size Income Statement and Common Size Balance Sheet of Swadeshi Polytex Ltd., for the years ended 31st March, 1997 and 1998. SWADESHI POLYTEX LIMITED Common-size Income Statement For the Years ended 31st December 1997 and 1998 (Figures in percentage) 1997 1998

Net Sales 100 100

Cost of Goods Sold 75 75 Gross Profit 25 25 Opening Expenses: Administration Expenses 2.50 2 Selling Expenses 3.75 4 Total Operating Expenses 6.25 6 Operating Profit 18.75 19

Interpretation The above statement shows that though in absolute terms, the cost of goods sold has gone up, the percentage of its cost to sales remains constant at 75%. This is the reason why the Gross Profit continues at 25% of the sales. Similarly, in absolute terms the amount of administration expenses remains the same but as a percentage to sales it has come down by 5%. Selling expenses have increased by .25%. This all leads to net increase in net profit by .25% (i.e., from 18.75% to 19%). SWADESHI POLYTEX LIMITED Common-size Income Statement

As on 31st December, 1997 and 1998 (Figures in percentage) 1997 1998 % %

Assets 100 100 Current Assets: Cash 7.70 9.21 Debtors 15.38 19.74 Stock 15.38 19.74 Total Current Assets 38.46 48.69 Fixed Assets: Building 23.07 17.76 Plant 23.07 17.76 Furniture 7.70 9.21 Land 7.70 6.68 Total Fixed Assets 61.54 51.31 Total Assets 100 100 Current Liabilities: Bills Pyable 3.84 4.93 Sundry Creditors 11.54 13.16 Taxes Payable 7.69 9.86 Total Current Liabilities 23.07 27.95 Long-term Liabilities: 6% Debentures 7.69 9.86

Capital & Reserves: 6% Preferences Share Capital 23.10 19.72 Equity Share Capital 30.76 26.32 Reserves 15.38 16.15 Total Shareholders' Funds 69.24 62.19 Total Liabilities and Capital 100 100

172 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES Interpretation. The percentage of current assets to total assets was 38.46 in 1997. It has gone up to 48.69 in 1998. Similarly the percentage of current liabilities to total liabilities (including capital) has also gone up from 23.07 in 1997 to 27.95 in 1998. Thus, the proportion of current assets has increased by a higher percentage (about 10) as compared to increase in the proportion of current liabilities (about 5). This has improved the working capital position of the company. There has been a slight deterioration in the debt-equity ratio though it continues to be very sound. The proportion of shareholder's funds in the total liabilities has come down from 69.24% to 62.19% while that of the debenture-holders has gone up from 7.69% to 9.86%. Comparative Utility of Common Size Financial Statements. The comparative common-size financial statements show the percentage of each item to the total in each period but not variations in respective items from period to period. In other words, common-size financial statements when read horizontally do not give information about the trend of individual items but the trend of their relationship to total. Observation of these trends is not very useful because there are no definite norms for the proportion of each item to total. For example, if it is established that inventory should be 30% of total assets, the computation of various ratios to total assets would be very useful. But since there are no such established standard proportions, calculation of percentages of different items of assets or liabilities to total assets or total liabilities is not of much use. On account of this reason common size financial statements are not much useful for financial analysis. However, common size financial statements are useful for studying the comparative financial position of two or more businesses. However, to make such comparison really meaningful, it is necessary that the financial statements of all such companies should be prepared on the same pattern, e.g., all the companies should be more or less of the same age, they should be following the same accounting practices, the method of depreciation on fixed assets should be the same. (c) Trend Percentages Trend percentages are immensely helpful in making a comparative study of the financial statements for several years.

The method of calculating trend percentages involves the calculation of percentage relationship that each item bears to the same item in the base year. Any year may be taken as the base year. It is usually the earliest year.

Any intervening year may also be taken as the base year. Each item of base year is taken as 100 and on that basis the percentages for each of the items of each of the years are calculated. These percentages

can also be taken as Index Number showing relative changes in the financial data resulting with the passage of time. The method of trend percentages is a useful analytical device for the management since by substituting percentages for large amounts, the brevity and readability are achieved. However, trend percentages are not calculated

for all of the items in the financial statements. They are usually calculated only for major items since the purpose is to highlight important changes.

While calculating trend percentages care should be taken regarding the following matters: 1. The accounting principles and practices followed should be constant throughout the period for which analysis is made. In the absence of such consistency, the comparability will be adversely affected. 2. The base year should be carefully selected. It should be normal year and be representative of the items shown in the statement. 3. Trend percentages should be calculated only for items having logical relationship with one another. 4. Trend percentages should be studied after considering the absolute figures on which they are based; otherwise, they may give misleading results.

Self-Instructional Material 173 Financial Statements: Analysis and Interpretation NOTES For example, one expense may increase from Rs. 100 to Rs. 200 while the other expense may increase from Rs. 10,000 o Rs. 15,000. In the first case trend percentage will show 100% increase while in the second case it will show 50% increase. This is misleading because in the first case the change though 100% is not at all significant in real terms as compared to the other. Similarly, unnecessary doubts may be created when the trend percentages show 100% increase in debt while only 50% increase in equity. This doubt can be removed if absolute figures are seen, e.g., the amount of debt may increase from Rs. 20,000 to Rs. 40,000 while that of equity from Rs. 1,00,000 to Rs. 1,50,000. 5. The figures for the current year should also be adjusted in the light of price level changes as compared to the base year before calculating the trend percentages. In case this is not done, the trend percentages may make the whole comparison meaningless. For example, if prices in the year 1998 have increased by 100% as compared to 1997, the increase in sales in 1998 by 60% as compared to 1997 will give misleading results. Figures of 1998 must be adjusted on account of rise in prices before calculating the trend percentages. Results are should be assets side of the trend percentages. Illustration 6.4. From the following data relating to the assets side of the

Balance Sheet of Kamdhenu

Ltd. for the period 31st Dec., 1995 to 31st December, 1998, you are required to calculate the trend percentage taking 1995 as the base year. (Rupees in thousands) Assets 1995 1996 1997 1998 Cash 100 120 80 140 Debtors 200 250 325 400 Stock-

in-trade 300 400 350 500 Other Current Assets 50 75 125 150 Land 400 500 500 500 Building 800 1,000 1,200 1,500 Plant 1,000 1,000 1,200 1,500 2,850 3,345 3,780 4,690 Solution: Comparative Balance Sheet As on December 31, 1995-98 Assets December 31 Trend percentages (Rs. in thousands) Base Year 1995 1995 1996 1997 1998 1995 1996 1997 1998 Current Assets: Cash 100 120 80 140 100 120 80 140 Debtors 200 250 325 400 100 125 163 200 Stock-in-trade 300 400 350 500 100 133 117 167

Other Current Assets 50 75 125 150 100 150 250 300 Total Current Assets 650 845 880 1,190 100 129 135 183 Fixed Assets: Land 400 500 500 500 100 125 125 125 Building 800 1,000 1,200 1,500 100 125 150 175 Plant 1,000 1,000 1,200 1,500 100 100 120 150 Total Fixed Assets 2,200 2,500 2,900 3,500 100 114 132 159

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Analysis and Interpretation NOTES 6.5

RATIO ANALYSIS

Accounting ratios are relationships expressed in mathematical terms between figures which are connected with each other in some

manner. Obviously, no purpose will be served by comparing two sets of figures which are not at all connected with each other. Moreover, absolute figures are also unfit for comparison. 6.6 CLASSIFICATION OF RATIOS Ratios can be classified into different categories depending upon the basis of

clas- sification.

Traditional Classification. This classification has been on the basis of the financial statements to which the determinants of a ratio belong. On this basis, the ratios could be

classified as: 1. Profit and Loss Account Ratios, i.e.,

ratios calculated on the basis of the items of the Profit and Loss Account only, e.g., gross profit ratio,

stock turnover ratio, etc. 2. Balance Sheet Ratios,

i.e.,

ratios calculated on the basis of the figures of Balance Sheet only, e.g., current ratio, debt-equity ratio, etc. 3. Composite Ratios

or Inter-statement Ratios, i.e.,

ratios based on figures of profit and

loss account as well as the balance sheet,

e.g., fixed assets turnover ratio,

overall profitability ratio, etc. Functional Classification. The traditional classification has been found to be crude and unsuitable because an analysis of

the

Balance Sheet and Income Statement cannot be done in isolation. They have to be studied together in order to determine the profitability and solvency of the business. In order that ratios serve as a tool for financial analysis, they are classified according to their functions as follows: 1. Profitability Ratios, 2. Turnover Ratios, and 3. Financial Ratios. 6.7 PROFITABILITY RATIOS Profitability is an indication of the efficiency with which the operations of the business are carried on. Poor operational performance may indicate poor sales and hence poor profits. A lower profitability may arise due to the lack of control over the expenses. Bankers, financial institutions and other creditors look at the profitability ratios as an indicator

of

whether or not the firm earns substantially more than it pays interest for the use of borrowed funds, and whether the ultimate repayment of their debt appears reasonably certain. Owners are interested to know the profitability as it indicates the return which they can get on their investments. The following are the important profitability ratios: 1. Overall

Profitability Ratio. It is also called 'Return on Investment' (ROI). It indicates the percentage of return on the total capital employed in the business. It is calculated on the basis of the following formula:

Self-Instructional Material 175 Financial Statements: Analysis and Interpretation NOTES OperatingProfit 100 Capital Employed ? The term capital employed has been given different meanings by different accountants. Some of the popular meanings are as follows: (i) Sum-total of all assets whether fixed or current (ii) Sum-total of fixed assets (iii) Sum-total of long, term funds amployed in the business, i.e.; Share + Besenves + Long, term + Nen

fixed assets (iii) Sum-total of long-term funds employed in the business, i.e.: Share + Reserves + Long-term + Nonbusiness + Fictitious

Capital and Surplus Loans Assets Assets In management accounting, the term capital employed is generally used in the meanings given in the point third above. The term 'Operating Profit' means 'Profit before Interest and Tax'. The term 'Interest' means 'Interest on long-term borrowings'. Interest on short-term borrowings will be deducted for computing operating profit. Non-trading incomes such as interest on Government securities or non-trading losses or expenses such as loss on account of fire, etc., will also be excluded. The computation of ROI can be understood with the help of the following il- lustration: Illustration 6.5. From the following figures extracted from the Income Statementand the Balance Sheet of Anu Pvt. Ltd., calculate the Return on Total Capital Employed (ROI): Particulars

Rs Particulars Rs Fixed Assets 4,50,000 Reserves 1,00,000 Current Assets 1,50,000 Debentures 1,00,000 Investment in Government Securities 1,00,000 Income from Investments 10,000 Sales 5,00,000 Interest on Debentures at 10 per cent Cost of Goods sold 3,00,000 Provision for Tax at 50 per cent Share Capital: of Net Profits 10

per cent Preference 1,00,000 Equity 2,00,000 Solution: It will

be appropriate

to prepare the Profit and Loss Account and the Balance Sheet

of the company

before computation of the return on capital employed. Anu Sales Pvt. Limited

PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To Cost of goods sold 3,00,000 By Sales 5,00,000 To

Interest on Debentures 10,000 By Income from Investments 10,000

To Provision for Taxation 1,00,000

To Net Profit after Tax 1,00,000 5,10,000 5,10,000

BALANCE SHEET as on..... Liabilities

Rs Assets Rs

Share Capital:

Fixed Assets 4,50,000 10%

Preference 1,00,000

Current Assets 1,50,000 Equity 2,00,000 Investment in Government Securities 1,00,000 Reserves 1,00,000 10% Debentures 1,00,000 Profit and Loss A/c 1,00,000 Provision for Taxation 1,00,000 7,00,000 7,00,000

Check Your Progress 1. State whether the following statements are ' True' or 'False'. (a) Equity to fixed interest- bearing securities is Acid Test Ratio. (b) Debt equity ratio is a 'Solvency Ratio'.

(c) Ratio analysis is a technique of planning

and control. (

d) A firm's ability to meet the interest charge and repayment dues on long- term obligations

is referred to as its solvency. (

e) Rate of return on capital employed is a turnover ratio. (f) 'Acid Test' denotes liquidity. (g) For Stock Turnover Ratio, average stock is to be calculated. (h) A decreased Stock Turnover Ratio usually indicates expanding business. 176

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Return on total capital employed = Net Operating Profit before Interest and Tax 100 TotalCapitalemployed ? 20,00,000 100 5,00,000 ? ? = 40 per cent Net Operating Profit = Net Profit + Provision for Tax – Income from Investments + Interest on Debentures =

Rs 1,00,000 + Rs 1,00,000 - Rs 10,000 + Rs 10,000 = Rs 2,00,000 Capital employed = Fixed Assets + Current Assets - Provision for Tax =

Rs 4,50,000 + Rs 1,50,000 - Rs 1,00,000 = Rs 5,00,000

or Share Capital + Reserves + Debentures + Profit and Loss A/c Balance - Investments

in Government Securities =

Rs 3,00,000 + Rs 1,00,000 + Rs 1,00,000 + Rs 1,00,000 - Rs 1,00,000 = Rs 5,00,000

Return on Investment (ROI) can be computed for computing the return for different purposes. Some of the ratios that are calculated are as follows: (i) Return of Shareholders' Funds. In case

it is desired to work out the profitability of the company from the shareholders' point of view, it should be computed as follows: Net Profit after Interest and Tax 100 Shareholders'

Fund ? The term Net Profit here means 'Net Income after Interest and Tax'. It is different from the 'Net Operating Profit' which is used for computing the 'Return on Total Capital Employed' in the business. This is because the shareholders are interested in Total Income after Tax including Net-Non-operating Income (i.e., Non- operatingIncome – Non- operating Expenses). Taking the figures from Illustration 6.2, the Return on Shareholders' Funds will be computed as follows: Rs1,00,000 100 20per cent Rs5,00,000 ? ? (

ii) Return on Equity Shareholders' Funds. The profitability from the point of view of the equity shareholders will be judged after taking into account the amount of dividend payable to the Preference Shareholders. The Return on Equity Shareholders' Funds will, therefore, be computed on the following basis: Net Profit after Interest, Tax and Preference Dividend 100 Equity Shareholders' Fund ? Taking figure from the Illustration 6.2, the Return on Equity Shareholders' funds will be computed as follows:

Rs 90,000 100 23 per cent Rs 3,90,000 ? ? ?

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iii) Return on Total Assets. This ratio is computed to know the 'Productivity of the Total Assets'.

There are three methods for computing it: (

a)

Net Profit after Tax 100 Total Assets × On the basis of the figure in the Illustration 1.2, the ratio will be: 1,00,000 100 7,00,000 ? ? (b) Net Profit after Tax +Interest 100 = 14.29 Total Assets × On thebasis of figures given in the Illustration 6.2, the ratio will be: 1,00,000 10,000 100 15.71 per cent 7,00,000 ? ? ? ? The inclusion of interest is conceptually sound because total assets have been financed from the 'pool' of funds supplied by the creditors and the owners. The objective of computing the 'Return on Total Assets' is to find out how effectively the funds pooled together have been used. Hence, it will be proper to include the interest in computing the Return on Total Assets. A further modification of this formula has been suggested by many accountants. It excludes 'Intangible Assets' from the 'Total Assets'. However, it will be proper to exclude only fictitious assets and not all intangible assets. The term 'fictitious assets' includes assets such as Preliminary expenses, Debit balance in the Profit and Loss Account, etc. The Return on Assets, according to this method, may, therefore, be calculated as follows: (c) 100 Net Profit after Tax + Interest

Total Assets excluding Fictitious Assets ? \times (

iv) Return on Gross Capital employed. The term Gross Capital employed means the total of Fixed Assets and the Current Assets employed in the business. The formula for its computation can be put as follows: Net Profit before Interest (on long as well as short-term borrowings) and Tax Gross Capital employed (i.e., Net Fixed Assets + Current Assets employed in the business) On the basis of figures given in the Illustration 6.5, the Return on Gross Capital employed can be computed as follows: $2,00,000 - - - \times 100 = 331/3$ per cent 6,00,000 Tutorial Note. The students are advised to give their assumptions regarding computation of 'Net Profits' as well as 'Capital employed' while calculating the Return on Investment (ROI). Average Capital employed. Some people prefer to use 'Average Capital employed' (or average total assets, as the case may be) in place of only 'Capital employed' (or Total Assets). Average Capital employed is the average of the capital employed at

the beginning and at the end of the accounting period.

For example, if in Illustration 6.5 given above, the capital employed at the beginning of the accounting period was Rs 4,50,000 the ROI will be calculated as follows:

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Financial Statements: Analysis and Interpretation NOTES Net Profit before Interest and Tax ROI 100

Average Capital employed 2,00,000 100 1 2(5,00,000 4,50,000) 2,00,000 100 42.11 percent. 4,75,000 ? ? ? ? ? ? ? ! It should be noted that while computing 'Return on Investment' according to any of the above methods 'Abnormal Gains or Losses' should always be excluded form Net Profit. Significance of ROI. The Return on Capital invested is a concept that measures the profit which a firm earns on investing a unit of capital. 'Yield on capital' is another term employed to express the idea. It is desirable to ascertain this periodically. The profit being the net result of all operations, the return on capital expresses all efficiencies or inefficiencies of a business collectively and, thus, is a dependable measure for judging its overall efficiency or inefficiency. On this basis, there can be comparison of the efficiency of one department with that of another, of one plant with that of another, one company with that of another and one industry with that of another. For this purpose, the amount of profits considered is that before making deductions on account of interest, income tax and dividends and capital is the aggregate of all the capital at the disposal of the company, viz., equity capital, preference capital, reserves, debentures, etc. The Return on Capital when calculated in this manner would also show whether the company's borrowing policy was wise economically and whether the capital had been employed fruitfully. Suppose funds have been borrowed at 8 per cent and the Return on Capital is 7¹/₂ per cent, it would have been better not to borrow (unless borrowing was vital for survival). It would also show that the firm had not been employing the funds efficiently. Return on Capital, as explained, may also be calculated on Equity Shareholders' capital. In that case, the profit after deductions for interest, income tax and preference dividend will have to be compared with Equity Shareholders' funds. It would not indicate operational efficiency or inefficiency but merely the maximum rate of dividend that might be declared. The business can survive only when the return on capital employed is more than the cost of capital employed in the business. 2. Earning Per Share (EPS). In order to avoid confusion on account of the varied meanings of the term capital employed, the overall profitability can also be judged by calculating earning per share with the help of the following formula:

Calculate the earning per share from the following data: Net Profit before Tax

Rs 1,00,000.

Taxation at 50 per cent of

Net Profit. 10 per cent

Preference Share Capital (

Rs 10 each) Rs 1,00,000. Equity Share Capital (Rs 10 shares) Rs 1,00,000.

Solution: Net Profit after Tax

and Pref. Dividend Earning per Share = ----- Number of Equity Shares 1

Profit available for equity shareholders.

Self-Instructional Material 179 Financial Statements: Analysis and Interpretation NOTES Rs 40,000 = --- = Rs 4 per share 10,000 Significance. The earning

per share helps in determining the market price of the equity share of the company.

A comparison of earning per share of the company with another will also help in deciding whether the equity share capital is being effectively used or not. It also helps in estimating the company's capacity to pay dividend to its equity shareholders. Earnings Per Share (EPS – AS 20) The Institute of Chartered Accountants of India (ICAI) has issued AS 20 – Earnings per Share which has become mandatory w.e.f. 1.4.2001 in respect of enterprises whose equity shares or potential equity shares are listed on a recognized stock exchange in India. The Standard makes a distinction between basic and diluted earning per share. The enterprise has to give both types of earnings as per the standard. Basic Earnings Per Share (BEPS). The basic earnings per share

are

computed as follows: Net Profit (or Loss)for the Period Attributable to EquityShareholders Weighted Average Number of EquitySharesOutstanding during the year The net profit for the above purpose means profit after deducting preference dividend and tax, excluding dividend tax on equity shares. The weighted average number of equity shares are the equility shares outstanding at the beginning of the period adjusted by the number of equity shares bought back or issued in the period multiplied by the time weighting factor. Illustration 6.7. From the following details, compute the basic earnings per share: Net profit for the year ending 31.12.2002 after tax and preference dividendRs 21,000 Equity as on 1.1.2002 1,800 Issued Equity Shares for Cash on 31.5.2002 600 Bought back Equity Shares on 1.11.2002 300 Solution : Weighted Average Number of Equity Shares Outstanding = $(1,800 \times 12/12 + 600 \times 7/12 - 300 \times 2/12) = 2,100$ shares Basic Earnings Per Share Net Profit for the Period Attributable to Equity Shareholders = Weighted Average No. of Equity Shares Outstanding during the Year 21,000 = 2,100 = Rs 10 per share Diluted Earnings Per Share (DEPS). Diluted earnings per share are calculated when there are potential equity shares in the capital structures of the enterprise. A potential equity share is a financial instrument or other contract (e.g. Convertible

Debentures,

Convertible Preference Shares, Option Warrants etc.) that entitles or may entitle its holder to equity shares. The diluted earnings per share are calculated as follows: Adjusted Net Profit (or Loss) for the Period Attributable to Equity Shareholders Adjusted Weighted Average Number of Shares 180 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES Illustration 6.8. From the following details, calculate: (a) Basic Earnings per Share; and (b) Diluted Earnings per Share. Net Profit for the year ending 31.12.2002 after Preference Dividend & Tax Rs 1,00,000 No. of Equity Shares as on 1.1.2002 50,000 No. of 12% Convertible Debentures of Rs 100/each 1.00.000 Each debentrue is convertible into 10 equity shares. The tax rate applicable to the company is 30%. Solution : (a) Basic Earning per Share Net Profit Available for Equity Shareholders No. of Equity Shares Outstanding ? 1,00,000 5,000 ? = Rs 20 per share (b) Diluted Earnings per Share = Adjusted Net Profit for the Current Year Net Profit after Interest Tax and Preference Dividend = Rs 1,00,000 Add: Interest Expense after Tax effect (Rs 1,20,000 - Rs. 36,000) = Rs 84,00 Rs 1,84,000 No. of Equity shares Resulting from conversion of Debentures = 10,000 Total number of Equity Shares after conversion of Debentures into Shares = 60,000 Diluted Earning per Share Adjusted Net Profit for the Period for Equity Shareholders Adjusted Weighted Average no. of Shares ? Rs.1,84,000 60,000 ? = Rs 3.06 per share 3. Price Earning Ratio (PER). This ratio indicates the number of times the earning per share is covered by its market price. This is calculated according to the following formula: Market Price Per Equity Share ————————— Earning Per Share For example, the market price of a share is Rs 30 and earning per share is Rs5, the price earning ratio would be 6 (i.e., $30 \div 5$). It means the market value of every one rupee of earning is six times or Rs 6. The ratio is useful in financial forecasting. It also help in knowing whether the shares of a company are under or overvalued. For example, if the earning per share of AB Limited is Rs 20, its market price Rs 140 and earning ratio of similar companies is 8, it means that the market value of a share of AB Limited should be Rs 160 (i. e., 8 × 20). The share of AB Limited is, therefore, undervalued in the market by Rs 20. In case the price earning ratio of similar companies is only 6, the value of share of AB Limited should have been Rs 120 (6 \times 20), thus the share is overvalued by Rs 20. Self-Instructional Material 181 Financial Statements: Analysis and Interpretation NOTES Significance. Price-earning ratio helps the investor in deciding whether to buy or not to buy the shares of a company at a particular market price. 4. Gross Profit Ratio. This ratio expresses relationship between gross profit and net-sales. Its formula is: Gross Profit $---- \times 100$ Net Sales Illustration 6.9. Calculate the Gross Profit Ratio from the following figures: Sales Rs 1,00,000 Purchases Rs 60,000 Sales Returns 10,000 Purchases Returns 15,000 Opening Stock 20,000 Closing Stock 5,000 Solution: Gross Profit Gross Profit Ratio = $---- \times 100$ Net Sales Net Sales – Cost of goods sold = ----- × 100 Net Sales Rs 90,000 - Rs 60,000 = ----- × 100 Rs 90,000 Rs 30,000 = -----×100 = 1 33 % 3 Rs 90,000 Significance. This ratio indicates the degree to which the selling price of goods per unit may decline without resulting in losses from operations to the firm. It also helps in ascertaining whether the average percentage of mark up on the goods is maintained. There is no norm for judging the Gross Profit Ratio, therefore, the evaluation of the business on its basis is a matter of judgement. However, the gross profits should be adequate to cover operating expenses and to provide for fixed charges, dividends and building up of reserves. 5. Net Profit Ratio. This ratio indicates net margin earned on a sale of

Rs 100.

It is calculated as follows: Net Operating Profit $---- \times 100$ Net Sales Net operating profit is arrived at by deducting operating expenses from Gross Profit. Illustration 6.10. Calculate Net Profit Ratio from the following data: Sales less Returns

Rs 1,00,000 Selling Expenses Rs 10,000

Gross Profit 40,000 Income from Investments 5,000 Administration Expenses 10,000 Loss on account of fire 3,000 Solution: Net Operating Profit Net Profit Ratio = $----- \times 100$ Net Sales 20,000 = $--- \times 100$ = 20 per cent 1,00,000 Significance.

This ratio helps in determining the efficiency with which affairs of the business are being managed.

An increase in the ratio over the previous period indicates improvement in the operational efficiency of the business provided the gross

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profit ratio is constant. The ratio is thus an effective measure to check the profitability of a business. An investor has to judge the adequacy or otherwise of this ratio by taking into account the cost of capital, the return in the industry as a whole and market conditions such as boom or depression period. No norms can be laid down. However, constant increase in the above ratio year after year is a definite indication of improving conditions of the business. 6. Operating Ratio. This ratio is a complementary of net profit ratio. In case the net profit ratio is 20 per cent, it means that the operating ratio is 80 per cent. It is calculated as follows: Operating Costs $----- \times 100$ Net Sales Operating costs include the cost of direct materials, direct labour and other overheads, viz., factory, office or selling. Financial charges such as interest, provision for taxation, etc., are generally excluded from operating costs. For example, in the Illustration 6.7 given for the net profit ratio above, when the net profit ratio is 20 per cent, the operating ratio will be 80 per cent. The ratio can be calculated regarding each element of operating cost to sales, viz. Direct Material Cost (i) Direct Material Cost to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct Labour Cost to Sales $----- \times 100$ Net Sales $---- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $---- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $----- \times 100$ Net Sales Direct Labour Cost (ii) Direct to Sales $------ \times 100$

100 Net Sales Factory Overheads (iii) Factory Overhead to Sales = $----- \times 100$ Net Sales Similarly, percentage of other operating costs such a administration and selling costs to sales can be computed. Significance. This ratio is the test of the operational efficiency with which the business is being carried. The operating ratio should be low enough to leave a portion of sales to give a fair return to the investors.

A comparison of the operating ratio will indicate whether the cost component is high or low in the figure of sales. In case the comparison shows that

there is increase in this ratio, the reason for such increase should be found out and management be advised to check the increased. 7. Fixed Charges Cover. The ratio is very important from the lender's point of view. It indicates whether the business would earn sufficient profits to pay periodically the interest charges. The higher the number, the more secure the lender is in respect of his periodical interest income. It is calculated as follows: Income before Interest and Tax = ----- Interest Charges This ratio is also called as 'Debt Service Ratio'. The standard for this ratio for an industrial company is that interest charges should be covered six to seven times. Illustration 6.11. The operating profit of A Ltd. after charging interest on debentures and tax is a sum of

Rs 10,000. The amount of interest charged is Rs 2,000 and the provision for tax has been made of Rs 4,000. Calculate the interest charges cover ratio.

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In case it is desired to compute the 'fixed dividend cover' it can be computed on the following basis: Net Profit after Interest and Tax Fixed Dividend Cover = ------ Preference Dividend In the above illustration if the amount of Preference Dividend payable is a sum of

Rs 1,000, the fixed dividend cover will be computed as follows: Rs 10,000 = ---- = 10 times Rs 1,000 8. Debt Service Coverage Ratio. The interest coverage ratio, as explained above, does not tell us anything about the ability of a company to make payment of principal amount also on time. For this purpose debt service coverage ratio is calculated as follows: Net Profit before Interest and Tax Debt Service Coverage Ratio=

Rs 50,000. 10% Debentures (payable in 10 year in equal instalments) Rs 1,00,000.

Tax Rate 50% Calculate the Debt Service Coverage Ratio. Solution: Net Profit before Interest and Tax Debt Service Coverage Ratio = -----Principal Payment Instalment Interest + ------I-tax Rate The ratio comes to 1.67. It means net profit before interest and tax covers adequately both interest and principal repayment instalment. Some accountants prefer to compute the Debt Service Coverage Ratio as under: Cash Profit available for Debts Service ————————————————————— Interest + Principal Payment Instalment Cash Profit available for debt service is computed by adding to Net Profit items like depreciation, interest on debt and amortisation of items like goodwill, preliminary expenses, etc. However, the former seems to be a better method since by giving the tax effect, it puts the two items interest and principal payment instalment on the same footing. The higher the ratio, better it is. 9. Payout Ratio. This ratio indicates what proportion of earning per share has been used for paying dividend. The ratio can be calculated as follows: Dividend per Equity Share ————————————————————— Earning per Equity Share 184 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES A complementary of this ratio is Retained Earning Ratio. It is calculated as follows: Retained Earning per Equity Share = Illustration 6.13. Compute the Payout Ratio and the Retained Earning Ratio from the following data: Net Profit Rs 10,000 No. of Equity Shares 3.000 Provision for Tax 5.000 Dividend per Equity ShareRe 0.40 Preference Dividend 2,000 Solution: Dividend per Equity Share Payout Ratio = ----- × 100 Earning per Equity Share Re 0.40 = ---- × 100 = 40 per cent Re 1 Retained Earnings Retained Earning Ratio = ----- × 100 Total Earning Rs 1,8000 = $---- \times 100$ = 60 per cent Rs 3,000 Retained Earning per share = $----- \times 100$ Total Earning per share Re .60 = $--- \times 100$ = 60 per cent Re 1 Significance. The payout ratio and the retained earnings ratio are indicators of the amount of earnings that have been ploughed back in the business. The lower the payout ratio, the higher will be the amount of earnings ploughed back in the business and vice versa. Similarly, the lower the retained earnings ratio, the lower will be the amount of earnings ploughed back into the business and vice versa. A lower payout ratio or a higher retained earnings ratio means a stronger financial position of the company. 10. Dividend Yield Ratio. This ratio is particularly useful for those investors who are interested only in dividend income. The ratio is calculated by comparing the rate of dividend per share with market value. Its formula can be put as follows: Dividend per share —————— Market Price per share For example, if a company declares dividend at 20 per cent on its shares, each having a paid-up value of Rs 8 and market price of Rs 25, the dividend yield ratio will be calculated as follows: 20 Dividend per Share = $-- \times 8$ = Rs 1.60 100 Self-Instructional Material 185 Financial Statements: Analysis and Interpretation NOTES Dividend per Share 1.6 Dividend Yield Ratio = $---- \times 100 = -- \times 100 = 6.4\%$ Market Price per Share 25 Significance. The ratio helps an intending investor in knowing the effective return he is going to get on the proposed investment. For example, in the above case, though the company is paying a dividend of 20 per cent on its shares, a person who purchases the shares of the company from the market will get only an effective return of 6.4 percent. Therefore, he can decide whether he should opt for this investment or not. 6.8 TURNOVER RATIOS The turnover ratios or activity ratios indicate the efficiency with which the capital employed is rotated in the business. The overall profitability of the business depends on two factors: (i)the rate of return of capital employed; and (ii) the turnover, i.e., the speed at which the capital employed in the business rotates. Higher the rate of rotation, the greater will be the profitability. Thus, overall profitability ratio can be classified into: 1. Net Profit Ratio 2. Turnover Ratio As already explained the Net Profit Ratio is calculated as follows: Net Operating Profit = ----- × 100 Sales Turnover ratio is calculated as follows: Sales = ----- Capital employed Turnover ratio indicates the number of times the capital has been rotated in the process of doing business. When these two ratios are put together, we get the overall profitability ratio. Overall profitability ratio = Net Profit Ratio × Turnover Ratio Net Profit Sales = 100 × ---- × ---- Sales Capital employed Net Profit = $---- \times 100$ Capital employed

Illustration 6.14. Determine which company is more profitable. A Ltd. B Ltd. Net Profit Ratio 5

per cent 8 per cent Turnover Ratio 6 times 3 times Solution: In the above case if only net profit ratio is seen, Company B seems to be more profitable. But actually Company A is more profitable, because it has a higher turnover ratio which gives it a higher return on capital employed, i.e., 30 per cent in comparison to 24 per cent in case of Company B. In order to find out which part of capital is efficiently employed and which part not, different turnover ratios are calculated. These ratios are as follows: 1.

Fixed Assets Turnover Ratio. This ratio indicates the extent to which the investments in fixed assets contributed towards sales.

If compared with a previous

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valueRs 1,50,000 Rs 3,00,000

Sales less Returns 6,00,000 8,00,000 Solution: Sales Fixed Assets Turnover Ratio = ----- Fixed Assets 1997 1998 = 6,00,000 ÷ 1,50,000 = 4 times 8,00,000 ÷ 3,00,000 = 2.67 times There has been a decline in the Fixed Assets Turnover Ratio though, absolute figures of sales have gone up. It means, increase in the investment in Fixed Assets has not brought about commensurate gain. However, the results for next two or three years must also be seen before commenting on judiciousness or otherwise of increase in investments in the fixed assets. The fixed assets turnover ratio can further be divided into turnover of each item of fixed assets to find out the extent each fixed asset has been properly used. For example: Net Sales Plant and Machinery to Turnover = ----- Plant and Machinery (Net) Land Buildings to Turnover Net Sales Land and Buildings(Net) ? Working Capital Turnover Ratio. This ratio indicates whether or not working capital has been effectively utilised in making sales. The ratio is calculated as follows: Net Sales -----Working Capital Working capital turnover ratio may take different forms for different purposes. Some of them are being explained below: (i) Debtors' Turnover Ratio (Debtors' Velocity). Debtors constitute an important constituent of current assets and therefore the quality of debtors to a great extent determines a firm's liquidity. Two ratios are used by financial analysts to judge the liquidity of a firm. They are (i) Debtors' turnover ratio, and (ii) Debt collection period ratio. The debtors' turnover ratio is calculated as under: Credit Sales ----- Average Accounts Receivable The term Accounts Receivable includes 'Trade Debtors' and 'Bills Receivable'. Illustration 6.16. Calculate the Debtors Turnover Ratio from the following figures:

Self-Instructional Material 187 Financial Statements: Analysis and Interpretation NOTES Total Sales for the year 1998 Rs 1,00,000

Cash Sales for the year 1998 20,000 Debtors as on 1 January, 1998 10,000

Debtors as on 31 December, 1998 15,000 Bills Receivable as on 1 January, 1998 7,500 Bills Receivable as on 31 December, 1998 12,500

CreditSales Rs80,000 = = = 3.56 times Average Accounts Receivable Rs 22,500**1/2 of (Rs 17,500 + Rs 27,500). In case details regarding opening and closing receivables and credit sales are not available the ratio may be calculated as follows: Total Sales ---- Accounts Receivable

Significance. Sales to Accounts Receivable Ratio indicates the efficiency of the staff entrusted with collection of book debts. The higher the ratio, the better it is, since it would indicate that debts are being collected more promptly. For measuring the efficiency, it is necessary to set up a standard figure; a ratio lower that the standard will indicate inefficiency. The ratio helps in Cash Budgeting since the flow of cash from customers can be worked out on the basis of sales. (ii) Debt Collection Period Ratio. The

ratio indicates the extent to which the debts have been collected in time.

It gives the average debt collection period. The ratio is very helpful to the lenders because it explains to them whether their borrowers are collecting money within a reasonable time. An increase in the period will result in greater blockage of funds in debtors.

----- Credit Sales for the year Accounts Receivable (c)

Sales Illustration 6.17. Credit Sales for the year Rs 12,000 Bills ReceivableRs 1,000 Debtors 1,000 Calculate the Debtors' Turnover Ratio and Debt Collection Period. Solution: Credit Sales 12,000 Debtors' Turnover Ratio = ----= = ---= 6 times. Accounts Receivable 2,000 Debt Collection Period (or Average Age of Receivables) Months in a year 12

= ----- = --- = 2 months Debtors' Turnover 6

Chack Vour Drogross 2
Check Your Progress 2.
The current ratio of a company is 2 : 1. Which of the following suggestions would improve the ratio, which would
reduce it and which would not change it? (a) To pay a current liability. (b) To sell a motor car for cash at a slight loss. (c)
To borrow money on an
interest-bearing
promissory note. (d) To purchase stocks for cash. (e) To give
an
interest-bearing promissory note to a creditor to whom money was owed on
a
current account. 3.
Assuming the current ratio is 2, state in each of the following cases whether the ratio will improve or decline or will have
no
change. (a) Payment of a
current liability. (b) Purchase of fixed assets. (c) Cash collected from customers. (d)Bills receivable dishonoured. (
e) Issue of new shares.
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Or Accounts Receivable × Months in a year 2,000 × $12 = = = 2$ months
Credit Sales in the year 12,000 Or Accounts Receivable 2,000 = $=$ = $=$ 2 months Monthly Credit
Sales 1,000 In fact, the two ratios are interrelated. Debtor's turnover can be obtained by dividing the months (or days) in a
year by the average collection period (e.g., $12/2 = 6$). Similarly, where the number of months (or days) in a year are
divided by the debtors turnover, average debt collection period is obtained (i.e., 12/6 = 2 months). Significance. Debtors'
collection period measures the quality of debtors since it measures the rapidity or slowness with which money is
collected from them.
A shorter collection period implies prompt payment by debtors. It reduces the chances of bad debts. A longer collection
period implies too liberal and inefficient credit collection performance. However, in order to measure a firm's credit and
collection efficiency, its average collection period should be compared with the average of the industry. It should be
neither too liberal nor too restrictive. A restrictive policy will result in lower sales which will reduce profits. It is difficult to
provide a standard collection period of
debtors. It depends upon the nature of the industry, seasonal character of the business and
credit policies of the firm.
In general, the amount of Receivables should not exceed 3–4 months' credit sales. (iii) Creditors' Turnover Ratio
(Creditors' Velocity). It is similar to
Debtors' Turnover Ratio. It indicates the speed with which the payments for credit purchases are made to
the creditors. The ratio can be
computed as follows: Credit Purchases ———————————————————————————————————
The term Accounts Payable includes 'Trade Creditors' and 'Bills Payable'. In case the details regarding credit purchases,
opening and closing
accounts payable have not been given, the ratio may be calculated as follows: Total Purchases ——————— Accounts
Payable (iv)Debt Payment Period Enjoyed Ratio (Average Age of Payables). The
ratio gives the average credit period enjoyed from the creditors. It can
be computed
by any one of the following methods: Months (or days) in a year (a) ———————————————————————————————————
Average Accounts Payable × Months (or days) in a year (b) Creditors'
Turnover Average Accounts Payable (c) ———————————————————————————————————
Purchases Illustration 6.18. From the following figures, calculate the Creditors' Turnover Ratio and the Average Age of
Accounts Payable: Credit Purchases during 1998
Rs 1,00,000 Bills Payable on 1 Jan., 1998 Rs 4,000
Creditors on 1 Jan., 1998 20,000 Bills Payable on 31 Dec., 1998 6,000 Creditors on 31 Dec., 1998 10,000
Self-Instructional Material 189 Financial Statements: Analysis and Interpretation NOTES Solution: Credit Purchase Rs
1,00,000 Creditors' Turnover Ratio = = = 5 times Average Accounts Payable Rs
Months in a year 12 Average Age of Accounts Payable = $= -= 2.4$ months (or credit period enjoyed)
Craditaria Turrayuar E. Or Ayaraga Assayuata Develata yi Majatha ju
Creditor's Turnover 5 Or Average Accounts Payable × Months in
Creditor's Turnover 5 Or Average Accounts Payable x Months in a year 20,000x12 = 2.4 months.

2.4 months. Average Monthly Credit Purchases 8,333.33 Significance. Both the creditors turnover ratio and the debt payment period enjoyed ratio indicate about the promptness or otherwise in making payment of credit purchases. A higher 'creditors turnover ratio' or a 'lower credit period enjoyed ratio' signifies that the creditors are being paid promptly, thus enhancing the credit worthiness of the company. However, a very favourable ratio to this effect also shows that business is not taking full advantage of credit facilities which can be allowed by the creditors. Stock Turnover Ratio. This ratio indicates whether investment in inventory is efficiently used or not. It, therefore, explains whether investment in inventories is within proper limits or not. The ratio is calculated as follows: Cost of Goods Sold during the year ----- Average Inventory Average inventory is calculated by taking stock levels of raw materials, work- in-process, finished goods at the end of each month, adding them up and dividing by twelve. Inventory ratio can be calculated regarding each constituent of inventory. It may thus be calculated regarding raw materials, work-in-progress and finished goods: Cost of Goods Sold (Average Stock of Raw Materials Cost of Completed Work (c) ----- Average Work-in-process Themethod discussed above is as a matter of fact the best basis for computing the Stock Turnover Ratio. However, in the absence of complete information, the Inventory Turnover Ratio may also be computed on the following basis: Net Sales ----- Average Inventory at Selling Price The average inventory may also be calculated on the basis of the average of inventory at the beginning and at the end of the accounting period. 190 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES Inventory at the beginning of the accounting period + Inventory at the end of the the Trading Account of Skylarks Ltd. Calculate the Stock Turnover Ratio: Dr. TRADING ACCOUNT Cr. Particulars Rs Particulars Rs To Opening Stock 40,000 By Sales 2,00,000 To Purchases 1,00,000 By Closing Stock 20,000 To Carriage 10,000 To Gross Profit 70,000 2,20,000 2,20,000 Solution: Cost of Sales Rs 1,30,000 Stock Turnover Ratio = ------ = ----- = 4.33 times. Average Stock 30,000 Significance of the ratio. As already stated, the inventory turnover ratio signifies the liquidity of the inventory. A high inventory turnover ratio indicates brisk sales. The ratio is, therefore, a measure to discover the possible trouble in the form of overstocking or overvaluation. The stock position is known as the graveyard of the balance sheet. If the sales are quick such a position would not arise unless the stocks consist of unsaleable items. A low inventory turnover ratio results in blocking of funds in inventory which may ultimately result in heavy losses due to inventory becoming obsolete or deteriorating in guality. 6.9 FINANCIAL RATIOS Financial ratios indicate the financial position of the company. A company is deemed to be financially sound if it is in a position to carry on its business smoothly and meet all its obligations-both long-term as well as short-term without strain. Thus, its financial position has to be judged from two angles—long-term as well as shortterm. It is a sound principle of finance that long-term requirements of funds should be met out of long-term funds and short-term requirements should be met out of short-term funds. For example, if fixed assets are purchased out of funds provided by bank overdraft, the company will come to grief because such assets cannot be sold away when payment will be demanded by the bank. We are giving below some of the important ratios which are calculated in order to judge the financial position of the company. 1. Fixed Assets Ratio. This ratio is expressed as follows: Fixed Assets ——————— Long-term Funds The ratio should not be more than 1. If it is less than 1, it shows that a part of the working capital has been financed through long-term funds. This is desirable to some extent because a part of

The ideal ratio is 0.67.

working capital termed as 'core working capital' is more or less of a fixed nature.

Fixed assets include 'net fixed assets' (i.e., original cost-depreciation to date) and trade investments including shares in subsidiaries. Long-term funds

include share capital, reserves and long-term loans.

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Illustration 6.20. From the following compute the Fixed Assets Ratio: Particulars Rs Particulars Rs Share Capital 1,00,000 Furniture 25,000 Reserves 50,000 Trade Debtors 50,000 12 per cent Debentures 1,00,000 Cash Balance 30,000 Trade Creditors 50,000 Bills Payable 10,000 Plant and Machinery 1,00,000 Stock 40,000 Land and Buildings 1,00,000 Solution: Fixed Assets 2,25,000 Fixed Assets Ratio = ----= --= 0.9 Long-term Funds 2,50,000 2. Current Ratio. This ratio is an indicator of the firm's commitment to meet its short-term liabilities. It is expressed as follows: Current Assets ---- Current Liabilities Current assets include cash and other assets convertible or meant to be converted into cash during the operating cycle of the business (which is of not more than a year). Current liabilities mean liabilities

payable within a year's time either out of existing current assets or by creation of new current liabilities.

A list of items included in current assets and current liabilities has already been given in the pro forma analysis balance sheet in the preceding pages. Book debts outstanding for more than six months and loose tools should not be included in current assets. Prepaid expenses should be taken into current assets.

A general rule of thumb for the current ratio is 2:1.

Illustration 6.21. From the following compute the 'Current Ratio': Particulars Rs Particulars Rs Sundry Debtors 40,000 Sundry Creditors 20,000 Prepaid expenses 20,000 Debentures 1,00,000 Short-term investments 10,000 Inventories 20,000 Loose Tools 5,000 Outstanding Expenses 20,000 Bills Payable 10,000 Solution: Current Assets Rs 90,000

Current Ratio = ----- = ---- = 1.8 Current Liabilities 50,000 An ideal current ratio is 2. The ratio of 2 is considered as a safe margin of solvency due to the fact that if the current assets are reduced to half, i.e., 1 instead of 2, then too, the creditors will be able to get their payments in full. However, a business having seasonal trading activity may show a lower current ratio at certain period in the year. A very high current ratio is also not desirable since it means less efficient use of funds. This is because a high current ratio means excessive dependence on long-term sources of raising funds. Long-term liabilities are costlier than current liabilities and therefore, this will result in considerably lowering down the profitability of the concern. It is to be noted that the mere fact that current ratio is quite high does not means that the company will be in a position to meet adequately its short-term liabilities. In fact the current ratio should be seen in relation to the components of the current assets and their liquidity. If a large portion of the current assets comprise obsolete stocks or debtors outstanding for a long time, the

company may fail if the current ratio is higher than 2.

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The Current Ratio can also be manipulated very easily. This may be done either by postponing certain pressing payments or postponing purchase of inventories or making payment of certain current liabilities. Consider the following examples: Example 1.

Rs

Current Assets: Sundry Debtors 40,000 Inventories 60,000 Cash in Hand 1,00,000 Current Liabilities: Sundry Creditors 80,000 Bills Payable 20,000 2,00,000

Current Ratio = --- = 3. 1,00,000 In case the creditors are paid to the extent of Rs 50.000

out of cash in hand, the current ratio will be as follows: 1,50,000 Current Ratio = --- = 3. 50,000 Example 2. A business has current assets of

Rs 30,000 including stock of goods of Rs 5,000. Its current liabilities are of Rs 15,000.

The current ratio is 2. However, if the business should have maintained a stock of

Rs 15,000,

the current ratio would have been as follows: 30,000 10,000 40,000 1.6 15,000 10,000* 25,000 ? ? ? ? *Presuming that the goods are purchased on credit. Significance. The current ratio is an index of the concern's financial stability since it shows the extent of the working capital which is the amount by which the current assets exceed the current liabilities. As stated earlier a higher current ratio would indicate inadequate employment of funds while a poor current ratio is a danger signal to the management. It shows that the business is trading beyond its resources. 3. Liquidity Ratio. This ratio is also termed as 'acid test ratio' or 'quick ratio'.

This ratio is ascertained by comparing the liquid assets (i.e.,

assets which are immediately convertible into cash without much loss)

to current liabilities Prepaid expenses and stock are not taken as liquid assets. The ratio may be expressed as under: be computed as under: Liquid Assets

Rs90,000 - Rs 40,000 Rs50,000 = = = = 1. Current Liabilities Rs50,000 Rs50,000

Some accountants prefer the term 'Liquid Liabilities' for 'Current Liabilities' for the purpose of ascertaining this ratio. Liquid liabilities mean liabilities which are payable within a short period. The bank overdraft (if it becomes a permanent mode of financing) and cash credit facilities will be excluded from current liabilities in such a case: Liquid Assets ----- Liquid Liabilities

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The ratio is also an indicator of short-term solvency of the company. A comparison of the current ratio to quick ratio shall indicate the inventory hold-ups. For example, if two units have the same current ratio but different liquidity ratios, it indicates over-stocking by the concern having low liquidity ratio as compared to the concern which has a higher liquidity ratio.

A general rule of thumb for liquidity ratio is 1:1. 4.

Debt-

equity Ratio. The debt-equity ratio is determined to ascertain the soundness of

the long-term financial policies of the

company. It is also known as 'External-internal' equity ratio. It may be calculated as follows: External equities Debt-equity Ratio = ----- Internal equities The term external equities refers to total outside liabilities and the term internal equities refers to shareholders' funds or the tangible net worth (as used in the proforma balance sheet given in the preceding pages). In case the ratio is 1 (i.e., outsider's funds are equal to shareholders' funds), it is considered to be quite satisfactory. (i) Debt-equity Ratio = Total Long-term debt Total Long-term funds (ii) Debt-equity Ratio = Shareholder's funds Total Long-term funds (iii) Debt-equity Ratio = Total Long-term debt Shareholder's funds Method (iii) is most popular. Ratios (i) and (ii) give the proportion of long-term debt/shareholders' funds in total long-term funds (including borrowed as well as owned funds). While Ratio (iii) indicates the proportion between shareholders' funds (i.e., tangible net worth), and the total long-term borrowed funds. Ratios (i) and (ii) may be taken as ideal if they are 0.5 each while the ratio (iii) may be taken as ideal if it is 1. In other words, the investor may take debt- equity ratio as quite satisfactory if shareholders' funds are equal to borrowed funds. However, a lower ratio, say 2/3rds, borrowed funds and 1/3rd owned funds may also not be considered as unsatisfactory if the business needs heavy investment in fixed assets and has an assured return on its investment, e.g., in case of public utility concerns. It is to be noted that preference shares redeemable within a period of 12 years from the date of their issue should be taken as a part of debt. Illustration 6.22. From the following figures calculate the Debt-Equity Ratio: Particulars Rs

Particulars Rs Preference Share capital 1,00,000 Unsecured Loans 50,000 Equity Share Capital 2,00,000 Creditors 40,000 Capital Reserves 50,000 Bills Payable 20,000 Profit and Loss A/c 50,000 Provision for Taxes 10,000 12 per cent Mortgage Debenture 1,00,000 Provision for Dividends 20,000 Solution: The debt-equity ratio may be calculated according to any of the following methods depending on the purpose for which the information is required. (i) Debt-equity Ratio = External Equities 2,40,000 0.6

InternalEquities 4,00,000??

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ii) Debt-equity Ratio = * Total Long-term Debt 1,50,000 0.27 Total Long-term Liabilities 5,50,000 ? ? (iii) Debt-equity Ratio = Shareholders' Funds 4,00,000 0.73 Total Long-term Funds 5,50,000 ?? (iv) Debt-equity Ratio = Total Long-term Debt 1,50,000 0.73 Shareholders Fund 4,40,000 ? ? * Unsecured loan has been taken as a long-term loan. Significance. The ratio indicates the proportion of owners' stake in the busi- ness. Excessive liabilities tend to cause insolvency. The ratio indicates the extent to which the firm depends upon outsiders for its existence. The ratio provides a margin of safety to the creditors. It tells the owners the extent to which they can gain the benefits of maintaining control with a limited investment. 5. Proprietary Ratio. It is a variant of debt-equity ratio. It establishes relationship between the proprietors' or shareholders' funds and the total tangible assets. It may be expressed as under: Shareholders' Funds ----Total Tangible Assets Illustration 6.23. From the following calculate the proprietary ratio:

Liabilities

Rs Assets Rs

Preference Share Capital 1,00,000 Fixed assets 2,00,000 Equity Share Capital 2,00,000

Current assets 1,00,000 Reserves and Surplus 50,000 Goodwill 50,000 Debentures 1,00,000 Investments 1,50,000 Creditors 50,000 5,00,000 5,00,000 Solution:

Rs 3,00,000 = Rs 4,50,000 Shareholders' Funds

Proprietary Ratio = = 0.67 or 67 per cent Total Tangible Assets Significance. This ratio focuses the attention on the general financial strength of the business enterprise. The ratio is of particular importance to the creditors who can find out the proportion of shareholders' funds in the total assets employed in the business. A high proprietary ratio will indicate a relatively little danger to the creditors, etc., in the event of forced reorganisation or winding up of the company. A low proprietary ratio indicates greater risk to the creditors since in the event of losses a part of their money may be lost besides loss to the proprietors of the business. The higher the ratio, the better it is. A ratio below 50 per cent may be alarming for the creditors since they may have to lose heavily in the event of company's liquidation on account

of heavy losses. 6.10 ADVANTAGES

OF RATIO ANALYSIS Following are some of the advantages

of ratio analysis: 1. Simplifies Financial Statements.

Ratio analysis

simplifies the comprehension of financial statements.

Ratios tell the

whole story of changes in the financial condition of the

business.

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Facilitates Inter-firm Comparison. Ratio analysis

provides data for inter- firm

comparison. Ratios highlight the factors associated with successful and unsuccessful firms. They also reveal strong firms and weak firms, over-valued and undervalued firms. 3.

Makes Intra-firm Comparison Possible. Ratio

analysis also makes possible comparison of the performance of the different divisions of the firm. The ratios are helpful in deciding about their efficiency or otherwise in the past and likely performance in the future. 4. Helps in

Planning. Ratio analysis helps in planning and forecasting. Over a period of time a firm or industry develops certain norms that may indicate future success or failure. If relationship changes in firm's data over different time periods, the ratios may provide clues on trends and future problems. Thus, '

ratios can assist management in its basic functions of forecasting, planning, coordination, control and communication.' 1 6.11

LIMITATIONS

OF ACCOUNTING

RATIOS Accounting ratios are subject to certain limitations. They are given below: 1.

Comparative study required. Ratios are useful in judging the efficiency of the business only when they are compared with the past results of the business or with the results of a similar business. However, such a comparison only provides a glimpse of the past performance and forecasts for future may not prove correct since several other factors like market conditions, management policies, etc., may affect the future operations. 2.

Based only on

financial statements. Ratios are based only on the information which has been recorded in the financial statements. As indicated

in the preceding pages financial statements suffer from a number of limitations, the

ratios derived therefrom, therefore, are also subject to those limitations.

