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SEMESTER - VI

COMMERCE

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BACHELOR OF COMMERCE

MANAGEMENT ACCOUNTING

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COURSE INTRODUCTION

The course '*Management Accounting'* of B.Com sixth semester will discuss the different