For example, non-financial charges, though important for the business, are not revealed by the financial statements. If the management of the company changes, it may ultimately have adverse effects on the future profitability of the company but this cannot be judged by a glance at the financial statements of the company. Similarly, the management has a choice about the accounting policies. Different accounting policies may be adopted by the

management of different companies regarding valuation of inventories, depreciation, research and development expenditure and treatment of deferred revenue expenditure, etc. The comparison of one firm with another on the basis of ratio analysis without taking into account the fact of companies having different accounting policies, will be misleading and meaningless. Moreover, the management of the firm itself may change its accounting policies from one period to another. It is, therefore, absolutely necessary that financial statements are themselves subjected to close scrutiny before an analysis is attempted on the basis of accounting ratios. The financial analyst must carefully examine the financial statements and make necessary adjustments in the financial statements on the basis of disclosure made regarding the accounting policies before undertaking

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financial analysis. The growing realisation among accountants all over the world, that accounting policies should be standardised, has resulted in

the establishment of the

International Accounting Standard Committee, which has issued a number of International Accounting 1

Batty J. 'Management Accounting' (1978), p. 413.

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Standards. In our country, the Institute of Chartered Accountants of India has established Accounting Standards Board of formulation of requisite accounting standards. The Accounting Standards Board has already issued twenty-three accounting Standards, including AS 1: Disclosure of Accounting Policies.

The standard has become mandatory in respect of accounts for periods commencing on or after 1 April, 1991. 3. Ratios

alone are not adequate.

Ratios are only indicators, they cannot be taken as final regarding

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good or bad financial position of the business. Other things also

have to be seen.

For example, a high current ratio

does not necessarily mean that the concern has a good liquid position in case current assets mostly comprise outdated stocks. It has been correctly observed, 'No ratio may be regarded as good or bad inter se.' It may be an indication that a firm is weak or

strong but it must never be taken as proof of either one. Ratios may be linked to rail- roads. They tell the analysist, 'stop, look and listen.' 4. Window dressing. The term window dressing means manipulation of accounts in a way so as to conceal vital facts and present the financial statements in

a way

to show a better position than what it actually is. On account of such a situation,

the

presence of particular ratio may not be a definite indicator of good or bad management. For example, a high stock turnover ratio is generally considered to be an indication of operational efficiency of the business. But this might have been achieved by unwarranted price reductions or failure to maintain proper stock of goods. Similarly, the current ratio may be improved just before the Balance Sheet date by postponing replenishment of inventory. For example, if a company has got current assets of

Rs 4,000 with current liabilities of Rs 2,000,

the current ratio is 2, which is quite satisfactory. In case the company purchases goods of

Rs 2,000 on credit, the current assets would go up to Rs 6,000 and current liabilities to Rs 4,000, thus reducing the current ratio to 1.5. The company may, therefore, postpone the purchases for early next year so that its current ratio continues to remain at 2 on the Balance Sheet date. Similarly, in order to improve the current ratio, the company may pay off certain pressing current liabilities before the Balance Sheet date. For example, if in the above case the company pays current liabilities of Rs 1,000, the current liabilities would stand reduced to Rs 1,000, current

assets would stand reduced to Rs 3,000 but the current ratio would go up to 3. 5. Problem of price level changes. Financial analysis based on accounting ratios will give misleading results if the effects of changes in price level are not taken into account. For example,

two companies set up in different years, having plant and machinery of different ages, cannot be compared on the basis of traditional accounting statements. This is because the depreciation charged on plant and machinery in case of

an

old company would be at a much lower figure as compared to the company which has been set up recently. The financial statements of the companies should,

therefore, be adjusted keeping in view the price level changes if a meaningful comparison is to made through accounting ratios.

The techniques of current purchasing power and current cost accounting are quite helpful in this respect. 6. No fixed standards.

No fixed standards can be laid down for ideal ratios.

For example, current ratio is generally considered to be ideal if current assets are twice the current liabilities. However, in case of those concerns which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities.

Check Your Progress 4.

Which accounting ratio will be useful in indicating the following symptoms? (

a) Low capacity utilisation. (b) Falling demand for the product in the market. (c) Inability to pay interest. (

d) Borrowing for short-term and investing in long-term assets. (e) Large inventory accumu- lation in anticipation of price rise in future. (f) Inefficient collection

of debtors. (g) Inability to pay dues to financial

institutions. (h) Return of shareholders' funds being much higher than the overall return on investments. (i) Liquidity crisis. (j) Increase in average credit period to maintain sales in view of falling demand.

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It may, therefore, be concluded that ratio analysis, if done mechanically, is not only misleading but also dangerous. It is indeed a double-edged sword which requires a great deal of understanding and sensitivity of the management process rather than mechanical financial skill. It has rightly been observed, 'The ratio analysis is an aid to management in taking correct decisions, but as a mechanical substitute for thinking and judgement, it is worse than useless. The ratios, if discriminately calculated and wisely interpreted, can be a useful tool of financial analysis.' 1 6.12 COMPUTATION OF RATIOS The computation of

different accounting ratios and the analysis of the financial statements on their basis can be very well understood with the help of the following illustrations:

Illustration 6.24. Following is the Profit and Loss Account and Balance Sheet of Jai Hind Ltd. Redraft them for the purpose of analysis and calculate

the following ratios: (i) Gross Profit Ratio; (ii) Overall Profitability Ratio; (iii)

Current Ratio; (iv) Debt-equity Ratio; (v) Stock Turnover Ratio; (vi) Liquidity Ratio.

PROFIT AND LOSS ACCOUNT Particulars Rs

Particulars Rs Opening Stock of Finished Goods 1,00,000 Sales 10,00,000

Opening Stock of Raw Materials 50,000 Closing Stock

of Raw Materials 1,50,000 Purchase of Raw Materials 3,00,000 Closing Stock of

Finished Goods 1,00,000 Direct Wages 2,00,000 Profit on Sale of Shares 50,000 Manufacturing Expenses 1,00,000 Administration Expenses 50,000 Selling

and

Distribution Expenses 50,000 Loss on Sale of Plant 55,000 Interest on Debentures 10,000

Net Profit 3,85,000 13,00,000 13,00,000 BALANCE SHEET Liabilities Rs Assets Rs Share Capital:

Fixed Assets 2,50,000 Equity Share Capital 1,00,000 Stock

of

Raw Materials 1,50,000 Preference Share Capital 1,00,000 Stock of Finished Goods 1,00,000 Reserves 1,00,000 Sundry Debtors 1,00,000 Debentures 2,00,000 Bank balance 50,000 Sundry Creditors 1,00,000 Bills Payable 50,000 6,50,000 6,50,000

Solution: INCOME STATEMENT

Rs

Sales 10,00,000 Less: Cost of Sales: Raw Materials consumed (Opening Stock + Purchases – Closing Stock) 2,00,000 Direct sages 2,00,000

Manufacturing Expenses 1,00,000 Cost of Production 5,00,000 Add: Opening Stock of Finished Goods 1,00,000 6,00,000 1

Hunt, Williams and Donaldson, Basic Business Finance (1971), p. 116. (Contd.)

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Less: Closing

Stock of Finished Goods 1,00,000

Cost of goods sold 5,00,000

Gross Profit 5,00,000 Less: Operating Expenses: Administration Expenses 50,000 Selling

and Distribution

Expenses 50,000 1,00,000 Net Operating Profit: 4,00,000 Add: Non-trading Income:

Profit on Sale of

Shares 50,000 4,50,000 Less: Non-trading Expenses

or Losses: Loss on sale of Plant 55,000 Income before Interest and Tax 3,95,000 Less: Interest on Debentures 10,000 Net Profit before Tax 3,85,000 BALANCE SHEET (OR POSITION STATEMENT)

Rs

Bank Balance 50,000 Sundry Debtors 1,00,000 Liquid Assets: 1,50,000 Inventories:

Stock of raw materials 1,50,000 Stock of finished goods 1,00,000 Current Assets: 4,00,000 Sundry Creditors 1,00,000 Bills Payable 50,000 Current Liabilities 1,50,000 Working Capital (

Rs 4,00,000 - Rs 1,50,000) 2,50,000

Add: Fixed Assets 2,50,000 Capital Employed 5,00,000 Less: Debentures 2,00,000

Shareholders' Net Worth 3,00,000 Less: Preference

Share Capital 1,00,000 Equity Shareholders' Net Worth 2,00,000 Equity Shareholders' Net Worth is represented by: Equity Share Capital 1,00,000

Reserves 1,00,000 2,00,000 Ratios: (i) Gross Profit Ratio: Gross profit 5,00,000 100 100 50 per cent Sales 10,00,000 ? ? ? ? (ii) Overall Profitability Ratio: Operating profit 4,00,000 100 100 80 per cent Capitalemployed 5,00,000 ? ? ? (iii) Current Ratio: Current Assets 4,00,000 2.67 Current Liabilities 5,00,000 ? ? (iv) Debt-Equity Ratio: External Equities 3,50,000 1.17 Internal Equities 3,00,000 ? ? Or 2,00,000 = 0.40 5,00,000 Total Long = term Debt Total Long = term Funds ? ?

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Or 2,00,000 = 0.67 3,00,000 Total Long-term Debt Total Long-term Funds ?? (v) Stock Turnover Ratio: (a) As regards average total inventory Cost of goodssold 5,00,000 = 2.5 Averageinventory* 2,00,000 ?? (* of raw material as well as finished goods). (b) As regards average inventory of raw materials: = Cost of goodssold 5,00,000 5 Averageinventoryof finished goods 1,00,000 ?? (c) As regards average inventory of finished goods: Cost of goodssold 5,00,000 5 Averageinventoryof finished goods 1,00,000 ?? (v) Liquidity Ratio: Liquid Assets 1,50,000 = Current Liabilities 1,50,000 Illustration 6.25. The Balance Sheet of Y Ltd. stood as follows as on: (Rs in lakhs) Liabilities 31.3.95 31.3.94 Assets 31.3.95 31.3.94 Capital 250 250 Fixed Assets 400 300 Reserves 116 100 Less: Depreciation 140 100 Loans 100 120 260 200 Creditors and Other Investments 40 30 Current Liabilities 129 25 Stock 120 100 Debtors 70 50 Cash/Bank 20 20 Other Current Assets 25 25 Misc. Expenditure 60 70 595 495 595 495 You are given the following information for the year 1994–95: Sales 600 PBIT 150 Interest 24 Provision for tax 60 Proposed dividend 50 All the figures given above are rupees in lakhs. From the above particulars calculate for the year 1994–95: (a) Return on Capital Employed Ratio. (b) Stock Turnover Ratio. (c) Return on Net Worth Ratio. (d) Current Ratio. (e) Proprietary Ratio.

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Solution: (i) Return on Capital Employed PBIT 100 Average Capital Employed ? 150 . ., 100 403 ie ? = 37.22% (ii) Stock Turnover Ratio Sales AverageStock 600 . ., 110 ie = 5.45 times (iii) Return on Net Worth × PAT 100 Average Net Worth 235 . ., 129 ie = 22.53% (iv) Current Ratio Current Assets = Current Liabilities 235 . ., 129 ie = 1.82 times (v) Proprietary Funds 306 = Total Assets–Misc. Expenditure 595–60 = 0.57 Working Notes: (i) Average capital employed (Rs

in lakhs) 31.3.1995 31.3.1994 Total Assets (excluding Misc. expenditure) 535 425 Less: Creditors and Other Current Liabilities 129 25 406 400

Average: 466 + 470 ÷ 2 = Rs 468

lakhs (ii) Average Net Worth Capital 250 250 Reserves 116 100 366 350 Less: Misc. Expenses 60 70 306 280 Average: 306 + 280 \div 2 =

Rs 293

lakhs Proprietary Funds as on 31.3.95 mean Net worth as on that date i.e.,

Rs 306 lakhs. (iii) Average Stock (Rs in Lakhs) (120 + 100)/2 = 110 (iv) Profit after Tax (PAT) (Rs

in lakhs) PBIT 150 Less: Interest 24 126 Less: Tax 60 66 (v) Current Assets as on 31.3.95 (

Rs

in lakhs) Stock 120 Debtors 70 Cash/Bank 20 Other Current Assets 25 235 6.12.1 Computation of Items of Financial Statements Illustration 6.26.

With the help of the following ratios regarding Indu Films, draw the Balance Sheet of the Company for the year 1995: Current Ratio 2.5 Liquidity Ratio 1.5 Net Working Capital

Rs 3,00,000

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Stock Turnover Ratio (cost of sales/closing stock) 6 times Gross Profit Ratio 20 per cent

Fixed Assets Turnover Ratio (on cost of sales) 2 times Debt Collection Period 2 months Fixed assets to Shareholders Net Worth 0.80 Reserve and Surplus to Capital 0.50

Solution:

BALANCE SHEET as on..... Liabilities Rs Assets

Rs

Share Capital 5,00,000 Fixed Assets 6,00,000

Reserve and Surplus 2,50,000

Debtors 2,50,000 Long-term Borrowings Stock 2,00,000 (balancing figure) 1,50,000 Bank 50,000 Current Liabilities 2,00,000 11,00,000 11,00,000

Working Notes:

If Current Liabilities = 1 Current Assets = 2.5 It means the difference or Working Capital = 1.5 Working Capital is 1.5 =

Rs 3,00,000 Therefore, Current Assets = Rs 5,00,000 Current Liabilities = Rs 2,00,000 As Liquidity Ratio = 1.5 And Current Liabilities = Rs 2,00,000

Therefore, the

Liquid Assets (bank and debtors) $(2,00,000 \times 1.5) = \text{Rs} 3,00,000 \text{ Stock} (5,00,000 - 3,00,000, i.e., current assets - liquid assets) =$

Rs 2,00,000 Cost of Sales (as stock turnover ratio is 6) =

Rs 12,00,000 Sales (as G.P. ratio is 20 per cent, 20 12,00,000 12,00,000 80 ? ? = Rs 15,00,000 Fixed Assets are Rs 12,00,000/2 since fixed assets turnover ratio is 2 = Rs 6,00,000 Debtors are Rs 15,00,000/6 since debt collection period is 2 months = Rs 2,50,000 Shareholders' Net Worth 6,00,00 1 0.80 ? ? ? ? ? ? = Rs 7,50,000

Out of Shareholders' Net Worth Reserves and Surplus = Rs 2,50,000 Therefore, share capital =

Rs 5,00,000

Illustration 6.27. The following extracts of financial information relate to Curious Ltd.: BALANCE SHEET as on 31st December (Rs in lakhs) Particulars 1995 1994 Share Capital 10 10 Reserve and Surplus 30 10 Loan Fund 60 70 100 90 Fixed Assets (Net) 30 30 Current Assets: Stocks 30 20 Debtors 30 30 Cash and Bank balances 10 20 (Contd.)

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Other Current Assets 30 10 100 80 Less: Current Liabilities 30 20 Net Working Capital 70 60 Total Assets 100 90 Sales (Rs

in lakhs) 270 300 (a) Calculate, for the two years Debt Equity Ratio, Quick Ratio and Working Capital Turnover Ratio; and (b) Find the sales volume that should have been generated in 1995 if the Company were to have maintained its Working Capital Turnover Ratio. Solution: (a) (i) Debt Equity Ratio 1995 1994 Debt Loan Funds = = Equity ShareCapital + Reserves = 60 40 70 20 (ii) Quick Ratio Quick Assets = Current Liabilities = 30 10 30 ? 30 20 20 ? = 1.33 : 1 2.5 : 1 (iii)Working Capital Turnover Ratio Sales = Working Capital = 270 70 300 60 = 3.86 times 5 times (b) Sales volume to be maintained RequiredSales 5 = 70 Sales required for 1995 = Rs 350 lakhs.

Illustration 6.28. With the following ratios and further information given below,

prepare a

Trading

Account. Profit and Loss Account and

a Balance Sheet

of Shri Narain: (i) Gross Profit Ratio25 per cent (vi) Fixed Assets/Capital 5/4 (ii) Net Profit/Sales 20 per cent(vii) Fixed Assets/Total (iii) Stock-turnover Ratio 10 Current Assets 5/7 (iv) Net Profit/Capital 1/5 (viii) Fixed Assets Rs 10,00,000 (v) Capital to Total (ix) Closing Stock Rs 1,00,000

Liabilities 1/2

Solution:

TRADING AND PROFIT AND

LOSS

ACCOUNT for the year ended...

Particulars Rs Particulars

Rs To Opening Stock 20,000

By Sales 8,00,000 To Purchases (

balancing figure) 6,80,000 By Closing Stock 1,00,000 To

Gross Profit

c/d 2,00,000 9,00,000 9,00,000 To

Expenses 40,000 By Gross Profit

b/d 2,00,000 To

Net Profit 1,60,000 2,00,000 2,00,000

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BALANCE SHEET as on.... Liabilities Rs Assets Rs Capital: Fixed Assets 10,00,000

Openings balance 6,40,000 Closing Stock 1,00,000 Add: Net Profit 1,60,000 8,00,000 Other Current Assets 13,00,000 (balancing figure) Liabilities 16,00,000 24,00,000 24,00,000 Working Notes: 1. Fixed Assets are Rs 10,00,000 Fixed Assets ? Capital = 5 ? 4 Capital = 10,00,000 ? 4 ? 5 = Rs 8,00,000. 2. Capital is 1/2 of Total Liabilities Liabilities = 8,00,000 ? 2 = Rs 16,00,000. 3. Net Profit is 1/5 of Capital Net Profit = 8,00,000 ? 1/5 = Rs 1,60,000. 4. Net Profit is 20 per cent of Sales Sales = 1,60,000 ? 100 ? 20 = Rs 8,00,000 5. Gross Profit Ratio is 25 per cent of Sales Gross Profit = Rs 2,00,000. 6. Stock Turnover Ratio (i.e., Cost of Sales/Average Inventory) is 10 Cost of Sales = Sales - Gross Profit = Rs 8,00,000 - 2,00,000 = Rs 6,00,000 Average Inventory is Rs 6,00,000 7. Closing Stock is Rs 1,00,000. Average Inventory is Rs 60,000. Opening Stock is Rs 20,000 8. Fixed Assets are Rs 10,00,000. Fixed Assets/Total Current Assets = 5 ? 7 Total Current assets are 10,00,000 ? 7/5 Rs 14.00.000 Stock is Rs 1,00,000 Other Current Assets are Rs 13,00,000. Illustration 6.29. From the following particulars prepare the Balance Sheet of Shri Mohan Ram & Co. Ltd. Current Ratio 2 Working Capital Rs 4.00.000 Capital Block to Current Assets 3:2 Fixed Assets to Turnover 1:3 Sales Cash/Credit 1:2 Stock Velocity 2 Months Creditors Velocity 2 Months Debtors Velocity 3 Months Capital Block: Net profit 10% of Turnover Reserve 2.5% of Turnover 1:2 Debentures/Share Capital Gross Profit Ratio 25% (to Sales) 204 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES Solution: Since Current Ratio is 2, Current Assets must be twice of Current Liabilities. In case Current Liabilities are 'x', Current Assets will be 2x. 2x - x = 4,00,000 = 4,00,000Rs Current Liabilities 4,00,000 Current Assets 8,00,000 Capital Block 12,00,000 Since the total liabilities are Rs 16,00,000 (i.e., 12,00,000 + Rs 4,00,000), the total assets will also be 16,00,000. Rs Fixed Assets (Rs 16,00,000 - Rs 8,00,000) 8,00,000 Turnover (8,00,000 ? 3) 24,00,000 Credit Sales 16,00,000 Cash Sales 8,00,000 Debtors' velocity 3 months Debtors are therefore (16,00,000 ? 3/12) 4,00,000 Gross Profits (24,00,000 ? 25/100) 6,00,000 Cost of Sales 18,00,000 Stock Turnover 2 Months Stock is therefore (18,00,000 ? 2/12) 3,00,000 Creditors' Velocity 2 Months Creditors are therefore (18,00,000 ? 2/12) 3,00,000 Cash balance (8,00,000 - 7,00,000) 1,00,000 Reserves (24,00,000 ? 2.5/100) 60,000 Profit (24,00,000 ? 10/100) 2,40,000 Block or Fixed Capital 12,00,000 Reserves and Profit 3,00,000 Debentures and Share Capital 9,00,000 Share Capital 6,00,000 Debentures 3,00,000 The Balance Sheet can now be prepared as follows: Shri Mohan Ram & Co. Ltd. BALANCE SHEET as on Liabilities Rs Assets Rs Share Capital 6,00,000 Fixed Assets 8.00.000 Reserves 60,000 Current Assets: Profit and Loss A/c 2,40,000 Debtors 4,00,000 Debentures 3,00,000 Stock 3,00,000 Sundry Creditors 3,00,000 Cash 1,00,000 Other Current Liabilities 1,00,000 16,00,000 16,00,000 6.12.2 Critical Analysis of Financial Statements Illustration 6.30. From the following you are required to comment upon the long-term as well as short-term solvency of the Company. BALANCE SHEET as on 31 December, 1998 Liabilities Rs Assets Rs Share Capital 1,00,000 Fixed Assets 6,00,000 Fixed Liabilities 2,50,000 Liquid Assets 3,00,000 Current Liabilities 2,50,000 Stock in Trade 1,00,000 10,00,000 10,00,000 Self-Instructional Material 205 Financial Statements: Analysis and Interpretation NOTES Solution: Long-term Solvency Ratios: Total Long-term Debt 2,50,000 Debt-Equity Ratio 0.33 Total Long-term Funds 7,50,000 ? ? ? The proportion of the long-term debt in total long-term funds is only 33 per cent. It means shareholders' funds are 67 per cent of the total long-term funds. Even if borrowed funds would have been 50 per cent, the financial position of the company would have been considered as quite good. The company, therefore, has a sound financial position from this angle. Fixed Assets 6,00,000 Fixed Assets Ratio 0.8 Long-term Funds 7,50,000 ? ? ? Long-term requirements of funds should be met out of long-term funds. Judged from this

angle the company has not only met the long-term financial requirements (i.e., for Fixed Assets) out of long-term funds but it has also met a part of working capital requirements from long-term funds. The ideal ratio is 0.67. The present ratio is 0.8 and hence it is quite satisfactory. Short-term Solvency Ratios: Current Assets 4,00,000

Current

Ratio = = = 1.6 Current Liabilities 2,50,000 The ideal ratio is from 1.5 to 2, the position is, therefore, quite satisfactory. Liquid Assets 3,00,000

Liquidity Ratio = = =1.2 Current Liabilities 2,50,000 The ideal ratio is 1. The present ratio of 1.2 is, therefore, also satisfactory. Illustration 6.31. The following are the summarised accounts of Unique Ltd. and Strange Ltd. for the two years 1994 and 1995: (

Rs

in lakhs) Particulars Unique Ltd. Strange Ltd. 1994 1995 1994 1995 Turnover 54.12 45.75 17.52 14.47 Manufacturing and Other Expenses 51.04 43.56 14.96 11.82 Depreciation 0.56 0.51 0.60 0.35 Profit before Tax 2.52 1.68 1.96 2.30 54.12 45.75 17.52 14.47 Intangible Assets 1.65 1.69 — Fixed Assets 8.36 9.41 3.51 2.75 Stock 11.24 12.19 1.77 2.26 Debtors 7.28 8.24 5.82 4.02 Bank 0.93 0.33 4.64 2.46 29.46 31.86 15.74 11.49 Creditors 9.47 9.26 2.33 1.75 Taxation (Less advance tax) 0.56 0.68 0.87 0.58 Short-term Borrowings 4.24 8.00 4.64 2.16 Long-term Borrowings 2.54 2.10 0.10 — Capital and Reserves 12.65 11.82 7.80 7.00 Total 29.46 31.86 15.74 11.49 You are required to: (a) Indicate and calculate five ratios which in your opinion are relevant in determining the stability of the two companies as going concerns. (b) Compare the ratios so determined for the two companies. Indicate what conclusions can be drawn therefrom.

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Solution: (a) Computation of five ratios is tabulated as follows: (b) The computations in the case of Unique Ltd. show a deteriorating position whereas in Strange Ltd., they show a better position in 1995 as compared to 1994. Profitability of Unique Ltd. is very poor and is declining. Its liquidity is also poor and declining. The defensive interval of Strange Ltd. is much higher as compared to that of Unique Ltd. Thus, Unique Ltd. needs to improve its position.

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Illustration 6.32. Shamsher Sterling Limited has been operating for two years. The most important facts as appearing from its accounts are as

under:

BALANCE SHEET Liabilities First Year Second Assets First Year Second Year

Rs Year Rs Rs Rs Equity Shares Goodwill 60,000 60,000 of Rs 10

each 1,00,000 1,00,000 Fixed Assets (at cost) 1,40,000 1,60,000 Reserves 20,000 30,000 Stocks 30,000 60,000 Profit and Loss Balance 30,000 20,000 Sundry Debtors 30,000 60,000 Secured Loans 80,000 80,000 Advances 10,000 Bank overdraft 20,000 Cash Balances 30,000 — Sundry Creditors 50,000 70,000 — Provision for Taxation 20,000 20,000 3,00,000 3,40,000 3,00,000 3,40,000 PROFIT AND LOSS APPROPRIATION ACCOUNT Liabilities First Year Second Assets First Second Year

Rs Year Rs YearRs Rs Transfer to Reserves 20,000 10,000 Balance b/d 30,000 Manager's Commission 10,000 30,000 Profit for the year after Dividends 10,000 20,000 taxation and before Net Profit 30,000 20,000 depreciation 70,000 50,000 70,000 80,000 You find that the total sales amounted to

Rs 6,00,000 in the first year and Rs 5,00,000

in the second year. Examine the above details and give a step-by-step analysis in a manner which indicates the overall efficiency of the business and its financial position. Solution: Shamsher Sterling Limited ANALYSIS OF WORKING CAPITAL AND FINANCIAL POSITION Overall Performance: The following ratios throw light on the comparative performance of the company over two

years:

First Year Second Year 1. Net Margin Ratio (Profit as given, Less: Commission to the manager) 10 per cent 4 per cent 2. Capital Turnover Ratio Sales Capital employed 3.53 2.94 3. Return on capital employed 5.29 per cent 11.76 per cent The following ratios have been found out on further analysis of capital turnover ratio: (a) Fixed Assets Turnover Ratio Sales Fixed Assets 4.29 3.12 (b) Stock Turnover Stock Closing Sales 20.00 8.33 (c) Debt Collection Period 18 days 44 days An examination of the ratios given above makes it clear that the overall per- formance of the company is much poorer in the second year as compared to the first year. The analysis brings out the following facts: (1) The operating ratio has increased from 90 per cent to 96 per cent. This has resulted in decline of the net profit ratio to 4 per cent from 10 per cent. One important reason of this decline is the rise in the commission 208

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paid to the Manager by 200 per cent. There seems to be no justification for such an increase. In case the commission paid to the Manager is not considered, while calculating net-margin, it has still declined to 10 per cent from 11.67percent on sales. This fall may be either due to: (i) Lower selling prices (ii) Higher prices for materials, etc., (iii) Inefficiency of the management. The last reason seems to be most probable, because normally the selling price of the articles can be adjusted to cover rise in the costs of the product. (2) There has been an all-round decline in utilisation of the resources, as

evi- denced

by capital turnover ratio. Even if it is assumed that there has been a fall in the fixed assets turnover ratios because the fixed assets were added towards the end of the year and, therefore, they could not properly be utilised, there seems little justification for a very sharp fall in the stock turnover ratio. On the same basis, there is no justification for increase in the debt collection period. These two ratios are very disturbing and they immediately raise the question regarding the reliability of the two figures of stocks and sundry debtors. The fall in sales but increase in inventories and debt collection period are indicators that the unsaleable items have been included in the stocks and the sundry debtors include doubtful debts. If that is true, the profit figure in the second year seems to be unreliable. Actually, there may be a loss. The management should, therefore, investigate thoroughly to determine the truth. (3) The sharp fall in the quantum of sales has raised one more adverse possibility. The company might be operating extremely close to the break-even point. This may ultimately result in losses to the company if the sales decrease still further. The management should, therefore, see that the sales are augmented and the costs are reduced by full utilisation of the present facilities and resources available at the disposal of the company. Financial Position. The following ratios reveal the financial position of the company: First Year Second Year (i) Debt Equity Ratio: Debt/Debt + Equity 34.8 per cent 34.8 per cent (ii) Fixed assets including Goodwill/ Long-term funds .87 .95 (iii) Current Ratio Current Assets/Current liabilities 1.43 1.09 (iv) Stock/Working capital 1.00 6.00 (v) Sundry debtors/Working capital 1.00 6.00 The company has a precarious financial position so far as shortterm solvency is concerned. The decline in the current ratio gives a partial indication of the danger which faces the company. The company has no cash balances. The bank can call upon the company to adjust its overdrafts at any time. The inventories seems to contain unsaleable items. The debtors include doubtful debts. Thus, there seems to be a little chance of the company meeting adequately its short-term immediate liabilities. A small pressure from short-term creditors may put the whole work of the company in jeopardy. This shows that the decisions of the management regarding the following matters are not judicious:

Check Your Progress 5.

Indicate the important accounting ratios that would be used by each of the following: (i) A long-term creditor interested in determining whether his claims

are

adequately secured; (ii) A Bank who has been approached by a company for short-term loan/ overdraft; and (iii) A shareholder who is examining his portfolio and who is to decide whether he should hold or sell his shares in a company. Self-Instructional Material 209 Financial Statements: Analysis and Interpretation NOTES (i)

Increasing the commission to manager (ii) Purchasing fixed assets as the time when the sales are declining (iii) Paying dividend and that too at double the rate of the previous year Moreover, the company has paid dividend without providing for depreciation on fixed assets. This is

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clear violation of

the provisions of Section 205 of the Companies Act. The company

will be put to serious difficulties when the assets become useless after their useful life in case the company continues to follow the policy of not providing for depreciation, as it will be almost impossible for the company to replace these assets. The company has also not made any provision for repayment of

the

loan. It should have created a sinking fund for this purpose. The amount of goodwill appearing in the balance sheet of the company is also valueless in view of the fact that the company has extremely low profits. Management should, therefore, take immediate remedial measures regarding the following matters: (i) Better sales performance (ii) Cost control and cost reduction (iii) Ascertainment of profits of the business according to strict accounting principles (iv) Better control over inventories and collection of book debts (v) No payment of dividend till the company raises enough cash resources to meet its requirements 6.13

KEY TERMS ?

Accounting Ratio.

It is the relationship expressed in mathematical terms between two accounting figures related to each other. ?

Balance Sheet. A statement of the

financial position of a

business at a specified moment of time. ?

Balance Sheet Ratios. Ratios calculated on the basis of

the figures in the

balance sheet only. ? Composite Ratios. Ratios based on figures of profit

and loss account as well as the balance sheet. They are also known as Inter-Statement Ratios. ? Financial Analysis. Critical evaluation of data given in the financial statements. ? Financial

Ratios. Ratios disclosing the financial position or solvency of the firm. They are

also known as Solvency Ratios. ?

Financial Statement. An organised collection of data according to

logical and consistent accounting procedures

conveying an understanding of some financial aspects of a business firm. ? Interpretation. Explaining the meaning and significance of the financial data. ? Profitability Ratios. Ratios which reflect the final results of business operations. ? Turnover Ratios. Ratios measuring the efficiency with which the assets are employed by a firm. They are also known as Activity or Efficiency Ratios. 6.14

SUMMARY

In this unit, you have learned that: ?

Accounting ratio is a mathematical relationship expressed between two inter- connected accounting figures. It may be expressed in 'times' or 'percentage'. ? Ratios are useful only when they are given in a comparative form. Moreover, ratios are only indicators. They cannot be taken as final regarding

the

good or bad financial position of the business. Other things also

have to be seen.

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Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES ?

No fixed standards can be laid down for ideal ratios. Moreover, a particular ratio may be calculated in more than one way without violating any basic prin- ciple of accounting. It is, therefore, advisable for a student to give the basis for computing a

particular ratio. ?

While making inter-firm (comparison of one firm with another) or intra-firm (

com- parison

within the firm itself) comparison on the basis of accounting ratios, it must be seen that the different firms or departments, which are being compared, have the same accounting policies and adopt the same accounting procedures. 6.15

ANSWERS TO 'CHECK YOUR PROGRESS' 1. (a) False; (b) True; (c) False; (d) True; (e) False; (f) True; (g) True; (h) False 2. (a) Improve the ratio; (b) Improve the ratio; (c) Reduce the ratio; (d) No change in the ratio; and (e) No change in the ratio 3. (a) improve; (b) decline; (c) no change; (d) no change; (e) improve 4. (a) Fixed Assets Turnover Ratio; (b) Finished Goods Turnover Ratio; (c) Interest Cover- age Ratio; (d) Fixed Assets Ratio; (e) Inventory Turnover Ratio; (f) Debtors Turnover Ratio; (g) Debt Service Coverage Ratio; (h) Debt-Equity Ratio, Return on Investment; (i) Current Ratio, Quick Ratio; (j) Debtors' Turnover Ratio, Debt Collection Period 5. (i) Debt Service Coverage Ratio; (ii) Current Ratio & Quick Ratio; (iii) Earning per Share 6.16 QUESTIONS AND EXERCISES 1. Discuss the concepts regarding financial statements and limitations of financial statements. 2.

Explain

the role of ratio analysis in the interpretation of financial statements.

Examine the limitations of ratio analysis. 3.

How do you analyse and interpret financial statements of a

company for reporting on the soundness of its capital structure and solvency. 4. '

Ratios like statistics have a set of principles and finality about them which at times may be misleading.' Discuss with illustrations. 5. 'Accounting Ratios are mere guides and complete reliance on them in decision-making in suicidal.' Elucidate. 6.

What is the need for financial analysis? How does the ratio analysis technique help in the financial analysis? 7. What do understand by analysis of Financial Statements? Describe the uses of such analysis? 8.

following accounting ratios: (i) Quick Ratio or Liquidity Ratio (ii) Selling Expenses Ratio (iii) Debt Equity Ratio (iv) Debtors Ratio or Debt Collection Period (v) Gross Profit Ratio 10. Explain any two of the following: (i) Gross Profit Ratio (ii) Stock Turnover Ratio (iii) Proprietary Ratio 11. The four basic groups of financial ratios are liquidity, leverage, activity (efficiency) and profitability. Explain their nature and indicate their principal users. 12. State the limitations of financial ratios. 13. Write short notes on: (a) Proprietary Ratio (b) Debt Coverage Ratio Self-Instructional Material 211 Financial Statements: Analysis and Interpretation NOTES (c) P/E Ratio (d) Yield Ratio (e) Market Value/Book Value of Shares 6.17 PRACTICAL PROBLEMS Computation of Ratios 1. From the following statements of X Ltd. for the year ending 31 March 1997, you are required to rearrange the items for purposes of financial analysis and calculate the following ratios: (i) Current Ratio, (ii) Quick Ratio, (iii) Operating Ratio, (iv) Stock Turnover Ratio, (v) Fixed Assets Turnover Ratio, (vi) Debtors' Turnover Ratio, and (vii) Net Profit to Capital employed. BALANCE SHEET Liabilities Rs Assets Rs Share Capital: Land and Buildings 5,00,000 Issued and fully paid up 50,000 Plant and Machinery 2,00,000 Equity shares of Rs 10 each 5,00,000 Stock 1,50,000 General Reserve 4,00,000 Sundry Debtors 2,50,000 Profit and Loss A/c 1,50,000 Cash and Bank balances 1,50,000 Sundry Creditors 2,00,000 12,50,000 12,50,000 PROFIT AND LOSS ACCOUNT for the year ending 31 March, 1997 Particulars Rs Particulars Rs To Opening Stock 2,50,000 By Sales 18,00,000 To Purchases 10,50,000 By Closing Stock 1,50,000 To Gross Profit 6,50,000 19,50,000 19,50,000 То Selling and Distribution By Gross Profit 6,50,000 Expenses 1,00,000 By Profit on sale of fixed To Administration Expenses 2,30,000 assets 50,000 To Finance Expenses 20,000 To Net Profit 3,50,000 7,00,000 7,00,000 [Ans. (i) 2.75, (ii) 2, (iii) 0.82, (iv) 5.75, (v) 18/7 = 2.6 or 11.5/7, (vi) 7.2, i.e., 51 days, (vii) 30 per cent] 2. The following data has been abstracted from the annual accounts of a Company: Share Capital Rs Lakhs 20,000 Equity Shares of Rs 10 each 200.00 General Reserve 156.00 Investment Allowance Reserve 50.00 Share Capital Rs Lakhs 15% Long-term Loan 300.00 Profit before Tax 140.00 Provision for Tax 84.00 Proposed Dividends 10.00 Calculate from the above the following details: (i) Return on Capital Employed, and (ii) Return on Net Worth. [Ans. (i) 26.4%, (ii) 14%] 3. From the following, calculate the basic earnings per share: Profit for the year ending 31.12.2001 after Interest Tex and Preference Dividend Rs 18,500 No. of Equity Shares as on 01.01.2001 18,800 of Rs. 10 each fully paid up No. of Equity Shares issued on 31.10.2001 600 of Rs 10 each, Rs 5 paid Partly paid shares are entitled to participate in the dividend to the extent of the amount paid. (Ans. Weighted Average number of Shares - 1,850 and Basic Earnings per Share — Rs. 10) 212 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES 4. From the following, calculate: (a) Basic Earnings per Share; and (b) Diluted Earnings per Share Net profit for the year ending 31.12.2001 Rs 10,00,000 No. of Equity Shares Outstanding on 31.12.2001 5,00,000 12% Convertible Debentures of Rs 100/- each 1,00,000 Each debenture is convertible to 10 equity shares. The company is in 30% tax bracket. [Ans. (a) Rs 2 per share and (b) Rs 1.27 per share] 5. From the following annual statements of Pioneer Ltd. calculate the following ratios: (a) Gross Profit Ratio, (b) Current Ratio; (c) Liquid Ratio; (d) Debt-equity

What ratios are to be worked out to study the long-term solvency of a concern? 9. State the formulae to calculate the

Ratio: and (e) Return on Investment Ratio. TRADING AND PROFIT AND LOSS ACCOUNT for the year ended 31st December 1994 Particulars Rs Particulars Rs То Materials consumed: By Sales 85,000 Opening Stock 9,050 By Profit on sale of investments 600 Purchases 54,525 By interest on investments 300 63,575 Closing Stock 14,000 49,575 To Carriage Inwards 1,425 To Office Expenses 15,000 To Sales Expenses 3,000 To Financial Expenses 1,500 To Loss on Sale of Assets 400 То Net Profit 15,000 85,900 85,900 BALANCE SHEET as on 31 st December, 1994 Liabilities Rs Assets Rs Share capital: Fixed Assets: 2.000 Equity Shares of Rs 10 Buildings 15,000 each-fully paid 20,000 Plant 8,000 23,000 Reserves 9,000 Current Assets: Profit and Loss A/c 6,000 Stock-in-trade 14,000 Bank Overdraft 3,000 Debtors 7,000 Sundry Creditors: Bills Receivable 1,000 for expenses 2,000 Bank Balances 3,000 for other 8,000 10,000 25,000 48,000 48,000 [Ans. (a) 40%, (b) 1.92, (c) 0.84, (d) (i) 13,000/35,000 = 0.271, (ii) 13,000/49,000 = 0.271, (e) 15,000/35,000 = 42.85%] 6. The following it the condensed form of balance sheets of XYZ Limited for the three years ended 31st December, 1992, 31st December, 1993 and 31stDecember, 1994. (Rupees in Lakhs) Particulars 31.12.92 31.12.93 31.12.94 Current Assets: Cash in hand and at Bank 5.00 10.00 20.00 Stock: Raw Materials 12.00 18.00 20.00 Finished Products and Process Stock 30.00 35.00 25.00 Stores and Spares 3.00 4.00 5.00 Debtors 40.00 50.00 50.00 Fixed assets 90.00 110.00 120.00 Total 180.00 227.00 240.00 Current Liabilities 20.00 32.00 30.00 Debentures Secured 60.00 60.00 60.00 Unsecured Loans-Banks 15.00 40.00 45.00 Reserves and Surplus 30.00 32.50 38.75 Profit and Loss A/c before providing Self-Instructional Material 213 Financial Statements: Analysis and Interpretation NOTES for taxation and dividends 15.00 22.50 26.25 Equity Shares Rs 100 each 20.00 20.00 20.00 10% Preference Shares Rs 100 each 20.00 20.00 20.00 Total 180.00 227.00 240.00 Sales 300.00 360.00 400.00 Gross Profit 15% 18% 20% The company earned the net profit before providing for income tax at 50 paise per rupee. Equity shareholders to get dividends 50% more than preference shareholders. Show the appropriation account and work out the following ratios after reworking balance sheet. (1) Acid Test Ratio. (2) Stock Turnover Ratio. (3) Earning per share by capital employed. (4) Ratio of Fixed Assets to shareholders' Funds. (5) Return on Capital employed. 1992 1993 1994 [Ans. (1) 1.38 1.24 1.45 (2) 6.07 6.21 6.53 (3) 0.04 0.04 0.35 (4) 1.24 1.40 1.38 (5) 0.10 0.14 0.15] 7. Mr. T. Munim is made an offer by the promoters of Svarqiya Enterprises Limited to invest in the project of the company by purchasing a substantial portion of the share capital. He is promised good returns by way of dividends and capital appreciation. Mr. Munim desires that you compute the following ratios for financial analysis. Workings should form part of your answer. (i) Return on Investment Ratio, (ii) Net Profit Ratio, (iii) Stock Turnover Ratio, (iv) Current Ratio, and (v) Debt Equity Ratio. The figures given to him are as under: (Rs '000s) Sales 16,000 Raw materials consumed 7,800 Consumables 800 Direct Labour 750 Other Direct Expenses 480 Administrative Expenses 1,200 Selling Expenses 260 Interest 1,440 Fixed Assets 14,000 Income Tax 50% Depreciation 700 Share Capital 5,000 Reserves and Surplus 1,500 Secured Term Loans 12,000 Unsecured Term Loans 1,500 Trade Creditors 3,350 Investments 400 Receivables 3,700

Inventories 6,000 Cash in Hand and at Bank 100 Provisions 650 Other Current Liabilities 200 [Ans. ROI 20.05%; Net Profit

Ratio -25.06%; Stock Turnover Ratio -1.04; Current

Ratio -2.33; Debt-Equity Ratio -2.08] 214 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES Computation of Items of Financial Statements 8. From the following information, you are required to prepare a Balance Sheet: 1. Current Ratio-1.75 2. Liquid Ratio-1.25 3. Stock Turnover Ratio (Cost of Sales/ Closing Stock)-94. Gross Profit Ratio-25 per cent 5. Debt Collection Period—112 months 6. Reserves and Surplus to Capital—27. Turnover to Fixed Assets—1.28. Capital Gearing Ratio-0.6 9. Fixed Assets to Net Worth-1.25 10. Sale for the year Rs 12,00,000 Rs Rs í Ans. Share Capital 5,00,000 Stock 1,00,000 Long-term Liabilities 3,00,000 Debtors 1,50,000 Reserve and Surplus 1,00,000 Cash and Bank balance 1,00,000 Current Liabilities 2,00,000 Balance Sheet Total 11,00,000] Fixed Assets 7,50,000 9. You are given the following information pertaining to the financial statement of AYZ Ltd., as on 31 December, 1997. On the basis of the information supplied, you are required to prepare the Trading and Profit and Loss A/c for the year ended and a Balance Sheet as on that date. Rs Rs Net Current Assets 2,00,000 Ratio of Gross Profit on Turnover 25 per cent Issued Share Capital 6,00,000 Net Profit to Issued Shares Capital 20 per cent Current Ratio 1.8 Stock Turnover Ratio (cost Quick Ratio (Ratio of debtors and of goods sold/ closing stock) 5 times bank balance to current liabilities) 1.35 Average Age of Outstandings Fixed Assets to for the years 36 1 2 days Shareholders' Equity 80 per cent On 31 December, 1998, the current assets consisted only of Stock, Debtors and Bank Balance, Liabilities consisted of Share Capital and Current Liabilities and Assets consisted of Fixed Assets and Current Assets. Rs Rs [Ans. Gross Profit 1,87,500 Stock 12,500 Net Profit 1,20,000 Bank balance 2,62,500 Current Assets 4,50,000 Fixed Assets 8,00,000 Current Liabilities 2,50,000 Balance Sheet total 12,50,000] Debtors 75,000 10. Based on the following information of the financial ratios prepare Balance Sheet of Star Enterprises Ltd., as on December 31, 1995. Explain your working and assumptions: Current Ratio 25 Liquidity Ratio 1.5 Net Working Capital Rs 6,00,000 Stock Turnover Ratio 5 Ratio of Gross Profit to Sales 20% Turnover Ratio to Net Fixed Assets 2 Average Debt Collection Period 2.4 months Fixed assets to Net Worth 0.80 Long-term debt to Capital and Reserve 7/25 [Ans. Fixed Assets -Rs 10,00,000; Current Assets - Rs 10,00,000; Share Capital and Reserves-Rs 12,50,000; Long-term Deposits-Rs 3,50,000; Current Liabilities-Rs 4,00,000] Self-Instructional Material 215 Financial Statements: Analysis and Interpretation NOTES 11. From the following information, prepare a summarised balance sheet as on 31st March, 1997: (i) Working Capital Rs (ii) Reserves and Surplus 1,20,000 (iii) Bank Overdraft 80,000 (iv) Assets (fixed)-Proprietary Ratio 20,000 (v) Current Ratio 0.75 (vi) Liquidity Ratio 2.5 1.5 [Ans. **Current Liabilities** Rs 80.000: Current Assets Rs 2,00,000, Fixed Assets Rs 3,60,000; Stock Rs 1,10,000; Balance Sheet Total Rs 5,60,000] 12. Following are the

ratios relating to the trading activities of an Organisation: Debtors' Velocity 3 Months Stock Velocity 6 Months Creditors' Velocity 2 Months Gross Profit Ratio 20% Gross profit for the year ended 31st December, 1996 was Rs 5,00,000. Stock at the end of 1996 was Rs 20,000 more than what it was at the beginning of the year. Bills Payable and Receivable were Rs 36,667 and Rs 60,000 respectively. You are to ascertain the figures of: (a) Sales; (b) Sundry Debtors; (c) Sundry Creditors; and (d) Stock. [Ans. (a) Rs 25,00,000; (b) 5,65,000; (c) Rs 3,00,000; and (d) Rs 10,10,000] 13. From the following information, relating to a limited company, prepare a Statement of Proprietors' Funds: (i) Current Ratio 2 (ii) Liquid Ratio 1.5 (iii) Fixed Assets/Proprietary Funds 3/4 (iv) Working Capital Rs 75,000 (v) Reserves and Surplus 50,000 (vi) Bank Overdraft 10,000 There were no long-term loans or fictitious assets. All working must form part of your answer. [Ans. Proprietors' Funds: Sources Rs 3,00,000; Applications: (a) Fixed Assets Rs 2,25,000, (b) Working Capital Rs 75,000] 14. From the following information relating to Wise Limited, you are required to prepare its summarised Balance Sheet: (a) Current Ratio 2.5 (b) Acid Test Ratio 1.5 (c) Gross Profit/Sales Ratio 0.2 (d) Net Working Capital/Net Worth Ratio 0.3 (e) Sales/Net Fixed Assets Ratio 2.0 (f) Sales/Net Worth Ratio 1.5 (g) Sales/Debtors Ratio 6.0 (h) Reserves/Capital Ratio 1.0 (i) Net Worth/Long-term Loan Ratio 20.0 (j) Stock Velocity 2 Months (k) Paid up Share Capital Rs 10 lakhs [Ans. In Rs Lakhs: Fixed Assets Rs 15, Stock 4, Debtors Rs 5, Other Current Assets Re 1, Reserves Rs 10, Longterm Loans Re 1 and Current liabilities Rs 4] 216 Self-Instructional Material Financial Statements: Analysis and Interpretation NOTES 15. Complete the following annual financial statements on the basis of ratios given below: **PROFIT AND** LOSS ACCOUNT Dr. for the year ended 30th June, 1990 Cr Particulars Rs Particulars Rs То Cost of goods sold 6,00,000 By Sales 20,00,000 To Operating Expenses - -To Earnings before Interest and Tax - To Debenture Interest 10,000 By Earnings before Interest To Income Tax — Tax To Net Profit BALANCE SHEET as on 30th June, 1990 Liabilities Rs Assets Rs Net Worth: Fixed Assets — Share capital — Current Assets: - Reserve and Surplus - Cash - 10% Debentures - Stock - Sundry Creditors 60,000 35,000 (i) Net Profit to Sales 5% (ii) Current Ratio 1.5 (iii) Return on Net Worth 20% (iv) Inventory Turnover (based on cost of goods sold) 15 times (v) Share capital to reserves 4 : 1 (vi) Rate of Income tax 50% [Ans. Operating Expenses Rs 11,90,000; EBIT Rs 2,10,000; Income Tax Rs 1,00,000; Net Profit after Tax Rs 1,00,000; Fixed Assets Rs 5,70,000; Current Assets Rs 90,000; Net Worth Rs 5,00,000; Debentures Rs 1,00,000] Analysis of Financial Statements 16. Following is the Profit and Loss A/c and Balance Sheet of A Limited for the year ended 31 December, 1998 and Balance Sheet as on that date. Calculate the different ratios and comment on the financial position of the company. Particulars Rs Net Sales 3,00,000 Less: Cost of goods sold 2,58,000 Gross Profit 42,000 Operating Expenses: Selling 2,200 General and Administration 4,000 Rent of Office 2,800 9,000 Gross Operating Profit 33,000 Depreciation 10,000 23,000 Other Income: Interest on Government Securities 1,500 Gross Income 24,500 Other Expenses: Interest on Bank Overdraft 300 Interest on Debentures 4,200 4,500 Net Income before Tax 20,000 Tax @ 50 per cent on Net Income 10,000 Net Income after Tax 10,000 Self-Instructional Material 217 Financial Statements: Analysis and Interpretation NOTES BALANCE SHEET as on 31 December, 1998 Liabilities Rs Assets Rs Sundry Creditors 6,000 Cash 5,000

Bills Payable 10,000 Investments (Government securities) 15,000 Outstanding Expenses 1,000 Sundry Debtors 20,000 Provision for Taxation 13,000 Stock 30,000 Total Current Liabilities 30,000 Total Current Assets 70,000 6% Mortgage Debentures 70,000 Fixed Assets 1,80,000 7% Preference Shares 10,000 Less: Provision for Equity Shares 50,000 depreciation 50,000 1,30,000 Reserve and Surplus 40,000 Total Claims on Assets 2,00,000 2,00,000 [Ans. Gross Profit Ratio 14 per cent, Net Profit Ratio (after considering interest on bank overdraft): 7.56 per cent,

ROI 13.53 per cent, Stock Turnover Ratio 8.6, Debt Collection Period 24 days, Fixed Assets Turnover 2.3, Fixed Assets Ratio .76, Debt-equity ratio 70/1000 = 0.7, Current ratio 2.3] 17.

The following items appear in the accounts at 31 December, 1996 of Operations Ltd.: Rs Cash 48,600 Land and Buildings at Cost 8,00,000 Deposits and Payments in Advance 62,000 Stock 2,72,800 Trade Creditors 4,05,750 General Reserve 1,00,000 Debtors 5,23,000 Bills Receivable 22,600 Plant and Machinery at cost less depreciation 5,44,000 Debentures—repayable 2000 (secured) 2,50,000 Bank Overdraft 52,000 Ordinary Stock,

Rs 10

units 10,00,000 Profit and Loss A/c balance 2,17,000 Proposed ordinary stock Dividend for 1996, net 86,250 Trade Investments 20,000 Advance payment of Tax 1,00,000 Provision for Taxation 2,64,000 Bills Payable 18,000 Net sales for the year 1996 21,82,400 Net Profit for the year 1996 before taxation and dividends 3,27,830 Note: The values of all fixed assets reflect current price levels and adequate depreciation has been provided. You are required: (i) to arrange the above items in the form of a financial statement to show the following accounting ratios, which should be stated: (a) return on capital employed; (b) stock: fixed assets; (c) current assets: current liabilities; (d) sales: debtors and bills receivable; (ii) to indicate briefly the significance of these ratios and how they may be used to compare the efficiency of the business with others in the same industry. [Ans. Ratios (a) ROI on shareholders' funds in 24.9 per cent, (b) 1 : 4.93, (c) 1.25 : 1, (d) 4 : 1] [Hint. Working Capital

Rs 2,03,000; Shareholders' Equity Rs 13,17,000]

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Financial Statements: Analysis and Interpretation NOTES 18.

India International Limited has been in existence for two years. The following particulars are extracted from its published accounts: BALANCE SHEET

at year end Liabilities 1st Year 2nd year Assets 1st Year 2nd Year

Rs Rs Rs Rs

Equity Capital 1,00,000 1,00,000 Fixed Assets 2,08,000 1,98,000 Reserve 10,000 20,000 Stock 30,000 60,000 Profit & Loss A/c 14,000 2,000 Book Debts 40,000 80,000 Loan 1,10,000 80,000 Cash at Bank 30,000 2,000 Bank Overdraft — 20,000 Creditors 30,000 90,000 Provision for Taxation 34,000 13,000

Proposed Dividend 10,000 15,000 3,08,000 3,40,000 3,08,000 3,40,000 PROFIT AND LOSS ACCOUNT Particulars Rs Rs Particulars Rs Rs

Interest on Loan 2,400 4,800 Balance b/d 14,000 Directors' Remuneration 10,000 30,000 Profit for the year 80,400 60,800 Provision for Taxation 34,000 13,000 Dividend 15,000 Transfer to Reserve 10,000 10,000 Balance c/d 14,000 2,000 Total 80,400 74,800 80,400 74,800 Sales amounted

to

Rs 6,00,000 in the first year and Rs 5,00,000

in the second year. Examine in detail from the point

of (i) Profitability, (ii) Solvency and (iii) Sales. Make such other computations as seem expedient to you and write on overall internal analysis of this company. [Ans. 1st Year 2nd Year Net Profit Ratio 11.73% 6.16% ROI (based on Capital at end) 30.08% 15.25% Current Ratio 1.35 1.03 Stock Turnover 20 8.33 Debtors Turnover 15 6.25] 6.18

FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

Self-Instructional Material 219 Cash

and Funds Flow Statements NOTES UNIT 7 CASH AND FUNDS

FLOW STATEMENTS Structure 7.0

Introduction 7.1 Unit Objectives 7.2

Meaning of Cash Flow Statement 7.3 Preparation of Cash Flow Statement 7.4 Sources of Cash 7.5 Difference between Cash Flow Analysis and Funds Flow Analysis 7.6 Utility of Cash Flow Analysis 7.7 Limitations of Cash Flow Analysis 7.8 As 3

(Revised): Cash Flow

Statements 1 7.9

Meaning of

Funds Flow Statement 7.9.1 Meaning of Funds 7.9.2 Meaning of 'Flow of Funds' 7.9.3

Finding out of Transaction Involving Change in Working Capital 7.10 Uses of Funds Flow Statement 7.11 Funds Flow Statement and Income Statement 7.12 Preparation

of Funds Flow Statement 7.12.1 Sources of Funds 7.12.2 Applications of Funds 7.13

Treatment of Provision for Taxation and Proposed Dividends 7.13.1 Provision of Taxation 7.13.2 Proposed Dividends 7.14 Computation of Funds from Operations 7.14.1 Digging out Hidden Information 7.15 Comprehensive Funds Flow Statements 7.16 Statement of Changes In Financial Position 7.17

Key Terms 7.18 Summary 7.19 Answers to '

Check Your Progress' 7.20 Questions and Exercises 7.21 Practical Problems 7.22 Further Reading 7.0 INTRODUCTION Information about the cash flow of an enterprise is useful in providing

users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows.

The economic decisions that are taken by

the

users require an evaluation of

the ability of an enterprise to generate cash and cash equivalents and the timing and uncertainty of their generation.

In view of the importance of cash flows in decision making, an enterprise should prepare a cash flow statement giving both inflows and outflows of cash during a particular period.

A cash flow statement, when used in conjunction with other financial statements, provides information that enables its

users to evaluate the changes in net assets of an enterprise, its financial structure and its ability to affect the amount and timings of

the cash flows in order to adapt to changing circumstances. The present unit deals with all these aspects in detail. 220

Self-Instructional Material Cash and Funds Flow Statements NOTES The Funds Flow Statement 1 is widely used by financial analysts, credit grant- ing institutions and financial managers in performance of their jobs.

It has become a useful tool in their analytical kit. This is because the financial statements, i.e., 'Income Statement' and the 'Balance Sheet' have a limited role to perform.

Income Statement measures flow restricted to transactions that pertain to rendering of goods or services to customers. The balance sheet is merely a static statement. It

is

a statement of assets and liabilities as on a particular date.

lt

does not sharp by focus those major financial transactions which have been behind the balance sheet changes. One has to draw inferences from the Balance Sheet about major financial transactions only after comparing the Balance Sheets of two periods. For example, if the fixed assets worth Rs 2,00,000 are purchased during the current year by raising share capital of Rs 2,00,000, the Balance Sheet will simply show a higher capital figure and higher fixed assets figure. In case, one compares the current year's Balance Sheet with the previous year's Balance Sheet, then only one can draw an inference that fixed assets were acquired by raising share capital of Rs 2,00,000. Similarly, certain important transactions which might occur during the course of the accounting year might not find any place in the Balance Sheet. For example, if a loan of Rs 2,00,000 was raised and paid in the accounting year, the Balance Sheet will not depict this transaction. How- ever, a financial analyst must know the purpose for which the loan was utilised and the source from which it was raised. This will help him in making a better estimate about the company's financial position and policies. In the following pages, we are explaining the meaning and utility of this type of statement and the technique of preparing it. 7.1 UNIT

OBJECTIVES

After going through this unit, you will be able to: ? Explain the meaning of

cash flow statement ? Understand the concept of

funds in cash flow analysis ? Identify the sources and applications of cash ? Differentiate between cash flow analysis and funds

flow analysis ? Explain the utility and limitations of cash flow analysis ? Prepare cash flow statement ? Understand the meaning of 'funds flow statement'; ?

Identify transactions which involve changes in funds; ? Explain the purpose and utility of funds flow statement; ? Differentiate the funds flow statement from income statement and balance sheet; ? Prepare funds flow statement; ? Explain the meaning of certain key terms 7.2 MEANING

OF CASH FLOW STATEMENT A

Cash Flow Statement is

a statement depicting change in cash position from one period to another.

For example, if the cash balance of a business is shown by its Balance Sheet on 31 December, 1997 at Rs 20,000

while the cash balance as per its Balance Sheet on 31 December, 1998 is 30,000, there has been an inflow of cash of Rs 10,000 in the year 1998 as compared to the year 1997. The cash flow statement explains the reasons for such inflows or outflows of cash, as the ------1

It is also termed as 'Statement of Changes in Financial Position (Working Capital basis)'.

Self-Instructional Material 221 Cash and Funds Flow Statements NOTES

case may be. It also helps management in making plans for the immediate future. A Projected Cash Flow Statement or a Cash Budget will help the management in ascertaining how much cash will be available to meet obligations to trade creditors, to pay bank loans and to pay dividend to the shareholders. A proper planning of the cash resources will enable the management to have cash available whenever needed and put it to some profitable or productive use in case there is surplus cash available. The term 'Cash' here stands for cash and bank balances. It has already been explained in the previous unit that the term 'Funds', in a narrower sense, is also used to denote cash. In such a case, the term 'Funds' will exclude from its purview all other current assets and currents liabilities and the term 'Funds Flow Statement' and 'Cash Flow Statement' will have synonymous meanings. However, for the purpose of this study, we are calling this part of study Cash Flow Analysis and not Funds Flow Analysis. 7.3 PREPARATION OF CASH FLOW STATEMENT The

Cash Flow Statement can be prepared on the same pattern on which a Funds Flow Statement is prepared. The change in the cash position from one period to another is computed by taking

in account 'Sources' and 'Applications' of cash.

BALANCE SHEET AS AT 31.12.1996 (Rs. '000) Assets 1996 1995 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 1,910 Accumulated depreciation (1,450) (1,060) 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 Statement of Profit and Loss for the period ended 31.12.1996 (Rs. '000) Sales 30,650 Cost of sales (26,000) Gross profit 4,650 Depreciation (450) Administrative and selling expenses (910) Contd...

222 Self-Instructional Material Cash and Funds Flow Statements NOTES 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 earthquake disaster settlement 180 Net profit after extraordinary item 3,530 Income-tax (300) Net profit 3,230 Direct Method Cash Flow Statement [Paragraph 18(a)] (

Rs. '000) 1996 Cash flows from operating activities 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 1,870 Cash flows from investing activities

Purchase of

fixed assets (350)

Proceeds from sale of equipment 20 Interest received 200 Dividends received 160

Net cash from investing activities 30 Cash flows from financing activities Proceeds from issuance of share capital 250 Proceeds from long-term borrowings 250 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 (see Note 1) 160 Cash and cash equivalents

at end of

period (

see Note 1) 910

Indirect Method Cash Flow Statement [Paragraph 18(b)] (

Rs. '000) 1996 Cash flows from operating activities Net profit before

taxation, and extraordinary item 3,350 Adjustments for : Depreciation 450 Foreign exchange loss 40 Interest income (300) Dividend income (200) Interest expense 400 Operating profit before working capital changes 3,740

Increase in sundry debtors (500) Decrease in inventories 1,050 Decrease in sundry creditors (1,740) Contd... Self-Instructional Material 223 Cash and Funds Flow Statements NOTES 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 1,870 Cash Flow Statements 35 Cash flows from investing activities Purchase of fixed assets (350) Proceeds from sale of equipment 20 Interest received 200 Dividends received 160 Net cash from investing activities 30 Cash flows from financing activities Proceeds from issuance of share capital 250 Proceeds from long-term borrowings 250 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 (see Note 1) 160 Cash and cash equivalents at end of period (see Note 1) 910 Notes to the cash flow statement (direct method and indirect method) 1. Cash and Cash Equivalents Cash and cash equivalents consist of cash on hand and balances with banks, and investments in money- market instruments. Cash and cash equivalents included in the cash flow statement comprise the following balance sheet amounts, 1996 1995 Cash on hand and balances with banks 200 25 Short-term investments 670 135 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. The company has undrawn borrowing facilities of 2,000 of which 700 may be used only for future expansion. 2. Total tax paid during the year (including tax deducted at source on dividends received) amounted to 900. Alternative Presentation (indirect method) 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 (26,910) Operating profit before working capital changes 3,740 Working Notes The working notes given below do not form part of the cash flow statement and, accordingly, need not be published. 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 Rs. '000.) 224 Self-Instructional Material Cash and Funds Flow Statements NOTES 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 300 at source from dividends received) 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 900, 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 (see paragraph 34). 4. Repayment of long-term borrowings Long-term debt at the beginning of the year 1,040 Add: Long-term borrowings made during the year 250 1,290 Less: Long-term borrowings at the end of the year 1,110 180 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 Cash

Flow Statement for a Financial Enterprise This illustration does not form part of the accounting standard. Its purpose is to illustrate the application of the accounting standard. 1. The illustration shows only current period amounts. 2. The illustration is presented using the direct method. Cash flows from operating activities (Rs. '000) 1996 Interest and commission receipts 28,447 Interest payments (23,463) Recoveries on loans previously written off 237 Cash payments to employees and suppliers (997) Operating profit before changes in operating assets 4,224 (Increase) decrease in operating assets: Short-term funds (650) Contd...

Self-Instructional Material 225 Cash and Funds Flow Statements NOTES Deposits held for regulatory or monetary control purposes 234 Funds advanced to customers (288) Net increase in credit card receivables (360) Other short-term securities (120) Increase (decrease) in operating liabilities: Deposits from customers 600 Certificates of deposit (200) Net cash from operating activities before

income tax 3,440

Income taxes

paid (100)

Net cash from operating activities 3,340 Cash flows from investing activities

Dividends received 250 Interest received 300 Proceeds from sales of permanent investments 1,200

Purchase of permanent investments (600) Purchase

of fixed assets (500) Net cash from investing activities 650 Cash

Flow Statements 39 Cash flows from financing activities

Issue of shares 1,800

Repayment of long-term

borrowings (200) Net decrease in other borrowings (1,000)

Dividends

paid (400)

Net cash

from financing activities 200 Net increase in cash and cash equivalents 4,190 Cash and cash equivalents

at beginning of period 4,650 Cash and cash equivalents

at end of period 8,840 7.4

SOURCES OF CASH Sources of Cash can be internal as well as external: Internal Sources.

Cash from operations is the main internal source. The Net Profit shown by the Profit and Loss Account will have to be adjusted for non- cash items for finding out cash from operations. Some of these items are as follows: (i) Depreciation. Depreciation does not result in outflow of cash and, therefore, net profit will have to be increased by the amount of depreciation or development rebate charged, in order to find out the real cash generated from operations. (ii) Amortization of intangible assets. Goodwill, preliminary expenses, etc., when written off against profits, reduce the net profits without affecting the cash balance. The amounts written off should, therefore, be added back to profits to find out the cash from operations. (

iii) Loss

on sale of fixed assets. It does not result in outflow of cash and, therefore, should be added back to profits. (iv) Gain

from sale of fixed assets. Since sale of fixed assets is taken as a separate source of cash, it should be deducted from net profits. (v) Creation of reserves. If profit for the year has been arrived at after charging transfers to reserves, such transfers should be added back to profits. In case operations show a net loss, such net loss after making adjustments for non-cash items will be shown as an application of cash.

Thus, cash from operations is computed on the pattern of computation of 'Funds' from operations, as explained in the earlier chapter. However, to find out real cash from operations, adjustments will have to be made for 'changes' in current assets and current liabilities arising on account of operations, viz., trade debtors, trade creditors, bills receivable, bills payable, etc.

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Self-Instructional Material Cash and Funds Flow Statements NOTES

For the sake of convenience, computation of cash from operations can be studied by taking two different situations: (1) when all transactions are cash transactions, and (2) when all transactions are not cash transactions. When All Transactions are Cash Transactions. The computation of cash from operations will be very simple in this case.

Transactions are Cash Transactions. The computation of cash from operations will be very simple in this case.

The

net profit as shown by the Profit and Loss Account

will

be

taken as the amount of cash from operations

as shown in the following example: Example **PROFIT AND LOSS** ACCOUNT for the year ended 31 December 1998 Particulars Rs Particulars Rs То Purchases 15.000 Bv Sales 50,000 To Wages 10,000 To Rent 500 To Stationery 2,500 To Net profit 22,000 50,000 50,000 In the example given above, if all transactions are cash transactions, i.e., all purchases have been paid for in cash and all sales have been realised in cash, the cash from operations will be Rs 22,000, i.e., the net profit as shown by the Profit and Loss Account. Thus, in case of all transactions being cash transactions, the equation for computing cash from operations can be put as follows: Cash from Operations = Net Profit When all transactions are not cash transactions. In the example given above, we have computed cash from operations on the basis that all transactions are cash transactions. It does not really happen in actual practice. The business sells goods on credit. It purchases goods on credit. Certain expenses are always outstanding and some of the incomes are not immediately realised. Under such circumstances, the net profit made by a firm cannot generate equivalent amount of cash. The computation of cash from operations in such a situation can be done conveniently if it is done in two stages: (i) Computation of funds (i.e., working capital) from operations as explained in the preceding chapter; and (ii) Adjustments in the funds so calculated for changes in the current assets (excluding cash) and current liabilities. We are giving below an illustration for computing 'Funds' from operations. However, since there are no credit transactions, hence the amount of 'Funds' from operations is as a matter of cash from operations as shown in the illustration. Illustration 7.1. TRADING AND **PROFIT AND** LOSS ACCOUNT for the year ended 31 March 1998 Particulars Rs Particulars Rs To Purchases 20,000 By Sales 30,000 To Wages 5,000 To Gross Profit c/d 5,000 30,000 30,000 To Salaries 1.000 By Gross Profit b/d 5,000 То Rent 1,000 By Profit on sale of building: To Depreciation on Plant 1,000 Book value Rs 10.000 To Loss on sale of Furniture 500 Sold for 15,000 5,000 To Goodwill written off 1,000 To Net Profit 5,500 10,000 10,000 Check Your Progress 1. State whether each of the following statements is ' Trup or 'False': (a) Cash flow statement reveals the effects of transactions involving movement of cash. (b) The term 'Funds' means 'Current Assets' in Case of a Cash Flow Analysis. (c) A 'Cash Flow Statement' can very well be equated with an 'Income Statement'. (d) A company should keep large balances of cash in hand so it can meet all contingencies. (e) Increase in provision for doubtful debts should be added back in order to find out cash from operations. (f) Funds flow statements and cash flow statements are one and the same. Self-Instructional Material 227 Cash and Funds Flow Statements NOTES Calculate the Cash from Operations. Solution: CASH FROM OPERATIONS Net Profit as per P & L A/c

Rs 5,500

Add: Non-cash items (i.e., items which do not result in outflow of cash): Depreciation

Rs 1,000

Loss on sale of furniture 500 Goodwill written off 1,000 2,500 8,000 Less: Non-cash items (items which do not result inflow of cash): Profit on sale of building 5,000 (Rs 15,000 will be taken as a source of cash) Cash from Operations 3,000 Adjustments for Changes in Current Assets and Current Liabilities In the illustration given above, the cash from operations has been computed on the same pattern on which funds from operations are computed. As a matter of fact, the funds from operations is equivalent to cash from operations in this case. This is because of the presumption that all are cash transactions and all goods have been sold. However, there may be credit purchases, credit sales, outstanding and prepaid expenses, etc. In such a case, adjustments will have to be made for each of these items in order to find out cash from operations. This has been explained in the following pages: (i) Effects of Credit Sales. In business, there are both cash sales and credit sales. In case, the total sales are

Rs 30,000 out of which the credit sales are Rs 10,000, it means sales have contributed only the extent of Rs 20,000 in providing cash from operations. Thus, while computing cash from operations, it will

be necessary that suitable adjustments for outstanding debtors are also made. Consider the following example: Example 1 Net Profit for the year Rs 20,000 Total Sales 40,000 Debtors Outstanding at the end of the accounting year 10,000 The above figures show that out of total sales of Rs 40,000 which must have been considered from computing net profit, Rs 10,000 has still to be realised in cash from debtors. Therefore, cash from operations should be computed as follows: Net Profit for the year

Rs 20,000

Less: Debtors Outstanding at the end of the accounting year 10,000 Cash from Operations 10,000 In case, there were outstanding debtors in the beginning of the accounting year amounting to Rs 15,000, it can safely be presumed that they must have been realised during the course of the year. The amount of cash from operations will therefore be computed as follows: Net Profit for the year

Rs 20,000

Less: Debtors Outstanding

at the end of the accounting year 10,000 10,000 Add: Debtors Outstanding at the end of the accounting year 15,000 Cash from operations 25,000 Thus, cash from operations can be calculated on the basis of the following equation if there are debtors outstanding at the end as in the beginning of the accounting year:

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Self-Instructional Material Cash and Funds Flow Statements NOTES + Debtors Outstanding at the beginning of the accounting year.

Cash from Operations = Net Profit Or – Debtors Outstanding at the end of the accounting year.

Or + Decrease in Debtors. Cash from Operations = Net Profit Or - Increase in Debtors

For example, in the above case, cash from operations can be computed as follows:

Rs 20,000 + Rs 5,000 = Rs 25,000 (

ii) Effects of Credit Purchases. Whatever have been stated regarding credit sales is also applicable to credit purchases. The only difference will be that decrease in creditors from one period to another will result in decrease of cash from operations because it means more cash payments have been made to the creditors which will result in outflow of cash. On the other hand, increase in creditors from one period to another will result in increase of cash from operations because less payment has been made to the creditors for goods supplied which will result in increase of cash balance at the disposal of the business. Example 2 Purchases for the year (including credit purchases of Rs 10,000) Rs 30,000

Sales for the year 40,000 Expenses 5,000 The amount of Net Profit comes to: Sales 40,000 Less: Purchases Rs 30,000

Expenses 5,000 35,000 Net Profit 5,000 Though the net profit is Rs 5,000, the cash operations will be Rs 15,000 (Rs 5,000 + Rs 10,000 for credit purchases). This is because though Purchases of Rs 30,000

have been considered for calculating the Net Profit, the actual cash which has been paid for purchases is only Rs 20,000. Thus, cash from operations stands increased by

Rs10,000,

the amount of creditors outstanding at the end of the year.

Example 3 Sales Rs 40,000

Purchases 30,000 Expenses 5,000 Creditors Outstanding in

the beginning of the accounting year 10,000 Creditors Outstanding at the end of the accounting year 15,000 The Cash from Operations

will be computed as follows: Sales 40,000 Less: Purchases Rs 30,000 Expenses 5,000 35,000 Net Profit 5,000 Add: Creditors Outstanding

at the end of the accounting year 15,000 20,000 Less: Creditors Outstanding at the beginning of the accounting year 10,000

Cash from operations 10,000 Alternatively, cash from operations can be computed as follows: Net Profit for the year Rs 5,000 Add: Increase in Creditors (Rs 15,000 – Rs 10,000) 5,000

Cash from Operations 10,000 Thus, the effect of credit purchases can be shown with the help of the following equation in computing cash from operations:

Self-Instructional Material 229 Cash and Funds Flow Statements NOTES +

Increase in Creditors Cash from Operations = Net Profit Or - Decreases in Creditors (

iii) Effect of Opening and Closing Stocks. The amount of opening stock is charged

to the debit side of the Profit and Loss Account.

It thus reduces the net profit without reducing the cash from operations. Similarly,

the amount of closing stock is put

on the credit side of

the

Profit and Loss Account.

lt

thus increases the amount of net Profit without increasing the cash from operations.

This will be clear with the help of the following

example: Example 4 Opening Stock Rs 5,000 Purchases 20,000 Sales 35,000 Closing Stock 10,000 Expenses 5,000 The amount of net profit can be computed as follows:

PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs Opening Stock 5,000 Sales 35,000 Purchases 20,000 Closing Stock 10,000

Expenses 5,000 Net Profit 15,000 45,000 45,000 The net profit for the year is Rs 15,000. The cash from operations will be computed as follows: Net Profit for the year

Rs 15,000 Add:

Opening Stock 5,000 20,000 Less: Closing Stock 10,000 Cash from Operations 10,000 Alternatively, the amount of cash from operations can be computed as follows: Net Profit for the year Rs 15,000 Less:

Outflow of cash on account of increase in stock 5,000 Cash from Operations 10,000 The effect of change in stock on cash from operations can now be put up as follows: +

Decrease in Stock Cash from Operations = Net Profit Or - Increase in Stock (

iv)Effect of Outstanding Expenses, Incomes Received in Advance, etc. The effect of these items on cash from operations is similar to the effect of creditors. This means any increase in these items will result in increase in cash from operations while any decrease means decrease in cash from operations. This is because net profit from operations is computed after charging to it all expenses whether paid or outstanding. In case certain expenses have not been paid, this will result in decrease of net profit without a corresponding decrease in cash from operations. Similarly, income received in advance is not taken into account while calculating profit from operations, since itrelates to the next year. It, therefore, means cash from operations will be higher than the actual

net profit as shown by the Profit and Loss Account.

Consider the following example:

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Self-Instructional Material Cash and Funds Flow Statements NOTES Example 5 Gross Profit Rs 30,000 Expenses paid Rs 10,000 Interest received Rs 2,000 Rs 2,000

are outstanding on account of expenses while Rs 500 has been received as interest for the next year. The net profit will be computed as follows:

PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To Expenses paid 10,000 By Gross Profit 30,000 Add. Outstanding 2,000 12,000 By Interest received 2,000 To Net Profit 19,500

Less: Interest received in advance 500 1,500 31,500 31,500 The cash from operations will now be computed as follows: Rs

Net Profit for the year 19,500 Add:Expenses Outstanding at the end of the year 2,000 Interest received in advance 500 Cash from Operations 22,000 Example 6 Net Profit for the year 1993 10,000 Expenses Outstanding as on 1 January, 1993 2,000 Expenses Outstanding as on 31 December, 1993 3,000 Interest received in Advance 1 January, 1993 1,000 Interest received in Advance 32 December, 1993 2,000 The cash from operations will be computed as follows: Net Profit for the year 10,000 Add:Expenses Outstanding on 31 December, 1993 3,000 Income received in Advance on 31 December, 1993 2,000 I

Rs 2,000

Interest received in Advance on 1 January, 1993 1,000 3,000 Cash from Operations 12,000 Alternatively, cash operations can be computed as follows: Net Profit for the year Rs 10,000 Add: Increase in

Outstanding Expenses 1,000 Add: Increase in interest received in Advance 1,000 Cash from Operations 12,000 Thus, the income received in advance and outstanding expenses on cash operations can be shown as follows: + Increase in Outstanding Expenses Cash from Operations = Net Profit + Increase in Income received in

Advance – Decrease in Outstanding Expenses – Decrease in

Income received in Advance (v) Effect of Prepaid Expenses and Outstanding Income. The effect of prepaid expenses and outstanding income of cash from operations is similar to the effect of debtors. While computing net profit from operations, the expenses only for

the accounting year are charged to the Profit and Loss Account. Expenses paid in advance

are not charged to the Profit and Loss Account. Thus, prepayment of expenses does not decrease net profit for the year but it decreases cash from operations. Similarly, income earned during a year is credited to the Profit and Loss Account whether it has

Check Your Progress 2.

Choose the correct answer: (i) Cash from operations is equal to: (a) Net profit plus increase in outstanding expenses (b) Net profit plus increase in debtors, (c) Net profit plus increase in stock. (ii) Increase

in the amounts of debtors results in: (a) Decrease in cash, (b) Increase in cash, (c) No change in

cash. (iii) Increase

in the amount of bills payable results in: (a) Increase in cash, (b) Decrease in cash, (

c) No change in

cash.

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been received or not. Thus, income, which has not been received but which has become due, increase the net profit for the year without increasing cash from operations.

This will be clear with the help of the following

example: Example 7 Gross Profit

Rs 30,000 Expenses paid 10,000 Interest received 2,000 The expenses paid include Rs 1,000 paid for the next year. While interest of Rs500

has become due during the year, but it has not been received so far. The net profit for the year will be computed as follow:

PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To Expenses paid 10,000 By Gross Profit 30,000 Less: Prepaid Exp. 1,000 9,000 By Interest received 2,000 To Net Profit 23,500 Add: Interest due 500 2,500 32,500 32,500 Now, the cash from operations will be computed as follows: Net Profit for the year Rs 23,500 Less: Prepaid Expenses 1,000 Less: Outstanding Interest 500 15,00 22,000 Example 8 Net Profit for the year 1993 20,000 Prepaid expenses 1 January, 1993 2,000 Outstanding (accrued) Income 1 January, 1993 1,000 Prepaid Expenses 31 December, 1993 3,000 Outstanding Income 31 December, 1993 2,000 Cash from Operations will be computed as follows: Net Profit for the year

Rs 20,000

Less: Prepaid Expenses on 31 Dec., 1993 3,000 Outstanding Income on 31 Dec., 1993 2,000 5,000 15,000 Add: Prepaid Expenses on 1 Jan., 1993 2,000 Income Outstanding on 1 Jan., 1993 1,000 3,000 18,000 Alternatively, Cash from Operations can be computed as follow: Net Profit for the year

Rs 20,000 Less: Increase in Prepaid Expenses Rs 1,000

Increase in Outstanding Income 1,000 2,000 18,000 Thus the effect of prepaid expenses and accrued income on cash from operations can be shown in the form of following equation: +

Decrease in Prepaid Expenses + Decrease in Accrued Income Cash from Operations = Net Profit – Increase in Prepaid Expenses – Income in Accrued Income

The overall effect of stock, debtors, creditors, outstanding expenses, income received in advance, prepaid expenses and accrued can be shown in the form of the following formula:

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Self-Instructional Material Cash and Funds Flow Statements NOTES +

Decrease in Debtors + Decrease in Stock + Decrease in Prepaid Expenses + Decrease in Accrued Income + Increase in Creditors Cash from Operations = Net Profit + Increase in Outstanding Expenses – Increase in Debtors – Increase in Stock – Increase in Prepaid Expenses – Increase in Accrued Income – Decrease in Creditors – Decrease in Outstanding Expenses

The above formula may

be summarised in the form of following general rules: Increase in a Current Asset Decrease in a Current Liability results in Decrease in Cash

AND

Decrease in a Current Asset Increase in a Current Liability results in Increase in Cash

Illustration 7.2 Continuing the figures given as Illustration 7.1 calculate the cash from operations with the following additional information: Balance as on 31 March, 1994 31 March 1995 Rs Rs (i) Stocks 10,000 12,000 (ii) Debtors 15,000 20,000 (iii) Creditors 5,000 7,500 (iv) Bills Receivable 5,000 8,000 (v) Outstanding Expenses 3,000 5,000 (vi) Bills Payable 4,000 2,000 (vii) Prepaid Expenses 1,000 500 Solution: The computation of cash from operations can be done conveniently if it is done as explained before in two stages: (i)Computation of 'Funds' from operations, taking the meaning of 'Funds' as working capital. (ii) Adjustment in the amount of 'Funds' so computed on the basis of 'current assets' and 'current liabilities'. The funds from operations amount Rs 3,000 (as computed in Illustration 7.1). However, adjustments will have to be made in this amount for current assets and current liabilities in order to compute cash from operations. This has to be done by taking each item of current assets and current liabilities independently as explained below: (i) The investment in stock has increased by

Rs 2,000

as compared to the previous year. This means cash must gone out to the extent of

Rs 2,000.

It will, therefore, decrease the cash balance. (ii) Debtors have gone up from

Rs 15,000 on March, 1994 to Rs 20,000 on 31 March, 1995. There is an increase of Rs 5,000. It shows that sales

Self-Instructional Material 233 Cash and Funds Flow Statements NOTES to the of Rs 5,000

have not been realised in cash. Hence, cash from operations will be reduced by Rs 5,000. (iii) Creditors have gone up by Rs 2,500.

Thus, purchases to the extent of this amount have not been paid in cash. It is, therefore, a 'source' of cash. (iv) Bills Receivable have increased by

Rs 3,000. Thus, sales to the extent of Rs 3,000

have not been paid in cash. Hence cash, on account of operations will be reduced by

Rs 3,000. (v) Bills Payable have come down by Rs 2,000.

It shows more payments of cash. The cash from operations will stand reduced by

Rs 2,000. (vi) Outstanding Expenses have increased by Rs 2,000.

Thus, expenses to this extent have not been paid resulting in increase of cash from operations by this amount. (vii) Prepaid Expenses have come down by

Rs 500.

This shows less of payment and hence cash operations will increase by

Rs 500. Cash

from operations now can be computed as follows: Increase (+) Decrease (–) Cash from Operations as per P. & L. A/c (Illustration 7.1) Rs 3,000

Increase

in Stock 2,000 Increase in Debtors 5,000 Increase in Creditors 2,500 Increase in Bills Receivable 3,000 Decrease in Bills Payable 2,000

Increase in Outstanding Expenses 2,000 Decrease in Prepaid Expenses 500 5,000 12,000 (7,000) (Inflow) of cash on account of

operations (4,000) External Sources. The external sources of cash are: (i) Issue of New Shares. In case shares have been issued for cash, the net cash received (i.e., after deducting expenses on issue of shares or discount on issue of shares) will be taken as a source of cash. (ii) Raising Long-term Loans. Long-term loans such as issue of debentures, loans from Industrial Finance Corporations, State Financial Corporation, IDBI, etc., are sources of cash. They should be shown separately. (iii) Purchase of Plant and Machinery on deferred payments. In case plant and machinery has been purchased on a deferred payment system, it should be shown as a separate source of cash to the extent of deferred credit. However, the cost of machinery purchased will be shown as an application of cash. (iv) Short-term Borrowings—cash credit from banks. Short-term borrowing, etc., from banks increase cash available and they have to be shown separately under this head. (v) Sale of Fixed Assets, Investments, etc. It results in generation of cash and therefore, is, a source of cash. Decrease in various current assets and increase in various current liabilities (discussed before) may be taken as external sources of cash, if they are not adjusted while computing cash from operations. Applications of Cash Applications of cash may take any of the following forms: (i) Purchase of Fixed Assets. Cash may be utilised for additional fixed assets or renewals or replacement of existing fixed assets.

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Self-Instructional Material Cash and Funds Flow Statements NOTES (

ii)

Payment of Long-term Loans. The payment of long-term loans such as loans from financial institutions or debentures results in decrease in cash. It is, therefore, an application of cash. (iii) Decrease in Deferred Payment Liabilities. Payments for plant and machinery purchased on deferred payment basis has to be made as per the agreement. It is, therefore, an application of cash. (iv) Loss on account of Operations. Loss suffered on account of business operations will result in outflow of cash. (v) Payment of Tax. Payment of tax will result in decrease of cash and hence it is an application of cash. (vi)

Payment of Dividend. This decreases the cash available for business and hence it is an application of cash. (vii)

Decrease in Unsecured Loans, Deposits, etc. The decrease in these liabilities denotes they have been paid off to that extent. It results, therefore,

in

outflow of cash. Increase in various current assets or decrease in various current liabilities may be shown as applications of cash, if changes, in these items have not been adjusted while finding out cash from operations.

Format of A Cash Flow Statemeny **†** A cash flow statement can be prepared in the following form:

CASH FLOW STATEMENT for the year ending on.... Balance as on 1 January, Cash

Balance Bank Balance Mdd: Sources of Cash: ____ Issue of Shares Raising of Long-term loans Sale of Fixed Assets Short-term Borrowings Cash from Operations: Profit as per Profit and Loss A/c Add/Less: Adjustment for Non-cash Items

Add:

Increase in Current Liabilities Decrease in Current Assets Less: Increase in current assets Decrease in current liabilities

Total Cash available (1) _____ Less: Applications of Cash: Redemption of Redeemable Preference Shares Redemption of Long-term Loans Purchase of Fixed Assets Decrease in Deferred Payment Liabilities Cash Outflow on Account of Operations Tax paid Dividend paid Decrease in unsecured Loans, Deposits, etc. Total Applications (2) _____ Closing Balance* Cash balance Bank balance * It should tally with the balance as shown by (1)–(2). **†**

The format given above has undergone a change as per AS-3 discussed later in the book.

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DIFFERENCE BETWEEN CASH FLOW ANALYSIS AND FUNDS FLOW ANALYSIS Following are the points of difference between a Cash Flow Analysis and a Funds Flow Analysis: 1. A Cash Flow Analysis is concerned only with the change in cash position while a Fund Flow Analysis is concerned with change in working capital position, between two balance sheet dates. Cash is only one of the constituents of working capital besides several other constituents such as inventories, accounts receivable, prepaid expenses. 2. A Cash Flow Statement is merely a record of cash receipts and disbursements. Of course, it is valuable in its own way but it fails to bring to light many important changes involving the disposition of resources. While studying the short-term solvency of a business one is interested not only in cash balance but also in the assets which can be easily converted into cash. 3. Cash flow analysis is more useful to the management as a tool of financial analysis in short-periods as compared to funds flow analysis. It has rightly been said that the shorter the period covered by the analysis, the greater is the importance of cash flow analysis. For example, if it is to be found out whether the business can meet its obligations maturing after 10 years from now, a good estimate can be made about the firm's capacity to meet its long-term obligations if changes in working capital position on account of operations are observed. However, if the firm's capacity to meet a liability maturing after one month is to be seen, the realistic approach would be to consider the projected change in the cash position rather than an expected change in the working capital position. 4.

Cash

is part of working capital and, therefore, an improvement in cash position results in improvement in the funds position but the reverse is not true. In other words 'inflow of cash' results in 'inflow of funds' but inflow of funds may not necessarily result in 'inflow of cash'. Thus, a sound funds position does not necessarily means a sound

cash position but a sound cash position generally means a sound funds position. 5. Another distinction between a cash flow analysis and a funds flow analysis can be made on the basis of the techniques of their preparation. An increase in a current liability or

decrease in a current asset results in decrease in working capital and vice versa. While an increase in a current liability or decrease in

a current asset (other than cash) will result in increase in cash and vice versa. Some people,

use the

term 'funds' in a very narrow sense of 'cash' only. In such an event the two terms 'Funds' and 'Cash' will have synonymous meanings. 7.6

UTILITY OF CASH FLOW ANALYSIS A Cash Flow Statement is useful for short-term planning. A business enterprise needs sufficient cash to meet its various obligations in the near future such as payment for purchase of fixed assets, payment of debts maturing in the near future, expenses of the business, etc. A historical analysis of the different sources and 236

Self-Instructional Material Cash and Funds Flow Statements NOTES

applications of cash will enable the management to make reliable cash flow projections for the immediate future. It may then plan for investment of surplus or meeting the deficit, if any. Thus, a cash flow analysis is an important financial tool for the management. Its chief advantages are as follows: 1. Helps in efficient cash management. Cash flow analysis helps in evaluating financial policies and cash position. Cash is the basis for all operations and hence a projected cash flow statement will enable the management to plan and coordinate the financial operations properly. The management can know how much cash is needed, from which source it will be derived, how much can be generated internally and how much could be obtained from outside. 2. Helps in internal financial management. Cash flow analysis provides information about funds which will be available from operations. This will help the management in determining policies regarding internal financial management, e.g., possibility of repayment of long-term debts, dividend policies, planning replacement of plant and machinery, etc. 3. Discloses the movements of cash. Cash flow statement discloses the complete story of cash movement. The increase in or decrease of cash and the reasons can therefore be known. It discloses the reasons for low cash balance in spite of heavy operating profits or for heavy cash balance in spite of low profits. However, comparison of original forecast with the actual results highlights the trends of movements of cash which may otherwise go undetected. 4. Discloses success or failure of cash planning. The extent of success or failure of cash planning can be known by comparing the projected cash flow statement with the actual cash flow statement and necessary remedial measures can be taken. 7.7

LIMITATIONS OF CASH FLOW ANALYSIS Cash flow analysis is a useful tool of financial analysis. However, it has its own limitations. These limitations are as under: 1. Cash flow statement cannot be equated with the Income Statement. An Income Statement takes into account both cash as well as non-cash items and, therefore, net cash does not necessarily mean net income of the business. 2. The cash balance as disclosed by the cash flow statement may not represent the real liquid position of the business since it can be easily influenced by postponing purchases and other payments. 3. Cash flow statement cannot replace the Income Statement or the Funds Flow Statement. Each of them has a separate function to perform. In spite of these limitations it can be said that cash flow statement is a useful supplementary instrument. It discloses the volume as well as the speed at which the cash flows in the different segments of the business. The technique of cash flow analysis, when used in conjunction with ratio analysis, serves as a barometer in measuring the profitability and financial position of the business.

The concept and technique of preparing a Cash Flow Statement will be clear with the help of illustrations given in the following pages.

Self-Instructional Material 237 Cash and Funds Flow Statements NOTES

Cash from Operations Illustration 7.3. From the following balances you are required to calculate cash from operations: 31 December 1993 1994

Rs Rs

Debtors 50,000 47,000 Bills Receivable 10,000 12,500 Creditors 20,000 25,000 Bills Payable 8,000 6,000 Outstanding Expenses 1,000 1,200 Prepaid Expenses 800 700 Accrued Income 600 750 Income received in advance 300 250 Profit made during the year — 1,30,000 Solution: CASH FROM OPERATIONS Particulars Rs. Rs.

Profit made during the year 1,30,000 Add: Decrease in Debtors 3,000

Increase in Creditors 5,000 Increase in Outstanding Expenses 200 Decrease in Prepaid Expenses 100 8,300 1,38,300 Less: Increase in Bills Receivable 2,500 Decrease in Bills Payable 2,000

Increase in Accrued Income 150 Decrease in Income received in Advance 50 4,700 Cash from Operations 1,33,600 Illustration 7.4. Statement of financial position of Mr. Arun is given below: Liabilities 1 Jan.,1998 31 Dec.,1998 Assets 1 Jan., 1998 31 Dec.,1998

Rs Rs Rs Rs

Accounts Payable 29,000 25,000 Cash 40,000 30,000 Capital 7,39,000 6,15,000 Debtors 20,000 17,000 Stock 8,000 13,000 Building 1,00,000 80,000 Other Fixed Assets 6,00,000 5,00,000 7,68,000 6,40,000 7,68,000 6,40,000 Additional Information (

a) There were no drawings. (b) There were no purchases or sales

of either building or other fixed assets. Prepare a Statement of Cash Flow. Solution: CASH FLOW STATEMENT Cash Balance as on 1 January, 1993 Rs 40,000 Net Loss as per Profit and Loss A/c:

Capital at the end of 1993 6,15,000 Less: Capital at the beginning of 1993 7,39,000 (1,24,000) (

Contd.)

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Add: Non-cash Charges: Depreciation on Buildings 20,000 Depreciation on other Fixed Assets 1,00,000 1,20,000 Funds from Operations (4,000) Add:

Decrease in Current Assets: Debtors 3,000 (1,000)

Less: Increase in Current Assets or Decrease in Current Liabilities:

Increase in

Stocks 5,000 Decrease in Accounts Payable 4,000 (9,000) Cash Outflow on account of operations (10,000) Cash Balance as on 31 December, 1993 30,000 7.8

AS 3 (REVISED): CASH FLOW STATEMENTS 1

The following are the salient features of the Revised Accounting Standard (AS) 3, Cash Flow Statements, issued by the Council of the Institute of Chartered Accountants of India in March 1997. This Standard supersedes AS 3, Changes in Financial Position, issued in June, 1981.

The standard has been mandatory for all enterprises from accounting period commencing or after 1.4.2001. 1.

Objectives Information about the cash flows of an enterprise is useful in providing

users of financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and needs of the enterprise to utilise those cash flows.

The economic decisions that are taken by users require an evaluation of

the ability of an enterprise to generate cash and cash equivalents and the timings and certainty of

their generation. The Statement deals with the provisions of information about the historical changes in cash and cash equivalents of an enterprise by means of a

cash flow statement which classifies cash flows during the period from operating, investing and financing activities. 2. Scope (1)

An enterprise should prepare a cash flow statement and should present it for each period for which financial statements are

presented. (2) Users of an enterprise's financial statements are interested in how the enterprise generates and uses cash and cash equivalents. This is the case regardless of the nature of the enterprise's activities and irrespective of whether cash can be viewed as the product of the enterprise, as

may be

the case with a financial enterprise. Enterprises need cash for essentially the same reasons, however different their principal revenue-producing activities might be. They need cash to conduct their operations, to pay their obligations, and to provide returns to their investors. 3. Benefits of Cash Flow Information (1) A cash flow statement, when used in conjunction with the other financial statements, provides information that enables users to evaluate the changes in net assets of an enterprise, its financial structure (including its liquidity and solvency), and its ability to affect the amounts and timing of cash 1

The Chartered Accountant, March, 1997, p. 68.

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flows in order to adapt to changing circumstances and opportunities.

Cash flow information is useful in assessing the ability of the enterprise to generate cash and cash equivalents and enables users to develop models to assess and compare the present value of the future cash flows of different enterprises. (2) It also enhances the comparability of the reporting of operating performance by different enterprise because it eliminates the effects of using different accounting treatments for the same transactions and events. (3) Historical cash flow information is often used as an indicator of the amount, timing and certainty of future cash flows. It is also useful in checking the accuracy of past assessments of future cash flows and in examining the relationship between profitability and net cash flow and the impact of changing prices. 4. Definitions The following terms are used in this Statement with the meanings specified: (1)

Cash comprises cash on hand and

demand deposits with banks. (2)

Cash equivalents are short term, highly liquid investments that are readily convertible into

known amounts of cash and which are subject to an insignificant risk of changes in value. (3)

Cash flows are inflows and outflows of cash and cash equivalents. (4)

Operating activities are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities. (5) Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. (6) Financing activities are activities that result in changes in the size and composition of the owner's capital (including preference share capital in the case of a company) and borrowings of the enterprise. 5.

Presentation of A Cash Flow Statement

The

cash flow statement should report cash flows during the period

classified by operating investing and financing activities. (1)

Operating activities.

Cash flows from operating activities are primarily derived from the principal revenue-producing activities of the enterprise. Therefore, they generally result from the transactions and other events that

enter into the determination of net

profit or loss. Examples of cash flows from operating activities are: (

a)

cash receipts from the sale of goods and the rendering of services; (b) cash receipts from royalties, fees, commissions, and other revenue; (

C)

cash payments to suppliers for goods and services; (d) cash payments to and on behalf of employees; (e) cash receipts and cash payments of an insurance enterprise for premiums and claims, annuities and other policy benefits; (f) cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities; and (g) cash receipts and payments relating to future contracts, forward contracts, option contracts and swap contracts when the contracts are held for dealing or trading purposes.

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Self-Instructional Material Cash and Funds Flow Statements NOTES (2)

Investing activities. Examples of cash flows arising from investing activities are: (a) cash payments to acquire fixed assets (including intangibles). These payments include those relating to capitalised research and

development costs and self-constructed fixed assets; (b) cash receipts from disposal of fixed assets (including intangibles); (c)

cash payments to acquire shares, warrants, or debt instruments of other enterprises and interests in joint ventures (other than payments for

those

instruments considered to be cash equivalents and those held for dealing or trading purposes); (

d)

cash receipts from disposal of shares, warrants, or debt instruments of other enterprises and interests in joint ventures (other than receipts from those

instruments considered to be cash equivalents and those held for dealing or trading purposes); (e) cash

advances and loans made to third parties (other than advances and loans

made by financial enterprise); (f) cash receipts from the

repayment of advances and loans made to third parties (other

that than advances and loans of a financial enterprise); (g) cash payments for

future contracts, forward contracts, option contracts, and swap contract except when the contracts are held for dealing or trading purposes,

or the payments and classified as financing

activities; and (h) cash receipts from future contracts, forward contracts, option contracts, and swap contracts except

when the contracts are held for dealing or trading purposes,

or the receipts are classified as financing activities. (3) Financing activities. Examples of cash flows arising from financing activities are: (a) cash proceeds from issuing shares or other similar instruments; (b)

cash proceeds from issuing debentures, loans, notes, bonds, and other short- or long-term borrowings; and (c) cash repayments of amounts borrowed.

Reporting Cash Flows from Investing and Financing Activities An enterprise should report separately major classes of gross cash receipts and gross cash payments

arising from investing and financing activities, except to the extent that cash flows described in paragraph 6 are reported on a net basis. 6. Reporting Cash Flows on A Net Basis (1) Cash flows arising from the following operating, investing or financing

ac- tivities may be

reported on a net basis: (a) cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customer rather than those of the enterprise. Examples of cash receipts and payments referred to

above are as follows: (a) the acceptance and repayment of demand deposits by a bank; (b) funds help for customers by an investment enterprise; and (c) rents collected on behalf of, and paid over to, the owners of properties. (d) cash receipts and payments for items in which the turnover is quick, the amounts large, and the maturities are short. Self-Instructional Material 241 Cash and Funds Flow Statements NOTES

Examples of cash receipts and payments referred above are advances made for, and the repayments of: (a) Principal amounts relating to credit card customers; (b) the purchase and sale of investments; and (c) other short-term borrowings, for example, those which have a maturity period of three months or less. (2) Cash flows arising from each of the following activities of a financial enterprise may be reported on a net basis: (a) cash receipts and payments for the acceptance and repayment of deposits with a fixed maturity date; (b) the placement of deposits with and withdrawal of deposits from other financial enterprises; and (c) cash advances and loans made to customers and the repayment of those advances and loans. 7. Disclosure (1) Components of cash and cash equivalents. An enterprise should disclose the components of cash and cash equivalents and should present a reconciliation of the amounts in its cash flow statement with the equivalent items reported in the balance sheet. (2) Other disclosures. An enterprise should disclose, together with a commentary by management, the amount of significant cash and cash equivalent balances held by the enterprise that are not available for use by it. Note. As a result of AS: 3 (Revised) discussed above, the presentation of a Cash Flow Statement has undergone a change. In the following pages, illustration involving presentation of Cash Flow Statement cash by the Traditional Approach and Modern Approach as per AS: 3 (Revised) are given. The students should prepare cash flow statement as per AS : 3 (Revised). We have given traditional approach only for making the subject more intelligible. Comprehensive Cash Flow Statements Illustration 7.5. Balance Sheet of A and B on 1 January, 1993 and 31 December, 1993 were as follows: BALANCE SHEET Liabilities 1 Jan., 1993 31 Dec., 1993 Assets 1 Jan., 1993 31 Dec., 1993 Rs

Rs Rs Rs

Creditors 40,000 44,000 Cash 10,000 7,000 Mrs. A'

s Loan 25,000 — Debtors 30,000 50,000 Loans from Bank 40,000 50,000 Stock 35,000 25,000 Capital 1,25,000 1,53,000 Machinery 80,000 55,000 Land 40,000 50,000 Building 35,000 60,000 2,30,000 2,47,000 2,30,000 2,47,000 During

the year

а

machine costing Rs 10,000 (accumulated depreciation

Rs 3,000) was sold for Rs 5,000. The provisions depreciation against Machinery as on 1 January, 1993 was Rs 25,000 and on 31 December, 1993

was Rs 40,000.

Net profit for the year 1993 amount to Rs 45,000. You are required to prepare

a Cash Flow Statement.

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Self-Instructional Material Cash and Funds Flow Statements NOTES Solution: (i) Traditional Approach CASH FLOW STATEMENT Rs

Cash Balance as on January, 1993 10,000 Add: Sources: Cash from Operations 59,000 Loan from Bank 10,000 Sale of Machinery 5,000 74,000 84,000 Less: Applications: Purchase of Land 10,000 Purchase of Building 25,000 Mrs. A's Loan repaid 25,000 Drawings 17,000 77,000 Cash balance as on 31 Dec., 1993 7,000 Working Notes Cash from Operations Rs Profit made during the year 45,000

Add: Depreciation on Machinery 18,000 Loss on sale of Machinery 2,000 Decrease in Stock 10,000 Increase in Creditors 4,000 34,000 79,000 Less: Increase in Debtors 20,000 Cash from Operations 59,000

MACHINERY ACCOUNT (AT COST) Particulars Rs Particulars Rs To Balance b/d 1,05,000 By Bank 5,000 By Loss on sale of Machinery 2,000

By Provision for Depreciation 3,000

By Balance c/d 95,000 1,05,000 1,05,000

PROVISION FOR DEPRECIATION

Particulars

Rs Particulars Rs To Machinery A/c 3,000 By Balance b/d 25,000

То

Balance c/

d 40,000 By

P. and L. A/c (

deprn. charged—balancing figure) 18,000 43,000 43,000 (ii) Modern Approach CASH FLOW STATEMENT

Rs

Net Cash Flows

from Operating Activities 59,000

Cash flows from Investing Activities: Sale of Machinery 5,000 Purchase of Land (10,000) Purchase of Building (25,000) Net Cash flows from Investing Activities (30,000) Cash flows from Financing Activities:

Loan from

Bank 10,000 Mrs. A's Loan repaid (25,000) Drawings (17,000)

Net Cash Flow

from Financial Activities 32,000 Net Increase (Decrease) in cash and cash equivalents 3,000 Cash and Cash Equivalents on Jan. 1, 1993 10,000 Cash and Cash Equivalents

on

Dec. 31, 1993 7,000

Self-Instructional Material 243 Cash

and Funds Flow Statements NOTES

Illustrations 7.6. The following is

the summarised Balance Sheet of a company as on December, 1992 and 1993: Liabilities 1992 1993 Assets 1992 1993 RsRs

Rs Rs

Share Capital 2,00,000 2,50,000 Land and buildings 2,00,000 1,90,000 General Reserve 50,000 60,000 Machinery 1,50,000 1,69,000 Profit and loss 30,500 30,600

Stock 1,00,000 74,000 Bank loan (Long-term) 70,000 — Sundry Debtors 80,000 64,200 Sundry creditors 1,50,000 1,35,200 Cash 500 600 Provision for taxation 30,000 35,000 Bank — 8,000 Goodwill — 5,000 5,30,500 5,10,800 5,30,500 5,10,800

Additional Information During the year ended 31 December, 1993: 1.

Dividend of

Rs 23,000

was paid. 2. Assets of another company were purchased for a consideration of

Rs 50,000 payable in shares. The

following assets were purchased: Stock Rs 20,000: Machinery Rs 25,000. 3. Machinery was further purchased for Rs 8,000. 4. Depreciation written off machinery

Rs 12,000. 5.

Income tax provided during the year Rs 33,000. 6. Loss on sale of machinery

Rs 200

was written off to General Reserve.

You are required to prepare

a cash flow statement. Solution: (

i) Traditional Approach CASH FLOW STATEMENT for the year ending 31 December, 1993 Particulars Rs

Cash Balance as on 1 Jan., 1993 500 Add: Sources of Cash: Sale of Machinery 1,800 Cash from Operations Funds from Operations 88,300 Add: Decrease in Stock 46,000 Decrease in Debtors 15,800 1,50,100 Less: Decrease in Creditors 14,800 1,35,300 1,37,600 Less: Applications of Cash: Payment of Dividend 23,000 Purchase of Machinery 8,000 Tax paid (See Note 4) 28,000 Mortgage Loan repaid 70,000 1,29,000 Closing Cash and Bank Balances 8,600 (Cash in hand Rs 600 + Cash at Bank Rs 8,000) Working Notes 1.

ADJUSTED PROFIT LOSS ACCOUNT Particulars

Rs Particulars

Rs To Dividend 23,000 By Balance b/d 30,500 To Depreciation on Building 10,000 By Funds from Operations To Provision for

Tax 33,000 (balancing figure) 88,300 (

Contd.)

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To Transfer to General Reserve 10,200 To Deprn. on Machinery 12,000 To

Balance c/d 30,600 1,18,800 1,18,800 2. MACHINERY ACCOUNT Particulars Rs

Particulars

Rs To Balance b/d 1,50,000 By Depreciation 12,000 To Share Capital 25,000 By General Reserve 200 To Bank 8,000 By Bank 1,800

By Balance c/d 1,69,000 1,83,000 1,83,000 3. GENERAL RESERVE

Particulars

Rs

Particulars Rs To Machinery A/c 200 By Balance b/d 50,000 To

Balance c/d 60,000 By

P&Lb/

d 10,200 60,200 60,200 4.

PROVISION FOR TAXATION Particulars Rs Particulars Rs To Bank 28,000 By Balance b/d 30,000

To Balance c/d 35,000 By

P. & L. A/c 33,000 63,000 63,000 5.

DECREASE IN STOCK Rs Stock as on December, 1992 1,00,000 Less: Stock as on December, 1993 54,000 (after deducting stock purchased by issuing share) Increase in Cash 46,000 (ii) Modern Approach as per AS: 3 (Revised) CASH FLOW STATEMENT for the ending 31 December, 1993 Particulars

Rs

Cash Flows Operating Activities: Funds from operations 88,300 Adjustments for:

Decrease

in Stock 46,000 Decrease in Debtors 15,800 Decrease in Creditors (14,800)

Tax paid 28,000 Net Cash from Operating Activities 1,07,300

Cash

Flows Investing Activities: Sale of

Machinery 1,800 Purchase of Machinery (8,000) Net Cash used

for Investing Activities (6,200) Cash Flows from Financing Activities Payment of Dividend (23,000) Mortgage Loan repaid (70,000) Net Cash used in

Financing Activities (93,000) Net Increase in Cash and

Cash Equivalents 8,100 Cash and Cash Equivalents as on 1st Dec., 1993 500 Cash and Cash Equivalents 31

st Dec., 1993 8,600 (Cash Rs 600 + Bank

Rs 8,000)

Self-Instructional Material 245 Cash

and Funds Flow Statements NOTES

Illustration 7.7 The Balance Sheet of XYZ Limited are as follows: BALANCE SHEET (Figures in 1994 thousand Rs)

Liabilities 1994 1995 Assets 1994 1995 Rs Rs Rs Rs

Equity 800 900 Fixed assets 600 800 General Reserve 300 400 Additions 200 100 P.& L. A/c 200 300 800 900 Provision for Taxation 300 400 Depreciation 300 350 Overdraft 300 464 500 550 Sundry Creditors 1,200 1,000 Investments 200 — Proposed Dividend 80 90 Stock 1,400 1,230 Debtors 1,080 1,774 3,180 3,554 3,180 3,554 PROFIT AND LOSS ACCOUNT for the year ending...

Particulars 1994 1995 Particulars 1994 1995 Rs Rs Rs To

Taxation 250 450 By Trading

Profit 430 660 To Proposed Dividend 80 90 By Profit on sale of Investment - 30 To

Transfer to General Reserve 100 100 By Income Tax excess provided To Balance c/f 200 300

in the previous year — 50 By Balance from last year 200 200 630 940 630 940 Additional Information (1) For the year ending 31 December, 1995, purchases were Rs 60 lakhs and sales were

Rs 70

lakhs. (2) Trading profit for the year ended 31 December, 1995 was arrived at after charging depreciation Rs 50,000

and directors remuneration Rs 1,20,000. Prepare the Cash Flow Statement. Solution: (i) Traditional Approach CASH FLOW STATEMENT for the year ending 31 December, 1995 (Rs in thousands) Overdraft as on 1 January, 1995 (300) Add: Sources: Increase in Share Capital 100 Investments sold (200 + 30) 230 330 Total Sources: 30 Less: Applications: Fixed Assets purchased 100 Dividend paid 80 Tax paid 300 Cash Outflow on account of operations (Note ii) 14 (494) Bank Overdraft as on 31 December, 1994 464 Working Notes: (i) ADJUSTED PROFIT AND LOSS ACCOUNT Particulars Rs

Particulars Rs To Provision for Tax 450 By Balanced b/d 200 To Proposed Dividend 90 By Provision for Tax (excess) 50 To Depreciation 50 By profit on sale of Investments 30 To Transfer to General Reserves 100 By Funds from Operations (bal. fig.) 710 To Balance c/d 300 990 990

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Self-Instructional Material Cash and Funds Flow Statements NOTES (ii) CASH FROM OPERATIONS Particulars Rs Funds from Operations 710 Add: Decrease in Stock 170 880 Less: Increase in Debtors 694 Decrease in Creditors 200 894 Cash Flow on account of Operations 14 (iii) PROVISION FOR TAXATION Particulars

Rs

Particulars Rs To P. & L. A/c (Excess Provision) 50 By Balanced b/d 300 To Bank 300 By P. & L. A/c 450 To Balance c/d 400 750 750 Cash outflow on account of Operation could have also been found out as follows:

Rs

Trading Profit 660 Add: Depreciation 50 Funds from Operations 710 Add: Decrease in Stock 170 880 Less: Increase in Debtors 694 Decrease in Creditors 200 894 Cash Outflow on account of operation 14 (

ii) Modern Approach as per AS 3 (Revised) CASH FLOW STATEMENT for the year ending 31st Dec., 1995 (Rs in '000) Cash Flows from Operations: Funds from Operations 710 Adjustments for: Decrease

in Stock 170 Increase in Debtors (694) Decrease in Creditors (200)

Tax paid (300)

Net Cash used for

Operating Activities (314)

Cash flows from Investing Activities: Fixed Assets purchased (100) Investment sold 230 Net Cash from Investing Activities 130 Cash Flows from Financing Activities: Proceeds from Issuance of Share Capital 100

Dividends (80) Net Cash

from Financing Activities 20 Net

Increase (Decrease) in Cash and Cash Equivalents (164) Cash and Cash Equivalents as on 1st Jan., 1995 (300) Cash and Cash Equivalents

as on 31

st Dec., 1995 (464) Cash Flow and Funds Flow Statements Illustration 7.8. The financial of M/s A and B on 1st Jan. and 31st Dec., 1994 was as follows: Liabilities 1 Jan. 31 Dec. Assets 1 Jan. 31 Dec.

Rs Rs Rs Rs

Current Liabilities for Goods 36,000 40,000 Cash 4,000 3,600 Mrs. A's Loan - 20,000

Debtors 35,000 38,000 Loan from Bank 30,000 25,000 Stock 25,000 22,000 Hire-purchase Vendor — 20,000 Land 20,000 30,000 Capital 1,48,000 1,54,000 Building 50,000 55,000 Machinery 80,000 86,000 Delivery Van — 25,000 2,14,000 2,59,600 2,14,000 2,59,600

Check Your Progress 3.

State the effect of the following transactions, considered individually, on funds (working capital concept) and funds (cash concept): (a) Purchase of goods

for cash. (

b) Purchase of building against a long-term loan payable. (c) Bonus paid in the form of fully paid shares.

Self-Instructional Material 247 Cash and Funds Flow Statements NOTES

The delivery van was purchased in December, 1994 on hire-purchase basis; a payment of

Rs 5,000

was made immediately and the balance of the amount is to be paid in 20 monthly instalments

of

Rs 1,000

each together with interest @ 12 per cent p.a.

During the year the partners withdrew Rs 26,000 for domestic expenditure.

The provision for depreciation against machinery on 31 December, 1993 was

Rs 27,000

and on 31

December, 1994 Rs 36,000.

You are required to prepare the Cash Flow Statement. Show also the Funds Flow Statement. Solution: (i) Traditional Approach M/s A & B CASH FLOW STATEMENT for the year ending 31 Dec., 1994 Particulars Rs Cash Balance on 1st Jan. 4,000 Sources: From Operations (see note 2) 45,600 Loan from Mrs. A 20,000 Total Sources 69,600 Applications: Payment of Bank Loan 5,000 Payment for Delivery Van 5,000 Machinery Acquired 15,000 Buildings Acquired 5,000 Land Acquired 10,000 Withdrawals by Partners 26,000 66,000 Cash Balance on 31 December 3,600 FUNDS FLOW STATEMENT for the year ending 31st December, 1994 Particulars Rs Particulars Rs Funds from Operations 41,000 Repayment of Bank Loan 5,000 Loan from Mrs. A 20,000 Payment for Delivery Van 5,000 Decrease in Working Capital 17,000 Payable in a year for Delivery Van 12,000 Machinery acquired 15,000 Land acquired 10,000 Buildings acquired 5,000 Partners' drawings 26,000 78,000 78,000 Working Notes 1. Funds from Operations Rs

Capital as on 31 December, 1994 1,54,000 Add: Drawings during the year 26,000 1,80,000 Less: Capital as on 1 January, 1994 1,48,000 Profit for the year 32,000 Add: Depreciation for the year (Rs 36,000 – Rs 27,000) 9,000 41,000 2. Cash from Operations Funds From Operations 41,000 Add: Decrease in Stock 3,000 Increase in Creditors 4,600 7,600 Less: Increase in Debtors 48,600 Cash from Operations 3,000 45,600

Check Your Progress 4. Cash flow statements is based upon: (a) Accrual basis of accounting (b)Cash basis of accounting 248 Self-Instructional Material Cash and Funds Flow Statements NOTES 3. MACHINERY ACCOUNT Particulars Rs Particulars Rs To Balance b/d 80,000 By Depreciation for the year 9,000 To Bank (acquired during the year) 15,000 By Balance c/d 86,000 95,000 (ii) Modern Approach as per AS 3 (Revised)

CASH FLOW STATEMENT for the year ending 31st Dec., 1994 Particulars Rs Cash Flows from Operating Activities:

Net

Cash Flow from Operations 45,600

Cash Flow from Investing Activities: Purchase of Machinery (15,000)

Purchase of Building (5,000)

Purchase of Land (10,000) Payment of Delivery Van (5,000) Net Cash used in Investing Activities (35,000)

Cash Flows from Financing Activities:

Loan from Mrs. A 20,000 Payment of Bank Loan (5,000) Drawings by Partners (26,000)

Net Cash used in

Financing Activities (11,000) Net Increase (Decrease) in Cash and Cash Equivalents (400) Cash and Cash Equivalents as on 1st Jan., 1994 4,000 Cash and Cash Equivalents

as on 31

st Dec., 1994 3,600 7.9

MEANING OF FUNDS FLOW STATEMENT It will be appropriate to explain the meaning of the term 'Funds' and the term 'Flow of Funds' before explaining

the meaning of the term 'Funds Flow Statement'. 7.9.1 Meaning of Funds The term 'Funds' has a variety of meanings. There are people who take it to be

synonymous with cash and to them there is no

difference between a Funds Flow Statement and a Cash Flow Statement.

Others include marketable securities besides cash in the definition of the term 'Funds'. The International Accounting Standard No. 7 on 'Statement of Changes in Financial Position' also recognises the absence of a single, generally accepted, definition of the term. According to the standard, 'the term "fund" generally refers to cash and cash equivalents, or to working capital.' Of these, the last definition of the term is by far the most common definition of 'fund'. There are also two concepts of working capital—gross concept and net concept. Gross working capital refers to the firm's investment in current assets while the term net

working capital means excess of current assets over current liabilities. 1 It

Self-Instructional Material 249 Cash and Funds Flow Statements NOTES Current assets The term 'Current Assets' includes assets which are acquired with the intention of converting them into cash

during the normal business operations of the

company.

However, the best definition of the term 'Current Assets' has been given by Grady in the following words: '

For accounting purposes,

the term "Current Assets" is used to designate cash and other assets or resources commonly identified as those which are reasonably expected

to be realised in cash or sold

or consumed during the normal operating cycle of the business.' 2

The broad categories of current assets,

therefore, are (i) Cash including fixed deposits with banks, (ii) Accounts receivable, i.e., trade debtors and bills receivable, (iii) Inventory, i.e., stocks of raw materials, work-in-progress, finished goods, stores and spare parts, (iv) Advances recoverable, i.e., the advances given to supplier of goods and services or deposits

with government or other public authorities e.g., customs, port authorities, advance income tax, etc., (v) Pre-paid expenses, i.e.,

cost of unexpired services, e.g., insurance premiums paid in advance, etc.

It should be noted that short-term investments should be included in the definition of the term current assets, while loose tools should be excluded from the category of current assets. Of course, this is not strictly according to the requirements of the Companies Act regarding presentation of financial statements where investments, even though held temporarily, are to be shown separately from current assets while loose tools are to be shown under

the category of current assets. Current liabilities The term 'Current Liabilities' is used principally to designate such obligations whose liquidation is reasonably expected to require the use of assets classified as current assets

in the same balance sheet or the creation of other current liabilities, or those expected to be satisfied within a relatively short period of time usually one year. 1

However, this concept of current liabilities has now undergone a change. The more modern version designates current liabilities as all obligations that will require within the coming year or the operating cycle, whichever, is longer, (i) the use of existing current assets or (ii) the creation of other current liabilities. 2 In other words, the mere fact that an amount is due within a year does not make it a current liability unless it is

payable

out of existing current assets or by creation of current liabilities.

For example, debentures due for redemption within a year of the balance sheet date will not be taken as a current liability if they are to be paid

out of the proceeds of a fresh issue of shares/

debentures or out of the proceeds realised on account of sale of debentures redemption fund investments. The term current-liabilities also includes amounts set apart or provided

for any

known liability of which the amount cannot be determined with substantial accuracy,

e.g., provision for taxation, pension etc., These liabilities are technically called provisions rather than

liabilities. The broad categories of current liabilities are: (i) Accounts payable e.g., bills payable and trade creditors. (ii)

Outstanding expenses, i.e., expenses for which

services have been received by the business but for which

the payment has not been made. (

iii) Bank overdrafts. ---- 2

Paul Grady: 'Inventory of Generally Accepted Accounting Principles for Business Enterprises.' pp. 234–235.

Accounting Research Study, No. 7. American Institute of Certified Public Accountants.

250 Self-Instructional Material Cash and Funds Flow Statements NOTES (iv) Short-term loans, i.e., loans from banks etc., which are payable within one year from the date of Balance Sheet. (

v) Advance payments received by the business for the

services to be rendered or goods to be supplied in future. (

vi) Current maturities of long-term loans, i.e.,

long-term debts due within a year of the balance sheet date or instalments due

within a year in respect of these loans, provided payable out of existing current assets or by creation of current liabilities, as discussed earlier. However, instalments of long-term loans due after a year should be taken as non-current liabilities. Provisions against Current Assets. Provisions against current assets, such as provision for doubtful debts, provisions for loss of stock, provision for discount on debtors, etc., are treated as current liabilities, since they reduce the amount of current assets. Non-current assets All assets other than current assets come within the category of non-current assets. Such assets include goodwill, land, building, machinery, furniture, long-term investments, patent rights, trade marks, debit balance of the Profit and Loss Account, discount on issue of shares and debentures, preliminary expenses, etc. Non-current liabilities other than current liabilities come within the

category of non-current liabilities. They include share capital, long-term loans, deben- tures, share premium, credit balance in the Profit and Loss Account, revenue and capital reserves (e.g., general reserve, dividend equalisation fund, debentures sinking fund, capital redemption reserve) etc. 7.9.2

Meaning of 'Flow of Funds' The term 'Flow' means change and, therefore, the term 'Flow of Funds' means 'Change in Funds' or 'Change in Working Capital'.

In other words, any increase or decrease in working capital means 'Flow

of Funds'. In business, several transactions take place. Some of these transactions increase the funds while others decrease the funds.

Some may not make any change in the funds position. In case a transaction results in increase of funds, it will be termed as a 'source of funds.' For, example, if the funds are Rs 10,000 and on account of a business transaction, say, issue of shares, they become Rs 15,000, '

Issue of Shares' will be taken as a source of

funds. In case a transaction results in decrease of funds it will be taken as an application or use of funds. For example, if the funds are Rs 10,000 and on account of a transaction say, purchase of furniture of Rs 5,000, they stand reduced to Rs 5,000, the purchase of furniture will be taken as an 'application of funds.' In case a transaction does not make any change in the funds position that existed just before the happening of the transaction, it is said that it is a non-fund transaction, For example, if the funds are Rs 10,000 and a fixed asset of Rs 5,000 is purchased by issuing shares of Rs 5,000 the funds position will not change, and therefore, this transaction will be taken as a non-fund transaction. The following extracts from the Balance Sheet of a Company will give a more detailed and clear concept of the term 'Flow of Funds': Self-Instructional Material 251 Cash and Funds Flow Statements NOTES Rs Rs Non-current Liabilities: Non-current Assets: Share capital Goodwill 50,000 12 per cent redeemable preference Buildings 1,00,000 share of Rs 10 each 1,00,000 Plant 1,00,000 Equity shares of Rs 10 each 1,00,000 Furniture 50,000 Long-term Loans: Long-term investments 50,000 10 per cent Debentures 1,00,000 Loan on mortgage 50,000 Reserves and surplus: General reserve 1,00,000 Profit and loss A/c 50,000 Total Non-current Liabilities (i) 5,00,000 Total Non-current Assets (iii) 3,50,000 Current Liabilities: Rs Current Assets: Rs Sundry

creditors 50,000 Sundry debtors 80,000 Bills payable 50,000 Bills receivable 50,000 Bank overdraft 25,000 Inventories 1,00,000 Outstanding expenses 25,000

Pre-paid expenses 50,000 Cash balance 20,000 Total Current Liabilities (ii) 1,50,000 Total Current Assets (iv) 3,00,000 Total Liabilities (i) + (ii) 6,50,000 Total Assets (iii) + (iv) 6,50,000 The above extracts from the Balance Sheet show that the Company has got a working capital of Rs 1,50,000 computed as given below: Current assets Rs 3,00,000 Current liabilities 1,50,000 Working capital 1,50,000 There will be a flow of funds in case the working capital position of the company changes on account of any transaction. We are giving some of the transactions which have taken place after preparation of the above Balance Sheet of the company. Each transaction has been considered independently: 1. The company realises Rs 20,000 from its debtors. This transaction will reduce the debtors from Rs 80,000 to Rs 60,000 but increase the cash balance from Rs 20,000 to Rs 40,000. Thus, the total current assets continue at the old figure of Rs 3,00,000. This means this transaction will not bring any change in the working capital position of the company. It is simply conversion of one current asset into another current asset. 2. The company pays to its creditors a sum of Rs 10,000 out of the cash balance. This will reduce the cash balance from Rs 20,000 to Rs 10,000. The total current assets will stand reduced from Rs 3,00,000 to Rs 2,90,000. The sundry creditors will stand reduced from Rs 50,000 to Rs 40,000. Thus, the position will be as follows: Current assets Rs 2,90,000 Current liabilities 1,40,000 Working capital 1,50,000 Thus, the transaction has not resulted in any change in the working capital position. It continues to stand at Rs 1,50,000. This is because the two accounts involved in the transaction are the constitutions of working capital itself, i.e., current assets and current liabilities. 3. The company purchase furniture of Rs 10,000 by raising long-term loan of Rs 10,000. This transaction will not have any effect on working capital position, since the transaction involves a non-current asset and a non-current liability which are not the constituents of the working capital.

252 Self-Instructional Material Cash and Funds Flow Statements NOTES 4. The company redeems preference shares of Rs 1,00,000 by issuing 12 per cent debentures of Rs 1,00,000. This transaction will also not involve any change in the working capital position on account of the fact that both the two accounts involved in the transactions are not the constituents of the working capital. 5. The company raises Rs 50,000 in cash by issue of new shares. This transaction will increase the cash balance of the company from Rs 20,000 to Rs 70,000 while there will be no change in the current liabilities position. The working capital will, therefore, be computed as follows: Current assets Rs 3,50,000 Current liabilities 1,50,000 Working capital 2,00,000 The transaction has resulted in increase of working capital. 6. The company sells its building having a book value of Rs 50,000 for a sum of Rs 60,000. This transaction will increase the cash balance with the company from Rs 20,000 to Rs 80,000. The total current assets will amount to Rs 3,60,000 while the total current liabilities continue to stand at Rs 1,50,000. The working capital will, therefore, be a sum of Rs 2,10,000. The transaction has brought a change in the working capital position because one account (i.e., building) is a non-current asset account while the other account (i.e., cash) is a current assets account. From the above, the following general rules can be formed: 1. There will be 'flow of funds' if a transaction involves: (i) current assets and fixed assets, e.g., purchase of building for cash; (ii) current assets and capital, e.g., issue of shares for cash; (iii) current assets and fixed liabilities, e.g., redemption of debentures in cash; (iv) current liabilities and fixed liabilities, e.g., creditors paid off in debentures; (v) current liabilities and capital e.g., creditors paid off in shares; (vi) current liabilities and fixed assets e.g., buildings transferred to creditors in satisfaction of their claims. 2. There will be 'no flow of funds' if a transaction involves. (i) current assets and current liabilities. e.g., payment made to creditors in cash; (ii) fixed assets and fixed liabilities, e.g., building purchased and payment made in debentures; (iii) fixed assets and capital e.g., building purchased and payment made in shares. 7.9.3 Finding out of Transaction Involving Change in Working Capital In order to determine whether a transaction will result in change of working capital or not, it will be appropriate to pass a journal entry for the transaction. In case the entry involves accounts which are only of a fixed (asset or liability) nature or only of a current (asset or liability) nature. there will be no flow of funds. But a 'cross transaction' (i.e. a transaction involving

a fixed asset or a fixed liability and a current asset or a current

liability) will result in flow of funds. We are giving below an analysis of certain transactions to make this point clear. Check Your Progress 5. Fill in the blanks. (a) Funds flow refers to changes in capital. (b) Building sold on credit is of funds. (c) Goods purchased on credit in flow of funds. (d) Commission outstanding is of funds. (e) Any gain on sale of non- current assets should be from the net profit for determining funds from operations. (f) Difference between Current Assets and Current Liabilities is known as (g) Depreciation is sometimes treated as funds. Self-Instructional Material 253 Cash and Funds Flow Statements NOTES 1. When shares are issued for cash, the journal entry is: Bank A/c Dr. To Share Capital A/c

Bank account is a current asset while share capital account is a fixed liability. Thus, this is a cross-transaction. It will, therefore, result in change in working capital. 2. When shares are issued to the vendors for purchase of building, the effective journal entry is: Building A/c Dr. To Share Capital A/c Building is a fixed asset while share capital is a fixed liability. There is no 'cross-transaction' and, therefore, there will be no change in the funds position of the business. 3. When debtors are realised. Bank A/c Dr. To Sundry Debtors Bank and Debtors both are current assets and, therefore, there will be no change in the funds position of the business. 4. When

а

provision for doubtful debts is made:

Profit and Loss A/c Dr. To Provision for Doubtful Debts

Profit and Loss Account is a fixed liability since it is part of the shareholders' funds while provision for doubtful debts is a current liability (it reduces debtors), There is a 'cross' transaction and, therefore, there will be flow of funds. The funds will decrease. 5. When creditors are issued bills payable:

Creditors A/c Dr. To Bills Payable Both creditors and bills payable are current

liabilities and, therefore, there will be no effect on funds. 6. When payment of bills payable is made: Bills Payable A/c Dr. To Bank Bills payable and Bank both belong to the category of 'current' accounts and, therefore, there will be no effect on funds. 7. Cash realised from bills receivable: Bank A/c Dr. To Bills Receivable There will be no flow of funds since both are 'current' accounts. 8.

Loss on sale of machinery: Profit and Loss A/c Dr. To Machinery A/c

Since both are 'non-current' accounts, therefore, there will be no flow of funds. 9. Money realised on account of sale of machinery: Bank A/c Dr. To Machinery A/c Bank Account is a current asset account, while Machinery Account is a fixed asset account. Hence, there is a 'cross' transaction. The funds will, therefore, increase on account of this transaction.

254 Self-Instructional Material Cash and Funds Flow Statements NOTES 10. Transfer to General Reserve: Profit and Loss Appropriation A/c Dr. To General Reserve Both are 'non-current' accounts and, therefore, there will be no flow of funds. 11. Building sold on credit: Debtors A/c Dr. To Building A/c Debtors Account is a current asset account, while building account is a fixed asset account. Thus, there is a 'cross' transaction and, therefore, there will be flow of funds. The funds would increase by the sale value of the building. 12. Inventory purchased by issuing shares: Inventories A/c Dr. To Share Capital Inventories belong to the category of current assets while share capital belongs to the category of non-current liabilities. There is a 'cross' transaction and, therefore, there will be flow sould increase by the amount. 13. Rent paid: Rent A/c Dr. To Bank Rent

Account will be transferred to the Profit and Loss Account at the end of the accounting period.

The entry will be: Profit and Loss A/c Dr. To

Rent Thus, the effective entry has been Profit and loss A/c Dr. To Bank Profit and Loss Account is a non-current liability, while Bank Account is a current asset. There is a 'cross' transaction and hence, there will be flow of funds. A funds flow statement is, therefore, a statement depicting change in working capital. It is also termed as a 'Statement of Sources and Application of Funds', 'Summary of Financial Operations', 'Funds Generated and Expended', 'Where got and Where gone Statement', 'Statement of Changes in Working Capital', etc. 7.10 USES OF FUNDS FLOW STATEMENT The funds flow statement helps the financial analyst to get a more detailed analysis and understanding of

changes in the distribution of resources between two balance sheet

dates. In case such a study is required regarding the future working capital position of the company, a projected funds flow statement can be prepared. The uses of a funds flow statement are as follows: It explains the financial consequences of business operations The funds flow state- ment provides a ready answer to so many conflicting situations, such as: (a) Why is the liquid position of the business becoming more and more unbalanced in spite of business making more and more profits? (b) How was it possible to distribute dividends in excess of current earnings or in the presence of a net loss for the period? (c) How does the business could have good liquid position in spite of business making losses or acquisition of fixed assets? (d) Where have the profits gone?

Self-Instructional Material 255 Cash and Funds Flow Statements NOTES Definite answers to these question will help the financial analyst in advising his employer/client regarding directing of funds to those channels which will be most profitable for the business. It answers intricate queries The financial analyst can find answers to a number of intricate questions: (a) What is the overall creditworthiness of the enterprise? (b) What are the sources of repayments of the loans taken? (c) How much are the funds generated through normal business operations? (d) In what way has the management utilised the funds in the past and what are going to be the likely uses of funds? It acts as an instrument for allocation of resources A projected funds flow state- ment will help the analyst in finding out how the management is going to allocate the scarce resources for meeting the productive requirements of the business. The use of funds should be managed in such an order that the available resources are put to the best use of the enterprise. The funds should be managed in such a way that the business is in a position to make payment of interest and loan instalments as per the agreed schedule. It is a test as to effective or otherwise use of working capital The funds flow statement is a test of the effective use of working capital by the management during a particular period. The adequacy or inadequacy of working capital will tell the financial analyst about the possible steps that the management should take for effective use of surplus working capital or make arrangements in case of inadequacy of working capital. 7.11

FUNDS FLOW STATEMENT AND INCOME STATEMENT A Funds Flow Statement differs from an Income Statement (i.e., Profit and Loss Account)

in several respects: (i) A Funds Flow

Statement deals with the financial resources required for running the business activities. It explains how the funds were obtained and how were they used. Whereas an Income Statement discloses the results of the business activities, i.e., how much has been earned and how it has been spent. (ii) A Funds Flow Statement matches the 'funds raised' and 'funds applied' during a particular period. The sources and applications of funds may be of capital as well as of revenue nature. An Income Statement matches the

incomes of a period with the expenditure of that period which are

both of a revenue nature. For example, where shares are issued for cash, it becomes a source of funds while preparing a funds flow statement but it is not an item of income for an Income Statement. (iii) Sources of funds are many besides operations such as share capital, debentures, sale of fixed assets, etc. An Income Statement which discloses the results of operations cannot even accurately show the funds from operations alone because of non-fund items (such as depreciation, writing off of fictitious assets etc.) being included therein. Thus, both the Income Statement and the Funds Flow Statement have different functions to perform. Modern management needs both. One cannot be a substitute for the other—rather they are complementary to each other.

256 Self-Instructional Material Cash and Funds Flow Statements NOTES 7.12 PREPARATION OF FUNDS FLOW STATEMENT In order to prepare a Funds Flow Statement, it is necessary to find out the 'sources' and 'applications' of funds. 7.12.1 Sources of Funds The source of funds can be both internal as well as external. Internal sources Funds from operations is the only internal source of funds. However, following adjustments will be required in the figure of Net Profit for finding out real funds from operations: Add the following items as they do not result in outflow of funds: (i) Depreciation on fixed assets. (ii) Preliminary expenses or goodwill, etc., written off. (iii) Contribution to debenture redemption funds, transfer to general reserve, etc., if they have been deducted before arriving at the figure of net profit. (iv) Provision for taxation or proposed dividend are usually taken as appropriation of profits only and not current liabilities for the purposes of Funds Flow Statement. This is discussed in detail later. Tax or dividends actually paid are taken as applications of funds. Similarly interim dividend paid is shown as an application of funds. All these items will be added back to net profit, if already deducted, to find funds from operations. (v) Loss on sale of fixed assets. Deduct the following items as they do not increase funds: (i) Profit on sale of fixed assets since the full sale proceeds are taken as a separate source of funds and inclusion here will result in duplication. (ii) Profit on revaluation of fixed assets. (iii) Non-operating incomes such as dividend received or accrued dividend, refund of income-tax, rent received or accured rent. These items increase funds but they are non-operating incomes. They will be shown under separate heads as 'source of funds' in the Funds Flow Statement. In case the Profit and Loss Account shows 'Net Loss', this should be taken as an item which decreases the funds. Illustration 7.9

From the following Profit and Loss Account, compute the funds from operations:

PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To Salaries 5,000

By Gross Profit b/d 1,000 To Rent 2,000

Ву

Rent 5,000 To Depreciation 1,000 By Interest on Investments 4,000 To Preliminary Expenses 2,000 By Net Loss 5,000 To Loss on sale of

land 5,000 15,000 15,000

Self-Instructional Material 257 Cash and Funds Flow Statements NOTES Solution: FUNDS FROM OPERATIONS Net Loss as per Profit and loss A/c Rs (–) 5,000 Add: Items which do not decrease funds: Depreciation Rs 1,000 Preliminary expenses 2,000 Loss on sale of land 5,000 8,000 Funds from operations 3,000 It may be noted that the two items 'Rent' and 'Interest on Investments' are strictly not items of operating incomes. In case it is desired to calculate 'funds from operations' in a strict sense, any non-operating income will have also to be excluded while finding out funds from operations. Such items will be shown as a separate source under the head, 'Non-operating income' in the Funds Flow Statement. In the present illustration the items will then appear in the Funds Flow Statement as follows: FUNDS FLOW STATEMENT Sources: Rs Funds from Non-operating Incomes 9,000 Applications: Outflow of Funds on account of operations (Rs 3,000 – Rs 9,000) 6,000 increase in Working Capital 3,000 Tutorial Note: The students should not interpret the term 'funds from operations' so strictly. They may solve an examination problem as per solution given in the first alternative. Illustration 7.10 The net profit after making a provision of Rs 3,30,000 for Income Tax of Tata Ltd. for the year ended 31st March, 1997 amounts to Rs 3,00,000. This figure of the net profit has been arrived at after taking into account the following items: Rs

Depreciation on fixed assets 65,000

Preliminary expenses written off 7,000 Bad debts 1,000 Loss on sale of

furniture 1,500 Profit on sale of

long-term investments 5,000 Calculate Funds from Operations Solution: FUNDS FROM OPERATIONS Profit after Tax Rs 3,00,000

Add: Depreciation on Fixed Assets 65,000

Preliminary expenses written off 7,000 Loss on sale of

furniture 1,500 73,500 3,73,500 Less: Profit on sale of

Long-term Investments 5,000

Funds from Operations 3,68,500

Illustration 7.11

Following are the extracts from the Balance Sheet of a company as on 31 December, 1996 and 31 December, 1997. You are required to calculate funds from operations:

258 Self-Instructional Material Cash and Funds Flow Statements NOTES As on 31 December 1996 1997 Profit and Loss Appropriation Account 30,000 40,000 General Reserve 20,000 25,000 Goodwill 10,000 5,000 Preliminary Expenses 6,000 4,000 Provisions for Depreciation on Machinery 10,000 12,000 Solution: FUNDS FROM OPERATIONS Rs Profit and Loss Appropriation A/c balance as on 31 December, 1997 40,000 Add: Items which do not decrease funds: Transfer to General Reserve 5,000 Goodwill written off 5,000 Preliminary Expenses written off 2,000 Provision for Depreciation on Machinery 2,000 54,000 Less: Profit and Loss Appropriation A/c balance as on 31 December, 1996 30,000 Funds from Operations 24,000 The funds from operations can also be found out by preparing an

Adjusted Profit and Loss Account: ADJUSTED PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To

Transfer

to General Reserve 5,000 By Balance b/d 30,000 To Goodwill written off 5,000 By Funds from Operations (bal. fig.) 24,000 To Preliminary Expenses written

of 2,000 To Provision for Depreciation 2,000 To Balance c/d 40,000 54,000 54,000 External Sources These sources include: Funds from long-term loans Long-term loans such as debentures, borrowings from financial institutions will increase the working capital and, therefore, there will be flow of funds. However, if the debentures have been issued in consideration of some fixed assets, there will be no flow of funds. Sale of fixed assets Sale of land, buildings, long-term investments will result in generation of funds. Funds from increase in share capital Issue of shares for cash or for any other cur- rent asset results result in increase in working capital and hence there will be flow of funds. 7.12.2 Applications of Funds The uses to which funds are put are called 'applications of funds'. Following are some of the purposes for which funds may be used: Purchase of fixed assets Purchase of fixed assets such as land, building, plant, machinery, long-term investments, etc., results in decrease of current assets without any decrease in current liabilities. Hence, there will be a flow of funds. But in case shares or debentures are issued for acquisition of fixed assets, there will be no flow of funds. Payment of dividend Payment of dividend results in decrease of a fixed liability and, therefore, it affects funds. Generally, recommendation of directors regarding declara- tion of dividends (i.e. proposed dividends) is simply taken as an appropriation of profits and not as an item affecting the working capital. This has been explained in detail later. Self-Instructional Material 259 Cash and Funds Flow Statements NOTES Payment of fixed liabilities Payment of a longterm liability, such as redemption of debentures or redemption of redeemable preference shares, results in reduction of working capital and hence it is taken as an application of funds. Payment of tax liability Provision for taxation is generally taken as an appropriation of profits and not as an application of funds. But if the tax has been paid, it will be taken as an application of funds. This has been explained in detail later. 7.12.3 Technique for Preparing a Funds Flow Statement A funds flow statement depicts change in working capital. It will, therefore, be better for the students

to prepare first a Schedule of Changes in Working Capital before preparing a Funds Flow Statement.

Schedule of changes in working capital The schedule of changes in working capital can be prepared by comparing the current assets and the current liabilities

of two periods. It may be in the following form: Items as on as on Change Increase Decrease Current Assets: Cash balance Bank balance Marketable securities Accounts receivable Stock-in trade Prepaid expenses Current Liabilities: Bank overdraft Outstanding expenses Accounts payable Net Increase/Decrease in Working Capital: Rules of

preparing the schedule (i) Increase in a current asset, results in increase (+) in 'working capital.' (ii)

Decrease in a current asset, results in decrease (-) in 'working capital.' (iii)

Increase in a current liability, result in decrease (-) in '

working capital.' (iv) Decrease in a current liability, results increase (+) in 'working capital.'

Funds flow statement While preparing a Funds Flow Statement, current assets and current liabilities are to be ignored. Attention is to be given to changes in Fixed Assets and Fixed Liabilities. The statement may be prepared in the following form: FUNDS FLOW STATEMENT

Sources of Funds:

Issue of shares Issue of debentures Long-term borrowings Sale of fixed assets

Operating profit* Total Sources Applications of funds: Redemption of

redeemable preference shares Redemption of debentures Payment of other long-term loans Purchase of fixed assets Operating loss* Payment of dividends, tax, etc. Total Uses Net increase/decrease in working capital (Total Sources–Total Uses) * Only one figure will be there.

260 Self-Instructional Material Cash and Funds Flow Statements NOTES The Funds Flow Statement can also be prepared in 'T' shape form as shown below: FUNDS FLOW STATEMENT Particulars Rs Particulars Rs Sources of Funds: Applications of Funds: Issue of shares Redemption of redeemable Issue of debentures preference shares Long-term borrowings Redemption of debentures Sale of fixed assets Payment of other long-term loans Operating profit* Purchase of fixed assets Decrease in working capital* Operating loss* Payment of dividends, tax etc. Increase in working capital* * Only one figure will be there. The change in working capital disclosed by the 'schedule of changes in working capital' will tally with the change disclosed by 'funds flow statement'. Proforma of adjusted profit and loss account Particulars Rs. Particulars Rs. To Depreciation and Depletion or xxx By Opening Balance (of P&L A/c) xxx amortization of fictitious and intangible assets, such as: Good-will, Patents, Trade Marks, Preliminary Expenses, etc. To Appropriation of Retained Earni- xxx By Transfers from excess provisions xxx ngs, such as: Transfers to General Reserve, Dividend Equalisation Fund, Sinking Fund, etc. To Loss on sale of any non-current xxx By Appreciation in the value or non- xxx or fixed asset current assets To Dividends (including interim dividend) xxx By Dividends received xxx To Proposed Dividend (if not taken as xxx By Profit on sale of fixed or non- xxx a current liability) current assets To Closing balance of P&L A/c xxx By Funds from operations (bala- xxx ncing figure in case debit side exceeds credit side) To Funds lost in Operations xxx xxx (balancing figure, in case credit side exceeds the debit-side) xxx xxx xxx Notes: ? Depreciation on fixed assets or amortisation of intangible assets like preliminary expenses, patents, goodwill, etc., written off is charged against profit to reflect the use of fixed assets or written off of intangible asset. In these transactions no corresponding cash outlay occurs and hence, add back the amount charged against profit, to arrive at the total funds generated from business operations. ? The Profit or Loss on sale of non-current assets (fixed assets and long-term investments) is adjusted to arrive at the true funds from operations. ? The provision for tax made in the profit and loss account is to be added back to the reported profit. The actual amount paid as tax is to be shown as the application of funds in the funds flow statement. The provision for tax, if it is shown in the

Self-Instructional Material 261 Cash and Funds Flow Statements NOTES balance sheet, need not be considered for calculation of funds generated for operations. ? Any amount appropriated in the Profit and Loss account towards transfer to reserves or proposed dividend is to be added back to arrive at the funds generated from operation. The actual amount paid as dividend is to be shown as application of funds in the funds flow statement. The dividend proposed but awaiting payment is a current liability in the balance sheet. If this amount increases, from one year end to the next, the extra liability appears as a source of funds. 7.13 TREATMENT OF PROVISION FOR TAXATION AND PROPOSED DIVIDENDS 7.13.1 Provision of Taxation In the chapter on 'Financial Statement: Analysis and Interpretation' we have studied that the 'provision for tax' is a current liability. While preparing a Funds Flow Statement, there are two options available 1 : (i) Provision for tax may be taken as a current liability. In such a case, when provision for tax is made the transaction involves Profit and Loss Appropriation Account, which is a fixed liability and Provision for Tax Account, which is a current liability. It will thus decrease the working capital. On payment of tax there will be no change in working capital because it will involve one current liability (i.e., Provision for Tax and the other current asset (i.e. Bank or Cash balance). (ii) Provision for tax may be taken only as an appropriation of profit. It means there will be no change in working capital position when provision for tax is made since it will involve two fixed liabilities i.e. Profit and Loss Appropriation Account and Provision for Tax Account. However, when tax is paid, it will be taken as application of funds, because it will then involve 'provision for tax account' which has been taken as a fixed liability and 'bank account' which is a current asset. 7.13.2 Proposed Dividends Whatever has been said about the 'provision for taxation' is also applicable to 'proposed dividends.' Proposed dividends can also be dealt with in two ways: (i) Proposed dividends may be taken as a current liability since declaration of divi- dends by the shareholder is simply a formality. Once the dividends are declared at the general meeting, they will have to be paid within 42 days of their declaration. In case the proposed dividend is taken as a current liability, it will appear as one of the items decreasing working capital in the 'schedule of changes in working capital'. It will not be shown as an application of funds when dividend is paid later on. ------1 It may be noted that AS: 3 'Statement of Changes in Financial Position', (now replaced by

Cash Flow Statements) issued by the Institute of Chartered Accountants of India,

allowed both the options given above. It gave two formats in the Appendix attached to AS: 3. In one format it showed 'Payment of Dividends' in the Funds Flow Statement as an application, while Provision for Tax as a current liability in the Schedule for Changes in Working Capital. It meant that the proposed dividends was taken as a non-current liability while Provision for Tax was taken as a current liability. In the second format it showed both Dividends and Tax paid as 'applications of funds.' In other words Proposed Dividends and Provision for Taxation were taken non- current liabilities. Moreover, it was also stated that methods of presentation used are illustrative only and in no way prescriptive. Other methods of presentation may equally comply with the accounting standard. The format used should be selected with a view to demonstrate clearly the manner in which the financial resources have been obtained and utilised. 262 Self-Instructional Material Cash and Funds Flow Statements NOTES (ii) Proposed dividends may simply be taken as an appropriation of profits. In such a case proposed dividend for the current year will be added back to the current year's profits in order to find out funds from operations if such amount of dividend has already been charged to profits. Payment of dividend will be shown as an 'application of funds.' Illustration 7.12 Form the following Balance Sheets as on 31 December, 1996 and 31 December, 1997, you are required to prepare a Schedule of Changes in the Working Capital and a Funds flow Statement taking: (i) the provision for tax and proposed dividends as non-current liabilities; (ii) the provision for tax and proposed dividends as non-current liabilities; (ii) the provision for tax and proposed dividends as non-current liabilities; (ii) the provision for tax and proposed dividends as non-current liabilities; (ii) the provision for tax and proposed dividends as non-current liabilities; (ii) the provision for tax and proposed dividends as non-current liabilities; (ii) the provis

BALANCE SHEET

as on 31 December Liabilities 1996 1997 Assets 1997 1998

Rs Rs Rs Rs Share Capital 10,000 15,000 Fixed Assets 10,000 20,000

Profit and Loss A/c 4,000 6,000

Current

Assets 13,000 14,500 Provision for

Tax 2,000 3,000 Proposed Dividends 1,000 1,500 Sundry Creditors 4,000 6,000 Outstanding Expenses 2,000 3,000 23,000 34,500 23,000 34,500 Additional Information Tax paid during 1997 Rs 2,500 Dividends paid during 1997 Rs 1,000 Solution: (i)When Provision for Tax and Proposed dividends are taken as non-current liabilities: SCHEDULE OF CHANGES IN WORKING CAPITAL Particulars Increase (+) Decrease (-) Rs Rs Sundry Creditors 2,000 Outstanding Expenses 1,000 Current Assets 1,500 Decrease in Working Capital 1,500 3,000 3,000 FUNDS FLOW STATEMENT Source: Increase in Share Capital Rs 5,000 Funds from Operations: Net Profit Rs 2,000 Add: Provision for Tax made during the year (Rs 3,000 + Rs 2,500 – Rs 2,000) 3,500 Add: Proposed Dividends 1,500 7,000 Total Sources 12,000 Applications: Fixed assets purchased 10,000 Tax paid 2,500 Dividends paid 1,000 Total Applications 13,500 Net Decrease in Working Capital 1,500

Self-Instructional Material 263 Cash and Funds Flow Statements NOTES (ii) When Provision for Tax and Proposed Dividends are taken as Current Liabilities: SCHEDULE

OF CHANGES IN WORKING CAPITAL Particulars Increase (+) Decrease (-) Rs Rs Sundry Creditors 2,000 Outstanding Expenses 1,000 Current Assets 1,500 Provision for Tax 1,000 Proposed Dividends 500 Decrease in Working Capital 3,000 4,500 4,500 FUNDS FLOW STATEMENT Particulars Rs

Sources: Increase in Share Capital 5,000 Funds from Operations 2,000 Total Sources 7,000 Applications: Purchase of Fixed Assets 10,000 Decrease in Working Capital 3,000 Alternative Solution to (ii). Sometimes it is desired to show the real funds from operations before tax and making any appropriations for dividends, etc. In such a case Proposed Dividends and Provision for Tax are first added back to profit if already subtracted and then any tax or dividend paid for the year or outstanding for the year is shown as an application. The Funds Flow Statement, in the above illustration, will appear as follows if this alternate approach is followed. FUNDS FLOW STATEMENT Particulars Rs Rs Source: Increase in Share Capital 5,000 Funds from Operations: Net Profit 2,000 Add: Provision for tax made during the year 3,500 Proposed dividends for the year 1,500 7,000 (A) 12,000 Applications: Fixed assets purchased 10,000 Tax paid and outstanding for the year (500 + 3,000)* 3,500 Dividends paid and outstanding for the year (0 + 1,500)* 1,500 (B) 15,000 Decrease in Working Capital (A) – (B) 3,000 *Provision for tax was Rs 2,000 last year. Tax paid amounts to Rs 2,500 this year. It means excess of Rs 500 relates to this year. A provision of Rs 3,500 has been made during the year. Thus, Rs 3,000 is still outstanding. Tax paid and outstanding for the year therefore amounts to Rs 3,500. In other words, whatever was added to the amount of Net profits for ascertaining 'real funds from operations' has been shown as an application. The net effect is zero. The same applies to Proposed Dividends. It has become customary to take Provisions for Tax as a charge against profits for accounting purposes Hence, funds from operations should be found out after tax. However, where Proposed Dividend is taken as a current liability, the above approach in respect of it may be adopted.

264 Self-Instructional Material Cash and Funds Flow Statements NOTES Tutorial Note: Students are advised to state their presumptions clearly. However, where from the question it is implied that these liabilities are to be taken as Current Liabilities (e.g. the items have been put under the heading 'Current Liabilities' in the Balance Sheet), the students are advised to treat them as Current Liabilities. We have generally taken these two items as non-current liabilities. In case the Balance Sheet contains the amount of 'Proposed Dividends' as well as the amount of 'Provision for Taxation', it can be presumed that the Proposed Dividends' and 'Provisions for Taxation' appearing in the last year's Balance Sheet must have been paid during the year in the absence of any other information. This presumption should generally be made at least for 'Proposed Dividends.' Example. The

following are extracts from the Balance Sheets of a company on

two different dates: As on 31 December As on 31 December, Liabilities 1997 1998 Profit and Loss A/c 50,000 80,000 Provision for Taxation 10,000 15,000 Proposed Dividends 5,000 10,000 On the basis of the above information Funds from Operations will be computed as follows in those case where 'Provision for Taxation' and 'Proposed Dividends' are taken as non-current liabilities. Rs

Balance of Profit and Loss A/c as on 31 December, 1997 80,000 Add: Provision for tax made

during the year 15,000 Add: Proposed dividends 10,000 1,05,000 Less: Balance of P. L. A/c as on 31 December, 1996 50,000 Funds from operations 55,000 While preparing a Funds Flow Statement for the year 1997, Rs 10,000 and Rs 5,000 will be shown as Application of Funds under the heads Tax paid and Dividends paid respectively. A distinction has to be made between 'tax payable' and 'provision for taxation.' Provision for tax may or may not be taken as a current liability, but 'tax payable' will be taken as a current liability, since this is the amount due by way of tax after finalisation of tax assessment. Similarly, 'dividend payable' is a current liability since this is the amount which has to be paid by way of dividends to the shareholders. Is depreciation a source of funds?

Depreciation means

decrease

in the value of an asset due to wear and tear, lapse of time, obsolescence,

exhaustion and accident.

Depreciation is

taken as an operating expense while calculating funds from operations. The accounting entries are: (i) Depreciation

A/c Dr. To Fixed Assets A/c (ii)Profit and Loss A/c Dr. To

Depreciation

Thus, effectively the Profit and Loss Account is debited while the Fixed Asset Account is credited with the amount of depreciation. Since, both Profit and Loss Account and the Fixed Asset Account are non-current accounts, depreciation is a non-fund item. It is neither a source nor an application of funds. It is added back to Operating Profit to find out Funds from Operations since it has already been charged to Profit but it does not decrease Funds from Operations. Depreciation should not, therefore, be taken as a 'Source of Funds'. If Depreciation were really a source of funds by itself,

any enterprise

Self-Instructional Material 265 Cash and Funds Flow Statements NOTES could have improved its funds position at will by merely increasing the periodical depre- ciation charge. However, depreciation can be taken as a source of funds in a limited sense because of there reasons: (i) Depreciation finds its way into current assets through charging of overheads (including depreciation). The value of closing inventory may include depreciation of fixed assets as an element of cost. (ii) Depreciation does not generate funds but it definitely saves funds. For example, if the business had taken the fixed assets on hire, it would have been required to pay rent for them. Since it owns fixed assets, it saves outflow of funds which would have otherwise gone out in the form of rent. (iii) Depreciation reduces taxable income and therefore, income-tax liability for the period is reduced. This will be clear with the following example. Case I Case II Particulars Rs Rs Income before depreciation 75,000 75,000 Depreciation provided (A) Nil 15,000 Taxable income 75,000 60,000 Income tax say at 50 per cent 37,500 30,000 Net Income after (B) 37,500 30,000 Net flow of funds after tax (A) + (B) 37,500 45,000 The above example shows that in Case II, the net flow of funds is more by Rs 7,500 as compared to Case I. This is because on account of depreciation charge being claimed as an expense, tax liability has been reduced by Rs 7,500 in case of Case II. It may therefore be said that true funds flow from depreciation is the opportunity saving of cash outflow through taxation. The technique of preparing

a Schedule of Changes in Working Capital and a Funds Flow Statement

can be very well understood with the help of exhaustive illustrations given in the following pages. 7.14 COMPUTATION OF

FUNDS FROM OPERATIONS Illustration 7.13 From the following details finds out the funds from operations. Particulars Rs Particulars

Rs

To Salaries 40,000 By Gross profit 1,00,000 To Rent 15,000 By

Profit on sale of Building To

Provision for bad debts 5,000 sold for Rs 10,000 To Preliminary expenses written off 10,000 book value Rs 5,000 5,000 To Goodwill written off 5,000 To Depreciation on machinery 5,000 To Loss on sale of plant book value Rs 10,000 sold for Rs 8,000 2,000 To Provision for tax 5,000 To Net Profit 18,000 1,05,000 1,05,000 Check Your Progress 6. State whether the following statements are 'True' or 'False'. (a)

Purchase of stock-in-trade is an application of funds. (b) A decrease in current liabilities increases working capital. (c) Funds flow refers to change in long-term funds. (d) The funds flow statement shows changes in the individual items comprising working capital. (e) Funds flow analysis shows the position of business as on the closing date of business period. (f)Working capital is the difference between fixed assets and current assets. (g) Cash or credit sales increases the working capital. (h) Purchase of fixed assets is a use of funds. (i) Amortisation of preliminary expenses is a use of funds. (j) Payment of dividends is a use of funds. (k) For funds flow statement provision for taxation will be treated as an item of internal source.

266 Self-Instructional Material Cash and Funds Flow Statements NOTES Solution: COMPUTATION OF FUNDS FROM OPERATIONS Particulars Rs Net Profit as per Profit and Loss Account 18,000 Add: Items which do not decrease funds from operations Provision for tax (i) 5,000 Loss on sale of plant (ii) 2,000 Depreciation (iii) 5,000 Goodwill written off (iv) 5,000 Preliminary expenses written off (v) 10,000 27,000 45,000 Less: Items which do not increase funds from operations: Profit on sale of buildings (vi) 5,000 Funds from operations 40,000 Working Notes: (i) Provision for tax is only an appropriation of profits and therefore, to find out funds from operations it will have to be added back. The amount of tax actually paid will be shown as a separate item under 'application of funds.' (ii) The entry for loss on sale of plant is: P. & L. A/c Dr. To Plant A/c Since both accounts are 'fixed', i.e., one a fixed liability and the other a fixed asset, there is no flow of funds. (iii) Depreciation of machinery P. & L. (Depreciation) A/c Dr. To Machinery Both accounts are 'fixed', therefore, there is no flow of funds. (iv) and (v) also involve "fixed" accounts only. (v) The entry for profit on sale of buildings. Building A/c Dr. To P. & L. A/c

Since both accounts are 'fixed' there is no flow of funds. Moreover, proceeds realised from sale of buildings Rs 10,000 will be taken as a separate source of funds. In case the item is considered here also, it will amount to considering it twice. Moreover, it is not an income or profit from operations. 7.14.1 Digging out Hidden Information Sometimes the information required for Funds Flow Statement is not directly given in the question. It may have to be found out. For example, the question may give Opening Balance of Provision for Tax as Rs 10,000, Closing Balance of Provision for Tax as Rs 15,000 and Tax paid as Rs 12,000. In order to find out the Provision for Tax which must have been charged to Profit and Loss Account for the year, a Provision for Tax Account will have to be prepared in the following manner: PROVISION FOR TAX ACCOUNT Particulars

Rs

Particulars

Rs

To Bank 12,000 By Balance b/d 10,000 To Balance c/d 15,000 By

P.& L. A/c (

balancing figure) 17,000 27,000 27,000

Self-Instructional Material 267 Cash and Funds Flow Statements NOTES The Provision for Tax charged to Profit and Loss Appropriation Account for the year is Rs 17,000. In case the figure of Net Profit given is after tax, Rs 17,000 will have to be added back to Net Profit in order to find out funds from operations. On the same pattern, accounts may have to be prepared for dividends, plant, building to find out the hidden information. Take another example. The Machinery Account gives a balance of Rs 1,00,000

in

the beginning of the accounting year while at the end of the accounting year

its balance is a sum of Rs 1,50,000. The provision for depreciation of the machinery stands at Rs 30,000 in

the beginning of the accounting year and Rs 40,000 at the end of the accounting year.

During the

year, a machinery whose original cost was Rs 5,000 and on which depreciation of Rs 4,000 had been charged so far, is sold for Rs 2,000.

In such a case, the amount of depreciation charged from the Profit and Loss Account

on Machinery and the value of the Machinery purchased during the accounting year will be found out by preparing (i) Machinery Account, and (ii) Provision for Depreciation on Machinery Account as given below:

MACHINERY ACCOUNT Particulars Rs Particulars

Rs To Balance b/d 1,00,000 By Bank 2,000 To Profit on sale of machinery 1,000 By Provision for depreciation 4,000 To Bank (Machinery purchased— 55,000 By Balance c/d 1,50,000 Balancing figure) 1,56,000 1,56,000 PROVISION FOR DEPRECIATION ON MACHINERY ACCOUNT Particulars Rs Particulars Rs To Machinery A/c 4,000 By Balance b/d 30,000 To Balance c/d 40,000 By Profit and loss A/c 14,000 (Depreciation charged— balancing figure) 44,000 44,000

Illustration 7.14

The Annual Accounts of Atlas Cycles Ltd. disclosed the following balances: 31 March 31 March 1997 1996 Investments in other companies 28,000 34,000 Retained Surplus (P. & L. A/c) 67,500 57,000 The company had sold its 40 per cent interest in another company for a sum of Rs 23,500. There was a gain of Rs 13,500 on account of such sale and the amount was credited to Retained Surplus Account. State the sources and uses of company's fund. Solution: 1. The company has investments in other companies. It has sold its interest in one of the companies for a sum of Rs 23,500. It has made a profit of Rs 13,500. It means cost of investment sold was Rs 10,000. The Investments on 31 March 1996 stood at Rs 34,000, out of which investments of Rs 10,000 have been sold away during the year. In the absence of any purchase of investment, the balance in the Investments Account should have been only Rs 24,000. However, it stands at Rs 28,000. This shows that investments have been purchased to the extent of Rs 4,000. It is an appli- cation of 'funds'. The same results can be derived by preparing "Investments in other Companies Account."

268 Self-Instructional Material Cash and Funds Flow Statements NOTES INVESTMENTS IN OTHER COMPANIES ACCOUNT Particulars Rs Particulars Rs To Balance b/d 34,000 By Bank (cost of investments sold) 10,000 To Bank (balancing figure) 4,000 By Balance c/d 28,000 38,000 38,000 2. The gain on sale of investments of Rs 13,500 has been credited to the Retained Surplus account. Since the company is not trading in investments, the profit of Rs 13,500 should not have been taken to that account. The funds from operations for the year should, therefore, be calculated as follows: Retained Surplus Balance as on 31 March, 1997 Rs 67,500 Less: Profit on sale of investments 13,000 54,000 Less: Retained Surplus as on 31 March, 1996 57,000 Outflow of funds on account of operations 3,000 The above results can also be obtained by preparing a Retained Surplus Account. RETAINED SURPLUS ACCOUNT Particular Rs Particular Rs To Outflow of funds on account of By Balance b/d 57,000 operations (Balancing figure) 3,000 By Profit on sale of investments 13,500 To Balance c/d 67,500 70,000 70,500 Funds flow statement can now be prepared as follows: FUNDS FLOW STATEMENT Particulars Rs Sources: Sale of Investments 23,500 Total Sources 23,500 Applications: Purchase of Investments 4,000 Operational Loss 3,000 Total Uses 7,000 Net Increase in Working Capital 16,500 7.15 COMPREHENSIVE FUNDS FLOW STATEMENTS

Illustration 7.15 From the following balance sheets of X Ltd. on 31 December, 1995 and 1996,

you are required to prepare: (a) A schedule of changes in working capital, (b) A funds flow statement. 1995 1996 1995 1996

Liabilities Rs Rs Assets Rs Rs

Share Capital 1,00,000 1,00,000 Goodwill 12,000 12,000 General Reserve 14,000 18,000 Building 40,000 36,000 Profit and Loss A/c 6,000 3,000 Plant 37,000 36,000 Sundry Creditors 8,000 5,400 Investments 10,000 11,000 Bills Payable 1,200 800 Stock 30,000 23,400 Provision for Taxation 16,000 18,000 Bills Receivable 2,000 3,200 Provision for Doubtful Debtors 18,000 19,000 Debts 400 600 Cash/Bank 6,600 15,200 1,55,600 1,55,800 1,55,600 1,55,800 Self-Instructional Material 269 Cash and Funds Flow Statements NOTES The following additional information has also been given: (i) Depreciation charged on Plant was Rs 4,000 and

on Building Rs 4,000. (ii) Provision for taxation of Rs 19,000 was made during the year 1996. (iii) Interim

dividend of Rs 8,000 was paid during the year 1996.

Solution: SCHEDULE OF CHANGES IN WORKING CAPITAL Particular 1995 1996 Increase (+) Decrease (–) Rs Rs

Rs Rs Current Assets: Cash at Bank6,600 15,200 8,600 Debtors 18,000 19,000 1,000 Bills receivable 2,000 3,200 1,200 Stock 30,000 23,400 6,600 Current Liabilities: Provision for doubtful debts 400 600 200 Bills payable 1,200 800 400 Sundry creditors 8,000 5,400 2,600 – Total 13,800 6,800 Net Increase in working capital

Rs 7,000. FUNDS FLOW STATEMENT Particulars Rs Source: Funds from Operations (See Note 1) 36,000 Total Sources 36,000 Applications: Purchase of plant (See Note) 3,000 Tax paid (See Note 3) 17,000 Investments purchased (See Note 4) 1,000 Interim dividend paid 8,000 Total Applications 29,000 Net Increase in Working Capital 7,000 36,000 Working Notes: 1. Funds from operations: Particulars Rs Rs Profit and loss A/c balance on 31 December, 1996 13,000 Add: Items which do not decrease funds from operations Transfer to general reserve 4,000 Provision for tax 19,000 Depreciation: Plant 4,000 Building 4,000 Interim dividend paid 8,000 39,000 52,000 Add: Profit and Loss Account balance on 31 December, 1996 16,000 Funds from operations for the year 36,000 2. Purchase of Plant: This has been found out by preparing the Plant Account.

270 Self-Instructional Material Cash and Funds Flow Statements NOTES PLANT ACCOUNT Particulars Rs Particulars Rs To Balance b/d 37,000 By Depreciation 4,000 To Bank (Purchase of plant— 3,000 By Balance c/d 36,000 balancing figure) 40,000 40,000 3. Tax paid during the year has been found out by preparing a provision for tax account. PROVISION FOR TAX ACCOUNT Particulars

Rs Particulars Rs To Bank (being

tax paid—Bal. figure) 17,000

By Balance b/d 16,000 To Balance c/d 18,000 By P. & L. A/c 19,000 35,000 35,000 4. '

Investments' have been taken as a fixed asset presuming that they are long-term invest- ments. Illustration 7.16 From the information as contained in the statement of Income and the Balance Sheet of G.C. Ltd., you are required to prepare a Funds Flow Statement and to describe the significant developments revealed by the statement. You are also required to prepare a Statement of Working Capital showing increase and decrease in each component thereof: A. STATEMENT OF INCOME AND RECONCILIATION OF EARNINGS FOR 1997 Particular Rs Rs Net Sales 25,20,000 Less: Cost of sales 19,80,000 Depreciation 60,000 Salaries and wages 2,40,000 Operating expenses 80,000 Provision for taxation 88,000 24,48,000 Net Operating Profit 72,000 Non-recurring Income: Profit on sale of an item of equipment 12,000 84,000 Retained earnings (balance in Profit and Loss A/c brought forward) 1,51,800 2,35,800 Dividend declared and paid during the year 72,000 Profit and Loss A/c balance as on 31 December, 1997 1,63,800 B. COMPARATIVE BALANCE SHEET Liabilities As at 31 As at 31 Assets As at 31 As at 31 Dec.1996 Dec.1997 Dec.1996 Dec.1997 Capital 3,60,000 4,44,000 Fixed Assets: Surplus in P. & L. A/c 1,51,800 1,63,800 Land 48,000 96,000 Sundry Creditors 2,40,000 2,34,000 Building and Equipment 3,60,000 5,76,000 Outstanding Expenses 24,000 48,000 Current Assets: Income Tax payable 12,000 13,200 Cash 60,000 72,000 Accumulated Depreciation Debtors 1,68,000 1,86,000 on building and equipment 1,20,000 1,32,000 Stocks 2,64,000 96,000 Advances 7,800 9,000 9,07,800 10,35,000 9,07,800 10,35,000 Cost of equipments sold was Rs 72,000. Check Your Progress 7. Select the most appropriate answer. (i) Increase in a fixed asset due to purchase is (a) Source of funds, (b) Use of funds, and (c) None. (ii) Net Profit earned plus non-working capital expenses is equal to (a) Fund provided by operations, (b) Use of funds, and (c) Sinking fund. (iii) Tax paid is (a) Application of fund, (b) Source of fund, and (c) No flow of fund. (iv) Stock at the end results in the (a) Application of fund, (b) Source of fund, (c) No flow of fund. (v) Stock in the beginning results in (a) Application of fund, (b) Source of fund, and (c) No flow of fund. (vi) An increase in the share premium account is (a) An application of fund, (b) A source of fund, and (c) No flow of fund. (vii)Sale of long-term investments indicates (a) Source of funds, (b) Application of funds, and (c) Change in current assets. Self-Instructional Material 271 Cash and Funds Flow Statements NOTES Solution: FUNDS FLOW STATEMENT for the year ended 31 December, 1997 Particulars Rs Rs Sources: Issue of shares 84,000 Funds from operations: Trading profit 72,000 Depreciation 60,000 1,32,000 Sale of fixed assets (equipment) 36,000 Total Sources (A) 2,52,000 Particulars Rs Applications: Purchase of land 48,000 Purchase of building and equipments 2,88,000 Dividend paid 72,000 Total Applications (B) 4,08,000 Decrease in Working Capital (A) – (B) 1,56,000

STATEMENT OF CHANGES IN WORKING CAPITAL Dec.1996 Dec.1997 Increase Decrease Rs Rs Rs Rs Current Assets: Cash 60,000 72,000 12,000 Debtors 1,68,000 1,86,000 18,000 Stock 2,64,000 96,000 1,68,000 Advances 7,800 9,000 1,200 4,99,800 3,63,000 31,200 1,68,000 Current Liabilities: Sundry Creditors 2,40,000 2,34,000 6,000 Outstanding Expenses 24,000 48,000 24,000 Income Tax Payable 12,000 13,200 1,200 2,76,000 2,95,200 37,200 1,93,200 Working Capital 2,23,800 67,800 1,56,000 The chief development portrayed by the Funds Flow Statement is a big expansion in fixed assets financed by issue of shares, depreciation funds and the major part of working capital. Working Notes: (i) BUILDING AND EQUIPMENT ACCOUNT

Particulars Rs Particulars

Rs To Balance b/d 3,60,000 By Bank 36,000 To Profit and loss

A/c 12,000 By Provision for depreciation To Bank (Purchases—balancing figure) 2,88,000 (on items sold) 48,000 By

Balance c/d 5,76,000 6,60,000 6,60,000 (ii) PROVISION FOR DEPRECIATION ACCOUNT Particulars Rs Particulars Rs To Building and equipment

A/c 48,000 By Balance b/d 1,20,000 (

for item sold-balancing figure) By Profit and loss A/c 60,000 To Balance c/d 1,32,000 1,80,000 1,80,000

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Self-Instructional Material Cash and Funds Flow Statements NOTES Since tax payable is a current liability, the amount of tax paid Rs 86,800 (i.e. Rs 12,000 + Rs 88,000 – Rs 13,200) has not been shown as application of funds in the Funds Flow Statement. Illustration 7.17 Balance Sheets of M/s Black and White as

on 1 January, 1997 and 31 December, 1997 were as follows: BALANCE SHEETS Liabilities 1Jan. '97 31 Dec. '97 Assets 1 Jan. '97 31 Dec. '97

Rs Rs Rs Rs Creditors 40,000 44,000 Cash 10,000 7,000 Mr. White's loan 25,000 – Debtors 30,000 50,000 Loan from P.N.

Bank 40,000 50,000 Stock 35,000 25,000 Capital 1,25,000 1,53,000 Machinery 80,000 55,000 Land 40,000 50,000 Building 35,000 60,000 2,30,000 2,47,000 2,30,000 2,47,000

During the year machine costing Rs 10,000 (accumulated depreciation

Rs 3,000)

was sold for Rs 5,000. The provision for depreciation against machinery as on 1 January,1997 was Rs 25,000 and on 31 December, 1997 Rs 40,000. Net profit for the year 1997 amounted to Rs 45,000.

You are required to prepare

Funds (

Working Capital) Flow Statement. Solution: FUNDS FLOW STATEMENT for the year ending 31 December, 1997 Particulars Rs Sources: Loan from P.N. Bank 10,000 Sale of Plant 5,000 Funds from Operations (See Working Note 2) 65,000 Total Sources 80,000 Applications: White's Loan repaid 25,000 Partners' drawings 17,000 Purchase of land 10,000 Purchase of building 25,000 Total Applications 77,000 Increase in Working Capital 3,000 Working Notes: 1. SCHEDULE

OF CHANGES IN WORKING CAPITAL Particulars Increase Decrease Rs Rs Cash 3,000 Debtors 20,000 Stocks 10,000 Creditors 4,000 20,000 17,000 Increase in Working Capital 3,000 2. FUNDS FROM OPERATIONS Rs

Profit made during the year 45,000 Add: Loss on sale of Machine sold 2,000 Depreciation on machinery 18,000 65,000 Self-Instructional Material 273 Cash and Funds Flow Statements NOTES 3. MACHINERY ACCOUNT Particulars Rs Particulars Rs To Balanceb/d 1,05,000 By Provision for Depreciation on machinery sold 3,000

By Bank 5,000 By Loss on machinery sold 2,000

By Balance c/d 95,000 1,05,000 1,05,000 4. PROVISION FOR DEPRECIATION ON MACHINERY Rs Rs

To Machinery A/c 3,000

By Balance b/d 25,000

To Balance c/d 40,000 By

P. and L. A/c (

Depreciation provided during the year -Balancing figure) 18,000 43,000 43,000 Illustration 7.18

From the following Balance Sheets of KEROX Ltd. prepare Funds Flow Statement for 1997: (Rs in thousands) Liabilities 31 March 31 March 31 March 1996 1997 1996 1997 Equity share capital 150 200 Goodwill 50 40 9 per cent

redeemable Land and buildings 100 85 preference shares 75 50 Plant 40 100 Capital reserve – 10 Investments 10 15 General reserve 20 25 Sundry debtors 70 85 Profit and

loss A/c 15 24 Stock 39 55 Proposed dividend 21 25 Bills receivable 10 15 Sundry creditors 13 24 Cash in hand 7 5 Bills payable 10 8 Cash

in bank 5 4 Liability for

expenses 15 18 Preliminary expenses 8 5 Provision for tax 20 25 339 409 339 409 Additional Information (i) A part of land was sold out in 1997, and the profit was credited to capial reserve. (

ii) A machine has been

sold for Rs 5,000 (written down value of the machine was Rs 6,000). Depreciation of Rs 5,000 was charged on plant in 1997. (

iii)

An interim dividend of Rs 10,000 has been paid in 1997. (iv) An amount of Rs 1,000 has been received by way of dividend on investment

in 1997. Solution: FUNDS FLOW STATEMENT for the year ended 31 March, 1997 Particulars Rs Particulars Rs Sources: Applications: Issue of equity shares 50,000 Tax paid 20,000 Sale of land 25,000 Redemption of preference shares 25,000 Sale of machinery 5,000 Interim dividend paid 10,000 Dividend on investments 1,000 Investments purchased 5,000 Funds from operations 92,000 Dividend paid 21,000 Plant purchased 71,000 Increase in working capital 21,000 1,73,000 1,73,000 Check Your Progress 8. Examine the impact of the following transactions on the funds flow. (a) Cash collected from debtors. (b) Purchase of machinery by issue of debentures. (c) Old furniture the book value of which is Rs 5,000 discarded and written off in the Profit and Loss Account. 9. State the reason whether the following transactions result in the increase or decrease of working capital or do not affect the working capital. (a) A company issued 10,000 shares of Rs 10 each at par and fully paid up. (b) Debentures for Rs 1,00,000 are converted into Equity shares. (c) Investments were sold for Rs 50,000. (d) Building was purchased for Rs 1,50,000. (e) Bills payable accepted and issued to creditors Rs 40,000. (f) Bills receivable Rs 10,000 discounted for Rs 9,500. (g) Fixed assets purchased by issue of shares for Rs 1,00,000. (h) Cash paid to creditors Rs 30,000. (i) Preliminary expenses written off Rs 5,000. (j) Advanced Income Tax paid Rs 50,000.

274 Self-Instructional Material Cash and Funds Flow Statements NOTES Working Notes: (i) SCHEDULE OF CHANGES IN WORKING CAPITAL for the year ending 31 March, 1997 Increase (+) Decrease (–) Rs Rs Sundry debtors 15,000 Stock 16,000 Bills receivable 5,000 Cash in hand 2,000 Cash at bank 1,000 Liability for expenses 3,000 Bills payable 2,000 Sundry creditors 11,000 38,000 17,000 Net Increase

in Working Capital Rs 21,000. (ii) PLANT ACCOUNT Particulars Rs Particulars

Rs To Balance b/d 40,000 By Bank 5,000 To Bank (Additions) 71,000 By P. & L. A/c 1,000 By Provision for Depreciation 5,000

By Balance c/d 1,00,000 1,11,000 1,11,000 (

iii) ADJUSTED PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To Provision for taxation 25,000 By Balance b/d 15,000

To Depreciation on machinery 5,000 By Dividend on investments 1,000 To Preliminary expenses 3,000 By Funds from operations To Goodwill written off 10,000 (balancing figure) 92,000 To General reserve 5,000 To Proposed dividend 25,000 To Interim dividend 10,000 To Loss on sale of machinery 1,000 To

Balance c/d 24,000 1,08,000 1,08,000 (iv) INVESTMENTS ACCOUNT Particulars Rs Particulars Rs To Balance b/d 10,000 By Balance c/d 15,000 To

Bank (Additions) 5,000 15,000 15,000 Alternative treatment (i) Provision for tax may be taken as a current liability. In such a case the net increase in working capital will be only Rs 16,000. Funds from operations will amount to Rs 67,000. Tax paid will not then appears as Application of Funds. (ii) If proposed dividend is also taken as a current liability, the working capital will further stand reduced to Rs 12,000. Funds from operations will be Rs 42,000 (i.e., Rs 67,000 – Rs 25,000). The Funds Flow Statement will appear as follows:

Self-Instructional Material 275 Cash and Funds Flow Statements NOTES Particulars Rs Sources: Issue of equity shares 50,000 Sale of land 25,000 Sale of machinery 5,000 Dividend from investments 1,000 Funds from operations (after dividend and tax) 42,000 Total sources (i) 1,23,000 Applications: Redemption of redeemable preference shares 25,000 Interim dividend paid 10,000 Investments purchased 5,000 Plant purchased 71,000 Total applications (ii) 1,11,000 Increase in working capital (i) – (ii) Rs 12,000. Tutorial Note: The students will find the former approach convenient. They may, therefore, adopt that ap- proach. Illustration 7.19 The Balance Sheets of ABC Co. Ltd. as at the end of 1996 and 1997 are give below: Liabilities 1996 1997 Assets 1996 1997 Rs Rs Rs Rs Share capital 1,00,000 1,50,000 Freehold land 1,00,000 1,00,000 Share premium – 5,000 Plant at cost 1,40,000 1,00,000

General reserve 50,000 60,000 Furniture at cost 7,000 9,000 Profit and loss A/c 10,000 17,000 Investments at cost 60,000 80,000 12 per cent debentures 70,000 50,000

Debtors 30,000 70,000 Precision for dep. on plant 50,000 56,000 Stock 60,000 65,000

Provision for Depreciation Cash 30,000 45,000 on furniture 5,000 6,000 Provision for Taxation 20,000 30,000 Sundry Creditors 86,000 95,000 3,91,000 4,69,000 3,91,000 4,69,000 A plant purchased for Rs 4,000 (Depreciation Rs 2,000) was sold for cash for Rs 800 on 30 September 1997. On 30 June 1997, an item of furniture was purchased for Rs 2,000. These were the only transactions concerning fixed assets during 1997.

A dividend of 22 1 / 2 per cent on original shares was paid. Solution: FUNDS FLOW STATEMENT Particulars Rs Sources of Funds: Share capital (including premium) 55,000 Sale of plant 800 Funds from operations (See Note 2) 79,700 Total sources 1,35,500 Applications of Funds: Redemption of debentures 20,000 Purchase of furniture 2,000 Dividend paid 22,500 Investments purchased 20,000 Tax paid (See Note 1) 20,000 Total uses 84,500 Increase in Working Capital 51,000 276 Self-Instructional Material Cash and Funds Flow Statements NOTES The increase in working capital can be verified by preparing a schedule of changes in working capital. SCHEDULE

OF CHANGES IN WORKING CAPITAL Particulars 1996 1997 Increase (+) Decrease (-) Rs Rs Rs Current Assets: Debtors 30,000 70,000 40,000 Stock 60,000 65,000 5,000 Cash 30,00 45,000 15,000 Current Liabilities: Sundry Creditors 86,000 95,000 9,000 60,000 9,000 Increase in Working Capital 51,000 Working

Notes: 1. Provision for taxation has been taken as a non-current liability. Moreover,

in the absence of any specific instructions in the question, it

is safe to presume that tax must have been paid equivalent to last year's provision for taxation. 2. Funds from operations have been calculated as follows:

ADJUSTED PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To Dividend paid 22,500 By Balance b/d 10,000 To Provision for taxation 30,000 By Funds from operations To Transfer to general reserve 10,000 (balance

figure) 79,700 To Depreciation: Plant 8,000 Furniture 1,000 To Loss on sale of plant 1,200 To Balance c/d 17,000 89,700 89,700 3. Loss on sale of Pant and Provisions for Depreciation on Plant and Furniture made during the year have been found out by preparing different accounts: PLANT ACCOUNT

Particulars Rs Particulars Rs To Balance b/d 1,04,000 By Bank 800 By P. & L. (loss on sale of

plant) A/c 1,200 By Provision for depreciation (on plant sold) 2,000

By Balance c/d 1,00,000 1,04,000 1,04,000 FURNITURE ACCOUNT Particulars Rs Particulars Rs To Balance b/d 7,000 By Balance c/d 9,000 To Bank (balancing figure) 2,000 9,000 9,000 PROVISION FOR DEPRECIATION ON FURNITURE ACCOUNT Particulars Rs Particulars Rs To Balance c/d 6,000 By Balance b/d 5,000

By P. & L. A/c 1,000 (

depreciation charged for the year-balancing figure) 6,000 6,000

Self-Instructional Material 277 Cash and Funds Flow Statements NOTES PROVISION FOR DEPRECIATION ON PLANT ACCOUNT Particulars

Rs Particulars Rs

To Plant A/c (dep. on plant sold) 2,000

By Balance b/d 50,000 To Balance c/d 56,000 By P. & L. A/c 8,000 (

Balancing figure-depreciation charged during the year) 58,000 58,000 Illustration 7.20

From the following financial statements of Workwell Ltd., you are required to prepare: (i) A Schedule of Changes in Working Capital, and (

ii) A Funds Flow Statement. Particulars 1996 1997 Rs Rs Trading Profit (after providing for depreciation and current taxation) 45,000 70,000 Profit on sale of investments — 2,000 45,000 72,000 Less: Provision for taxation 27,700 45,000 17,300 27,000 Balance of Profit brought forward from previous year 15,000 17,300 Income tax refund — 4,000 32,300 48,300 Proposed Dividend 15,000 15,000 17,300 33,300 Transfer to General Reserve — 10,000 Balance of retained earnings 17,300 23,300 BALANCE SHEET

Liabilities 1996 1997 Assets 1996 1997

Rs Rs Rs Rs Equity Share Capital 70,000 80,000 Fixed assets at cost 60,000 68,000 General Reserve 25,000 35,000 Less: Accumulated Profit and Loss A/c 17,300 23,300 depreciation 20,000 32,000 Future Taxation 20,000 32,000 40,000 36,000 1,32,300 1,70,300 Current assets 3,20,000 4,18,500

Current Liabilities: Account Payable 1,93,000 2,39,200 Current Taxation 19,700 30,000 Proposed Dividend 15,000 15,000 3,60,000 4,54,500 3,60,000 4,54,500

Solution: SCHEDULE OF CHANGES IN WORKING CAPITAL Particulars Increase (+) Decrease (-)

Rs Rs Current Assets 98,500 Account Payable 46,200 Current Taxation 10,300 Increase in Working Capital — 42,000 98,500 98,500

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Self-Instructional Material Cash and Funds Flow Statements NOTES FUNDS FLOW STATEMENT Particulars Rs Sources: Issue of Shares 10,000 Funds from Operations (including profit on sale of investments) 69,000 Refund of Income Tax 4,000 Total Sources (i) 83,000 Applications: Purchase of Fixed Assets 8,000 Tax paid 33,000 Total Applications (ii) 41,000 Increase in Working Capital (i) – (ii) 42,000 Working Notes: 1. ADJUSTED

PROFIT AND LOSS ACCOUNT Particulars Rs Particulars Rs To General Reserve 10,000 By Balance b/d 17,300 To Depreciation 12,000 By Income-tax refund 4,000 To Provision for Tax (future) 45,000 By Funds from operations To Balance c/d 23,300 — (balancing figure) 69,000 90,300 90,300 2. FUTURE TAXATION

ACCOUNT Particulars

Rs

Particulars

Rs

То

Bank (Tax Paid) 33,000 By Balance b/d 20,000 To Balance c/d 32,000 By P. & L. A/c 45,000 65,000 65,000 3. Profit

on account of sale of investments could have been shown as a separate 'Source of Funds' instead of including it as a part of funds from operations. 4. Total sale proceeds on account of sale of investments could not be found out in the absence of adequate information. 5. Income tax refund could have also been adjusted in Future Taxation Account. In such a case 'refund of tax' could not have been shown as a 'Source of Funds' and Rs 29,000 would have been shown as 'Tax paid'.

Illustration 7.21

The summarised Balance Sheet of FF Ltd. as on 31st March, 1995 and 31st March, 1996,

were as follows: Particulars 1995 1996 Rs Rs

Sources of Funds: Share capital 6,00,000 8,00,000 General reserve 3,40,000 4,20,000 Profit & Loss A/c 20,000 50,000 15% Debentures-A series 4,00,000 - 14% Debentures-B series - 5,00,000 Total 13,60,000 17,70,000 (Contd.) Self-Instructional Material 279 Cash and Funds Flow Statements NOTES Particulars 1995 1996 Rs Rs Applications of Funds: Fixed Assets at cost 16,00,000 19,00,000 Less: Depreciation to date 7,60,000 8,80,000 Net Fixed Assets (A) 8,40,000 10,20,000 Investments (B) - 3,00,000 Sundry Debtors 2,00,000 2,00,000 Less: Provisions for doubtful debts 20,000 50,000 1,80,000 1,50,000 Stocks 2,20,000 1,60,000 Cash and Bank Balances 1,80,000 2,20,000 Other Current Assets 72,000 96,000 Current Assets 6,52,000 6,26,000 Less: Current Liabilities 1,32,000 1,76,000 Net Current Assets (C) 5,20,0004,50,000 Total (A) + (B) + (C) 13,60,00017,70,000 While going through the accounts, the following are noticed: (i) Fixed assets of original cost of Rs 75,000 with book value of Rs 10,000 were scrapped and sold for Rs 5,000. (ii) Included in current liabilities are proposed dividend figures: Rs 31.3.1995 60,000 31.3.1996 80,000 (iii) During the year interim dividend for Rs 45,000 was paid besides the outstanding as on 31.3.1996. From the above you are required to prepare a statement of funds flow during 1995–96. (CA Final, May 1991, adapted) Solution: FF Ltd. FUNDS FLOW STATEMENT for the year ended 31.3.1996 Particulars Rs Particulars Rs Sources: Applications: Issue of shares 2,00,000 Redemption of 15% Debentures-A Issue of 14% Debentures-B Series 5.00.000 Series 4.00.000 Sale of Fixed Assets 5.000 Purchase of Fixed Assets 3,75,000 Funds from Operations 4,25,000 Purchase of Investments 3,00,000 Decrease in Working Capital 50,000 Payment of Dividend for 1994–95 60,000 Payment of Interim Dividend for 1995–96 45,000 11,80,000 11,80,000

Working Notes: 1. STATEMENT OF CHANGES IN WORKING CAPITAL Particulars 1995 1996 Change in Working Capital Increase (+) Decrease (-) Current Assets Sundry Debtors (

Less: Provision) 1,80,000 1,50,000 30,000 Stock 2,20,000 1,60,000 60,000 Cash and bank balances 1,80,000 2,20,000 40,000 (Contd.)

280 Self-Instructional Material Cash and Funds Flow Statements NOTES Particulars 1995 1996 Change in Working Capital Increase (+) Decrease (-) Other current assets 72,000 96,000 24,000 Other liabilities (excluding proposed dividend) 72,000 96,000 24,000 64,000 1,14,000 Decrease in working capital 50,000 1,14,000 1,14,000 2.

ADJUSTED PROFIT & LOSS ACCOUNT Particulars Rs Particulars Rs To Transfer to General Reserve 80,000 By Balance b/d 20,000 To Depreciation Provision 1,85,000 By Funds from Operations

То

Loss on sale of fixed assets 5,000 (balancing figure) 4,25,000 To Proposed dividend (1995–96) 80,000 To Interim dividend 45,000 To

Balance c/d 50,000 4,45,000 4,45,000 3. FIXED ASSETS ACCOUNT

Rs Rs To Balance b/d 16,00,000 By Fixed Assets Disposal A/c 75,000 To Bank (Purchases-bal.figure) 3,75,000 By Balance c/d 19,00,000 19,75,000 19,75,000 4.

FIXED ASSETS DISPOSAL ACCOUNT Rs Rs To Fixed assets

A/c 75,000 By

Depreciation Provision A/c 65,000 By Bank A/c (Sale proceeds) 5,000 By Adjusted Profit & Loss A/c (Loss on disposal) 5,000 75,000 75,000 5. DEPRECIATION PROVISION ACCOUNT Rs Rs To Fixed Assets Disposal A/c 65.000

By Balance c/

d 7,60,000 To Balance c/d 8,80,000 By

P.&L. A/c (

Provn. for the year) 1,85,000 9,45,000 9,45,000 6.

Investments have been taken as long-term. 7. Proposed Dividends have been taken as non-current liabilities.

Alternatively, they could have been taken as current liabilities also. Illustration 7.22 Given below are the Balance Sheets of A Limited for a period of three years-as at 31st March each year:

Rs in lakhs Liabilities 1995 1996 1997 Assets 1995 1996 1997 Rs Rs Rs Rs Rs Rs Rs Share Capital-

in-equity Plant and Machinery 45 55 70 shares of Rs 10 each 30 35 35 Investments 10 15 20 General Reserve 10 15 18 Stock 12 15 15 Surplus 5 8 9 Debtors 14 15 12 13% Debentures 10 5 10 Cash and Bank 3 6.5 13 Bank Credit 5 10 15 Trade Creditors 10 12 15 Income Tax Provision for the current year 8 11 14 Proposed Dividends 6 10.5 14 84 106.5 130 84 106.5 130

Self-Instructional Material 281 Cash and Funds Flow Statements NOTES Other details: (i) Depreciation provided in-the books: 94–95 Rs 6 lakhs 95–96 Rs 8 lakhs 96–97 Rs 10 lakhs (ii) A part of the Debentures was converted into equity at par in September 1996. (iii) There was no sale of fixed assets during the period. The management seeks your advice on the liquidity position of the company. You are to use the Funds Flow Statement for the purpose. (CA Final, Nov. 1993) Solution: (a) STATEMENT OF CHANGE IN WORKING CAPITAL (Rs in lakhs) Particulars 1994–95 1995–96 1996–97 A Current Assets: Stock 12.0 15.0 15.0 Debtors 14.0 15.0 12.0 Cash and bank 3.0 6.5 13.0 29.0 36.5 40.0 B Current Liabilities: Bank Credit 5.0 10.0 15.0 Trade Creditors 10.0 12.0 15.0 15.0 22.0 30.0 C Working Capital (A) - (B) 14.0 14.5 10.0 D Changes in Working Capital - + 0.5 - 4.5 (b) STATEMENT OF FUNDS FROM OPERATIONS (Rs in lakhs) Particulars 1995-96 1996–97 Increase in Surplus 3.0 1.0 Increase in General Reserve 5.0 3.0 Tax Provision 11.0 14.0 Proposed Dividends 10.5 14.0 Depreciation 8.0 10.0 Funds from Operations 37.5 42.0 (c) FUNDS FLOW STATEMENT 1995–96 1996–7 Sources: Funds from operations 37.5 42.0 Issue of 13% debentures – 5.0 37.5 47.0 Applications: Purchase of plant and machinery 18.0 25.0 Purchase of investments 5.0 5.0 Tax payment 8.0 11.0 Dividend payment 6.0 10.5 37.0 51.5 Changes in Working Capital 40.5 – 4.5 Comments The Funds Flow Statements prepared for the year 1995–96 and 1996–97 disclose that funds generated from operations during these years were largely used for paying taxes and dividend. In 1995–96 about 37% of funds generated from operations were used to pay taxes and dividend. In the year 1996–97, this percentage increased to 51%.

282 Self-Instructional Material Cash and Funds Flow Statements NOTES The dividend policy adopted by the company does not appear to be sound because it is not based on the liquidity position of the company. In 1996–97 the funds generated from operations were 12% more as compared to 1995–96. But, at the same time, the dividend rate was increased to 30% in 1995–96 as compared to 20% in 1994–95. The dividend of Rs 10.5 lakhs for 1995–96 was paid in 1996–97. This payment of dividend absorbed 25% of the total funds generated from operations in 1996–97. Moreover, the dividend rate was further hiked to 40% in 1996–97 in spite of poor working capital position. The tax paid to funds generated from operations also increased from 21% in 1995–96 to about 26% in 1996–97. This all shows that the company had not adopted a sound dividend policy. In 1995–96, more than 60% of the total funds generated from operations were utilised for purchase of plant and machinery and investments. The balance of the funds was used for paying taxes and dividends, besides, leaving Rs 50,000 for the working capital business. However, in the year 1995–96 the situation was different. The total funds generated amounted to Rs 47 lakhs while the total applications amount to Rs 51.15 lakhs. The investment in fixed assets (plant and machinery Rs 25 lakhs + investments Rs 5 lakhs) amounted to Rs 30 lakhs while long-term funds of only Rs 5 lakhs through debentures were raised. The rest of the requirements of the funds were made from funds from operations. The increase in dividend and tax payment resulted in overall deficit of Rs 4.5 lakhs in the working capital during 1996–97. Thus, on account of defective financial policies pursued by the company, the working capital position sharply deteriorated in 1996–97. The company's current ratio has declined sharply from 1.93 in 1995–96 to 1.33 in 1996–97. The sharp decline in the current ratio is because of financing investment and fixed assets by short-term loans as discussed above. Of course, as per Chore Committee's recommendations, the current ratio of 1.33 is considered to be sufficient for obtaining working capital loans from bank. However, the position of the company is too risky and needs immediate improvement. The company purchased investments of Rs 5 lakhs in 1996–97. In case these are trade investments the company's decision to purchase investments can be justified. However, if they are nontrade investments, it can be stated that the company has been following very unsound financial policy. Assumptions The following assumptions have been made while preparing the Funds Flow Statement: 1. The bank credit has been taken as short-term advance from the bank. 2. In the absence of information about the actual amount of dividend and tax paid, it has been presumed that the proposed dividend and tax provision for the current year were paid in the next year. 7.16 STATEMENT OF CHANGES IN FINANCIAL POSITION 'Statement of changes in Financial Position' is an extension of 'Funds Flow Statement'. It is very informative and comprehensive in indicating the firm's financial position, since the term 'Fund' is used here in a wider sense covering both current and non-current accounts. For example, when debentures are redeemed by converting them into share capital or when fixed assets are purchased by issue of fully paid shares to the vendors, there is no change in the working capital of the company but there is a change in the overall financial position of the company. These transactions do not find a place in the Funds Flow Statement, since there is no change in the funds position of the company.

Self-Instructional Material 283 Cash and Funds Flow Statements NOTES However, since they change the financial position of the company, they will be shown in the Statement of Changes in Financial Position both as Sources of Funds as well as Applications of Funds. Issue of shares to vendors for redemption of debentures will be shown as a Source of Funds while Redemption of Debentures or Purchase of Fixed Assets will be shown as an Application of Funds. Such a presentation gives a much more detailed as well as accurate information about the changes in the financial position of the company as compared to the changes in financial position as shown by the traditional Funds Flow Statement. The importance of Statement of Changes in the Financial Position is now undoubtedly realised by all shareholders, management, lenders and others. In USA the publication of the Statement of Change in Financial Position as a part of Financial Statements has been made obligatory by the Accounting Principles Board. It states: 'Information concerning the financial and investing activities of a business enterprise and the changes in its financial position for a period is essential for financial statement users, particularly owners and creditors, in making economic decisions. When financial statements purporting to present both financial position (balance sheet) and results of operations (statement of income and retained earnings) are issued, a statement summarising changes in financial position should also be presented as a basic financial statement for the period for which an income statement is presented.' 3 In our country, under the existing legal requirements, the companies are under no legal obligation to publish Statement of Changes in Financial Position along with their financial statements. However, there is a growing practice to publish such a statement along with financial statements especially in the case of companies listed on the stock exchange and other large commercial, industrial and business enterprises in the public and private sectors. As a matter of fact, the Institute of Chartered Accountants of India had issued Accounting Standard 3 dealing with the preparation and presentation of the Statement of Changes in Financial Position. Of course, the Standard has now been revised and titled as 'Cash Flow Statement'. Definition A Statement of Changes in Financial Position may be defined as a statement of disclosing changes in the firm's total financial resources. According to International Accounting Standards Committee (International Accounting Standard No. 7) a Statement of Changes in Financial Position means 'A statement which summarises for the period the resources made available to finance the activities of an enterprise and the uses to which such resource have been put.'

The AS:3 issued by Accounting Standards Board established by the Institute of Chartered Accountants of India defined a Statement of Changes in Financial Position as 'A statement which summarises for the period covered by it, the changes in the financial position including the sources from which those were obtained by the enterprise and the specific uses to which funds were applied.' 4 According to the Board, the term 'funds' generally refers to cash and cash equivalent or to working capital. Thus, according to the Board, the Statement of Changes in Financial Position may involve—(i) changes only in the firm's cash position, (ii) changes in the firm's working capital position, and (iii) changes in the firm's total financial resources position. Of course, the term 'Statement of Changes in Financial Position' is generally used in the last mentioned case. Importance The statement of changes in financial position provides a meaningful link between the balance sheets at the beginning and at the end of a period and

the net

profit (or loss) as per the profit and loss account for those items in the profit and loss account

which to not cause a flow of funds, (e.g., depreciation). An alternative method is to begin with revenues that provided funds during the period and deduct the costs and expenses that involved a movement of funds. The resulting amount is described as funds from operations. (ii) Unusual movement of funds to be disclosed. Unusual movements of funds, if material, are separately disclosed in the statement of changes in financial position just as unusual items are shown separately in the profit and loss account. (iii) Other sources and applications to be separately listed. Other sources and applications of funds which are usually listed separately in the statement of changes in financial position include (but are not limited to): (a) Proceeds from issue of shares capital; (b) Redemption of preference share capital; (c) Borrowings by way of term-loans; (d) Repayment of term loans; (e) Increase/decrease in bank borrowings for working capital (other than term loans); (f) Increase/decrease in public deposits; (g) Capital expenditure; (h) Sale of fixed assets; (i) Purchase/sale of investments; (i) Dividends paid. (iv) Set-off or merger. Individually important figures relating to the movements of funds are not ordinarily set-off or merged. However, if the amounts involved are not material, set-off or merger is resorted to e.g., capital expenditure may be shown net of fixed assets of small value disposed of during the period. (v) Exchange of one source for another. Where a transaction involves the exchange of one source of funds for another, both aspects of the transaction are shown separately. For example, in the case of the conversion of term loans into equity, the issue of further equity and the cancellation/reduction of debt are shown separately. Similarly, where a transaction involves both a financing and an investing aspect, e.g., issue of shares against acquisition of fixed assets, the two aspects of the transaction are usually separately disclosed. (vi) Other requirements. The following are some of the other important requirements which were required by the Accounting Standard 3:

Self-Instructional Material 285 Cash and Funds Flow Statements NOTES (a) The Statement of Changes in Financial Position should be prepared along with the annual accounts. (b) Such statements should be prepared and presented for the period covered by the Profit and Loss Account and for the corresponding previous period. (c) Each enterprise should adopt the form of presentation for the Statement of Changes in the Financial Position which is most informative in the circumstances. Illustration 7.23 From the following comparative Balance Sheet and Income Statement of ABC Ltd., prepare a Statement of Changes in Financial Position. ABC Limited COMPARATIVE BALANCE SHEET for the year ended 31 December 1995 and 1996 Particulars 1996 1995 Rs Rs

Current Assets: Cash 60,000 50,000 Debtors 50,000 45,000 Stock (Inventory) 1,25,000 90,000 Total Current Assets 2,35,000 1,85,000 Fixed Assets: Land and Building 1,50,000 1,00,000 Plant

and Machinery 2,20,000 2,00,000 Less: Accumulated Depreciation (82,000) (80,000)

Total Fixed Assets 2,88,000 2,20,000 Total Assets 5,23,000 4,05,000 Current Liabilities: Creditors 25,000 30,000 Salaries Payable 15,000 10,000 Provision for Tax 50,000 60,000 Provision for Dividend 40,000 40,000 Total Current Liabilities 1,30,000 1,40,000 Long-term Liabilities: Bank Loan 23,000 15,000 Debentures 1,20,000 1,50,000 Total long-term Liabilities 1,43,000 1,65,000

Total Liabilities 2,73,000 3,05,000 Owner's Equity: Share Capital 1,75,000 75,000 Share Premium 12,500 7,500 Reserves and Surplus 62,500 17,500 2,50,000 1,00,000 Total Equities 5,23,000 4,05,000 ABC Ltd. INCOME STATEMENT for the year ended 31 December, 1996 Rs

Sales 5,00,000 Less: Cost of goods sold 2,10,000 Gross Profit 2,90,000 Less:

Operating Expenses:

Office and Administration Expenses 45,000 Selling and Distribution 25,000 (Conmtd.)

286 Self-Instructional Material Cash and Funds Flow Statements NOTES Rs Interest 12,000 Depreciation 22,000 1,04,000 Operating Profit 1,86,000 Add: Gain on sale of plant 6,000 Total profit 1,92,000 Less: Income-tax 85,000 Net profit 1,07,000 Additional Information 1. During the year plant Rs 50,000 (accumulated depreciation Rs 20,000) was sold. 2. The debentures of Rs 30,000 were converted into share capital at par. 3. The company declared a cash dividend of Rs 40,000 and a stock dividend of Rs 20,000 for the year. 4. The company issued 5,000 additional shares, par value of Rs 10 per share, at a premium of 10 per cent during the year. Solution: STATEMENT OF CHANGES IN FINANCIAL POSITION Rs Sources: Funds from Operations 1,21,000 Sale of Plant 36,000 Loan from Bank 8,000 Issue of Shares: for cash 55,000 as stock dividend* 20,000 to convert debentures* 30,000 (A) 2,70,000 Applications: Purchase of Land Buildings 50,000 Purchase of Plant and Machinery 70,000 Payment of Dividend: in cash 40,000 as stock* 20,000 Redemption of debentures by conversion into shares* 30,000 (B) 2,10,000 Increase in Working Capital (A) – (B) 60,000 *These items do not find place in a Funds Flow Statement. However, they have to be shown in the Statement showing Changes in Financial Position as they affect the overall financial position of the company. Working Notes: ADJUSTED RESERVES AND SURPLUS ACCOUNT

Particulars Rs Particulars Rs To Proposed Dividend 60,000 *By Balance b/d 17,500 To Accumulated Depreciation A/c 22,000 By Plant and Machinery A/c To

Balance c/d 62,500 (profit on sale) 6,000 By Funds from Operations (balancing figure) 1,21,000 1,41,500 1,41,500 *Proposed dividend has been added back to find out real funds from operations.

Self-Instructional Material 287 Cash and Funds Flow Statements NOTES

PLANT AND MACHINERY ACCOUNT Particulars Rs Particulars Rs To Balance b/d 2,00,000 By Accumulated Depreciation A/c 20,000 To Adjusted Reserves and Surplus A/c 6,000 By Cash (sale) 36,000 To Cash (purchase-bal. figure) 70,000 By Balance c/d 2,20,000 2,76,000 2,76,000 ACCUMULATED DEPRECIATION ACCOUNT

Particulars Rs Particulars Rs To Plant A/c 20,000 By Balance b/d 80,000 To Balance b/d 82,000

Вy

Adjusted reserves and surplus A/c (Depreciation) 22,000 1,02,000 1,02,000 Illustration 7.24 The Balance sheet of A Ltd as on 31st March, 1996 and the consolidated Balance Sheet of A Ltd. and its subsidiary B Ltd. as on 31st March, 1997 were as follows: (Rs in lakhs) Liabilities As at As at Assets As at As at 31.3.96 31.3.97 31.3.96 31.3.97 Equity share capital Goodwill – 50.0 (of Rs 10 per share) 500.0 675.0 Land and Buildings 650.0 650.0 Reserves and Surplus 850.0 1,175.0 Plant and Machinery 625.0 1,617.5 Term Loans 300.0 425.0 Stock 275.0 375.0 Minority Interest – 175.0 Debtors 225.0 420.0 Creditors 275.0 600.0 Cash 150.0 5.0 Bank Overdraft – 67.5 1,925.0 3,117.5 1,925.0 3,117.5 Further Information: A Ltd. had acquired 75% of the equity shares of B Ltd. on 1.9.96. At that date, the Assets and Liabilities of B Ltd were: (Rs in lakhs) Fixed Assets 625 Stock 75 Debtors 100 Cash 125 Term Loans 125 Creditors 200 A Ltd. had paid Rs 500 lakhs to acquire the shares in B Ltd. This was made up of an issue of shares valued at 437.5 lakhs. Balance consideration was met from cash. The share premium on the issue of shares stood included in the reserves. Depreciation charged in the consolidated accounts amounted to Rs 125 lakhs, as to building Rs 25 lakhs and as to plant and machinery Rs 100 lakhs. A Ltd. paid an interim dividend of Rs. 50 lakhs on 1.3.97. On the same date B Ltd paid an interim dividend of Rs 25 lakhs. Prepare a Consolidated Statement of Sources and Application of Funds with relevant workings.

288 Self-Instructional Material Cash and Funds Flow Statements NOTES Solution: CONSOLIDATED FUND FLOW STATEMENT for the year ended 31st March, 1997 (Rs in lakhs)

Sources Rs Application Rs Issue of Shares at Premium Purchase of fixed assets (

WN 3) 1117.50 for purchase of business of B Ltd. 437.50 Payment of Dividend by A Ltd. 50.00 Funds from Operations [WN 2] 268.75 Payment of Dividend to Minority Loans 125.00 Shareholders in B Ltd 6.25 Minority Interest [WN 1(b)] 150.0 Payment of Goodwill 50.00 Decrease in Working Capital [WN 1(a)] 242.50 1223.75 1223.75 Working Notes: (Rs in lakhs) 1. Minority Interest (a) Minority Interest at the date of acquisition Assets: Fixed assets 625 Stock 75 Debtors 100 Cash 125 925 Liabilities: Term loans 125 Creditors 200 325 Net assets on 1.9.96 600 Less: Minority interest on 1.9.96 (25/100 ? 600) 150 A's share capital and capital profits of B Ltd. at the date of acquisition 450 Purchase consideration 500 Payment of Goodwill 50 (b) Minority Interest on date of consolidation 175 Minority Interest on date of acquisition 150 (shown as source) Minority's share in post-acquisition profits of B Ltd 25 (added to 'funds from operations') 2. Funds from operations Increase in Reserves and Surplus (1175 – 850) 325.00 Less: On account of Share Premium (shown separate as source) 262.50 62.50 Add: Depreciation 125.00 Dividend paid by A Ltd. 50.00 (shown separately as application) Dividend paid by B Ltd. to minority shareholders (25/100 ? 25) (shown separately as application) 6.25 181.25 243.75 Add: Share of Minority Shareholders of B Ltd. in the Post-acquisition Profits 25.00 268.75 3. Purchase of Fixed Assets Opening Depreciation Closing Additions Balance Balance (a) (b) (c) = (a) – (b) (d) (d) – (c) Land and Buildings 650 25 625 650 25.0 Plant and Machinery 625 100 525 1617.5 1092.5 1117.5 4.

SCHEDULE OF CHANGES IN WORKING CAPITAL 31.3.96 31.3.97 Increase Decrease Current Assets: (+) (–) Stock 275.0 375.0 100 Debtors 225.0 420.0 195 (

Contd.)

Self-Instructional Material 289 Cash and Funds Flow Statements NOTES 31.3.96 31.3.97 Increase Decrease Cash 150.0 5.0 145 650.0 800.0 Current Liabilities: Creditors 275.0 600.0 – 325 Bank Overdraft – 67.5 – 67.5 Working Capital 275.0 667.5 295 537.5 Decrease in Working Capital 242.5 242.5 Tutorial Note: Please note that the amount of Goodwill (excess of purchase consideration over the amount of A's share of share capital and capital profits of B Ltd.) at the date of acquisition is same as the amount at the date of consolidation. Hence, it is clear that dividend received from B Ltd. was credited by A Ltd. to its Profit and Loss Account as dividend out of post-acquisition profits of B Ltd. 7.17 KEY TERMS ?

Cash: The term stands for cash and demand deposits with banks. ? Cash Equivalents: The term includes short-term highly liquid investments that are readily convertible into a known amount of cash and

which is subject to insignificant risk or change in values. ? Cash Flow Analysis: A technique involving analysis of the causes of flows of cash from one period to another. ? Cash Flow Statement: A statement depicting the change in cash position from one period to another. ?

Current assets. Cash and other assets that are expected to be converted into cash or consumed in the production of goods or rendering of services in the normal course of business. ? Current liabilities. Liabilities payable within a year either out of the existing cur- rent assets or by creation of other current liabilities. ? Funds. It refers to working capital of a business. ? Funds flow statement. A statement summarising inflows and outflows of funds from any business activity. ? Working capital. It represents excess of current assets over current liabilities. 7.18 SUMMARY In this unit, you have learned that: ?

Cash flow statement describes the inflows (sources) and outflows (uses) of cash and cash equivalents during a specified period

of time. ? AS 3 (Revised) classifies the cash flows in a period in the following three categories: (a)

cash flows from operating activities; (b) cash flows from investing activities; and (c) (deducting) cash flows from financing activities. ?

Net increase (decrease) in cash and cash equivalents is arrived at by adding (deducting) the cash inflows (outflows) during a particular period. The cash and cash equivalents at the beginning of the accounting period is added to the amount computed as above to ascertain the amount of cash or cash equivalents at the end of the accounting period. ? The term '

funds' refers to working capital

of the business. Working capital denotes excess of current assets over current liabilities.

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Self-Instructional Material Cash and Funds Flow Statements NOTES ? The term 'flow of funds' means change in working capital. In other words, any increase or decrease in working capital means flow of funds. ? There will be a flow of funds only when there is a cross transaction, i.e., transaction involving current liabilities or assets with non-current liabilities or non-current assets. ? Schedule of changes in working capital can be prepared only on the basis of a balance sheet. The additional information relating to current assets and current liabilities is of no consequence for this purpose. ? The results shown by the schedule of changes in working capital can be checked with the funds flow statement. ? Depreciation is not a source of funds. However, it is added back to operating profit to find out funds from operations. 7.19 ANSWERS TO 'CHECK YOUR PROGRESS' 1. (

a) True, (b) False, (c) False, (d) False, (e) True, (f) False 2. (i) (a), (ii) (a), (iii) (a) 3. When funds denote working capital, none of the items will affect

the

working capital. When funds denotes 'Cash', items (a) will result in decrease of cash while items (b) and (c) will have no effect on cash. 4.

Cash

basis of accounting. 5. (a) working, (b) a source, (c) does not result, (d) an application, (e) deducted, (f) working capital, (g) a source 6. (

a) False, (b) True, (c) False, (d) False, (e) Flase, (f) False, (g) True, (h) True, (i) False, (

j) True, (k) True 7. (i) b, (ii) a, (iii) a, (iv) b, (v) a, (vi) b, (vii) a 8. None of the transactions will affect funds flow 9. (a) Increase (b) No effect (c) Increase (d) Decrease (e) No effect (f) Decrease by Rs 500 (g) No effect (h) No effect (i) No effect (j) Decrease]. 7.20

QUESTIONS AND EXERCISES 1.

Explain the meaning of a Cash Flow Statement. Discuss its utility. 2. Explain the technique of preparing a Cash Flow Statement with imaginary figures. 3.

Distinguish between Funds Flow Statement and Cash Flow Statement. 4. What is a Cash Flow Statement? 5.

What is a 'Funds Flow Statement'? Examine its managerial uses. 6. '

A Funds Flow Statement is a better substitute for an Income Statement.' Discuss. 7. Explain the various concepts of funds in the context of Funds Flow

Analysis. 8. What do you understand by Funds Flow Statements? How are they prepared? What are their uses? 9. What are the chief advantages of Funds Flow Statement? Also describe its limitations. 10. (a) 'Funds' flow analysis represents a 'stock to flow linkage.' Justify. (b) 'The true funds flow from depreciation is the opportunity saving of cash outflow through taxation.' Illustrate with a numerical example. 11. Distinguish between (i) Statement showing changes in working capital, and (ii)

Funds Flow Statement. 12. (a) What type of transaction will not be reflected in the Statement of Sources and Application of Funds? (

b) What do you understand by Funds generated within a company and funds available from outside a company? (c) Distinguish between a Funds Flow Statement and a Balance Sheet? 13. Write short notes on: (i) Application of Funds (ii) Importance of Funds Flow Statement. (iii) Statement of Changes in Financial Position Self-Instructional Material 291 Cash and Funds Flow Statements NOTES 7.21 PRACTICAL PROBLEMS Cash from Operations 1. Compute cash from operations from the following figures: (i) Profit for the year 1993 is a sum of Rs 10,000 after providing for depreciation of Rs 2,000. (ii) The current assets for the business for the year ending 31 Dec., 1992 and 1993 are as follows: Particulars 31 Dec., 1992 31 Dec., 1993 Rs Rs Sundry debtors 10,000 12,000 Provision for doubtful debts 1,000 1,200 Bills receivable 4,000 3,000 Bills payable 5,000 6,000 Sundry creditors 8,000 9,000 Inventories 5,000 8,000 Short-term investments 10,000 12,000 Outstanding expenses 1,000 1,500 Prepaid expenses 2,000 1,000 Accrued income 3,000 4,000 Income received in advance 2,000 1,000 [Ans. Cash from Operations Rs 7.7001 2. From the following Profit and Loss Account, you are required to compute cash from operations: **PROFIT AND** LOSS ACCOUNT for the ending 31 December, 1994 Particulars Rs Particulars Rs To Salaries 5,000 By Gross Profit 25,000 То Rent 1,000 Bv Profit on sale of Land 5.000 To Depreciation 2,000 By Income tax Refund 3,000 To Loss on sale of plant 1,000 To Goodwill written off 4,000 To Proposed Dividends 5,000 To Provision for Taxation 5,000 To Net Profit 10,000 33,000 33,000 [Ans. Cash from Operations Rs 19,000] Simple Cash Flow Statement 3. The following is the summarised Balance Sheet M/s Rahul Brother Private Ltd. March, 1994 and 1995. Liabilities 1994 1995 Assets 1994 1995 Rs Rs Rs Rs 12% Redeemable Fixed Assets 4,100 4,000 Preference Shares - 1,000 Less: Depreciation 1,100 1,500 Equity Shares 4,000 4,000 3,000 2,500 4,000 5,000 Debtors 2,000 2,400 General Reserve 200 200 Stock 3,000 3,500 Profit and Loss A/c 100 120 Prepaid Expenses 30 50 Debentures 600 700 Cash 120 350 Creditors 1,200 1,100 Provision for Taxation 300 420 Proposed Dividend 500 580 Bank Overdraft 1,250 680 8,150 8,800 8,150 8,800 You are required to prepare a Statement of Cash Flow. [Ans. Cash from Operations Rs 400, Sources Rs 1,600, Applications Rs 800] 292 Self-Instructional Material Cash and Funds Flow Statements NOTES **Comprehensive Cash** Flow Statement 4. Wearwell Ltd. supplies you the following Balance Sheet on 31 December: Liabilities 1994 1995 Assets 1994 1995 Rs Rs Rs Rs Share capital 70,000 74,000 Bank balance 9,000 7,800 Bonds 12,000 6,000 Receivable 14,900 17,700 Accounts payable 10,360 11,840 Inventories 49,200 42,700 Provision for Land 20,000 30,000 doubtful debts 700 800 Goodwill 10,000 5,000 Reserves & surplus 10,040 10,560 1,03,100 1,03,200 1,03,100 1,03,200 Following additional information has also been supplied to you: (i) Dividends amounting to Rs 3,500 were paid during the year 1994. (ii) Land was purchased for Rs 10,000. (iii) Rs 5,000 were written off on Goodwill during the year. (iv) Bonds of Rs 6,000

were paid during the course of the year. You are required to prepare a Cash Flow Statement. [Ans.

Cash from Operations Rs 14,300, Sources

Rs 18,300, Applications 19,500] 5. Tiny Tot Limited furnishes you with

the following Balance Sheets for the year ending on 31 December, 1994 and 1995. You are required to prepare a Cash Flow Statement for year ended 31 December, 1995.

Liabilities 1994 1995 Assets 1994 1995

Rs Rs Rs Rs

Equity Share Capital 10,000 10,000 Goodwill 1,200 1,200

General Reserve 1,400 1,800 Land 4,000 3,600 Profit and Loss A/c 1,600 1,300

Building 3,700 3,600 Sundry Creditors 800 540 Investments 1,000 1,100

Outstanding Exps. 120 80 Inventories 3,000 2,340 Prov. for Taxation 1,600 1,800 Receivables 2,000 2,220 Prov. for Bad Debts 40 60 Bank balance 660 1,520 15,560 15,580 15,560 15,580 Following additional information has also been supplied to your (i) A pieze of land has been cald for Ba 400. (ii) Depresenting to

supplied to you: (i) A piece of land has been sold for Rs 400. (ii) Depreciation amounting to

Rs 700 has been charged on building. (iii) Provision for taxation has been made for

Rs 1,900 during the year. [

Ans. Cash from Operations Rs 2,860, Sources Rs 3,260, Application

Rs 2,400] 6.

The Balance Sheets of T Ltd. as on 31 December, 1995 and 31

December, 1996 are as follows: Liabilities 1995 1996 Assets 1995 1996

Rs Rs Rs Rs

Share Capital 300.00 300.00

Freehold Property (at cost) 225.00 240.00 Reserves 255.00 240.00 Plant and Machinery 135.00 165.00 16 per cent Debentures 75.00 75.00 (at cost less depreciation) (unsecured) Investments in Shares of Mortgage on companies under the Freehold Property 27.00 14.25 same management 150.00 150.00 Creditors 45.00 45.00 (unquoted) Proposed Div. (subject Investments in Shares of to ded. of tax) 22.00 23.25 other companies (quoted) 112.50 112.50 Provision for Taxation 21.00 37.50 (Market Value 1996 Secured Overdraft (by a 15.00 82.50

Rs120 lakhs, 1995 floating charge on Rs 150 lakhs assets) Stock 52.50 75.00 Debtors 45.00 75.00 Bank 10.50 - 730.50 817.50 730.50 817.50

Self-Instructional Material 293 Cash and Funds Flow Statements NOTES

The following additional information for the year 1996 is relevant: Rs (1) Credit Sales 675 lakhs (2) Credit Purchases 520 lakhs (3) Overheads 83.75 lakhs (4) Depreciation on Plant and Machinery 17.50 lakhs (5) Dividend for 1995 was paid in full (6) Amount paid towards taxation for the year 1995 21.50 lakhs In view of credit squeeze, the company has been asked by the Bank to reduce the overdraft substantially within six months, if possible by 50 per cent. You are required to prepare a cash flow statement and briefly comment on the financial position of the company and suggest remedial measures to overcome the financial crisis. [Ans. Cash from Operations Rs 41.25 lakhs. Applications Rs 119.25

lakhs. Operations is the only source. Company has a safe financial position as far as long-term financial solvency is concerned, it is rather unduly conservative. Current ratio is extremely poor. ROI before interest and tax is 22.62 per cent which is quite satisfactory. The company can improve its current ratio by disposing of a part of quoted shares in other companies or converting a part of bank overdraft in a term loan] 7. The Mismanagement Ltd. always finds that it is hard pressed for funds. In spite of borrowing funds at high rate from banks they are not able to make payments to suppliers in time. The financial position of the company as reflected from the balance sheet for the last two years is as under: BALANCE SHEET 1993 1994

Rs Rs Rs Rs Share Capital (Rs 10

fully paid) 10.00 10.00 Profit and Loss A/c 1.65 0.45 Bank Overdraft 1.55 5.95 Sundry Creditors 1.00 6.00 14.20 22.40 Land and Buildings 3.00 5.00 Plant and Machinery 5.00 6.00 Less: Depreciation 1.20 3.80 1.80 4.20 Motor Cars 1.00 1.30 Less: Depreciation 0.40 0.60 0.60 0.70 Stock 2.20 7.20 Sundry Debtors 4.60 5.30 14.20 22.40 The following further information has been given: (a) Dividend was paid during the year ended 31 December, 1994 at the rate of 10 per cent. (b) The company had sold

a motor van during the year 1994 for Rs 8,000. This was purchased for Rs 10,000

and its depreciated value in the books as on 1 January, 1994 was

Rs 5000.

You are required to prepare a Cash Flow Statement. 8.

A company finds on 1 January, 1995 that it is short of funds with which to implement its programme of expansion. On 1 January, 1994, it had a credit balance of

Rs 1,80,000. From the following information, prepare a statement for the board of directors, to show how the overdraft of Rs 68,750

as at 31 December, 1994 has arisen: Figures as per Balance Sheets as at 31 December

of each year are as follows: 1993 1994 Rs Rs Fixed Assets 7,50,000 11,20,000 Stock and Stores 1,90,000 3,30,000 Debtors 3,80,000 3,35,000 Bank

balance (Cr.) 1,80,000 (Overdraft) 68,750 Trade Creditors 2,70,000 3,50,000 Share Capital (in shares of

Rs 10 each) 2,50,000 3,00,000 Bills Receivable 87,500 95,000

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Self-Instructional Material Cash and Funds Flow Statements NOTES

The

Profit for year ended 31 December, 1994, before charging depreciation and taxation amounted to

Rs 2,40,000.

The 5,000

shares were issued on 1 January, 1994, at a premium of

Rs 5 per share. Rs 1,37,500

were paid in

March, 1994, by way of income tax. Dividend was paid as follow: 1993 (final)—on the capital on 31

December, 1993 at 10 per cent less tax at 25 per cent. 1994 (interim) – 5 per cent free of tax. [Ans. Cash from Operations Rs 2,17,500; Sources Rs 2,92,500; Applications Rs 5,41,250] [Hint. Final dividend paid is

Rs 18,750 (i.e., Rs 25,000 less Tax of Rs 6,250);

Income tax payable to the Government on account of dividend is Rs 11,250 i.e., 6,250 +

Rs5,000

on interim dividend free of tax); assume tax paid of

Rs 1,37,500

includes this tax also] 9. The directors of Maheswari Brothers Private Ltd., are alarmed at the deterioration of the financial position of their company. They find that the overdraft is at the limit allowed by the bank and that they do not have sufficient funds to pay their creditors on the due dates. They are at a loss to understand why, when their accounts show satisfactory profits, they should be short of funds. You are given the Balance Sheet of the Company as on 31 March, 1995 and 1996. You are required to prepare a statement which will show what has happened to the money which has come into the business during the year. BALANCE SHEET 31 March, 1995 31 March, 1996 Rs Rs Share Capital: Shares of Rs 10

each fully paid 5,00,000 5,00,000 Reserve and Surplus 30,000 40,000 Bank Overdraft 80,000 3,00,000 Sundry Creditors 1,00,000 3,00,000 7,10,000 11,40,000 Land and Buildings 1,50,000 2,50,000 Plant and Machinery 2,50,000 3,00,000 Less: Depreciation 60,000 1,90,000 90,000 2,10,000 Motor Vehicles 58,000 62,000 Less: Depreciation 28,000 30,000 42,000 20,000 Stock 1,10,000 3,60,000 Sundry Creditors 2,30,000 3,00,000 7,10,000 11,40,000 During the year a dividend of 10 per cent was distributed to the shareholders. On 1 April, 1995 a motor car whose original cost was Rs 10,000 and depreciated to a book value of Rs 6,000 was sold for Rs 8,000. [

Ans. Cash Outflow on account of Operations Rs 14,000; Sources Rs 8,000; Applications Rs 2,28,000] Funds Flow and Cash Flow Statements 10. From the following particulars, prepare Cash Flow and Funds Flow Statements of Mr. Kumar.

BALANCE SHEET Liabilities 31.12.92 31.12.93 Assets 31.12.92 31.12.93 Rs Rs Rs Rs Loan — 25,000 Cash 5,000 4,000 Current Liabilities 35,000 40,000 Debtors 40,000 45,000 Bank O.D. 40,000 30,000 Stock 30,000 25,000 Capital 1,50,000 1,54,000 Land 30,000 40,000 Building 50,000 55,000

Machinery 70,000 80,000 2,25,000 2,49,000 2,25,000 2,49,000 During the year, Mr. Kumar brought additional capital of Rs 10,000 and his drawings during the year were Rs 31,000.

Provision for depreciation on machinery—opening balance Rs 30,000, closing balance Rs 40,000. No depreciation need be provided on other assets. [Ans. Total Sources of Cash Rs 40,000; Total Application of Cash Rs 66,000; Cash from Operations Rs 40,000; Total Sources of Funds 70,000;

Self-Instructional Material 295 Cash and Funds Flow Statements NOTES

Total Applications of Funds

Rs 66,000; Increase in working Capital Rs 40,000; Funds from Operations Rs 35,000] 11. The following are the Balance Sheets of a Company as on 31 December, 1992 and 31 December, 1993: Liabilities 1992 1993 Assets 1992 1993 Rs Rs Rs Rs

Equity Share Capital 7,00,000 8,00,000 Fixed Assets 5,00,000 6,00,000 General Reserve 4,50,000 6,00,000 Additions 1,00,000 80,000 Profit and Loss A/c 1,73,000 2,33,000 6,00,000 6,80,000

Current Liabilities: Depreciation 2,00,000 3,20,000 Trade Creditors 7,00,000 9,00,000 4,00,000 3,60,000 Bank Overdraft 11,50,000 14,00,000 Investments 1,20,000 Creditors for Exps. 80,000 92,000 Current Assets: Prov. for Taxation 1,97,000 3,70,000 Debtors 13,00,000 21,85,000 Proposed Dividends 1,50,000 1,50,000 Stock at cost 17,80,000 20,00,000 36,00,000 45,45,000 The profit for the year 1993 as per Profit and Loss Account after providing for depreciation amounted to

Rs 7,00,000 which was further adjusted as follows: Rs

P. & L. Balance b/f 1,73,000 Profit after Depreciation 7,00,000 Add: Profit on sale of Investments 20,000 Rs 8,93,000

Less: Provision for Taxation 3,60,000 Transfer to Reserve 1,50,000 Proposed Dividend 1,50,000 6,60,000 Balance c/f 2,33,000 You are informed that (i) The sales and purchases of the year 1993 amounted to Rs 80,00,000 and Rs 65,00,000

respectively. (ii) In arriving at the profit from the sales referred to already, the cost of sales and administration and selling expenses were deducted. You are required to prepare: (a) a Funds Flow Statement showing details of changes in Working Capital. (b) a Cash Flow Statement. [Ans. Funds from Operations Rs 8,20,000; Total Sources of Funds

Rs 10,60,000; Total Applications of Funds Rs 4,17,000; Cash Outflow on account of Operations Rs 73,000; Sources of Cash Rs 2,40,000; Applications of Cash Rs 4,90,000] Schedule of Changes

in Working Capital 12. From the following Balance Sheets you are required to prepare schedules of changes in working capital

of 1993 and 1994. Liabilities 31 Dec. 31 Dec. 31 Dec. Assets 31 Dec. 31 Dec. 31 Dec. 1992 1993 1994 1992 1993 1994 Rs Rs Rs Rs Rs Rs Share Capital 40,000 50,000 50,000 Cash 30,000 40,000 45,000 9 per cent Inventories 10,000 15,000 10,000 Debentures 20,000 20,000 30,000 Accounts Sundry Creditors 20,000 20,000 40,000 Receivable 20,000 20,000 25,000 Outstanding Land 20,000 20,000 30,000 Expenses 10,000 20,000 20,000 Plant 40,000 60,000 70,000 Tax Payable 10,000 15,000 20,000 Retained Earnings 20,000 30,000 20,000 1,20,000 1,55,000 1,80,000 1,20,000 1,55,000 1,80,000 [Ans. (i) No change in working capital in 1993 as compared to 1992. (ii) Decrease in working capital Rs 20,000 in 1994 as compared to 1993] [Hint. Tax payable is a current liability]

296 Self-Instructional Material Cash and Funds Flow Statements NOTES Funds from Operations 13. Calculate the Funds

from Operations from the following

Profit and Loss Account:

PROFIT AND LOSS ACCOUNT

Particulars Rs Particulars

Rs To

Salaries 5,000 By Gross Profit 50,000 To

Rent 3,000 By

Profit on sale of buildings To

Depreciation

on plant 5,000 Book value Rs 10,000

To Printing and stationery 3,000 Sold for 15,000 5,000 To Preliminary expenses written off 2,000 To Goodwill written off 3,000 To

Provision for tax 4,000 To Proposed dividends 6,000 To Net profit taken to balance sheet 24,000 55,000 55,000 [Ans. Rs 39,000] Simple Funds Flow Statement 14.

The following are the summarised Balance Sheets of XYZ Ltd., as on 31

December, 1996 and 1997:

BALANCE SHEETS 31 December 31 December Liabilities 1996 1997 Assets 1996 1997 Rs Rs Rs Rs Capital 14 per cent Fixed Assets: 41,000 40,000 Redeemable Less: Depreciation 11,000 15,000 Preference shares – 10,000 30,000 25,000 Equity shares 40,000 40,000 Current Assets: 40,000 50,000

Debtors 20,000 24,000 General Reserve 2,000 2,000 Stock 30,000 35,000 Profit and Loss A/c 1,000 1,200 Prepaid Expenses 300 500 Debentures 6,000 7,000 Cash 1,200 3,500

Current Liabilities: Creditors 12,000 11,000 Provision for Tax 3,000 4,200 Proposed Dividends 5,000 5,800 Bank Overdraft 12,500 6,800 81,500 88,000 81,500 88,000 You

are required to prepare: (i) a statement

showing changes in the working capital

and (ii) a

statement of sources and applications of funds. [Ans. Funds from operations Rs 4,200, Increase in working capital Rs 16,200] 15. From

the following particulars, prepare the

Funds Flow Statement: Liabilities 1 Jan. 31 Dec. Assets 1 Jan. 31 Dec. Rs Rs Rs Rs Creditors 36,000 41,000 Cash 4,000 3,600 Bank Loan 30,000 45,000 Debtors 35,000 38,400 Capital 1,48,000 1,49,000 Stock 25,000 22,000 Land 20,000 30,000 Building 50,000 55,000 Machinery 80,000 86,000 2,14,000 2,35,000 2,14,000 2,35,000 During the year, drawings by the proprietor for personal; use amounted to

Rs 26,000 provision for depreciation on machinery stood at Rs 27,000 on 1 January and at Rs 36,000 on 31, December. [

Ans. Decrease in Working Capital Rs 5,000]

Self-Instructional Material 297 Cash and Funds Flow Statements NOTES Comprehensive Funds Flow Statement 16. From the Balance Sheets of A Ltd.,

make out: (a) a

Statement of Changes in the Working capital. (b) a Funds Flow Statement. BALANCE SHEETS 31 March 31 March Liabilities 1995 1996 Assets 1995 1996 Rs Rs Rs Rs Equity Share Goodwill 1,15,000 90,000 Capital 3,00,000 4,00,000 Land and Buildings 2,00,000 1,70,000 12% Redeemable Plants 80,000 2,00,000 Preference Share Capital 1,50,000 1,00,000 Debtors 1,60,000 2,00,000 General Reserve 40,000 70,000 Stock 77,000 1,09,000 Profit and Loss A/c 30,000 48,000 Bills Receivable 20,000 30,000 Proposed Dividends 42,000 50,000 Cash in hand 15,000 10,000 Creditors 55,000 83,000 Cash at bank 10,000 8,000

Bills Payable 20,000 16,000 Prov. for Taxation 40,000 50,000 6,77,000 8,17,000 6,77,000 8,17,000

Additional Information: (i) Depreciation of Rs 10,000 and 20,000 has been charged on Plant and Land and Buildings respec- tively in 1996. (ii) An interim dividend of Rs 20,000 has been paid in 1996. (iii) Income Tax of Rs 35,000 has been paid in 1996. [Ans. Funds from operations Rs 2,18,000, Total sources Rs 3,28,000, Total applications Rs 2,77,000] [Hint. Provision for tax has been taken as a non-current liability. Presume that last year's dividend must have been paid during the year.] 17.

From the following Balance Sheet of a Company

you are required to prepare (i) a statement showing changes in the working capital

and (ii) a statement of sources and application of funds.

Liabilities Jan.1994 Dec. 1994 Assets Jan.1994 Dec. 1994 Rs Rs Rs Rs Rs Current Liabilities 30,000 32,000 Cash 40,000 44,400 Bonds Payable 20,000 20,200 Accounts receivable 10,000 20,700 Capital stock 35,000 43,500 Inventories 15,000 15,000 Retained earnings 15,000 19,500 Land 4,000 4,000 Building 20,000 16,000 Equipment 15,000 17,000 Accumulated depreciation (5,000) (2,800) Patents 1,000 900 1,00,000 1,15,200 1,00,000 1,15,200 Additional Information: (a) Income for the period Rs 10,000. (b)

A building that cost Rs 4,000 and which had a book value of Rs 1,000 was sold for Rs 1,400. (c) The depreciation charge for the period was Rs 800. (

d)

There was Rs 5,000 issue of common stock. (e) Cash dividends Rs 2,000 and Rs 3,500 stock dividend were declared. (M Com Madurai Nov., 1981, adapted) [Ans. Increase in Working Capital Rs 13,100.

Sources Rs 17,100, Applications Rs 4,000]

298 Self-Instructional Material Cash and Funds Flow Statements NOTES 18. Prepare a Funds Flow Statement from the following data: 31 Dec. 1993 31 Dec. 1994 Rs Rs Cash 2,000 2,500 Accounts receivable 2,400 2,700 Inventories 3,100 3,200 Other assets 800 700 Fixed assets 5,000 5,800 Accumulated depreciation 2,100 2,500 Accounts payable 2,000 2,100 Long-term debt 1,400 1,300 Equity capital 5,000 5,300 Retained earnings 2,800 3,700 Notes: (a) Fixed assets costing Rs 1,200 were purchased for cash. (b) Fixed assets (original cost Rs 400,

accumulated depreciation Rs 150) were sold for Rs 200. (c) Depreciation for the year 1994 amounted to Rs 550 and

duly debited to Profit and Loss Account. (d) Dividends paid amounted to Rs 300 in 1994. (e) Reported income for 1994 was Rs 1,200. (M Com, Madras, December 1979) [Ans. Increase in Working Capital Rs 700, Sources Rs 2,300, Applications Rs 1,600] 19. The balance sheet of Work Well Private Ltd., as on 31 March 1996 and 31 March 1997 are as given below: Liabilities 1996 1997 Assets 1996 1997 Rs Rs Rs Rs Issued Share Capital Freehold Properties at 20,000 16,000 (shares of Re 1 each) 3,00,000 3,50,000 Plant and Machinery at Capital Reserves: at cost (less: depreciation) 2,86,000 3,08,000 Share Premium – 10,000 Current Assets 1,38,400 1,66,100 Profit on sale of Preliminary Expenses 1,600 800 freehold land - 2,900 Profit and loss A/c 32,000 60,000 15 per cent Debentures 50,000 - Current Liabilities 64,000 68,000 4,46,000 4,90,900 4,46,000 4,90,900 The whole of the share capital of the company was issued for cash. Depreciation on plant and machinery written off during the year to 31 March, 1997 amounted to Rs 28,000. During the same year the company paid a dividend of Rs 15,000. Prepare a statement showing: (i) the net increase in working capital during the year ended 31 March, 1997 and (ii) the sources and applications of funds during the year. [Ans. Increase in Working Capital Rs 23,700, Sources Rs 1,38,700, Applications Rs 1,15,000] 20. The following are the summarised financial statements of Madras Electronics Ltd. BALANCE SHEET (Rs in thousands) 31 December 31 December Liabilities 1994 1995 Assets 1994 1995 Equity Share Capital 1,000 1,000 Fixed Assets 4,000 4,500 Debentures 2,000 2,000 (Less: Depreciation) Retained Earnings 1,500 2,000 Inventory 1,250 1,500 Sundry Creditors 900 1,000 Accounts Receivable 650 550 Bills Payable 400 500 Cash 400 500 Outstanding Wages 200 300 Accrued Taxes 300 200 6,300 7,000 6,300 7,000 Self-Instructional Material 299 Cash and Funds Flow Statements NOTES INCOME STATEMENT FOR 1995 (Rs in thousands) Sales 10,000 Cost of goods sold 5,000 Administration and selling expenses 1,500 Depreciation 300 Interest 200 7,000 Net Income before Taxes 3,000 Taxes 1,500 Net Income after Taxes 1,500 Prepare for the year ended 31 December, 1995: (a) A statement of Sources and Applications of Funds; (b) A statement showing the Changes in Working Capital. [Ans. No change in Working Capital position] [Hint. Provision for taxation has been taken as a current liability] 21. From the following balance sheets and additional information relating to Precision Tools Ltd., prepare: (i) Statement showing the

Changes in the Working Capital,

and (ii) Statement of Sources and Applications of Funds

for the year ended 31 December, 1996:

BALANCE SHEET (Rs in thousands) 31 December 31 December Liabilities 1995 1996 Assets 1995 1996 Sundry Creditors 1,000 1,030 Cash 1,600 1,776 Bills Payable 200 250 Sundry Debtors 400 740 Debentures 880 880 Stock of Raw materials 220 248 Depreciation Fund 200 112 Stock of Finished Goods 280 240 Reserves and Surplus 600 780 Stock of Work-in-progress 100 200 Share Capital 1,400 1,740 Land 160 160 Buildings 800 640 Plant and Machinery 600 680 Debenture Discount 80 72 Patents 40 36 4,280 4,792 4,280 4,792 Additional Information: (a) Net Profit reported Rs 4,00,000 (b) Dividend paid 80,000 (c) Depreciation charged to profits 32,000 (d) The company issued equity shares of Rs 2,00,000 and bonus shares for Rs 1,40,000. (e) A building was sold off for Rs 56,000 the cost and book value being Rs 1,60,000 and Rs 40,000 respectively. [Ans. Increase in Working Capital Rs 5,24,000, Funds from operations Rs

Rs 1,60,000 and Rs 40,000 respectively. [Ans. Increase in Working Capital Rs 5,24,000, Funds from operations Rs 4,28,000] 22. The following are the summarised trial balances of Honesty Ltd., as on 31

December, 1996 and 31 December, 1997. 31 December 31 December Particulars 1996 1997 Dr. Cr. Dr. Cr. Issued share capital 8,00,000 8,00,000 Capital reserve 2,00,000 8 per cent debentures 2,50,000

Discount on issue of debentures 5,000 Land and building 5,00,000 4,00,000 Plant and machinery 10,00,000 12,50,000 Provision for depreciation on fixed assets 4,00,000 5,00,000 Profit and loss A/c: Balance on 1st January 3,00,000 4,50,000

Contd...

300 Self-Instructional Material Cash and Funds Flow Statements NOTES Net profit for the year 2,30,000 3,00,000 Dividend for the previous year 80,000 80,000 Provision for doubtful debts 20,000 35,000

Trade investments (at cost) 1,00,000 3,00,000 Current Assets 7,00,000 8,50,000 Current Liabilities 3,50,000 2,50,000 Bank Overdraft 2,80,000 1,00,000 23,80,000 23,80,000 28,85,000 28,85,000 Additional Information: (1) During the year, Land and Building having an original cost of Rs 1,00,000 and a written down value of Rs 75,000 have been sold for Rs 3,00,000. The capital profit has been transferred to Capital Reserve and the profit equivalent to the depreciation written off in the past has been included in the profit for the year. (2) On 1 January, 1997 the company issued debentures of a face value of Rs 2,50,000 at a discount of 5

per cent.

Part of the discount has been written off out of the profits. Prepare a statement of sources and applications of funds during the year. [

Ans. Increase

in Working Capital Rs 4,15,000, Funds from Operations Rs 4,07,500] 23. The summarised

balance sheets of XYZ Ltd., as on 31 December 1994 and 31 December, 1995 are given below: Liabilities 1994 1995 Assets 1994 1995

Rs

Rs Rs Rs

Share Capital 4,50,000 4,50,000 Fixed Assets 4,00,000 3,20,000

General Reserve 3,00,000 3,10,000 Investments 50,000 60,000 P. & L. A/c 56,000 68,000 Stocks 2,40,000 2,10,000 Creditors 1,68,000 1,34,000 Debtors 2,10,000 4,55,000 Provision for Taxation 75,000 10,000 Bank 1,49,000 1,97,000 Mortgage Loan – 2,70,000 10,49,000 12,42,000 10,49,000 12,42,000 Additional information: (i) Investments costing Rs 8,000 were sold during the year 1995 for

Rs 8,500. (

ii) Provision for tax made during the year was Rs 9,000. (

iii)

During the year part of the

fixed assets costing Rs 10,000 were sold for Rs 12,000 and the profit

was included in profit and loss account; and (iv) Dividend paid during

the year amounted to Rs 40,000.

You are required to prepare

a statement of sources and uses of funds. (

Adapted from CS Final, June 1981) [Ans. Total sources Rs 4,29,000, Applications Rs 1,32,000, Funds from operation Rs 1,38,500] [Hint. Provision for tax presumed to be non-current liability] 24. The

following are the summaries of

the balance sheets of a

limited company as on 31st December, 1994 and 31

st December 1995: Liabilities 1994 1995 Assets 1994 1995 Rs Rs Rs Rs Sundry Creditors 39,000 41,000 Cash at Bank 2,500 2,700 Bills Payable 34,280 11,660 Sundry Debtors 87,490 73,360 Bank Overdraft 59,510 – Stock 1,11,000 97,300 Provision for Taxation 40,000 50,000 Land and Buildings 1,48,500 1,44,250 Reserves 45,000 45,000 Plant and Machinery 1,12,990 1,36,270 Profit and Loss A/c 44,690 46,220 Share Capital 2,00,000 2,60,000 4,62,480 4,53,880 4,62,480 4,53,880 The following additional information is obtained from the general ledger: (i)

During the year ended 31st December, 1995 an interim dividend of Rs 26,000 was paid. (

ii) The assets of another company were purchased for Rs 60,000 payable in fully paid shares of the company. These assets consisted of stock Rs 21,640 and machinery Rs 38,360. In addition, sundry purchase of plant were made totalling Rs 5650.

Self-Instructional Material 301 Cash and Funds Flow Statements NOTES (iii) Income-tax paid during the year amounted to Rs 25,000. (iv) The net profit for the year before tax was Rs 62,530. Prepare a statement showing the sources and applications of funds for the year 1995 and a schedule setting out changes in working capital. (CS Inter, June 1992, adapted) [Ans. Funds from Operations Rs 87,510, Increase in Working Capital Rs 52,500, Sources 1,09,150, Applications Rs 56,650] 7.22 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

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Self-Instructional Material Cash

and Funds Flow Statements NOTES

Self-Instructional Material 303 NOTES Marginal Costing and Cost Volume Profit Analysis UNIT 8 MARGINAL COSTING AND COST VOLUME PROFIT ANALYSIS Structure 8.0 Introduction 8.1 Unit Objectives 8.2 Absorption Costing 8.3 Marginal Costing 8.4 Difference between Absorption Costing and Marginal Costing 8.5 Marginal Costing and Direct Costing 8.6 Marginal Costing

and Differential Costing 8.7 Marginal Cost 8.8 Segregation of Semi-Variable Costs 8.9 Profit Planning 8.10 Cost Valume Profit Analysis 8.11 Break-Even Analysis 8.12 Key Factor 8.13 Break-Even Chart 8.14 Angle of Incidence 8.15 Assumptions Underlying CVP Analysis/Break-Even Charts 8.16 Utility of CVP Analysis 8.17

Key Terms 8.18 Summary 8.19

Answers to 'Check Your Progress' 8.20 Questions and Exercises 8.21 Practical Problems 8.22 Further Reading 8.0 INTRODUCTION

Computation of the cost of

a product is an important job of an accountant. The term 'cost' represents the expenditure which has been made or incurred for economic benefit. There are three broad elements of cost – (a) Material – substance from which product is made, (b) Labour – human effort necessary for conversion of material into finished product, and (c) Expenses – any other cost besides material and labour is termed as an expense. Each of the above elements of cost can be either direct or indirect. In case the cost of an element can be charged wholly, directly or specifically to a product, it is termed as 'indirect cost'. Indirect costs are also known as overhead costs. The present chapter deals with the impact of fixed and variable costs on profit of a firm at different output levels. These elements of cost can also broadly be put into two categories: Fixed Costs and Variable Costs. Fixed Costs are those costs which do not vary but remain constant within a given period of time and range of activity in spite of fluctuations in production. The examples of Fixed Costs are rent, insurance charges, management salaries, etc. On the other hand, Variable Costs are costs which vary in direct proportion to any change in the volume of output. The costs of direct materials, direct wages, etc., can be put into this category. The cost of a product or process can be ascertained using the different elements of cost according to any of the following two techniques: (i) Absorption Costing (ii) Marginal Costing 304 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 8.1

UNIT

OBJECTIVES

After going through this unit, you will be able to: ? Understand the

concept

of

marginal costing ? Differentiate between

marginal costing from absorption costing, direct costing and differential costing? Explain the different methods for segregation of semi-variable costs? Identify the factors affecting profit of a firm? Appreciate the utility of cost-volume profit analysis and break-even analysis? Draw different types of break-even charts? Explain assumptions, advantages and limitations of break-even charts? Appreciate the utility and limitations of marginal costing technique? Explain the meaning of certain key terms. 8.2 ABSORPTION COSTING Absorption Costing technique is also termed as Traditional or Full Cost Method. According to this method, the cost of a product is determined after considering both Fixed and Variable Costs. The Variable Costs, such as those of direct materials, direct labour, etc., are directly charged to the products while the fixed costs are apportioned on a suitable basis over different products manufactured during a period. Thus, in case of Absorption Costing all costs are identified with the manufactured products.

This

will be clear with the help of the following illustration.

Illustration 8.1.

A company is manufacturing three products

A, B and C. The costs of their manufacture are as follows: A B C Direct Material per

unit

Rs 3 Rs 4 Rs 5 Direct Labour 2 3 4 Selling Price 10 15 20 Output 1,000 units 1,000 units 1,000 units The total overheads are Rs 6,000 out of which Rs. 3,000 are fixed and rest are variable. It is decided to apportion these costs over different products

in the ratio of output. You are required to prepare a statement showing cost of each product and profit according to Absorption Costing. Solution: The cost of each proctuct would be ascertained according to Absorption Costing as follows: STATEMENT SHOWING COST AND PROFIT (According to Absorption Costing Technique) A B C Per Unit Total Per Unit Total Per Unit Total Rs Rs Rs

Rs Rs Rs Direct Materials 3 3,000 4 4,000 5 5,000 Direct Labour 2 2,000 3 3,000 4 4,000 Overheads:

Fixed 1 1,000 1 1,000 1 1,000 Variable 1 1,000 1 1,000 1 1,000 Total Cost 7 7,000 9 9,000 11 11,000 Profit 3 3,000 6 6,000 9 9,000 Selling Price 10 10,000 15 15,000 20 20,000

Total Profit Rs 3,000 + Rs 6,000 + Rs 9,000 = Rs 18,000

Self-Instructional Material 305 NOTES Marginal Costing and Cost Volume Profit Analysis Under Absorption Costing each unit of product has to bear its total share of cost. It may be true that some products may not be able to bear their full share of cost but may be able to contribute to the overall profitability of the firm. For example, a product can be sold at a price which is sufficient to recover more than its Variable Cost required to produce it, but may not be sufficient to recover its full share of Fixed Cost. On the other hand, there may be products which contribute much more than their share of variable and fixed costs. Under absorption costing, the management is interested in knowing whether or not a product can produce an adequate return on investment after absorbing its share of the overall cost whether fixed or variable or direct or indirect. This is because in the long run, all costs must be more than recovered to assure a satisfactory return to the investors on their investment. However, charging of fixed costs creates problems. These costs are apportioned to different products on some suitable basis, e.g., as a percentage of direct material, a percentage of direct labour or a rate per article, etc. But, there is always some doubt about the suitability of the method adopted for apportionment of these Fixed Costs. It cannot be said definitely that the fixed costs so charged are really the costs which should have been charged to each of the different products. It, therefore, brings more inexactness into costing. Moreover, fixed costs have to be incurred whether there is production or no production. It means cost of a product not only depends upon the costs which are directly incurred but also on the volume of output. For example, if the cost of direct material and direct labour for a unit is Rs 3 and Rs 4 respectively and the fixed costs are Rs 2,000 and the volume of output is 1,000 units, the total cost of production will be as follows: Cost of Direct Materials Rs 3,000 Cost of Direct Labour 4,000 Fixed Overheads 2,000 Total Costs 9,000 The cost per unit comes to Rs. 9. In case, the output is 800 units only, the cost of production will be as follows: Direct Material Rs. 2,400 Direct Labour 3,200 Fixed Overheads 2,000 Total Cost 7,600 The cost per unit comes to Rs 9.50 per unit. From the above example, it is clear that the cost of the product has gone up by 50 paise per unit not because of any increase in price of direct materials or increase in the rates for direct labour, but because of lower volume of production. This seems to be a bit illogical. Some people, therefore, argue that the fixed cost should not be

considered while computing the cost of the product. They should rather be charged against the total fund arising out of excess of selling price over variable cost.

Marginal Costing, as explained below, is a technique of costing which deals with this concept. 8.3 MARGINAL COSTING Marginal costing is a technique where only the variable costs are considered while computing the cost of a product. The fixed costs are met against the total fund arising out

the

excess of selling price over total variable cost. This fund is known as 'contribution' in marginal costing.

According to the Chartered Institute of Management Accountants, London, marginal costing is a

technique where 'only the variable costs are charged to cost units, the fixed costs attributable being written off in full against the contribution for that period'.

This

will be clear with the help of the following illustration.

llustration 8.2. From the data given in Illustration 8.1,

prepare a Statement of Cost and Profit according to the Marginal Costing technique. 306

Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Solution:

STATEMENT OF COST AND PROFIT (According to Marginal Costing Technique) Product A Product B Product C

Per Unit Total Per Unit Total Per Unit Total Rs Rs Rs Rs Rs Rs Rs Direct Materials 3 3,000 4 4,000 5 5,000 Direct Labour 2 2,000 3 3,000 4 4,000 Variable Overheads 1 1,000 1 1,000 Total Marginal Cost 6 6,000 8 8,000 10 10,000 Contribution 4 4,000 7 7,000 10 10,000

Selling Price 10 10,000 15 15,000 20 20,000

Thus, the total contribution from the three products A, B and C amounts to Rs 21,000. The profit will now be computed as follows: Total Contribution Rs 21,000 Less: Fixed Costs 3,000 Profit 18,000 Thus, marginal costing considers only the variable costs while computing the cost of the product. As a matter of fact, it is not a system of cost finding such as job, process or operating costing, but it is a special technique concerned particularly with the effect of fixed overheads on running the business.

This is being explained in the following pages while explaining the difference between Marginal Costing and Absorption Costing. 8.4 DIFFERENCE BETWEEN ABSORPTION COSTING AND MARGINAL COSTING As explained earlier under Absorption Costing, full costs are charged to production, i.e., all fixed and variable costs are recovered from production while under Marginal Costing only Variable Costs are charged to production. Fixed costs are ignored. This is on the basis that for additional output only Variable Costs are incurred since Fixed Costs remain constant. There is, therefore, no reason to burden the additional output with the share of fixed overheads, otherwise, it will give a wrong idea about the likely profit to be earned on additional sales. On account of recovery of only variable costs from production, the closing stock under Marginal Costing is valued only at marginal cost. Thus, Marginal Costing system differs from Absorption Costing system in two respects: 1. Recovery of Overheads 2. Valuation of Stocks 1. Recovery of Overheads. In case of Absorption Costing both fixed and variable overheads are charged to production. On the other hand, in Marginal Costing, only variable overheads are charged to production while fixed overheads are transferred in full to the costing and profit and loss account. Thus, in case of Marginal Costing, there is under-recovery of overheads since only variable overheads are charged to production. 2. Valuation of Stocks. In case of Absorption Costing stocks of work-in-progress and finished goods are valued at works cost and total cost of production, respectively. The works cost or cost of production so used includes the amount of fixed overheads also. In case of Marginal Costing, only variable costs are considered while computing the value of work-in- progress or finished goods. Thus, the closing stock in Marginal Costing is under-valued as compared to Absorption Costing. This also results in carrying over the fixed overheads of one period to the next period. The above points of difference

will be clear with the help of the following illustration. Illustration 8.3.

Taking the figures given in Illustration 8.1,

compute the amount of profit

under Marginal and Traditional Costing systems, in case the units sold of the products A. B and C are 900 in each case. Self-Instructional Material 307 NOTES Marginal Costing and Cost Volume Profit Analysis Solution: STATEMENT OF PROFIT (Under Absorption Costing System) A B C Rs Rs Rs Direct Material 3,000 4,000 5,000 Direct Labour 2,000 3,000 4,000 Overheads: Variable 1,000 1,000 1,000 Total Marginal Cost 6,000 8,000 10,000 Add: Fixed Overheads 1,000 1,000 1,000 Total Cost of Production 7,000 9,000 11,000 Less: Closing Stock 700 900 1,100 Cost of Goods Sold 6,300 8,100 9,900 Profit 2,700 5,400 8,100 Sales 9,000 13,500 18,000 Thus, total profit under Absorption Costing is: Rs Product A 2,700 Product B 5,400 Product C 8,100 Total 16,200 STATEMENT OF PROFIT (Under Marginal Costing) A B C Rs Rs Rs Total Marginal Cost 6,000 8,000 10,000 Less: Closing Stock 600 800 1,000 Marginal Cost of Production of Goods Sold 5,400 7,200 9,000 Contribution (Sales – Marginal Cost of Production) 3,600 6,300 9,000 Sales 9,000 13,500 18,000 Thus, total profit under Marginal Costing will be: Rs Product A 3,600 Product B 6,300 Product C 9,000 Total Contribution 18,900 Less: Fixed Cost 3,000 Profit 15,900 The profit under Traditional Costing System is Rs. 16,200 while it is Rs 15,900 in case of Marginal Costing System. This is on account of the difference in valuation of Closing Stock. The Closing Stock under Traditional Costing System includes fixed cost of Rs 300. This is the reason of the profit under Traditional Costing System being higher by Rs 300 as compared to the Marginal Costing System. On the same basis, if there is opening stock but no closing stock, the value of opening stock will include fixed cost under traditional costing system. However, the opening stock will be valued only at variable cost in case of Marginal Costing System.

308 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Thus, the profit under Marginal Costing would be more as compared to Traditional Costing System. In case there are no stocks whatsoever the profits under both the systems will be the same. 8.5 MARGINAL COSTING AND DIRECT COSTING Direct costing is the technique where only direct costs are considered while calculating the cost of the product. Indirect costs are met against the total margin (excess of selling price over

direct costs) given by all the products taken together. Many accountants use 'Direct Costing' and 'Marginal Costing' as synonymous terms. This is unfortunate, because all direct costs need not be variable costs. A direct cost, it may be recalled, is a cost that can be identified readily with a department, a function, a unit of product or some other relevant unit. Direct cost can be fixed as well as variable. For example, if rent is paid for a factory building in which only one product is being manufactured, the rent paid will be taken as a direct cost but not as a variable cost. Thus, the cost of the product under Direct Costing and Marginal Costing will be different. Though, most of the direct costs are variable costs but, as explained above, all direct costs may not be variable. The term 'Variable Costing' should be preferred to marginal costing as compared to 'Direct Costing'. 8.6 MARGINAL COSTING AND DIFFERENTIAL COSTING Marginal Costing is sometimes confused with Differential Costing. The term 'Differential Costing' means 'a technique used in the preparation of ad hoc information in which only cost and income differences between alternative courses of action are taken into consideration'. 1 Thus, in case of differential costing a comparison is made between the cost differential and income differential between two or more situations and decision regarding adopting a particu-lar course of action is taken if it is on the whole profitable. This is illustrated with the following illustration. Illustration 8.4. Pioneer Manufacturing Company, makers of a specialized line of toys, receives an order for 2,000 units of toy battle tanks, from a large mail-order house at a price of Rs 3 per unit. The company sells this type of toy to its other customers at Rs 5 each but it has surplus capacity and can take the special order without adversely affecting its regular operations for the coming month. The income statement of the company for the preceding month is as follows: Rs Net Sales-10,000 units @ Rs. 5 50,000 Costs: Rs. Direct Material: Rs. 1.50 per unit 15,000 Direct Labour: Re. 1 per unit 10,000 Factory Overhead 10,000 Selling and Administration Expenses 10,000 Total Costs 45,000 Net Profit 5,000 Direct material and direct labour costs to be incurred on the special order are estimated to be of the same amount per unit as for the regular business. Special tools costing Rs 500 would be required to meet the specifications of the mail-order house. You are required to prepare a differential cost analysis for deciding about the acceptance of the order. 1 Presumed to be fixed. Self-Instructional Material 309 NOTES Marginal Costing and Cost Volume Profit Analysis Solution: DIFFERENTIAL COST STATEMENT Existing Proposed Net Increase/ Situation Situation Decrease 10,000 Units 12,000 units 2,000 units Sales (i) Rs. 50,000 56,000 6,000 Cost: Direct Materials 15,000 18,000 3,000 Direct Labour 10,000 12,000 2,000 Factory Overhead 2 10,000 10,000 — Selling & Adm. Expenses 3 10,000 10,000 — Special Tools — 500 500 Total Costs (ii) 45,000 50,500 5,500 Profit (i) - (ii) = (iii) 5,000 5,500 500 In the above case differential costs are Rs. 5,500 while differential sales are Rs 6,000. Thus, acceptance of order from a large mail order house gives an extra profit of Rs 500. The order may be accepted provided it does not adversely affect the present sales at Rs 5 per unit. Thus, in case of Differential Costing, the change in total costs (both fixed and variable) is taken into account. The term 'Differential Cost' means the net increase or decrease in total cost resulting from a variation in production. The differential cost is termed as 'Incremental Cost' when the cost increase and 'Decremental Cost' when the cost decreases. Thus, Incre- mental Costing and Decremental Costing are two variants of Differential Costing which are different from Marginal Costing and Direct Costing. The difference between Marginal Costing and Differential Costing can be summarised as follows: 1. Differential Costing can be used both in case of Absorption Costing and Marginal Costing. 2. In case of Marginal Costing, the entire fixed costs are excluded while in the case of Differential Costing such fixed costs which are relevant for decision-making are considered. 3. Differential costs are worked out separately as analysis statements while marginal costs may be embodied in the accounting system itself. 4. In Marginal Costing, the contribution and the profit-volume ratio are the main yardsticks for the purposes of performance evaluation and decision-making. While in case of Differential Costing, the differential costs are compared with incremental or decremental revenue as the case may be. The manner of application of Differential Costing is somewhat different from that of Marginal Costing. Under Differential Costing, differential costs of various alternatives are compared with the differential revenues and the decisions are taken on the basis of maximum net gain. While evaluating the viability of different projects, making a choice out of several alternative proposals, Differential Costing helps in a better way than Marginal Costing. If under Marginal Costing, while deciding about the profitability of products for making cost- benefit analysis, fixed costs are also considered at some stage, it takes the shape of Differential Costing. Hence practically, the purpose of applying the two techniques is the same and here too, we have not made any difference in the application of these techniques to the problems which management has to face in its routine or otherwise decision-making process. 8.7 MARGINAL COST The technique of Marginal Costing is concerned with 'Marginal Cost'. It is, therefore, very necessary that the term

The technique of Marginal Costing is concerned with 'Marginal Cost'. It is, therefore, very necessary that the term 'Marginal Cost' is correctly understood. According to the Chartered Institute of Management Accountants, London, the term 'Marginal Cost' means 'the amount at any given volume

of output by which aggregate costs are changed if the volume of

output

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Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES

is increased or decreased by one unit'. On analysing this definition we can conclude that the term 'Marginal Cost' refers to increase or decrease in the amount of cost on account of increase or decrease of production by a single unit. The unit may be a single article or a batch of similar articles. This will be clear from the following example. Example 1 A factory produces 500 fans per annum. The variable cost per fan is Rs 50. The fixed expenses are Rs 10,000 per annum. Thus, the cost sheet of 500 fans will appear as follows: Variable Cost (500 × Rs 50) Rs 25,000 Fixed Cost 10,000 Rs 35,000 If production is increased by one unit, i.e., it becomes 501 fans per annum, the cost sheet will then appear as follows: Variable cost (501 × Rs 50) Rs 25,050 Fixed Cost 10,000 Total Cost Rs 35,050 Marginal cost per unit is, therefore, Rs 50. Marginal cost is, thus, the total variable cost because within the capacity of the organisation, an increase of one unit in production will cause an increase in variable cost only. The variable cost consists of direct materials, direct labour, variable direct expenses and variable overheads. The term "all variable overheads" includes variable overheads plus the variable portion contained in semi-variable overheads. This portion has to be segregate from the total semi-variable overheads according to the methods discussed later in this chapter. Thus, Marginal Cost = Total Variable Cost Or = Direct Material + Direct Labour + Direct Expenses (Variable) + Variable Overheads Or = Total Cost - Fixed Cost 8.8 SEGREGATION OF SEMI-VARIABLE COSTS Marginal costing requires segregation of all costs between two parts, fixed and variable. This means that the semi-variable cost will have to be segregated into fixed and variable elements. This may be done by any one of the following methods: 1. Levels of output compared to levels of expenses method, 2. Range method, 3. Degree of variability method, 4. Scattergraph method, 5. Least squares method. Each of the above methods has been discussed in detail with the help of the following illustration: Illustration 8.5 Production Semi-variable in Units Expenses 1998 July 50 150 August 30 132 September 80 200 October 60 170 November 100 230 December 70 190 During the month of January, 1999, the production is 40 units only. Calculate the amount of fixed, variable and total semi-variable expenses for the month. 1. Levels of Output Compared to Levels of Expenses Method. According to this method, the output at two different levels is compared with corresponding level of expenses. Since the fixed expenses remain constant, the variable overheads are arrived at by the ratio of change in expense to change in output. Self-Instructional Material 311 NOTES Marginal Costing and Cost Volume Profit Analysis Solution: Taking the figure of the month of September and November of the Illustration given above: Month Production Semi-variable Fixed Variable expenses Units Rs Rs Rs September 80 200 80* 120* November 100 230 80** 150** Difference 20 Rs 30 Therefore, variable element Change in amount of expense = Change in activity or quantity 30 = Rs1.50 per unit 20 ? *Variable Overheads for September = 80 × Rs. 1.50 = Rs 120 Fixed Overheads for September = Rs 200 - R. 120 = Rs 80 **Similarly, Overheads for November have been computed. Variable Overheads for January 40 × Rs 1.50 = Rs 60 Fixed Overheads Rs 80 Total Semi-variable Overheads Rs 140 2. Range Method. This method is similar to the previous method except that only the highest and lowest points of output are considered out of various levels. This method is also designated as 'high and low' method. Solution: The highest production in the illustration is in the month of November while the lowest is in the month of August. The figures of these two months, therefore, have been taken. Production Semi-variable Fixed Variable expenses Units Rs Rs Rs August 30 132 90* 42* November 100 230 90** 140** Difference 70 98 Variable elements: $98/70 = \text{Re. } 1.4 \text{ per unit *Variable Overheads for August} = 30 \times \text{Rs. } 1.4 = \text{Rs. } 42 \text{ Fixed Overhead for August} =$ 132 – Rs 42 = Rs 90 **Similarly, the fixed and variable overheads for November have been found out. Variable overheads for January = 40 × Rs 1.4 = Rs 56 Fixed overheads = Rs 90 Total semi-variable overheads Rs 146 3. Degree of Variability Method. In this method, degree of variability is noted for each item of semi-variable expense. Some semi-variable items may have 30% variability while others may have 70% variability. The method is easy to apply but difficulty is faced in determining the degree of variability. Solution: Assuming that degree of variability is 60% in semi-variable expenses and taking the month of October as a basis, the analysis shall be as under: Variable element = (60% of Rs 170), i.e., Rs 102 Fixed element = Rs 170 - 102 = Rs 68. On the basis of the variable expenses of Rs 102 for the production of 60 units the variable expenses for 40 units (the production for January, 1999) will be:

312 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 102 Rs 40 Rs.68 60 ? ? Hence, the total Semi-variable expenses for January, 1999 will be equal to Rs68 + Rs 68, i.e., Rs 136. 4. Scattergraph Method. In this method the given data is plotted on a graph paper and line of best fit is drawn. The method is explained below: (i) The volume of production is plotted on the horizontal axis and the costs are plotted on the vertical axis. (ii) Corresponding to each volume of production costs are then plotted on the paper, thus, several points are shown on it. (iii) A straight line of best fit is then drawn through the points plotted. This is the total cost line. The points where this line intersects the vertical axis is taken to be the amount of fixed element. (iv) A line parallel to the horizontal axis is drawn from the point where the line of best fit intersects the vertical axis. This is the fixed cost line. (v) The variable cost at any level can be known by noting difference between fixed cost and total cost lines. Solution: An inspection of the above graph tells us that fixed expenses are Rs 85 approximately. For the month of January, 1999, the semi-variable expenses (see Graph) are Rs 143 and, therefore, the variable expenses are Rs 58 (Rs 143 – 85). 5. Method of Least Squares. This method is based on the mathematical technique of fitting an equation with the help of observations. The linear equation, i.e., a straight line equation, can be assumed as: y = a + bx and the various sub-equations shall be; y na b x???? 2 xy a x b x ? ? ? ? ? An equation of second order, i.e., a curvilinear equation, can be drawn as y = a + bx + cx 2 and the various sub-equations to solve it i.e., to find out the values of constants a, b and c, shall be: ; y na b x ? ? ? ? 2 3 ; xy axbxcx??????2234.xyaxbxcx??????

Similarly, the equation can be fitted for any number of order or degree depending upon the number of observations available and the accuracy desired.

Self-Instructional Material 313 NOTES Marginal Costing and Cost Volume Profit Analysis Solution: A linear equation can be obtained with the help of the following values, thus: Months Production Expenses (Units) Rs x y x 2 xy July, 1998 50 150 2,500 7,500 August, 1998 30 132 900 3,960 September, 1998 80 200 6,400 16,000 October, 1998 60 170 3,600 10,200 November, 1998 100 230 10,000 23,000 December, 1998 70 190 4,900 13,300 Total 390 ? ?x 1,072 ? ?y 2 28,300 ?? x 73,960 ?? xy Assuming, the equation as y = a + bx, we have to find the values of constants a and b with the help of above figures. The other two equations are: y na b x ? ? ? ? ... (i) 2 xy a x b x ? ? ? ? ... (ii) Putting the values in these equations, we have 1,072 = 6a + 390b ..(iii) 73,960 = 390a + 28,300b ...(iv) Multiplying equation (iii) by 65 and deducting it from (iv), we get 4,280 = 2,950b; ? b = 1.45 (approx.) Putting the value of b in equation (iii) we can know the value of a: 1,072 (390 1.45) 84.42 (approx.) 6 a ? ? ? ? 8.9 PROFIT PLANNING The basic objective of running any business organisation is to earn profits. Profits determine the financial position, liquidity and solvency of the company. They serve as a yardstick for judging the competence and efficiency of the management. Profit planning is therefore a fundamental part of the management function and is a vital part of the total budgeting process. The management determines the profit goals and prepares budgets that will lead them to the realisation of these goals. However, profit planning can be done only when management is aware about the various factors which affect profits. Some of the important factors affecting profits are as follows: 1. Selling Price. Variation in the selling price causes variation in the amount of profit also. An increase in the selling price increases the profits and vice versa. 2. Cost.

The term 'cost', means 'the amount of expenditure (actual or notional) incurred

on or attributable to a specified thing or activity'. A variation in the cost also affects the amount of profit. 3. Volume. The term 'volume' refers to the level of activity. This may be expressed in any of the following manners: (i) Sales capacity as a percentage of maximum sales; (ii) Value of sales; (iii) Quantity of sales; (iv) Production capacity as a percentage of maximum production; (v) Value of production; (vi) Quantity of production; (vii) Direct labour cost;

314 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES (viii) Direct labour hours; (ix) Machine hours. The measure adopted for expressing the volume should be simple, consistent and well defined. It is common to express volume in terms of units or value. 4. Product Mix. In a multi-product company, the profit is also affected by the product mix, i.e., variation of produce mix, may cause variation in profit also. The management can achieve their target profit goal by varying one or more of the above variables. This

will be clear with the help of the following illustration. Illustration 8.6.

A firm has Rs. 10,00,000 invested in its plant and sets a goal of 15% annual return on investment. Fixed costs in the factory presently amount to Rs 4,00,000 per year and variable costs amount to Rs 15 per unit produced. In the past year the firm produced and sold 50,000 units at Rs 25 each and earned a profit of Rs 1,00,000. How can management achieve their target profit goal by varying different variables like fixed costs, variable costs, quantity sold or increasing the selling price per unit. Solution: Profit to be earned is Rs 1,50,000 (i.e., 15% of Rs 10,00,000) The equation of profit can be put as follows: Profit = (Quantity \times S.P. per unit) – (Quantity \times Variable Cost per unit) – Fixed costs. (i) Achievement of target profit by varying fixed costs: Let the fixed costs be X 1,50,000 = (50,000 \times Rs 25) – (50,000 \times Rs 15) – X or 1,50,000 = (Rs 12,50,000) – (Rs 7,50,000) – X X = Rs 12,50,000 – 7,50,000 – 1,50,000 X = Rs 3,50,000 The present fixed costs are Rs. 4,00,000 – Rs 3,50,000). (ii) Achievement of the target profit by varying variable costs: Let the variable cost be X per unit Rs 1,50,000 = (50,000 \times Rs 25) – (50,000 \times Rs 25) – (50,000 \times Rs 4,00,000 or 1,50,000 \times Rs 12,50,000 – Rs 4,00,000 or 50,000 \times Rs 7,50,000 – Rs 4,00,000 or 50,000 \times Rs 12,50,000 \times Rs 4,00,000 or 50,000 \times Rs 12,50,000 \times Rs 4,00,000 \times Rs 4,00,

Rs 14 The present variable cost per unit is Rs 15 per unit. The management can earn the target profit of Rs 1,50,000 by reducing the variable cost by Re 1 per unit (i.e., Rs 15 – Rs 14). (iii) Achievement of the target profit by varying quantity sold: Rs 1,50,000 = $(X \times Rs 25) - (X \times Rs 15) - Rs 4,00,000 \text{ or } 1,50,000 = 25X - 15X - Rs 4,00,000 \text{ or } 10X = 5,50,000 \text{ or } X = 55,000$ The present sales are 50,000 units. The management can earn the target profit of Rs 1,50,000 by increasing the units sold by 5,000. (iv) Achievement of the target profit by varying selling price: Let the selling price be X Rs 1,50,000 = $(50,000 \times X) - (50,000 \times Rs . 15) - Rs . 4,00;000 \text{ or } Rs 1,50,000 = 50,000 X - Rs 7,50,000 - Rs 4,00,000 \text{ or } - 50,000X = -13,00,000 , \text{ or } X = Rs . 26 The present selling price is Rs 25 per unit. The management can earn the target profit of Rs 1,50,000 by increasing the selling price by Re 1 per unit. Self-Instructional Material 315 NOTES Marginal Costing and Cost Volume Profit Analysis$

Illustration 8.7. A company is manufacturing three products A, B and C. The

data regarding cost, sales and profits are as follows: Product Sales (units) Selling Variable cost Contribution price per unit per unit per unit A 2,000 5 2 Rs 3 B 1,000 5 3 Rs 2 C 1,000 5 3 Rs 2 The fixed costs are Rs 5,000. The Company wants to change the sales mix from the existing proportion of 2:1:1 to 2:2:1 of A, B and C respectively. You are required to calculate the number of units of each product which the company should sell to maintain the present profit. Solution: Present Profit Total Contribution (Rs. 6,000 + Rs. 2,000 + Rs. 2,000) Rs 10,000 Less: Fixed Costs 5,000 Profit 5,000 Number of units to be sold for Profit of Rs 5,000 as per new mix If the number of units to be sold of product C is taken as x Units sold of product B = 2x Units sold of product A = 2x Total Sales in Rs = 5x + 10x + 10x = 25x Variable Costs in Rs. = 3x + 6x + 4x = 13x Total Sales = Total Cost + Profit or 25x = 13x + 5,000 + 5,000 or 12x = Rs 10,000 or x = 833.33 units Number of units to be sold A 1,666.66 or 1,667 B 1,666.66 or 1,667 C 833.33 or 833 Verification: Total Contribution: Rs A 1,667 × Rs 3 = 5,001 B 1,667 × Rs 2 = 3,334 C 833 × Rs 2 = 1,666 10,001 Less: Fixed Costs 5,000 5,001 or (say) Profit Rs. 5,000 The above illustrations make this amply clear that the two, important factors which help management in profit planning are cost (both fixed and variable) and volume of sales (both in quantity and value). This Cost-Volume-Profit relationship, which is more populary known as Break-even Analysis, is being explained in detail in the following pages. 8.10 COST VOLUME PROFIT ANALYSIS Cost Volume Profit (CVP) analysis is an important tool of profit planning. It provides infor- mation about the following matters: 1. The behaviour of cost in relation to volume 2. Volume of production or sales, where the business will break-even

316 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 3. Sensitivity of profits due to variation in output 4. Amount of profit for a projected sales volume 5. Quantity of production and sales for a target profit level Cost-volume-profit analysis may therefore be defined as a managerial tool showing the relationship between various ingredients of profit planning, viz., cost (both fixed and variable), selling price and volume of activity, etc. Such an analysis is useful to the Finance Manager in the following respects: (i) It helps him in forecasting the profit fairly accurately. (ii) It is helpful in setting up flexible budgets, since on the basis of this relationship, it can ascertain the cost, sales and profits at different levels of activity. (iii) It also assists him in performance evaluation for purposes of management control. (iv) It helps in formulating price policy by projecting the effect which different price structures will have on cost and profits. (v) It helps in determining the amount of overhead cost to be charged at various levels of operations, since overhead rates are generally predetermined on the basis of a selected volume of production. Thus, cost-volume-profit analysis is an important media through which the management can have an insight into effects on profit on account of variations in costs (both fixed and variable) and sales (both volume and value) an take appropriate decisions. 8.11 BREAK-EVEN ANALYSIS Break-even analysis is a widely used technique to study cost-volume-profit relationship. The narrower interpretation of the term break-even analysis refers to a system of determination of that level of activity where total cost equals total selling price. The broader interpretation refers to that system of analysis which determines

probable profit at any level of activity. It portrays the relationship between cost of production, volume of production and

the sales value. It may be added here that CVP analysis is also popularly, although not very correctly, designated as 'Break-even Analysis'. The difference between the two terms is very narrow. CVP analysis includes the entire gamut of profit planning, while break-even analysis is one of the techniques used in this process. However, as stated above, the technique of break-even analysis is so popular for studying CVP Analysis that the two terms are used as synonymous terms. For the purposes of this study, we have also not made any distinction between these two terms. In order to understand the concept of break-even analysis, it will be useful to know about certain basic terms as given below: 1. Contribution This refers to the excess of selling price over the variable cost. It is also known as, 'gross margin'. The amount of profit (loss) can be ascertained by deducting the fixed cost from contribution. In other words, fixed cost plus profit is equivalent to contribution. It can be expressed by the following formula:— Contribution = Selling Price (–) Variable Cost or Fixed Cost (+) Profit Profit = Contribution – Fixed Cost : Example 2 Variable Cost = Rs 50,000 Fixed Cost = Rs 20,000 Selling Price = Rs 80,000 Contribution = Selling Price – Variable Cost = Rs 80,000 – Rs 50,000 = Rs 30,000 Profit = Contribution – Fixed Cost = Rs 80,000 – Rs 50,000 = Rs 30,000 Profit = Contribution – Fixed Cost = Rs 80,000 – Rs 50,000 = Rs 30,000 Profit = Contribution – Fixed Cost = Rs 80,000 – Rs 50,000 = Rs 30,000 Profit = Contribution – Fixed Cost = Rs 80,000 – Rs 50,000 = Rs 30,000 Profit = Contribution – Fixed Cost = Rs 80,000 – Rs 50,000 = Rs 30,000 Profit = Contribution – Fixed Cost = Rs 80,000 – Rs 30,000 Profit = Contribution – Fixed Cost

Self-Instructional Material 317 NOTES Marginal Costing and Cost Volume Profit Analysis = Rs 30,000 - Rs 20,000 = Rs 10,000 Hence, contribution exceeds fixed cost and, therefore, the profit is of the magnitude of Rs 10,000. Suppose the fixed cost is Rs. 40,000 then the position shall be Contribution – Fixed cost = Profit = Rs 30,000 - Rs 40,000 = (-) Rs 10,000 The amount of Rs 10,000 represents the extent of loss since the fixed costs are more than the contribution. At the level of fixed cost of Rs 30,000, there shall be no profit and no loss. The concept of the break-even analysis emerges out of this theory. 2.

Profit/Volume Ratio (P/V Ratio) This term is important for studying the profitability of operations of a business, Profit volume ratio establishes a relationship between the contribution and the sale value. The ratio can be shown in the form of a percentage also. The formula can be expressed thus: P/V Ratio Contribution Sales – Variable Cost Sales Sales ? ? or C/S S–V Variable Costs or 1 S Sales ? ? This

ratio can also be called 'Contribution/Sales' ratio. This ratio can also be known by comparing the change in contribution to change in sales or change in profit due to change in sales. Any increase in contribution would mean increase in profit only because fixed

costs are assumed to be constant at all levels of production. Thus,

P/V Ratio Change in Contribution Change in Profit or Change in Sales Change in Sales ?

This ratio would remain constant at different levels of production since variable costs as a proportion to sales remain constant at various levels. Example 3 Sales Rs 2,00,000 Variable Costs 1,20,000 Fixed Costs 40,000 P/V Ratio Rs 2,00,000 Rs1,20,000 0.4 or 40% Rs 2,00,000 ? ? ? The ratio is useful for the determination of the desired level of output or profit and for the calculation of variable costs for any volume of sales. The variable cost can be expressed as under: VC = S (1 – P/V Ratio) In the above example if we know the P/V Ratio and sales beforehand, the variable cost can be computed as follows: Variable costs = 1 - .04 = .06, i.e., 60% of sales = Rs 1,20,000 (60% of Rs 2,00,000) Alternatively, by the formula Since P/V Ratio S V , S ? ? ? S – V = S × P/V ratio or V = S – S × P/V Ratio or = S (1 – P/V Ratio) The following are the special features of P/V Ratio: (i) It helps the management in ascertaining the total amount of contribution for a given volume of sales. (ii) It remains constant so long the selling price and the variable cost per unit remain constant or so long they fluctuate in the same proportion.

318 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES (iii) It remains unaffected by any change in the level of activity. In other words, PV ratio for a product will remain the same whether the volume of activity is 1,000 units or 10,000 units. (iv) The ratio also remains unaffected by any variation in the fixed cost since the latter are not at all considered while calculating the PV ratio. In case of a multi-product organisation, PV ratio is of vital importance for the manage- ment to find out which product is more profitable. Management tries to increase the value of this ratio by reducing the variable costs or by increasing the selling price. 3. Break-even Point The point which breaks the total cost and the

selling price evenly to show the level of output or sales at which there shall be neither profit nor loss, is

regarded as break-even point. At this point, the income of the business exactly equals its expenditure. If production is enhanced beyond this level, profit shall accrue to the business, and if it is decreased from this level, loss shall be suffered by the business. It will be proper here to understand different concepts regarding marginal cost and break-even point before proceeding further. This has been explained below: Marginal Cost = Total Variable Cost or = Total Cost – Fixed Cost or = Direct Material + Direct Labour + Direct Expenses (Variable) + Variable Overheads Contribution = Selling Price – Variable Cost Profit = Contribution – Fixed Cost Fixed Cost = Contribution – Profit Contribution = Fixed Cost + Profit Profit/Volume Ratio (P/V Ratio) Contribution per unit Selling price per unit ? or Total Contribution Total Sales ? In case P/V ratio is to be expressed as a percentage of sales, the figure derived from the formulae as given above should be multiplied by 100. Break-even Point (of output) Fixed Cost Total Sales Total Contribution ? ? or Fixed Cost Selling Price per unit Contribution per unit ? ? or Fixed Cost Total Sales Total Contribution ? ? or Fixed Cost Variable cost per unit P/V Ratio 1 Selling price per unit ? ? At break-even point the desired profit is zero. In case the volume of output or sales is to be computed for a 'desired profit', the

amount of 'desired profit' should be added to Fixed cost in the formulae given above. For example: Units for a desired profit Fixed Cost + Desired Profit Contribution per unit ? Sales for a desired profit Fixed Cost + Desired Profit P/V Ratio ? This will be clear from the following illustrations.

Self-Instructional Material 319 NOTES Marginal Costing and Cost Volume Profit Analysis Illustration 8.8. A factory manufacturing sewing machines has the capacity to produce 500 machines per annum. The marginal (variable) cost

of each machine is Rs 200 and each machine is sold for Rs 250. Fixed overheads are Rs 12,000 per annum. Calculate the break-even points for output and sales and show what profit will result if output is 90% of capacity? Solution:

Contribution per machine is Rs 250 – Rs. 200 = Rs. 50 Break-even Point for Output (Output which will give 'contribution' equal to fixed costs Rs. 12,000). BEP (for output) Total Fixed Cost Contribution per unit ? 12,000 240 machines 50 ? ? Break-even Point for Sales = Output × Selling price per unit = $240 \times \text{Rs} 250 = \text{Rs} 60,000$. Break-even point for sales can also be calculated with the help of any of the following formulae: (i) BEP Total Fixed Cost

Variable Cost per unit 1– Selling Price per unit ? 12,000 200 1 250 ? ? 12,000 Rs 60,000 1 5 ? ? (ii) BEP Total Fixed Cost ×Selling Price per unit Contribution per unit ? 12,000 250 Rs 60,000 50 ? ? ? (iii) BEP Total Fixed Cost P/V Ratio* ? 12,000 Rs 60,000 20% ? ? *P/V Ratio

Contribution 25,000 100 100 20%. Sales 1,25,000 ? ? ? ? ? Profit at 90% of the capacity has been calculated as follow: Capacity 500 machines Output at 90% of capacity 450 machines Break-even point of output 240 machines Since fixed overheads will be recovered in full at the break-even point, the entire contribution beyond the break-even point will be the profit. The profit on 450 units, therefore, will be: = Rs $50 \times (450 - 240) = \text{Rs } 10,500$. Illustration 8.9. SRCC conducts a special course on 'Computer Application' for a month during summer. For this purpose, it invites applications from graduates. An entrance test is given to the candidates and based on the same, a final selection of a hundred candidates is made. The Entrance Test consists of four objective type examinations and is spread over four days, one examination per day. Each candidate is charged a fee of Rs 50 for taking up the entrance test. The following data was gathered for the past two years:

320 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES SRCC STATEMENT OF NET REVENUE FROM THE ENTRANCE TEST FOR THE COURSE OF 'COMPUTER APPLICATIONS' 1995 1996 Rs Rs Gross Revenue (Fees collected) 1,00,000 1,50,000 Costs: Valuation 40,000 60,000 Question Booklets 20,000 30,000 Hall rent at Rs 2,000 per day 8,000 8,000 Honorarium to Chief Administrator 6,000 6,000 Supervision charges (on supervisor for every 100 candidates at the rate of Rs 50 per day) 4,000 6,000 General Administration Expenses 6,000 6,000 Total Cost 84,000 1,16,000 Net Revenue 16,000 34,000 You are required to compute: (a) The budgeted net revenue if 4,000 candidates take up the entrance test 1997. (b) The break-even number of candidates. (c) The number of candidates to be enrolled if the net income desired is Rs. 20,000. Solution: (a) SRCC BUDGETED NET INCOME STATEMENT FOR ENTRANCE TEST IN 1997 No. of Candidates 4,000 Gross Revenue (fees collected) (A) 2,00,000 Less: Costs (B) Variable Costs Rs Valuation (4,000 × Rs 20) 80,000 Question Booklets (4,000 × Rs 10) 40,000 Semi-variable Cost Supervision charges (4,000 ÷ 100) × Rs. 50 × 4 8,000 Fixed Costs Honorarium to Chief Administrator 6,000 General Administration Expenses 6,000 Hall Rent 8,000 1,48,000 Net Revenue (A) – (B) 52,000 (b) The supervision costs vary for every 100 candidates. It is, therefore, appropriate to compute the contribution per 100 candidates. CONTRIBUTION PER 100 STUDENTS Rs. Revenue (Fees Collected): (100 × Rs 50) 5,000 Less: Variable Costs Valuation (100 × 20) 2,000 Question Booklets (100 × 10) 1,000 Supervision Costs (50 × 4) 200 3,200 1,800 Computation of Break-even Point BEP Fixed Cost Contribution per 100 students ? = 20,000/1,800

Check Your Progress 1. State whether each of the following statements is True or False: (a) The technique of marginal costing can be used in con-junction with standard cost- ing or budgetary control. (b) The fixed costs are included in the valuation of work-in-progress and finished goods stocks in case of marginal costing. (c) The valuation of stock is at a higher price in absorption costing as compared to mar-ginal costing. (d) Semi-variable costs form a part of product cost in mar- ginal costing. (e) Absorption costing is not as suitable for decision-making as marginal costing. (f) Direct costing and marginal costing techniques are same in all cases. (g) Break-even chart depicts cost-volume-profit relation- ship. (h) The angle formed at the in- tersection of the sales line and the total cost line is called an 'angle of incidence.' (i) A high margin of safety shows that the actual sales are much more than break- even sales. (j) Increase in selling price will have no effect on margin of safety. (k) Profit-volume ratio indicates the relationship between profit and sales. (i) Differential cost analysis can be made in the case of both absorption costing as well as marginal costing. Self-Instructional Material 321 NOTES Marginal Costing and Cost Volume Profit Analysis = 11.1111 hundred students = $11.1111 \times 100 = 1111.11$ students However, supervision cost is to be incurred at the rate of Rs 200 (i.e., 50×4) for every 100 students. It means even for 11.11 students, Rs 200 will have to be incurred and not only Rs 22.22 (i.e., 11.11 × 2). As such, there will be an under-recovery of invigilation costs to the extent of Rs 177.78 (i.e., 200 – 22.22). In case breakeven-point is taken at 1111.11 students, additional 8.89 (i.e., 177.78/20) studentes will have to be added to this number. This means the break-even-point will be at the level of 1,120 (i.e., 1111.11 + 8.89) candidates. The number of candidates for desired income of Rs 20,000 Fixed Cost + Desired Income Contribution per 100 students ? 20,000 20,000 1,800 ? ? = 22.2222 hundred students = 22.2222 × 100 = 2222.22 students. At this level also, there will be under-recovery of supervision costs to the extent of Rs 155.56, i.e., (Rs 200 – 44.44). In order to recover this cost, additional 7.78 (i.e., 155.56/20) will have to be added to this number. This will push the break-even level to 2,230 (i.e., 2222.22 + 7.78) students. Cash Break-even Point. It is the point where cash breaks even, i.e., the volume of sales where cash realisations on account of sales will be just sufficient to meet immediate cash liabilities. While calculating this point cash fixed costs (i.e., excluding fixed share of deprecia- tion and deferred expenses) and cash contribution (i.e., after making adjustments for variable share of depreciation etc.) are considered. The point helps the management in determining the level of activity below which there are chances of insolvency on account of the firm's inability to meet cash obligations unless alternative arrangements are made. Illustration 8.10. From the following, calculate the Cash Break-even Point. Selling price per unit Rs 50 Variable cost per unit Rs 40 Depreciation included in above per unit Rs 10

Fixed cost Rs 2,00,000 Depreciation included in above Rs 40,000 Presume that there is no time-lag in payments Solution: Cash Break-even Point (in units) Cash fixed costs Cash contribution per unit ? Rs1,60,000 8,000 Rs 20 ? ? Cash Break-even Point (Sales in Rs) = 8,000 × Rs 50 = Rs 4,00,000. Composite Break-even Point In case, a concern is dealing in several products, a composite break-even point com- puted according to the following formula: Composite Break-even Point (Sales in Rs) Total Fixed Cost Composite P/V Ratio ? or Total Fixed Cost × Total Sales Total Contribution ? Composite P/V Ratio Total Contribution 100 Total Sales ? ?

322 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Example 5 Particulars Products A B C D Selling Price (Rs) 10 20 15 10 Variable Cost (Rs) 6 15 9 6 Sales Volume (Units) 1,000 2,000 1,000 1,000 Total Fixed Cost Rs 4,800 Composite Break-even Point Fixed Cost Composite Contribution per unit ? A B C D Contribution per unit = $4 \times 1/5 \times 2/5 6 \times 1/5 4 \times 1/5$ In proportion of sales mix = Re 0.80 Rs 2 Rs 1.20 Re 0.80 Composite Contribution per unit = Rs 4.80 Composite Break-even Point Fixed Cost Composite Contribution per unit ? Rs 4,800 Rs 4.80 ? = 1,000 units Break-even Sales Mix (in units) A 1,000 $\times 1/5$ = 200 units B 1,000 $\times 2/5$ = 400 units C 1,000 $\times 1/5$ = 200 units D 1,000 $\times 1/5$ = 200 units 1,000 units Verification Contribution A 200 $\times 4$ = 800 B 400 $\times 5$ = 2,000 C 200 $\times 6$ = 1,200 D 200 $\times 4$ = 800 = 4,800 Less : Fixed cost = 4,800 Profit (Loss) = Nil Following illustration will help the students to have a better understanding. Illustration 8.11. The budget of AB Ltd. includes the following data for the forthcoming financial year: (a) Fixed expenses Rs 3,00,000 (b) Contribution per unit Product X—Rs 6 Product Y—Rs 2.50 Product Z—Rs 4 (c) Sales forecast Product X—24,000 units @ Rs 12.50 Product Y—1,00,000 units @ Re 7.00 Product Z—50,000 units @ Rs 10.00 Calculate the composite P/V ratio and composite BEP.

Self-Instructional Material 323 NOTES Marginal Costing and Cost Volume Profit Analysis Solution: Sales mix forecast X : 24,000 × 12.50 = Rs 3,00,000 Y : 1,00,000 × 7.00 = Rs 7,00,000 Z : 50,000 × 10.00 = Rs 5,00,000 Rs 15,00,000 Therefore Sales Mix = 3 : 7 : 5 Composite Contribution per unit Composite Selling Price per unit ? Composite P/V Ratio (3/15 6) (7/15 2.50) (5/15 4) (3/15 12.50) (7/15 7) (5/15 10) ? ? ? ? ? ? ? ? ? ? ? ? or Total Contribution Total Sales ? 1,44,000 2,50,000 2,00,000 594 15,00,000 1,500 ? ? ? ? Composite BEP Total Fixed Expenses 3,00,000 1,500 Composite P/V Ratio 594 ? ? ? = Rs. 7,57,575 BEP Sales for the 3 products X: Rs 1,51,515 or 12,121 units Y: Rs 3,53,535 or 50,505 units Z: Rs 2,52,525 or 25,253 units Illustration 8.12. Nandi Chemicals Limited has two factories with similar plant and machinery for manufacture of soda ash. The Board of Directors of the company has expressed the desire to merge them and to run them as one integrated unit. Following data are available in respect of these two factories: Factory X Y Capacity in operation 60% 100% Turnover 120 lakhs 300 lakhs Variable cost 90 lakhs 220 lakhs Fixed costs 25 lakhs 40 lakhs Find out: (a) What should be the capacity of the merged factory to be operated for break- even? (b) What is the profitability of working 80% of the integratede capacity? (c) What turnover will give an overall profit of Rs 60 lakhs? Solution: (a) STATEMENT SHOWING THE COST AND PROFIT SITUATION OF FACTORIES X AND Y (INDIVIDUALLY AND INTEGRATED) (Rupee in lakhs) Factory Factory Factory Combined X X Y Capacity Levels 60% 100% 100% 100% Turnover 120 200 300 500 Variable Cost 90 150 220 370 Contribution 30 50 80 130 Fixed Cost 25 25 40 65 P/V Ratio 25% 25% 26.67% 26% Break-even Point 100 100 150 250 BEP as a % of Turnover 80.3% 50% 50% 50%

324 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES (b) Profit at 80% utilisation of integrated capacity: Turnover Rs. 400 lakhs Contribution = $130 \times 80/100$ 104 lakhs Fixed cost 65 lakhs Profit 39 lakhs Profit as % of turnover 9.75 (c) Total contribution required 60 lakhs Profit 65 lakhs Fixed cost 125 lakhs Turnover required 100 125 26 ? 480.77 lakhs Illustration 8.13. A company is producing an identical product in two factories. The following are the details in respect of both the factories: Factory X Factory Y Selling price per unit Rs 50 Rs 50 Variable cost per unit 40 35 Fixed cost 2,00,000 3,00,000 Depreciation included in above 40,000 30,000 Sales (units) 30,000 20,000 Production capacity (units) 40,000 30,000 You are required to determine: (a) Break-even Point (BEP) for each factory individually. (b) Which factory is more profitable. (c) Cash BEP for each factory individually. (d) BEP for company as a whole, assuming the present product mix. (e) BEP for company as a whole, assuming the product mix can be altered as desired. (f) Consequence on profits and BEP if product mix is changed to 2 : 3 and total demand remains constant. Note: BEP may be indicated in number of units. Solution: (a) COMPUTATION OF BREAK-EVEN POINT (BEP) FOR EACH FACTORY INDIVIDUALLY Factory X Factory Y Fixed Cost Rs 2,00,000 Rs 3,00,000 Contribution per unit 10 15 Fixed Cost BEP Contribution per unit ? 20,000 units 20,000 units (b) Which factory is more profitable will depend on the level of production. If the production is 20,000 units only at each factory both are equally 'profitable' since both have their breakeven points at this level. If output is less than 20,000 units, factory X will give a lower loss, @ Rs. 10 per unit of the shortfall below the break- even point, whereas the loss will be Rs 15 per unit in case of factory Y. Production in excess of 20,000 units will make factory Y more profitable since each extra unit produces a profit of Rs 15 per unit as compared to Rs 10 per unit in case of factory X. However in case choice is to be made as to whose capacity is to be utilised, first choice should be for Y since it gives a higher contribution per unit. (c) Computation of Cash Break-even Point (BEP) for each factory individually: Cash fixed cost Rs. 1,60,000 Rs. 2,70,000 Contribution per unit 10 15 Fixed Cost BEP Contribution per unit? 16,000 units 18,000 units

Self-Instructional Material 325 NOTES Marginal Costing and Cost Volume Profit Analysis (d) Computation of Break-even Point (BEP) for the company as a whole, assuming the present product mix, i.e., 3 : 2. Combined contribution ($3/5 \times Rs$ 10) + ($2/5 \times 15$) Rs 12 Fixed cost Rs. 5,00,000 Combined BEP 5,00,000 41,667 units 12 ? (e) Break-even Point for the company as a whole, assuming that the product mix can be altered as desired, has been call calculated as follows: Factory Y gives a higher contribution, hence Factory Y to be used fully, i.e., 30,000 units. This will give a contribution of Rs 4,50,000 Balance Rs 1,50,000 of fixed cost should be met by producing 5,000 units in Factory X, since there is a contribution of Rs 10 per unit. Break-even point will therefore, be at a production of 35,000 units (i.e., 5,000 units of X and 30,000 units of Y). (f) Consequences on profits if product mix is changed: Profit as at present: Rs Rs Factory X: Total contribution on 30,000 units @ Rs 10 3,00,000 Fixed cost 2,00,000 1,00,000 Factory Y: Total contribution 20,000 units @ Rs. 15 3,00,000 Fixed cost 2,00,000 Profit in the new situation: Factory X: Total contribution on 20,000 units 2,00,000 Fixed cost 2,00,000 Fixed cost 2,00,000 units 4,50,000 Fixed cost 3,00,000 Fixed cost 2,00,000 Fixed cost 3,00,000 Total profit 1,00,000 Profit in the new situation: Factory X: Total contribution on 20,000 units 2,00,000 Fixed cost 2,00,000 Fixed cost 2,00,000 Fixed cost 3,00,000 Total profit 1,00,000 Profit in the new situation: Factory X: Total contribution on 20,000 units 2,00,000 Fixed cost 2,00,000 Fixed cost 2,00,000 Fixed cost 3,00,000 Total profit 1,00,000 Profit in the new situation: Factory X: Total contribution on 20,000 units 2,00,000 Fixed cost 2,00,000 Fixed cost 2,00,000 Composite BEP 5,00,000 (LS + 10 + 3/5 × 15) Fixed cost Rs 5,00,000 Composite BEP 5,00,000/13 = 38,462 units. Cost Break-even Point. It refers to a situation where the costs of operating two alternative plants is equal. The point enables the firm to i

can be understood with the help of the following illustration. Illustration 8.14. Find the

cost break-even points between each pair of plants whose cost functions are: Plant A: Rs 6,00,000 + Rs 12X Plant B: 9,00,000 + Rs 10X Plant C: 15,00,000 + Rs 8X (Where X is the number of units produced) Solution: Following are the cost break-even points between each pair of plants: Plants A and B. The amount fixed cost is Rs 3,00,000 more in case of Plant B as compared to Plant A. The variable cost per unit is Rs 2 less in case of Plant B as compared to Plant A. Thus 1,50,000 units (Rs 3,00,000 /Rs 2) will have to be produced in case of plant B to recover additional fixed costs of Rs 3,00,000. At this point, the cost of operating the two plants (i.e., A and B) will be the same. This can also be calculated by means of a simultaneous equation:

326 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Rs 6,00,000 + Rs 12X = Rs. 9,00,000 + Rs. 10X or 2X = 3,00,000 or X = 1,50,000 Plants B and C. Plant C has a higher total fixed cost of Rs 6,00,000 and lower Rs 2 per unit variable cost as compared to Plant B. It means that the two plants will have the same operating costs at level of output of 3,00,000 units (Rs 6,00,000/Rs 2). This can also be calculated by means of a simultaneous equation Rs 9,00,000 + Rs 10X = Rs 15,00,000 + Rs 8X or 2X = 6,00,000 or X = 3,00,000 Plants A and C. Plants A and C will have the same operating costs at a level of output of 2,25,000 units as calculated below: Rs 6,00,000 + Rs 12X = Rs 15,00,000 + 8X or 4X = 9,00,000 or X = 2,25,000 units The above workings show that Plant A is the best for an output below 1,50,000 units, Plant B will give the optimum results if the output is between 1,50,000 and 3,00,000 units. Plant C is the best in case of output above 3,00,000 units. In between A and C (if B is Signored) A should be preferred over C up to output of 2,25,000 units similarly, in between B and C (if A is ignored) B should be preferred over C up to the output of 3,00,000 units. Illustration 8.15. The parts of an automobile vehicle are produced to rigorous standards of accuracy. Every batch of 1,00,000 units is tested to discover whether the units are defective at a cost of Rs 12.50 per unit. The defective units are then rectified and put in good order at a cost of Rs 50 per unit. It the units are not tested, any defect would become apparent later when they are fitted in the vehicle. At that stage it would cost Rs 100 per unit to put the parts in good working order. Find out by calculation the minimum percentage of defective units in a batch such that it would be cheaper to test all the units in the batch instead of none of them. Solution: Suppose the number of defective units in a batch is 'x'. If testing is done, cost comes to: $50x + 1,000 \times 12.50 = 50x + 12,500$ If testing is not done, cost comes to: 100x Thus: 100x = 50x + 12,500 or 50x = 12,500 or x = 250 units. If the number of defective units is only 250 (i.e., 25%) in a batch of 1,000 units, the total cost will be the same whether testing is done or not. Hence, it would be cheaper to test all units in the batch if the minimum percentage of defective units in a batch is more than 25%. 4. Margin of Safety Total sales minus the sales at break-even point is known as the 'margin of safety'. Thus, the formula is: M.S. = T.S. - B.E.S. Margin of Safety = Total Sales – Break-even Sales. Margin of safety can also be computed according to the following formula: Margin of Safety Net Profit P/V Ratio ? Margin of safety can also be expressed as a percentage of sales: Margin of Safety 100 Total Sales ??

Self-Instructional Material 327 NOTES Marginal Costing and Cost Volume Profit Analysis Example 4 Total Sales Rs 1,50,000 Variable Costs 75,000 Fixed Costs 50,000 The margin of safety can be computed as follows: Break-even Sales Fixed Cost P/V Ratio ? 50,000 Rs1,00,000 50% ? ? Net Profit = Contribution - Fixed Cost = Rs 75,000 - Rs 50,000 = Rs 25,000 Margin of Safety= Rs 1,50,000 - Rs.1,00,000 = Rs 50,000 Net Profit P/V Ratio ? 25,000 Rs 50,000 50% ? ? If the margin of safety is large, it is a sign of soundness of the business since even with a substantial reduction in sales, profit shall be earned by the business. If the margin is small, reduction in sales, even to a small extent may affect the profit position very adversely and larger reduction of sales value may evenresult in losses. Thus, margin of safety serves as an indicator to the strength of the business. In order to rectify the unsatisfactory margin of safety, the management can take the following steps: (i) Selling prices may be increased, but it should not affect the demand adversely otherwise the net sales revenue shall stand reduced. (ii) Fixed or the variable cost may be reduced. (iii) Production may be enhanced, but it should be at a lower cost. (iv) Unprofitable products may be substituted by profitable ones. 8.12 KEY FACTOR Key factor is that factor which limits the volume of output or level of activities of an undertaking at a particular point of time or over a period. The extent of its influence must be assessed first so as to maximise the profits. Generally on the basis of contribution, the decision regarding product mix is taken. It is not the maximisation of total contribution that matters, but the contribution in terms of the key factor that is to be compared for relative profitability. Thus, it is the limiting factor or the governing factor or principal budget factor. If sales cannot exceed a give quantity, sales is regarded as the key factor, if production capacity is limited, contribution per unit, i.e., in terms of output, has to be computed. If raw material is in short supply, contribution has to be expressed in relation to per unit of raw material required. There may be labour shortage and in such a case contribution per labour hour is to be known. If machine capacity is a limitatiion, contribution per machine hour is to be considered for appropriate decision making. Thus, profitability can be measured by: Contribution Key Factor The following illustratiions would clearly show how key factor affects the relative profitability of different products.

Illustration 8.16. The following particulars are obtained from costing records of a factory. 328

Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Product A Product B (per unit) (per unit)

Rs Rs Selling Price 200 500 Material (Rs. 20 per litre) 40 160 Labour (Rs. 10 per hour) 50 100 Variable Overhead 20 40 Total Fixed Overheads—Rs 15,000 Comment on the profitability of each product when: (a) raw material is in short supply; (b) production capacity is limited; (c) sales quantity is limited; (d) sales value is limited; (e) only 1,000 litres of raw material is available for both

the products

in total and maximum sales quantity of each product is 300 units. Solution:

Particulars Product A Product B (

per unit) (per unit) Rs Rs. Selling Price 200 500 Less : Variable Costs: Materials 40 160 Labour 50 100 Variable Overhead 20 110 40 300 Contribution per unit 90 200 (i) Contribution P/V Ratio = 100

Sales a ? 90 100 200 ? 200 100 500 ? = 45% = 40% (ii) Contribution per litre Rs.90 2litre Rs 200 8litre = Rs 45 = Rs 25 (iii) Contribution per hour Rs 90 5 hrs Rs 200 10 hrs = Rs 18 = Rs 20 (a)

When raw material is in short supply, contribution per litre of product A is higher and

hence product A is more profitable. (b)

When production capacity is limited, contribution per hour of product B is higher and

hence product B is more profitable. (c)

When sales quantity is limited, contribution per unit of product B is higher and

hance product B is more profitable. (d)

When sales value is limited, the P/V Ratio of product A is higher and hance product A

is more profitable. (e) When raw material as well as sales quantity both are limited, the raw materials should first be used for maximum number of units of product A, i.e., for 300 units. This will consume 600 litres of material and the balance 400 litres shall be utilised for producting 50 units (i.e., 400/8) of product

B. The profit in such a case would be : Rs Contribution from 300 units of product A (300 × 90) 27,000 Contribution from 50 units of product B (50 × 200) 10,000 Total Contribution 37,000 Less : Fixed Overheads 15,000 Maximum Profit 22,000 Self-Instructional Material 329 NOTES Marginal Costing and Cost Volume Profit Analysis Illustration 8.17. On the basis of the following information in respect of an engineering company, what is the product mix which will give the highest profit attainable? Do you recommend overtime working up to a maximum of 15,000 hours at twice the normal wage (ignore overheads)? Products manufactures A B C Raw materials per unit 10 kg. 6 kg. 15 kg. Labour hours per unit @ Re 1 per hour 15 25 20 Sales price per unit (Rs) 125 100 200 Maximum production possible (units) 6,000 4,000 3,000 1,00,000 kg raw materials are available @ Rs 10 per kg Maximum Production hours are 1,84,000 with facility for a further 15,000 hours on overtime basis at twice the normal wage rate. Solution: MARGINAL COST ANALYSIS STATEMENT Products Total Remarks A B C Maximum production (units) 6,000 4,000 3,000 13,000 Raw materials quantity (kg) 60,000 24,000 45,000 1,29,000 Maximum available is only 1,00,000 kg Value (Rs) 6,00,000 2,40,000 4,50,000 12,90,000 Labour time (hours) 90,000 1,00,000 60,000 2,50,000 Maximum possible are 1,99,000 hours (including 15,000 overtime hrs) Cost (Rs) 90,000 1,00,000 60,000 2,50,000 Variable Costs (Rs.) 6,90,000 3,40,000 5,10,000 15,40,000 Selling price per unit (Rs) 125 100 200 Sales Value (Rs) 7,50,000 4,00,000 6,00,000 17,50,000 Contribution (Rs) 60,000 60,000 90,000 2,10,000 RANKING OF PRODUCTS A B C Ranking Contribution per unit (Rs) 10 15 30 C, B, A Contribution per kg of raw material (Rs) 1.00 2.50 2.00 B, C, A Contribution per labour hour (Rs) 0.67 0.60 1.50 C, A, B The above ranking shows that products B and C give higher contribution per unit as well as per kg. of raw materials as compared to product A. Thus, production mix should contain the maximum possible units of B and C. The production of B and C should, therefore, be of the following order: No. of Raw Labour units materials hours Product B 4,000 24,000 kg 1,00,000 Product C 3,00045,000 60,000 Total 7,000 69,000 1,60,000 The balance of raw materials available 31,000 kg. and labour hours 24,000 should be used for making product A. Though, 31,000 kg of raw materials would permit production of 3,100 units, only 1,600 units can be produced because of only 24,000 available labour hours.

330 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Overtime Hours The available overtime hours are 15,000 and, therefore, additional 1,000 units of product A can be manufactured (since raw material is available). This will give an additional labour costs of Rs 15,000. Thus, overall contribution will be reduced by Rs 5,000. It is, therefore, not advisable to use overtime hours. Most Profitable Mix Thus, the most profitable product mix will be as under: Contribution Units Rs Product A 1,600 16,000 Product B 4,000 60,000 Product C 3,000 90,000 8.13 BREAK-EVEN CHART The relationship between costs, sales and profits can be shown in the form, of a chart. Such a chart not only depicts the level of activity where there will be neither loss nor profit but also shows the profit or loss at various levels of activity.

According to the Chartered Institute of Management Accountants, London, the

break-even chart means 'a chart which shows profit or loss at various levels of activity, the level at which neither profit nor loss is shown being termed the break-even point'. This may also take the form of a chart on which is plotted the relationship either of total cost of sales to sales or of fixed costs to contribution. Thus, it is a graphical presentation of cost and revenue data so as to show their inter-relationship at different levels of activity. Forms of Break-even Chart A break-even chart can be presented in different forms as given below: (i) Simple break-even chart. This is also known as traditional or orthodox break-even chart. This can be prepared by any of the following two methods: First Method. On the X-axis of the graph is plotted the volume of production or the quantities of sales and on the

Y-axis (Vertical line) costs and sales revenues are represented. The fixed cost line is drawn parallel to the X-axis because with any volume of production the fixed costs shall remain the same. The

variable cost line is depicted above the fixed cost line,

which shows that the cost is increasing with the increase in the volume of output. This line can also be regarded as the total cost line because it starts from the point where variable cost is zero and certain fixed cost has been incurred. Thereafter, figures of sales are plotted from the origin and a line is drawn up which goes in the upward direction with the increase of production sales. The two lines—total cost line and sales line—shall intersect each other at one point, and a perpendicular can be drawn from this point to find out the level of output where the business shall be at no-profit no-loss position, since the total costs are equal to total sales revenue here. If the business produces less than this level of output, it shall be running at a loss. The portion of loss is shown by the lower sales line and upper total cost line. If the business produces more units than the break-even level, profit shall result and it shall be higher and higher as the production/sales increases. This is indicated by upper sales line and lower total cost line. Illustration 8.18. From the following data, compute the break-even point by means of a Break-even Chart:

Selling Price per unit Rs 2.50 Variable Cost per unit Rs 2.00 Total Fixed Costs Rs 20,000 Solution:

As explained earlier, break-even point is 'point of no-profit no-loss'. The point will, therefore, be there where total costs are equal to total sales. In other words, if the two data are plotted on the graph paper, at the break-even point, the two lines, i.e., the total cost line Check Your Progress 2. From the following choose the most appropriate answer: (i) Contribution margin is also known as (a) Marginal Income, (b) Gross Profit, (c) Net Income. (ii) Period cost means: (a) Variable cost, (b) Fixed cost, (c) Prime cost. (iii) The costing method in which fixed factory overheads are added to inventory is: (a) Direct costing, (b) Marginal costing, (c) Absorption costing. (iv) When fixed cost is Rs. 10,000 and P/V ratio is 50%, the break-even, point will be: (a) Rs. 20,000, (b) Rs. 40,000, (c) Rs. 50,000, (d) None of these. (v) When profit-volume ratio is 40% and sales value Rs. 10,000, the variable costs will be: (a) Rs. 4,000, (b) Rs. 6,000, (c) Rs.10,000, (d) None of these. (vi) When margin of safety is 20% and P/V ratio is 60%, the profit will be: (a) 30%, (b) 33 1 3 %, (c) 12%, (d) None of these. (vii) When sales are Rs. 2 lakhs, fixed cost Rs. 30,000, P/V ratio 40% the amount of profit will be: (a) Rs. 50,000, (b) Rs. 80,000, (c) 12,000.

Self-Instructional Material 331 NOTES Marginal Costing and Cost Volume Profit Analysis and the total sales line, will intersect each other. However, for plotting the data on the graph paper, we need at least two points—one for plotting the total cost line and the other for plotting the total sales line. It will, therefore, be necessary to presume different levels of output and sales, as shown below: Output Variable Costs Fixed Costs Total Costs Sales (Units) Rs Rs Rs Rs 10,000 20,000 20,000 40,000 25,000 20,000 40,000 20,000 60,000 50,000 30,000 60,000 20,000 80,000 75,000 40,000 80,000 20,000 1,00,000 1,00,000 50,000 1,00,000 20,000 1,20,000 1,25,000 60,000 1,20,000 20,000 1,40,000 1,50,000 The data can now be plotted on the graph paper as follows: Tutorial Note The students should first compute the break-even point by any mathematical method as explained in the preceding pages. It will help them in assuming different levels of output and sales for the purposes of break-even chart. For example, in the case of the above illustration the break-even point can be computed mathematically, as follows: BEP of output Total Fixed Costs Contribution per unit ? 20,000 0.5 ? = 40,000 units. The break-even sales will amount to Rs 1,00,000 (i.e., $40,000 \times 2.50$). Second Method. Another method of drawing a break-even chart is showing the variable cost line first and thereafter drawing the fixed cost line above the variable cost line. The latter, however, will be the total cost line a in the first case. The difference under this method from the first method is that the fixed cost line shown above the variable cost line shall be parallel to the latter, whereas under first method the fixed cost line is parallel to the X-axis. The sales line is drawn as usual and therefore the added advantage of this method is that 'contributions' at varying levels of output are automatically depicted in the chart ('contribution' connotes the difference of sales revenue and the variable cost). The break-even point is indicated by the intersection of the total cost line and the sales line. The break-even chart on the basis of date given in Illustration 8.19 will appear as shown on the next page according to this method.

332 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES (ii) Contribution break-even chart. The chart helps in ascertaining the amount of contribution at different levels of activity besides the break-even point. In case of this chart, first the fixed cost is plotted parallel to the X-axis. The contribution lane is then drawn from the bottom, or the origin, which goes up with the increase of output/sales. The sales line is plotted as usual from the '0' point but since there is no total cost line, the question of intersection of sales line with it to show the break-even point does not arise. In such a case, the contribution line crosses the fixed cost line and the point of intersection is treated as break-even point. At this level, the fixed cost shall be equal to contribution which means that there shall be no profit and no loss. As the contribution steps down from the level of fixed cost, business shall be operated at a loss at varying levels of production/sales. On the basis of data given in Illustration 8.19, the break-even chart will appear as given below: (iii) Profit chart. The break-even point can also be found out graphically by means of a Profit Chart. Illustration 8.19 compute the Break- even Point by means of a Profit Chart. Solution: Output Total Costs Sales Profit/Loss (Units) Rs Rs Rs 10,000 40,000 25,000 –15,000 20,000 60,000 1,40,000 1,50,000 +10,000

Self-Instructional Material 333 NOTES Marginal Costing and Cost Volume Profit Analysis The chart will now appear as given below: Illustration 8.20. Draw a break-even chart from the following figures: Sales Profit (Rs. lakhs) Year 1 160 4 Year 2 175 10 From the above chart predict the variable cost, contribution, fixed cost and profit associated with a sales volume of Rs 250 lakhs, and set out your prediction in the form of a profit statement. Solution: STATEMENT SHOWING COSTS & PROFIT AT SALES OF Rs 250 LAKHS Sales Rs Rs 250 lakhs Less: Variable Cost 150 lakhs Fixed Cost 60 lakhs 210 lakhs Profit** 40 lakhs. *The fixed cost is Rs 60 lakhs since loss at `nil', sales is Rs. 60 lakhs. **The perpendicular at sales of Rs 250 lakhs meets on profit of Rs 40 lakhs as depicted on the graph. (iv) Analytical break-even chart. Analytical break-even chart is prepared to show different elements of cost and appropriations of profits. Its preparation can be understood with the help of the following illustration. Illustration 8.21.

Draw up an analytical break-even chart with the following data show- ing variable cost first above the baseline, followed by fixed costs and profit: Rs Sales 1,00,000 Fixed Cost 20,000 Debenture interest (not included in fixed cost) 10,000 (Contd.)

334 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Rs Proposed Preference Dividend 10,000 Proposed Ordinary Dividend 20,000 Income Tax payable 20,000 Variable Costs 20,000 Variable Costs divided into: Direct Material 8,000 Direct Labour 4,000 Factory Overhead 6,000 Selling and Adm. Overheads 2,000 Solution: Presuming that the figures in the question relate to 100% capacity, the following table can be prepared to plot the data on the graph paper. Capacity Direct Direct Variable Fixed Debe- Total Sales levels material labour over- overnture cost heads heads interest Rs Rs Rs Rs Rs Rs Rs Rs 20% 1,600 800 1,600 20,000 10,000 34,000 20,000 40% 3,200 1,600 3,200 20,000 10,000 38,000 40,000 60% 4,800 2,400 4,800 20,000 10,000 42,000 60,000 80% 6,400 3,200 6,400 20,000 10,000 46,000 80,000 100% 8,000 4,000 8,000 20,000 10,000 50,000 1,00,000 The break-even point can be calculated mathematically as follows: Break-even Point Fixed Costs P/V Ratio ? = 30,000 80% 30,000 100 Rs 37,500 80 ? ? The data can be plotted on the graph paper as follows: (v) Cash break-even chart. The chart is prepared to show the volume at which cash breaks even, i.e., the point at which the cash inflows will be just equal to the cash required to meet immediate cash liabilities. For the purposes of drawing this chart, the fixed costs are divided into two categories: (i) fixed costs which do not require immediate cash outlay, e.g., depreciation, deferred expenses, and (ii) fixed costs which require immediate cash outlay, rent,

Self-Instructional Material 335 NOTES Marginal Costing and Cost Volume Profit Analysis salaries, etc. While drawing the chart the cash fixed costs are plotted first parallel to the baseline, variable costs (presuming all of them to be in terms of cash) are then plotted over them. The non-cash fixed costs are plotted in the last. The sales line is plotted as usual. This will be clear from the following illustration. Illustration 8.22. From the following data, plot a Cash Break-even Chart: Output and Sales 10,000 units Selling Price per unit Rs 15 Fixed Costs Rs 5,000 (including depreciation Rs 1,000) Variable Cost per unit Rs 5 Assume there is no time-lag in payments. Solution: Output Variable Cash Fixed Total Cash Sales (Units) Costs Costs Costs Rs Rs Rs Rs 200 1,000 4,000 5,000 3,000 400 2,000 4,000 6,000 6,000 600 3,000 4,000 7,000 9,000 800 4,000 4,000 8,000 12,000 1,000 5,000 4,000 9,00015,000 Cash Break-even Point Cash Fixed Costs Cash Contribution per unit ? The data can now be plotted on a graph paper as follows : 8.14 ANGLE OF INCIDENCE Angle of Incidence is formed at the intersection of total cost line and total sales line. As a matter of fact there are two angles of incidence: (i) The angle formed at the right side of the break-even point; (ii) The angle formed at the left side of the break-even point. The angle formed at the right side of the break-even point indicates the profit area while that formed at the left side indicates the loss area. The size of the angle of incidence is indication of the quantum of profit or loss made by the firm at different output/sales levels. For example, if the angle of incidence is narrow to the right side of the BEP, it indicates that

336 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES the guantum of profits made by the firm is also low. Similarly, if it is narrow to the left side of the BEP, it indicates that the quantum of loss made by the firm is also low. In other words, a narrow angle of incidence shows a slow rate of profit earning capacity while a wider angle of incidence shows a swift rate of profit earning capacity of the firm. A narrow angle also indicates that the variable cost as a proportion to sales is quite high and therefore very little has been left by of way contribution. A study of angle of incidence, break-even point and margin of safety can help the management in having a better understanding about profitability, stability and incidence of fixed and variable costs on the performance of the firm. This can be understood by taking the following four different situations: (i) High margin of safety, large angle of incidence and low break-even point. This is the most favourable condition of the business. It indicates that the business is fairly sound and steady in financial terms. It also shows that the firm is making high profits over a large range of output. Chart showing High Margin of Safety, Large Angle of Incidence and Low Break-even Point (ii) High margin of safety, small angle of incidence and low break-even point. This situation is similar to the first except that it indicates that the firm is making a low rate of profit over large range of output. Chart showing High Margin of Safety, Small Angle of Incidence and Low Break-even Point Self-Instructional Material 337 NOTES Marginal Costing and Cost Volume Profit Analysis (iii) Low margin of safety, large angle of incidence and high break-even point. Such a situation shows that the business has heavy losses with a small decline in output or sales. Chart showing Low Margin of Safety, Large Angle of Incidence and High Break-even Point (iv) Low margin of safety, small angle of incidence and high break-even point. This is the worst situation. That shows that the business has high fixed costs and it is financially unsound. Chart showing Low Margin of Safety, Small Angle of Incidence and High Break-even Point 8.15 ASSUMPTIONS UNDERLYING CVP ANALYSIS/ BREAK-EVEN CHARTS The following assumptions are common to both Break-even Charts and CVP Analysis: (i) Fixed costs remain constant at every level and they do not increase or decrease with change in output. (ii) Variable cost fluctuates per unit of output. In other words, it varies in the same proportion in which the volume of output or sales varies.

338 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES (iii) All costs are capable of being bifurcated into fixed and variable elements. (iv) Selling price remains constant even when the volume of production or sales changes. (v) Cost and revenue depend only on volume and not on any other factor. (vi) Production and sales figures are either identical or changes in

the

inventory at

the beginning and at the end of the accounting period

are not significant. (vii) Either the sales mix is constant or only one product is manufactured. Advantages of Break-even Charts 1.

Provides, detailed and clearly understandable information. The chart visualises the information very clearly and a glance at the chart gives a vivid picture of the whole

affairs. The different elements of cost-direct materials, direct labour, overheads (factory, office and selling, etc.) can be presented through an analytical break-even chart. Further, the information presented is in a simple form and, therefore, is clearly understandable even to a layman. 2. Profitability of products and business

can be known. The profitability of different products can be known with the help of break-even charts,

apart from the level of no-profit no-loss. The problem of managerial decision regarding temporary or permanent shutdown of business or continuation at a loss can be solved by break-even analysis. 3. Effect of changes in cost and selling price can be demonstrated. The effect of changes in fixed and variable costs at different levels of production or profits can be demonstrated by the graph legibly. Effect of changes in selling price also can be quickly grasped by the management by having a look at the break-even chart. In other words, the relationship of cost, volume and profit at different levels of activity and varying selling price is shown through the chart. Thus, it studies the requisites for survival of the company. 4.

Cost control can be exercised. The break-even chart shows the relative importance of the fixed cost in the total cost of a product. If the costs are high, it induces management to take measures to control such costs.

Thus, it is a managerial tool for control and reduction of costs, elimination of wastage and achieving better efficiency. 5. Economy and efficiency can be effected. The capacity can be utilised to the fullest possible extent and the economies of scale and capacity utilisation can be effected.

Compara- tive plant efficiencies can be studied through the break-even chart. The operational efficiency of a plant is indicated by the angle of incidence formed at the intersection of the total cost line and the sales line. 6.

Forecasting and planning possible. Break-even analysis is very helpful for forecast- ing, long-term planning, growth and stability.

Limitations of Break-even Charts There are certain limitations of break-even charts. As a matter of fact, these limitations are the objections raised in certain quarters against the utility of break-even analysis. 1. Based on false assumptions. Break-even charts are based on following false assumptions: (a) Stock changes affect income. The break-even chart depicts the volume of production or sales along the X-axis and thus ignores the effect of changes in stock volume. As a matter of fact, it is assumed that stock changes will not affect the income. This is not true since the absorption of fixed costs depends on production and not on sales. (b) Condition of growth not assumed. Conditions of growth or expansion in an organisation are not assumed under break-even analysis. In the

actual life of any business organisation, the operations undergo a continuous process. of growth and expansion. (c) Fixed costs do not always remain constant. The assumption underlying break-even charts that fixed costs do not vary and remain constant at all level of production, does not hold good in every business firm. In some cases they have a tendency to rise to some extent after the production is increased beyond a certain level. (d) Variable costs do not always vary proportionately. The variable costs also do not always change in the same proportion in which the volume of production or sales changes. Usually, the production cost increases if the law of diminishing returns is applicable. This presents difficulty in the drawing of the total cost line and the fixed cost line. The lines drawn are not straight and sometimes a curved line is obtained in respect of variable costs.

Self-Instructional Material 339 NOTES Marginal Costing and Cost Volume Profit Analysis (e) Sales revenue does not always change proportionately. Besides the costs aspect, the sales revenue aspect is also not reliable regarding its nonvariability at all levels of production. Selling prices are often lowered with increased production in an effort to boost up sales revenues. This gives a curved line in respect of sales revenue also in place of a straight line. When both the total cost line and the sales line are not straight lines, the results produced, i.e., the break-even point, may not show the correct level of output at which the total revenues can just recover the total costs and nothing more. As a matter of fact the two lines may be taken as thick bands with considerable tolerance on both sides of the lines as shown in the following chart: In some cases on account on a non-linear behaviour of cost and sales there may be two or more breakeven points. In such a case the optimum profit is earned where the difference between the sales and the total cost is the greatest. It is obvious that the business should produce only up to this level. This is being illustrated in the following chart: 2. Limited information. Only a limited amount of information can be presented in a single break-even chart. If we have to study the changes of fixed costs, variable costs and selling prices, a number of charts will have to be drawn up. Similarly, when a number of products are manufactured, it would be a tedious job to present the information through a breakeven chart. However, the data can be shown bydrawing several break-even charts, since, through only one chart, the number of units sold cannot be measured along the X-axis. Besides that for complete analysis of a problem, the breakeven chart has to be supplemented by various schedules and statistical material. 3. No necessity. There is no necessity of preparing break-even charts on account of the following reasons: (a) Simple tabulation sufficient. Even

simple tabulation of the results of cost and sales can serve the purpose which is served by a break-even chart. Hence, there is no need of presenting data through a break-even chart. (

b) Conclusive guidance not provided. No conclusive basis or guidance for action is provided to the management by the technique of break-even analysis. (c) Difficult to understand.

The chart becomes very complicated and difficult to under- stand, particularly for a layman, if the number or lines of curves depicted on the graph are large.

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Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES (d) No basis for comparative efficiency. The chart does not provide any basis for comparative efficiency between different units or organisations. In spite of all the above limitations, it will have to be accepted that it is a useful tool for the management for analysing its different problems. As a matter - of fact management's decisions are expedited through the help of different types of break-even charts. 8.16 UTILITY OF CVP ANALYSIS CVP analysis has great utility in the following areas of managerial decision making: (1) Fixation of selling price. CVP analysis helps in fixing the selling price of the products. The cost of the product and the desired profitability are two important factors which govern fixation of selling price of a new product. Illustration 8.23. The overall P/V ratio of ABC Ltd., is 60%. The marginal cost of product X is estimated at Rs 50. Determine the selling price for product X. Solution: If selling price is Rs 100, variable cost will be Rs 40 and contribution Rs 60. Thus, the selling price of a product having a marginal cost of Rs 40 is Rs 100. The selling price of a product having a marginal cost of Rs 50 should be 100 50 125 40 ?? Illustration 8.24. An enthusiastic marketing manager suggests to his managing director that only if he is permitted to reduce the selling price of a product by 20%, he would be able to achieve a 30 per cent increase in sales volume. The managing director, finding that the sales volume increase exceeds in percentage the extent of requested reduction in price, gives the clearance. You are given the following information: Present selling price per unit Rs 7.50 Present volume of sales 2,00,000 Nos. Total variable costs Rs 10,50,000 Total fixed costs Rs 3,60,000 Assuming no changes in the costs pattern in the coming period: (i) Examine the consequences of the managing director's decision assuming that 30% increase in sales is realised. (ii) At what volume of sales can the present quantum of profits be sustained, after effecting the price reduction? Solution: (i) STATEMENT SHOWING THE PRESENT RESULT AND THE RESULT AFTER PRICE REDUCTION Particulars Present Result Proposed Result

Selling Price per unit (Rs) 7.50 6.00 Sales Volume (Nos) 2,00,000 2,60,000 Variable Cost per unit (Rs) 5.25 5.25 Contribution per unit (Rs) 2.25 0.75 Total Contribution (Rs) 4,50,000 1,95,000

Total Fixed Cost (Rs) 3,60,000 3,60,000 Total Profit (Loss) (Rs) 90,000 (1,65,000) The above statement shows that on account of reduction in the selling price there will be loss of Rs. 1,65,000 as compared to the present profit of Rs. 90,000 in spite of increase in the sales volume. Thus, there will be an effective drop in profit of Rs 2,55,000 on account of the decision taken by the managing director on the suggestion made by the marketing manager. (ii) Statement showing the volume of sales at which the present profit can be retained after price reduction.

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packing cases. Due to competition, the company proposes to reduce the selling price. If the present level of profit is to be maintained, indicate the number of units to be sold if the proposed reduction in selling price is: (

a) 5%, (b) 10%, and (c) 15% The following additional information is available: Rs Rs Present Sales Turnover (30,000 units) 3,00,000 Variable Cost (30,000 units) 1,80,000 Fixed Costs 70,000 2,50,000 Net Profit 50,000 Solution: CONTRIBUTION AT VARIOUS PRICES Present Price Price at a reduction of 5% 10% 15% Price Rs 10.00 Rs 9.50 Rs 9.00 Rs 8.50 Variable Cost 6.00 6.00 6.00 Contribution per unit 4.00 3.50 3.00 2.50 Total Contribution required: Fixed Expenses Rs 70,000 Profit at present Rs 50,000 Rs 1,20,000 Units required to produce the total contribution: Units at the persent price Rs 1,20,000 \div 4.00 = 30,000 at a price reduced by 5% Rs 1,20,000 \div 3.50 = 34,286 at a price reduced by 10% Rs 1,20,000 \div 3.00 = 40,000 at a price reduced by 15% Rs 1,20,000 \div 2.50 = 48,000 Illustration 8.26. The sales turnover and profit during two periods were as follows: Period 1 Sales Rs 20 lakhs Profit Rs 2 lakhs Period 2 Sales Rs 30 lakhs Profit Rs 4 lakhs Calculate: (i) P/V Ratio, (ii) Sales required to earn a profit of Rs 5 lakhs, and (iii) Profit when sales are Rs 10 lakhs.

342 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES Solution: (i) Calculation of P/V Ratio: Period 1 Period 2 Increase in period 2 over period 1 Sales Rs 20,00,000 30,00,000 10,00,000 Profit 2,00,000 3,00,000 2,00,000 Increase in Costs 8,00,000 Since, fixed costs are constant, the increase in costs is increase in variable cost in tune with increase in sales volume. As such variable costs are 80% of sales. Therefore P/V Ratio is 100 - 80% = 20%. (ii) Calculation of sales required to earn a profit of Rs 5 lakhs: Fixed Expenses = Contribution – Net Profit = 20% of 30,00,000 - 4,00,000 = Rs 2,00,000 Required Sales Fixed Expenses + Desired Profit P/V Ratio ? 2,00,000 5,00,000 100 Rs 35,00,000. 20 ? ? ? ? Verification Sales Rs 35,00,000 Marginal Cost of sales 28,00,000 (80%) Contribution 7,00,000 (20%) Fixed Expenses 2,00,000 Profit 5,00,000 (iii) Profit at Sales of Rs 10 lakhs: = Sales × P/V Ratio – Fixed Expenses = Rs 10 lakhs × 20% - Rs 2,00,000 = Rs 2,00,000 - Rs 2,00,000 = Nil. Verification Sales Rs 10,00,000 Marginal Cost of sales 8,00,000 (80%) Contribution 2,00,000 (20%) Fixed Expenses 2,00,000 Profit Nil Illustration 8.27. Two competing food vendors were located side by side at a state fair. Both occupied buildings of the same size, paid the same rent, Rs 1,250, and charged similar prices for their foods. Vendor a employed three times as many employees as B and had twice as much income as B even though B had more than half the sales of A. Other data are as follows: Vendor A Vendor B Sales Rs 8,000 Rs 4,500 Cost of goods sold 50% of Sales 50% of Sales Wages Rs 2,250 Rs 750 You are required to answer the following: (i) Explain why vendor A is twice as profitable as Vendor B. (ii) By how much would vendor B's sale have to increase in order to justify the doubling of the number of employees at the same rate of pay if B's desired operating income is Rs 350?

Self-Instructional Material 343 NOTES Marginal Costing and Cost Volume Profit Analysis Solution: (i) STATEMENT OF OPERATING PROFIT Particulars Vendor A Vendor B Sales 8,000 4,500 Less: Cost of Sales 4,000 2,250 Contribution 4,000 2,250 Less: Fixed Costs Wages 2,250 750 Rent 1,250 3,500 1,250 2,000 Profit 500 250 In case of vendor A, profitability is more on account of lower fixed costs as a percentage of sales as compared to vendor B. The excess contribution of Rs 1.750 (Rs 4.000 – Rs 2.250) earned by vendor A, results in increase in fixed cost only by Rs 1.500 (Rs 3.500 – Rs 2.000) as compared to vendor B. This gives him an extra profit of Rs 500. (ii) Sales for Desired Profit New Fixed Costs + Desired Profit Rs 3,100* Rs 6,200 P/V Ratio 50% ? ? ? * Rs 2,750 + Rs 350 This means B must increase his sales by Rs 1,700 in order to earn the desired profit of Rs 350. Illustration 8.28. Your company has estimated the unit variable cost of a product to be Rs 10 and the selling price as Rs. 15 per unit. Budgeted sales for the year are 20,000 units. Estimated fixed costs are as follows: Fixed Costs per annum Probability Rs 50,000 0.1 60,000 0.3 70,000 0.3 80,000 0.2 90,000 0.1 What is the probability that the company will equal or exceed its target profit of Rs 25,000 for the year? Solution: Each of the different outcomes for fixed costs are mutually exclusive events. For instance if fixed costs are Rs 60,000 they can't be anything else as well. Budgeted Sales are 20,000 units Budgeted per unit contribution = Rs 15 - 10 = 5 Budgeted total contribution = 20,000 x 5 = Rs 1,00,000 Target Profits = Rs 25,000 Maximum fixed costs if target is to be achieved = 1,00,000 - 25,000 = Rs 75,000. The probability that fixed costs will be Rs 75,000 or less will be equal to the combined probability of fixed costs being Rs 50,000, Rs 60,000 Rs 70,000, i.e., 0.1 + 0.3 + 0.3 = 0.7 i.e., 70%. 3. Accepting of price less than the total cost. Sometimes prices have to be fixed below the total cost of the product. This becomes necessary to meet the situation arising during trade depression. It will be enough in such period if the marginal cost is recovered. The selling price may be fixed at a level above this cost though it may not be enough to cover the total cost. This is because in such periods any material contribution towards recovery of fixed cost is good enough rather than not to have any contribution at all. A price less than the total cost but above marginal cost may be acceptable when a specific order has been received and it shall not adversely affect the home market. The Check Your Progress 3. By noting 'P/V Ratio will increase' or 'P/V Ratio will decrease or P/V Ratio will not change', as the case may be, state how the following independent situations will affect the P/V Ratio: (i) An increase in the physi- cal sales volume; (ii) An increase in the fixed cost; (iii) A decrease in the variable cost per unit; (iv) A decrease in the contribu- tion margin; (v) An increase in selling price per unit; (vi) A decrease in the fixed cost; (vii)A 10% increase in both sell- ing price and variable cost per unit; (viii)A 10% increase in the sell- ing price per unit and 10% decrease in the physical sales volume; (ix) A 50% increase in the variable cost per unit and a 50% decrease in fixed cost; and (x) An increase in the angle of incidence.

344 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES additional sales revenue should be compared with the additional costs (which are generally only marginal costs) and if the net revenue is greater, the order should be accepted. In case the market is competitive and there is a fear of adverse impact on existing sales even in the long run, the decision should be taken after due and careful thought. Similar is the situation when order for exports is received by a concern. Exports at a price above the marginal cost but below the total cost may be made since exports will not interfere in any way with the sales in the home market. Selling at marginal cost or even below the marginal cost may be recommended in extraordinary situations like the following: (i) When it is desired to eliminate weak competitors (ii) When the production is to be kept continued because otherwise there is a danger of heavy losses on account of shutdown (iii) When goods are likely to be perished by the passage of time (iv) When a new product is to be introduced in the market or an existing one is to be made more popular (v) When the product can be sold with profit in combination with some other product Illustration 8.29. A manufacturer of a certain product has been selling exclusively in the Indian market up to now. He has just received his first export enquiry and wants to quote as competitively as the circumstances will allow. His latest Indian cost sheet is as follows: Rs per unit Raw Materials 34 Direct Labour 13 Services 6 Works Overhead 7 Office Overhead 2 Total Cost 62 Profit earned in India 6 Indian Selling Price 68 Management is thinking of quoting a selling price somewhere between Rs 62 and Rs 68 per unit for this export order. One of the directors suggests quoting an even lower price based on the principles of marginal costing. As the firm's accountant, you are requested to compute the lowest price the management could quote on those principles. State clearly any assumptions that you may make on the above facts, and also on any other costs or facts. Solution: The cost sheet given in the guestion does not give specifically the fixed and variable costs regarding three items: services, works overhead and office overheads. It has also not been stated whether the factory has sufficient manufacturing capacity. No mention has also been made in the question about certain direct costs such as insurance, special packing, export duty, etc., which if incurred would further push up the price to be quoted for the export order. The following resumptions have, therefore, been made while calculating the lowest price for the export enquiry: (i) It has been assumed that the factory has sufficient manufacturing capacity. The supplies to the Indian market will not, therefore, get disrupted on account of the export order. In case of disruption, the negative cost of disruption will have to be taken into account while accepting the proposal for export of the product. (ii) The service costs to the extent of Rs 4 per unit have been taken as variable while the balance of Rs 2 per unit has been taken as fixed. (iii) Both works overhead and office overheads have been taken totally as fixed. However, in case of works overhead, a part of the total works overhead cost may also be variable. Based on the above presumptions, the marginal cost of the product will be as follows: Raw Materials Rs 34 Direct Labour 13 Services 4 51 Self-Instructional Material 345 NOTES Marginal Costing and Cost Volume Profit Analysis The marginal cost of the product comes to Rs 51 and, therefore, any price above this amount should be guoted by the company. However, before quoting the price, the company should take into account as indicated earlier any special costs that may have to be incurred in respect of the export order. Moreover, any cash subsidy available from the Government should also be taken into account while fixing the price for the product. Illustration 8.30. Ram Dass Pvt. Ltd., Nasik, is currently operating at 80 per cent capacity. The profit and loss account shows the following: (Rs in lakhs) Sales 640 Less: Cost of Sales: Direct Materials 200 Direct Expenses 80 Variable Overheads 40 Fixed Overheads 260 580 Profit 60 The Managing Director has been discussing an offer from Middle East of a quantity which will require 50 per cent capacity of the factory. The price is 10 per cent less than the current price in the local market. The order cannot be split. You are asked by him to find out the most profitable alternative. The factory capacity can be augmented by 10 per cent by adding facilities at an increase of Rs. 40 lakhs in fixed cost. Solution: COMPARATIVE STATEMENT OF PROFITABILITY (Figures in Rs lakhs) Particulars Present Proposed Local Local Middle Total East (1) Sales 640 480 360 840 (60% of 800) (400 – 10%) (2) Variable Costs: Direct Materials 200 150* 125** 275 Direct Expenses 80 60 50 110 Variable Overheads 40 30 25 55 Total Variable Cost 320 240 200 440 (3) Contribution (1) - (2) 320 240 160 400 (4) Fixed Cost 260 300 (5) Profit (3)-(4) 60 100 60 *200 80 ? . 50 **150 60?. If the order from the Middle East is accepted, the profits would rise by Rs 40 lakhs. Though, an additional investment of Rs 40 lakhs is required, the proposal is worth accepting if similar offers are to be received in future also. If the additional capacity is not augmented, investment in fixed assets is not required. The local sale will be reduced by 10% further (of the total capacity) reducing contribution by Rs 40 lakhs. Thus, profit position would remain unchanged. The offer may also be accepted even in such a case. 4. Decisions involving alternative choices. The technique of marginal costing helps in making decisions involving alternative choices, viz., discontinuance of a product line, changes of sales mix, make or buy, own or lease, expand or contract, etc. These decisions are generally made by applying the technique of differential costing which is as a matter of fact an extension of the technique of marginal costing. The concepts of differential cost and differential costing have already been explained in this chapter. Check Your Progress 4. State true or false: (i) Fixed costs remain constant per unit and vary with output. (ii) Variable costs remain con- stant per unit and vary with output. (iii) Contribution = Variable cost + Fixed cost. (iv) Break even point is a no profit and no loss situa- tion.

346 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 8.17 KEY TERMS ? Absorption Costing: A technique under which the cost of a product is determined after considering both the fixed and the variable costs. ? Break-even Analysis: It is one of the techniques used for cost volume profit analysis. It refers to that system of analysis which determines the break-even level and also probable profit at any level of activity. ? Break-even Point: The level of activity at which these is neither a profit nor a loss. ? Break-even Chart: A chart which indicates approximate profit of loss at differrent levels of sales volume within a limited range ? Cash Break-even Point: The level of activity where the total costs under two alternatives are the same. ? CVP Analysis: A management tool showing the relationship between various ingredients of profit planning viz., cost, selling price and volume of activity. ? Differential Costing: A technique in which only costs and income differences between alternative courses of action are taken into consideration. ? Direct Costing: A technique under which only direct costs are considered while computing the cost of a product. It is different from marginal or variable costing since all direct costs need not be variable. ?

Marginal Costing: A technique where only the variable costs are considered while computing the cost of a product. The fixed costs are met against the total

contribution given by all the products taken together. ? Profit Volume Ratio: The ratio establishing the relationship between the contribution and the sales value. 8.18 SUMMARY In this unit, you have learned that: ? The cost of a product can be ascertained by any of the two techniques – (a) Absorption Costing; and (b) Marginal Costing. ? In case of absorption costing, the cost of a product is determined after considering both fixed and variable cost while in case of marginal costing only the variable costs are considered for

computing the cost of a product. The fixed costs are met against the total

contribution given by all the products taken together. ? Cost-Volume-Profit Analysis is an important tool for profit planning. It provides infor- mation regarding behaviour of cost and relationship to volume, the volume of produc- tion or sales where the product will be break-even and sensitivity of products due to variation in output. ? Break-even analysis is generally used as synonymous with cost-volume-profit analy- sis. Of course, CVP is a much wider term than break-even analysis. ? Contribution per unit of key factor is helpful in determining the product mix decision which will maximize the profits. ? CVP analysis helps in decision making such as fixation of the selling price of a product, determining the level of output desired for a profit, circumstances where a price less than total cost can be accepted and choosing among several alternative courses of action. 8.19

ANSWERS TO 'CHECK YOUR PROGRESS' 1. (a) True; (b) False; (c) True; (d) False; (e) True; (f) False; (g) True; (h) True; (

i) True; (j) False; (k) False; (l) True 2. (i) a (Marginal Income); (ii) b (Fixed Cost); (iii) c (Absorption Costing); (iv) a (Rs. 20,000); (v) b (Rs. 6,000); (vi) c (12%); (vii) a (Rs. 50,000) 3. (i) no change, (ii) no change, (iii) increase, (iv) decrease, (v) increase, (vi) no change, (vii) no change, (viii) increase; (ix) decrease; and (x) increase. 4. (i) False (ii) True (iii) False (iv) True.

Self-Instructional Material 347 NOTES Marginal Costing and Cost Volume Profit Analysis 8.20 QUESTIONS AND EXERCISES 1. How does marginal cost differ from total cost? In what circumstances, if any, may it be to the advantage of manufacturer to sell some of its products at price: (a) below total cost (b) below marginal cost 2. What is 'cost and profit'? Bring out its importance. 3. 'Profit-Volume analysis' is a technique of analysing the costs and profits at various 'levels of volume'. Explain how such analysis helps management. 4. (a) Your boss is looking over a Break-even Chart which you have constructed to portray the cost volume profit relationship of proposed plan of operations. He comments 'The chart only tells me that the more we sell, the more profits we make'. What is your reply? (b) What are the limitations of a breakeven chart? 5. Explain the technique of marginal costing and state its importance in decision-making. 6. (a) State the distinction between Marginal Costing and Absorption Costing as regards valuation of finished goods inventories. (b) State the circumstances in which 'contribution approach to price is most suitable'. If this approach is adopted, what are the special items of cost or revenue that have to be considered when a quotation for an export order is made? 7. (a) What benefits are gained from Marginal Costing? Are there any pitfalls in the application of Marginal Costing? Discuss these matters critically. (b) Give a brief account of the practical application of marginal costing which you consider sound from a policy point of view. 8. What is Break-even Analysis? Discuss its assumptions and uses. 9. State the implications of selling the product of a multiple firm at a price less than the marginal cost. When would you advocate selling below the marginal cost? 10. 'Cost-Volume-Profit' relationship provides the management with a simplified framework for an organization which is thinking on a number of its problems. Discuss. 11. 'The proper treatment of fixed costs presents a problem in full cost pricing.' Explain this statement. Give suitable illustrations. 12. Explain with suitable illustrations the following statements: (a) 'In the very long run all costs are differential'. (b) 'In the long run profit calculated under absorption costing will be the same as that under variable costing'. 13. State four different methods of finding out the break-even point graphically. 14. Explain how semi-variable costs can be split into fixed and variable costs. 15. What is meant by differential cost? Explain the practical utility of differential cost analysis. 16. What is meant by break-even analysis? Explain the important assumptions and practical significance of break-even analysis. 17. Explain briefly the principles of cost and pricing governing the following facts of life: (a) In any transport system, season tickets are always cheaper than normal ones. (b) Gift articles are always costly. (c) Clients expect the professionals to charge heavy fees. (d) An air conditioned theatre with equally comfortable chairs charges different rates for witnessing the same performance. 18. What are the uses of Break-even Analysis and Direct Costing? 19. Mention the types of problems which a Management Accountant can expect to solve with Break-even Analysis. 20. 'Marginal Costing is an administrative tool for the management to achieve higher profits and efficient operation'. Discuss.

348 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 21. Explain under what circumstances marginal costing plays an important role in price fixation? 22. Explain how marginal costing technique is useful in day-to-day decision making. 23. What are the chief advantages of break-even analysis? Outline the assumptions behind this analysis. 24. Write briefly about Cost-Volume-Profit Analysis. 25. Examine the concept of 'Margin of Safety' and give its uses for decision making. 26. Explain the concept of BEP and CVP. Explain as to how are they useful for the managers for their decision-making, 27. What are the limitations of marginal costing? Explain, 28. Distinguish between Marginal Costing and Total Costing techniques of Cost Analysis. How are the Profit Statements under the two techniques Present? 29. Mention any four important factors to be considered in Marginal Costing Decisions. 30. Discuss the relationship between Angle of Incidence, Break-even level and Margin of Safety. 8.21 PRACTICAL PROBLEMS Absorption/Marginal Cost Statements 1. Kaku Ltd. produces one standard type of article. The result of the Last 4 months of the year 1998 are as follows: Output (units) September 1998 200 October 1998 300 November 1998 400 December 1998 600 Prime cost is Rs. 10 per unit. Variable expenses are Rs. 2 per unit. Fixed expenses are Rs. 36,000 per annum. Find out cost per unit of each month. [Ans. September Rs. 27, October Rs. 22, November Rs. 19.50, December Rs. 17.00] 2. From the following data prepare statements of cost according to both absorption costing and marginal costing systems: Product A Product B Product C Rs. Rs. Rs. Sales 30,000 60,000 80,000 Direct Material 12,000 25,000 36,000 Direct Labour 8,000 10,000 14,000 Factory Overheads: Fixed 6,000 8,000 6,000 Variable 2,000 3,000 5,000 Administration Overheads Fixed 1,000 2,000 2,000 Selling Overheads Fixed 2,000 2,000 3,000 Variable 1,000 3,000 3,000 [Ans. Absorption Costing-Profit (Loss): Product A Rs. (2,000), Product B Rs. 7,000; Product C Rs. 11,000; Marginal Costing-Contribution; Product A Rs. 7,000, Product B Rs. 19,000, Product C Rs. 22,000] 3. Production costs of Oriental Enterprises Limited are as follows: Levels of activity 60% 70% 80% Output (in units) 1,200 1,400 1,600 Cost (in Rs.) Direct Materials 24,000 28,000 32,000 Direct Labour 7,200 8,400 9,600 Factory Overheads 12,800 13,600 14,400 Works Cost 44,000 50,000 56,000

Self-Instructional Material 349 NOTES Marginal Costing and Cost Volume Profit Analysis A proposal to increase production to 90% level of activity is under consideration of management. The proposal is not expected to involve any increase in fixed factory overheads. Prepare a statement showing the prime cost, total marginal cost and total factory cost at 90% level of activity. [Ans. Prime Cost Rs. 46,800, Marginal Cost Rs. 54,000, Works Cost Rs. 62,000] [Hint. Fixed overheads Rs. 8,000] 4. A company is at present working at 90% of its capacity and produces 13,500 units per annum. It operates a flexible budgetary control system. The following figures are obtained from its budget: 90% 100% 13,500 units 15,000 units Rs. Rs. Sales 15,00,000 16,00,000 Fixed Expenses 3,00,500 3,00,500 Rs. Rs. Semi-variable Expenses 97,500 1,00,500 Variable Expenses (other than material and labour) 1,45,000 1,49,500 Labour and material cost per unit remain the same under present conditions. Profit margin has been 10% on sales. (i) You are required to determine the differential cost of producing 1,500 units by increasing capacity to 100%. (ii) What would you suggest for an export price for these 1,500 units taking into account that the overseas prices are lower than those of the home market? [Ans. (i) Rs. 97,170 (ii) Cost per unit comes to Rs. 64.78. The selling price should not be less than this price.] [Hint: Cost of materials and labour of 13,500 units comes to Rs. 8,07,000 by working backward.] 5. A firm has two factories, the product being the same in both cases. The following is the relevant information about the two factories. I II Capacity p.a. 10,000 units 15,000 units Variable Cost per unit Rs 70 Rs 55 Fixed Cost p.a. Rs 4,00,000 Rs 9,00,000 The demand is only 20,000 units. State how the capacity in two factories should be utilised. [Ans. Both factories have to be operated for meeting demand in full. However, Factory II has a lower variable cost per unit. Hence, Factory II should produce 15,000 units and Factory I should produce 5,000 units] Break-even Point; Profit Planning, etc. 6. Sales of a product amount to 200 units per month at Rs. 10 per unit. Fixed overhead is Rs. 400 per month and variable cost Rs. 6 per unit. There is a proposal to reduce price by 10%. Calculate the present and future P/V ratios and find by applying P/V ratios, how many units must be sold to maintain total profit. [Ans. Present P/V Ratio 40%; Future P/V Ratio 33 1 3 %; units to be sold 267]. 7. Merry Manufacturers Ltd., has supplied you the following information in respect of one of its products: Rs. Total Fixed Costs 18,000 Total Variable Costs 30,000 Total Sales 60,000 Units Sold 20,000 Find out (a) contribution per unit, (b) break-even point, (c) margin of safety, (d) profit, and (e) volume of sales to earn a profit of Rs. 24,000 [Ans. (a) Rs. 1.50, (b) 12,000 units, (c) 8,000 units, or Rs. 24,000, (d) Rs. 12,000, (e) 28,000 units] 8.

From the following data, calculate: (i) Break-even point expressed in amount of sales in rupees. (ii)

Number of units that must be sold to earn a profit of Rs. 60,000 per year. (iii) How many units must be sold to earn a net income of 10% of sales?

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Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES

Selling price Rs. 20 per unit Variable manufacturing costs l l per unit Variable selling costs 3 per unit Fixed factory overheads 5,40,000 per year Fixed selling costs 2,52,000 per year [

Ans. (i) Rs. 26,40,000; (ii) 1,42,000 units; (iii) 1,98,000 units] [Hint. For (iii) Presume x as the number of units to be sold.] 9. Ahmed Khan sells a popular brand of men's sports shirts at an average price of Rs. 28/ each. He purchases the shirts from a supplier at a unit cost of Rs. 18/. The costs of operating his shop are all fixed costs and amount to Rs. 54,000 a year. He pays commission to his salesmen at the rate of Re. 1 for every shirt sold through the particular salesman. Required: (i) How many shirts must be sold in a year to break even? (ii) Compute the sales revenue at the break-even. (iii) Compute the monthly sales revenue required to earn a net profit before tax of Rs. 45,000 in a year. [Ans. (i) 6,000 shirts, (ii) Rs. 1,68,000, (iii) Rs. 25,667] 10. (a) A company has fixed expenses of Rs. 90,000 with sales at Rs. 3,00,000 and a profit of Rs. 60,000. Calculate the profit/volume ratio. If in the next period, the company suffered a loss of Rs. 30,000, calculate the sales volume. (b) What is the margin of safety for a profit of Rs. 60,000 in (a) above? [Ans. (a) 50%,

Rs. 1,20,000; (b) Rs. 1,80,000] 11. An analysis of Sultan Manufacturing Co. Ltd. led to the following information: Cost element Variable cost Fixed costs (% of sales) Rs

Direct Material 32.8 Direct Labour - 28.4 Factory Overheads 12.6 1,89,900 Distribution Overheads 4.1 58,400 General Administration Overheads 1.1 66,700 Budgeted Sales are Rs. 18,50,000. You are required to determine: (i) The break-even sales volume; (ii) The profit at the budgeted sales volume;

and (iii) The profit if actual sales: (a) drop by 10% and (b) increase by 5% from budgeted sale. [Ans. (i) Rs. 15,00,000, (ii) Rs. 73,500, (iii) (a) Rs. 34,650, (b) Rs. 92,925] 12. Company A and Company B, both under the same management, make and sell the same type of product. Their budgeted Profit and Loss Account for January-June 1986 are as under: Company A Company B Rs Rs Rs Sales 3,00,000 3,00,000 Less: Variable cost 2,40,000 2,00,000 Fixed Cost 30,000 2,70,000 70,000 2,70,000 30,000 30,000 You are required to: (i) Calculate the Break-even Point for each company. (ii) Calculate the sales volume at which each of the two companies will profit by Rs. 10,000. (iii) Assess how the profitability will change with decrease or increase in volume: [Ans. Company A Company B (i) Rs. 1,50,000 (i) Rs. 2,10,000 (ii) Rs. 2,00,000 (ii) Rs. 2,40,000 (iii) P/V Ratio 20% (iii) 33 1 3 %]

Self-Instructional Material 351 NOTES Marginal Costing and Cost Volume Profit Analysis 13. The budgeted sales of three products of a company are as follows: Products X Y Z Budgeted sales in units 10,000 15,000 20,000 Budgeted selling price per unit 4 4 4 Budgeted variable cost per unit 2.5 3 3.5 Budgeted fixed expenses (total) 2,000 9,000 7,500 From the information you are required to compute the following for each product: (a) The budgeted profit. (b) The budget break-even sales. (c) The budgeted margin of safety in terms of sales value. X Y Z [Ans. (a) Rs 3,000 Rs 6,000 Rs 2,500 (b) Rs 32,000 Rs 36,000 Rs 60,000 (c) Rs 8,000 Rs 24,000 Rs 20,000] 14. From the following information calculate the break-even point and the turnover required to earn a profit of Rs. 36,000 Express the 'margin of safety available cost per unit 2 Selling price 20 If the company is earning a profit of Rs. 2,40,000, Margin of Safety Rs. 40,000] 15. The Reliable Battery Co. furnishes you the following information: Year 1996 First half Second half Sales Rs. 8,10,000 Rs.10,26,000 Profit earned 21,600 64,800 From the above you are required to compute the following assuming that the fixed cost remains the same in both the periods: (i)Profit/Volume Ratio. (ii) Fixed cost. (iii) The amount of profit or loss where sales are Rs. 6,48,000. (iv) The

amount of sales required to earn a profit of Rs.1,08,000. (

Ans. (i) 20%; (ii) Rs. 1,40,400; (iii) Loss Rs.10,800; (iv) Rs.12,42,000.] 16. Tractors Ltd., have been an installed capacity of 5,000 tractors per annum. They are presently operating 35 per cent of installed capacity. For the coming year, they have budgeted as follows: Production/Sales 4,000 units Costs: Rs. (crores) Direct Materials 8.00 Direct Wages 0.60 Factory Expenses 0.80 Administration expenses 0.20 Selling Expenses 0.20 Profit 1.00 Factory expenses as well as selling expenses are variable to the extent of 20 per cent. Calculate break-even capacity utilisation percentage. [Ans. BEP 2,000 units, BEP as a percentage of installed capacity 40%]

352 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 17. Calculate from the following data (i) the value of output at which the business breaks even, and (ii) the percentage capacity at which it breaks even: Budget for year Estimated 1990 based on shut-down 100% capacity expenditure (Rs.) (Rs.) Direct Wages 2,09,964 – Direct Materials 2,44,552 Works Expenses 1,81,820 93,528 Selling and Distribution Expenses 61,188 40,188 Administration Expenses 30,000 20,508 Net Sales 8,40,000 [Ans. Rs. 4,85,74,6; (ii) 53.8%] [Hint. Shut-down costs are Fixed Costs.] 18. From the following data, you are required to calculate the break-even point and net sales value at this point: Selling Price per unit Rs. 25 Direct Material Cost per unit 8 Direct Labour Cost per unit 5 Fixed Overheads 24,000 Variable Overheads @ 60% on direct labour Trade discount 4%

If sales are 15% and 20% above the break-even volume, determine the net profits. [Ans. BEP (units) 3,000 B. E. Sales (Net) Rs. 72,000, Net Profit when Sales are above 15% of B. E. Volume Rs. 3,600, Net Profit when Sales are above 20% of B. E. Volume Rs. 4,80,000] 19. The Taylor Company produces two products, A and B. Expected data for the first year of operations are: A B Expected Sales (units) 8,000 12,000 Selling Price Rs. 45 Rs. 55 Variable Costs 30 35 Total fixed costs are expected to be Rs. 3,60,000 for the year. You are required to answer the following: (i) If sales, prices and costs are as expected, what will be the operating income and the break-even volume in sales revenue? (ii) Assume that prices and costs were as expected but Taylor sold 12,000 units of A and 8,000 units of B. Re-calculate the operating income and the break-even volume in sales revenue. [Ans. (i) Operating Income Nil; Break-even Sales Rs. 10,20,000 (ii) Loss Rs. 20,000; Composite Break-even Sales Rs. 10,37,763 comprising sales of Product A Rs. 6,22,658 and sales of Product B Rs. 4,15,105] 20. The Kisan's Implements Factory which has been specialising in the production of a patented plough-share finds its sales dropping due to increasing competition from other concerns producing similar products. It is felt that the reduction of the selling price from Rs. 3 per share to Rs. 2.50 will increase the volume of sales and enable the profit to be maintained at the same level as in the previous year. Assuming that the total fixed charges of the concern are Rs. 2,00,000 per annum, variable cost per unit Rs. 1.50 and the volume of sales Rs. 4,50,000, indicate the number of units that the concern should plan to produce and sell. Tabulate the results of the previous year and the current year showing (a) the number of units produced, (b) selling price realised, (c) cost price (including fixed and variable costs), and (d) the profit at the end of the year. [Ans. (a) Previous Year: 1,50,000 units, Current year: 2,25,000 units; (b) Selling Price: Previous year Rs. 4,50,000, Current Year Rs. 5,62,500; (c) Cost Price: Previous Year Rs. 4,25,000; Current Year Rs. 5,37,000 and (d) Profit: Previous Year Rs. 25,000; Current Year Rs. 25,000.]

Self-Instructional Material 353 NOTES Marginal Costing and Cost Volume Profit Analysis 21. The particulars of two plants producing an identical product with the selling price are as under: Plant A Plant B Capacity utilisation 70% 60% (Rs. Lacs) (Rs. Lacs) Sales 150 90 Variable Costs 105 75 Fixed Costs 30 20 It has been decided to merge Plant 'B' with Plant 'A'. The additional fixed expenses involved in the merger amount to Rs. 2 lacs. Required: (i) Find the break-even point of Plant 'A' and Plant 'B' before merger' and the break-even point of the merged plant. (ii) Find the capacity utilisation of the integrated plant required to earn a profit of Rs18 lacs. (Ans. (i) Break-even point Plant A Rs. 100 lacs, Plant B Rs. 120 lacs, Merged Plant Rs 212.16 lacs. (ii) Sales for desired profit Rs. 285.61acs, capacity utilisation 78.4%.] 22. Titan Plastic Toys and Utensils manufactures children's toys and household utensils of various types and sizes from a uniform material and operates the batch system of costing for ascertainment of costs. Each month's production is determined in advance and the different types and sizes of utensils are put through production. Each type and size is allotted a unit value, e.g., 5 Us., 20 Us., 47 Us., and so on, and the total production cost in a month is spread over the total 'Us' produced. The cost of 100 'Us' is taken as a convenient unit of production and is ascertained as follows: Material per unit of 100 'Us' Rs. 10.00 Labour per unit of 100 'Us' 3.00 Electric power for heating, moulding, shaping, etc. 4.00 Variable overheads 5.00 Total Variable Cost 22.00 Having regard to market conditions, the selling price of finished goods to the extent 100 'Us' is fixed at Rs. 40. The fixed expenses amount to Rs. 50,950 per annum. Assuming the scope for sales to be unlimited what should be the volume of output in 'Us': (i) to absorb the fixed overhead; and (ii) the turnover to earn a profit of Rs. 50,000 per annum. [Ans. (i) 2,83,056 units; (ii) 5,60,834 units] 23. S. Ltd. furnishes you the following information relating to the half year ended 30th June, 1990: Fixed Expenses Rs. 45,000 Sales Value 1,50,000 Profit 30,000 During the second half of the year, the company has projected a loss of Rs. 10,000. Calculate: (i) The break-even point and margin of safety for six months ending 30th June, 1990. (ii) Expected sales volume for second half of the year assuming that the P/V ratio and fixed expenses remain constant in the second half year also. (iii) The break-even point and margin of safety for the whole year 1990. [Ans. BEP Rs. 90,000; M.S. Rs. 60,000; (ii) Rs. 70,000; (iii) BEP Rs. 1,80,000; M.S. Rs 40,000] 354 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 24. The following are the cost and the sales data of a manufacturer selling three products X, Y and Z. Product Selling price Variable Per cent of per unit cost per unit Rupee Sales Volume X Rs. 4 Rs. 3 20 Y 5 4 40 Z 8 6 40 Capacity of the manufacturer; Rs. 15,00,000 total sales volume, Annual fixed cost; Rs. 2,30,000. (i) Find the break-even point in rupees. (ii) Calculate his profit or loss in rupees. [Ans. (i) Rs. 10,00,000; (ii) Rs. 46,000] 25. The following figures relate to a company manufacturing a varied range of products: Total Sales Total Cost Year ended 31st December, 1990 22,23,000 19,83,600 Year ended 31st December, 1991 24,51,000 21,43,200 Assuming stability in prices, with variable costs carefully controlled to reflect predetermined relationships and an unvarying figure for fixed cost, calculate: (a) The profit/volume ratio, to reflect the rates of growth for profit and sales. (b) Fixed cost. (c) Fixed cost percentage to sales. (d) Break-even point. (e) Margin of safety for the year 1990 and 1991. [Ans. (a) 1990: 30%, 1991: 30%; (b) 1990: Rs 4,27,500, 1991: Rs 4,27,500; (c) 1990: Rs 19.23%, 1991: 17.44%; (d) 1990: Rs 14,25,000, 1991: Rs 14,25,000; (e) 1990: Rs 7,98,000,1991: Rs 10,26,000] 26. At the budgeted activity of 75% of total capacity, a company earns a P/V ratio of 25% and a profit of 10% on sales. During the course of the year the company had to reduce its price of the product by 10% due to recession and poor offtake. The company was able to achieve actually a production and sales volume for the year equivalent to 50% of its total capacity. The sales value at this level was Rs. 13,50,000 at the reduced price of Rs. 9.00 per unit. Due to reduction in production the actual variable costs went up by 2% of the budget. Required: (i) Comparative statement of profitability at the budgeted and actual activity. (ii) Find the P/V ratio, break-even point in value and units of production at the actual sales activity. [Ans. (i) Profit (Loss): Budgeted Activity Rs. 2,25,000, Actual Activity (Rs. 1,35,000), (ii) P/V Ratio 15%, Break-even sales Rs. 22,50,000; Units 2,50,000] 27. A company has three units, A, B, and C, each manufacturing the same product. The following details are available: A B C Rs. Rs. Rs. Variable Cost per unit 2.50 2.20 2.10 Fixed Cost per annum 78,000 1,08,000 1,20,000 Calculate the range of output over which each of the units would be most economical. [Ans: The following range of output will be most economical: Plant A: For less than 1,00,000 units; Plant B: Between 1,00,000 and 1,25,000 units; Plant C: For output of higher than 1,25,000 units] 28. The following estimated data are given: (a) Cost of investigation of variance = Rs. 800 (b) Cost of correcting the out of control process = Rs. 2,000 (c) Cost of allowing the process to remain out of control = Rs.10,000

Self-Instructional Material 355 NOTES Marginal Costing and Cost Volume Profit Analysis (d) Probability of being in control = 0.95 (e) Probability of being out of control = 0.05 Calculate the expected values of investigating and not investigating. [Ans. Cost of investigation and rectifying out of control situation Rs. 900, cost of rectification without investigation Rs 500. Hence, it is cheaper not to investigate but carry out the rectification, whenever the process goes out of control. 29. A machine which originally costs Rs 12,000 has an estimated life of 10 years and is depreciated at the rate of Rs 1,200 per year. It has been unused for some time, however, as expected production orders did not materialise. A special order has now been received which would require the use of the machine for two months. The current net realisable value of the machine is Rs 8,000. If it is used for the job, its value is expected fall to Rs 7,500. The net book value of the machine is Rs 8,400. Routine maintenance of the machine currently costs Rs 40 per month. With use, the cost of maintenance and repairs would increase to Rs 60 per month. What would be the relevant cost of using the machine for the order so that it can be charged as the minimum price for the order. [Ans. Minimum price to be charged will be Rs 540 (i.e., marginal user cost Rs 500 + Addl. cost of maintenance and repairs Rs 40). Besides this, loss of interest for two months on Rs 8,000 i.e., present saleable value of the machine, can also be considered for calculating minimum selling price]. Break-even Charts 30. Draw a break-even chart on the basis of following data: Plant capacity: 1,60,000 units per year

Rs 5 per unit Selling price: Rs 10 per unit [

Ans. BEP 80,000

units] 31. From the following particulars draw a break-even chart and find out the break-even point: Rs. Variable Cost per unit 15 Fixed Expenses 54,000 Selling Price per unit 20 What should be the selling price per unit, if the break-even point is to be brought down to 6,000 units? [Ans. Old BEP 10,800 units; New Selling Price Rs 24 per unit] 32. (a) Plot the following data on a graph and determine the break-even point: Direct labour Rs 100 per unit Direct material Rs 40 per unit Variable overheads 100% of direct labour Fixed overheads Rs 60,000 Selling price Rs 400 per unit (b) In order to increase efficiency in production, the concern instals improved machinery which results in fixed overhead of Rs. 20,000 but the variable overhead is reduced by 40%. You are required to plot the data on the above graph and to determine the new break- even point assuming that there is no change in sale price. [Ans. Old BEP at 50% capacity Rs 1,50,000, New BEP Rs 1,60,000] 33. From the following data draw a simple break-even chart: Selling price per unit Rs 10.00 Trade Discount 5%

Direct Material cost per unit 3.00 Direct Labour cost per unit 2.00 Fixed Overhead 10,000 Variable overheads 100% on direct labour

cost. If sales are 10% and 15% above the break-even volume, determine the net profits. [Ans. B.E. sales Rs 38,000; if sales are 10% above, B.E. Sales Volume, Profit will be Rs. 1,000; if sales are 15% above B.E. Sales Volume, profit will be Rs 1,500] 356 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 34. After a study of cost-volume relationships the Kalinga Tubes Company concluded that its costs for any given volume of sales could be expressed as Rs. 1,00,000 for fixed costs plus variable costs equal to 60% of sales. The company's range of volume was from zero to Rs 8,00,000 of sales. Prepare a graph which will illustrate this cost volume relationship. Also draw a proper sales line to the graph to form a break-even chart. Determine the break-even point. A competitor operating a plant of the same size as Kalinga Tubes also with fixed cost of approximately Rs 1,00,000 per year, but his break-even point is Rs 3,00,000 of sales. What may be the probable causes of the difference between this break-even point and that of the Kalinga Tube Company? [Ans. BEP of sales Rs. 250,000. In case of the competitor P/V Ratio is 33 1 3 %. In other words, his variable cost per unit is more.] [Hint. Take sales at different levels in percentages] Key Factor 35.

From the following data, which product would you recommend to be manufactured in a factory, time being the key factor?

Per unit of Per unit of Product 'A' Product 'B' Direct Material Rs 24 Rs 14 Direct Labour at Re 1 per hour 2 3 Variable Overhead at Rs 2 per hour 4 6 Selling Price 100 110 Standard Time to produce 2 hours 3 hours [Ans: Product A recommended] 36. From the following data, recommend the most profitable product mix, presuming that direct labour hours available are only 700: Products A B Contribution per unit Rs 30 Rs 20 Direct Labour per unit 10 hrs. 5 hrs. The maximum production possible for each of the products A and B 100 units. The fixed overheads are Rs 1,000 [Ans. Product A 20 units; Product B 100 units. Net profit Rs 1,600] 37. (a) From the following data, which product would you recommend for manufacture in the factory? Per unit of Product A Product B Standard Manufacturing Time 2 hours 3 hours Direct Materials Rs. 50

Rs. 30 Direct Labour @ Rs 10 per hour 20 30 Variable Overheads @ Rs 6 per hour 12 18 Selling Price 200 240 Total Machine Hours available in the factory are 60,000. (b) Calculate the effect on profit of a proposed change in 'Sales Mix' from the following data: Existing Sales mix M N O PTotal Sales (in Rs) 80,000 1,00,000 40,000 20,000 2,40,000 Variable Cost (in Rs) 48,000 68,000 32,000 8,000 1,56,000 Fixed Cost (in Rs) - - - 58.800 Proposed Sales Mix Rs 60,000 88,000 80,000 12,000 2,40,000 [Ans. (a) Product A is recommended (b) Decrease in Profit Rs 8,640, Present Profit Rs 25,200, Proposed Profit Rs 16,560.] Self-Instructional Material 357 NOTES Marginal Costing and Cost Volume Profit Analysis Application CVP Analysis 38. Polestar Electronics decides to effect a 10% reduction in the price of its product because it is felt that such a step may lead to a greater volume of sales. It is anticipated that there are no prospects of a change in total fixed costs and variable cost per unit. The directors wish to maintain the net profits at the present level. The following information has been obtained from its books: Sales: 10,000 units Rs 2,00,000 Variable Costs Rs 15 per unit Fixed Costs Rs 40,000 How would management proceed to implement this decision? [Ans. Profit Rs 10,000; Units to be sold 16,667. Management should reduce selling price only when it is sure of increasing sales by 6,667 units] 39. Evenkeel Limited manufactures and sells a single product X whose selling price is Rs 40 per unit and the variable cost is Rs 16 per unit. (a) If the fixed costs for this year are Rs 4,80,000 and the annual sales are at 50% margin of safety, calculate the rate of net return on sales assuming an income-tax level of 40%. (b) For the next year, it is proposed to add another product line whose selling price would be Rs 50 per unit and the variable cost Rs 10 per unit. The total fixed costs are estimated at Rs 6,66,600. The sales mix of X : Y would be 7 : 3. At what sales next year, would Evenkeel Ltd. break even? Give separately for both X and Y the breakeven sales in rupees and quantities. [Ans. (a) 4,32,000/20,00,000 = 21.6% (b) Break-even Sales Rs 10,00,000. The mix would consist of: x 17.675 units of Rs 7,07,000 y 6,065 units of Rs 3,03,000] 40. With a view to increase the volume of sales, Ambitious Enterprises has in mind a proposal to reduce the price of its products by 20%. No change in total fixed costs or variable costs per unit is estimated. The directors, however, desire the 'present level of profit to be maintained. The following information has been provided: Sales 50,000 units Rs 5,00,000 Variable Costs Rs 5 per unit Fixed Costs Rs 50,000 Advise the management on the basis of the various calculations made from the data given. [Ans. Present P/V Ratio 50%, Future P/V Ratio 37.5%. Sales required to maintain present profit Rs 6,66,667.] 41. Quality Products Ltd. manufactures and markets a single product. The following data are available: Per unit Materials Rs 16 Conversion Costs (variable) 12 Dealer's Margin 4 Selling Price 40 Fixed Cost Rs 5 lakhs Present Sales 90,000 units Capacity utilisation 60 per cent There is acute competition. Extra efforts are necessary to sell. Suggestions have been made for increasing sales: (a) By reducing sale price by 5 per cent, (b) By increasing dealer's margin by 25 per cent over the existing rate. Which of these two suggestions you would recommend, if the company desires to maintain the present profit? Give reasons [Ans. The second proposal, i.e., increasing dealer's margin is recommended because of higher contribution per unit and lower volume of sales required to earn the same profit]

358 Self-Instructional Material Marginal Costing and Cost Volume Profit Analysis NOTES 42. Murugesan Ltd., manufacturing single product, is facing severe competition in selling it at Rs 50 per unit. The company is operating at 60% level of activity at which level sales are Rs 12,00,000. Variable costs are Rs 30 per unit. Semi-variable costs may be considered as fixed at Rs 90,000 when output is nil and the variable element is Rs 250 for each additional 1% level of activity. Fixed costs are Rs 1,50,000 at the present level of activity, but at a level of activity of 80% or above these costs are expected to increase by Rs 50,000. To cope with the competition, the management of the company is considering a proposal to reduce the selling price by 5%. You are required to prepare a statement showing the operating profit at levels of activity of 60%, 70% and 80% assuming that: (a) the selling price remains at Rs 50 (b) the selling price is reduced by 5%. Show also the number of units which will be required to be sold to maintain the present profit if the company decided to reduce the selling price of the product by 5%. [Ans. Capacity levels 60% 70% 80% Rs Rs Rs (i) Profit at selling price of Rs 50 2,25,000 3,02,500 3,30,000 (ii) Profit if selling price is reduced by 5% 1,65,000 2,32,500 2,50,000 (iii) Sales for desired profit of Rs 2,25,000 : 27,556 units] 43. The trading results of Oxfam Ltd. for the first year of business which ended on 31st December, 1991 are: Rs Rs Sales (at Rs 40 per unit) 32,00,000 Less: Material 12,00,000 Labour 4,80,000 Variable Overhead 2,40,000 Fixed Overhead 5,00,000 24,20,000 Profit 7,80,000 During 1991 the factory has been working at 50% capacity and the marketing manager has estimated that the quantity sold could be doubled in 1992 if the selling price was reduced to Rs 35 per unit. No change is anticipated in unit variable cost, but certain administration change to cope with the additional volume of work would increase fixed overhead by Rs. 40,000. You are required to: (a) Evaluate the marketing manager's proposal; and (b) Assuming the selling price was reduced, as proposed, unit variable cost remaining as in 1991, and fixed overhead increased by Rs 40,000, calculate what quantity would need to be sold in 1992, in order to yield a profit of Rs 10,00,000. [Ans. (a) The proposal should be accepted since this will increase profit by Rs 4,40,000; (b) 1,40,000 units] 44. A toy manufacturer earn on everage

net profit of Rs 3 per piece in a selling price of Rs 15 by producing and selling 60,000 pieces at 60% of the potential capacity. Composition of his cost of sales is: Direct Material Rs 4 Direct Wages Re 1 Works Overhead Rs 6 (50% fixed) Sales Overhead Re 1 (25% varying) During the current year, he intends to produce the same number but anticipates that: (a) his fixed charges will go up by 10% (b) rates of direct labour will increase by 20% (c) rates of direct material will increase by 5% (d) selling price cannot be increased. Under these circumstances, he obtains an order for a further 20% of his capacity. What minimum price will you recommend for accepting the order to ensure the manufacturer an overall profit of Rs 1,80,500? [

Ans. Re. 11 per unit]

Self-Instructional Material 359 NOTES Marginal Costing and Cost Volume Profit Analysis [Hint: Marginal cost per unit Rs 8.65, extra profit of Rs 47,000 is to be earned on 20,000 units.] 45. A company is proposing to add a new machine costing Rs 1,00,000. The machine has a life of five years and no salvage value. Other fixed costs associated with the machine are Rs 5,000 per year. If the variable costs per unit of the product are 75% of selling price, how much minimum additional sales will be necessary so that the present profits are maintained even after the new machine is installed? [Ans. Additional cost per annum Rs 25,000; P/V Ratio 25%; Additional sales required to maintain the present profit Rs 1,00,000.] 46. SV Ltd. engaged in the manufacture of four products has prepared the following budget for 1989: Products A B C D Production (Units) 20,000 5.000 25,000 15,000 Selling Price Rs. /unit 21.75 36.75 44.25 64.00 Direct Materials Rs. /unit 6.00 13.50 10.50 24.00 Variable Overheads Rs. /unit 2.25 5.00 6.00 6.50 Fixed Overhead Rs. per annum 75,000 25,000 2,25,000 1,80,000 When the budget was discussed, it was proposed that the production should be increased by 10,000 units for which capacity existed in 1989. It was also decided that for the next year, i.e., 1990, the production capacity should be further increased by 25,000 units over and above the increase of 10,000 units envisaged as above for 1989. The additional production capacity of 25,000 units should be used for the manufacture of Product B for which new production facilities were to be created at an annual fixed overhead cost of Rs 35,000. The direct material costs of all the four products were expected to increase by 10% in 1990 while the other costs and selling prices would remain the same. Required: (a) Find the profit of 1989 on the assumption that the existing capacity of 10,000 units is utilised to maximise the profit. (b) Prepare a statement of profit for 1990. (c) Assuming that the increase in the output of Product 'B' may not fully materialise in the year 1990, find the number of units of Product B to be sold in 1990 to earn the same overall profit as in 1989. [Ans. (a) Profit (Loss):

A: Rs 45,000 + B: Rs 16,250 + C: Rs 1,16,250 + D: (37,500) = Rs 1,40,000. (b) Profit (Loss): A: Rs 33,000 + B: Rs 1,47,000 + C: Rs 79,500 + D: (

Rs 73,500) =

51-94) Unit 4:

Rs 1,86,000. (c) 23,333 units.] 8.22 FURTHER READING 1.

Maheshwari, S.N. and S.K. Maheshwari, An Introduction to Accountancy. 2. Maheshwari, S.N. and S.K. Maheshwari, A Text Book for Accounting for Management.

Notes Self-Instructional 360 Material

Self-Instructional Material 361 Notes

Notes Self-Instructional 362 Material

Hit and source - focused comparison, Side by Side

Submitted text		As student entered the text in the submitted document.						
Matching text		As the text appears in the source.						
1/3	SUBMITTE	DTEXT	18 WORDS	60%	MATCHING TEXT	18 WORDS		
Preparation of Financial Statements: Profit and Loss					Preparation of Financial statements; 6 & 9 Profit and loss			
Account and Balance Sheet with Necessary Adjustments.					Account ; 6 & 9 Balance Sheet ; 6 & 9 Cash Flow			
Analysis and Interpretation of Financial					statement; 12 5. Analysis and Interpretation of Financial			
M https://ddceutkal.ac.in/Downloads/UG_SLM/Comme					erce/Financial_Accounting.pdf			
2/3	SUBMITTE	DTEXT	20 WORDS	76%	MATCHING TEXT	20 WORDS		
Unit 1: Accounting: Meaning, Scope and Principles				Unit-2: Accounting Principles and Standards (Pages 13-				
(Pages: 5-34) Unit 2: Journalising Transactions (Pages:				30) Unit-3: Journalising Transactions (Pages 31-48) Unit-				
35-50) Unit 3: Ledger Posting and Trial Balance (Pages:				4: Ledger Posting and Trial Balance (Pages 49-71) Unit-5:				

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3/3	SUBMITTED TEXT	19 WORDS	57%	MATCHING TEXT	19 WORDS					
Pages: 95-124) Unit 5: Company Financial Statements (Pages: 127-162) Unit 6: Financial Statements: Analysis and Interpretation (Pages: 163-218) Unit 7: Cash and				Pages 219-232) Unit-10: Corporate Disclosure and Financial Reporting (Pages 233-253) Unit-11: Financial Statements: Analysis and Interpretation (Pages 255-296)						
Funds Flow S	Statements (Pages: 219-301)		Unit-12: Cash Flow Statement (Pages 297-320)							
W https://ddceutkal.ac.in/Syllabus/MCOM/Financial_Accounting.pdf										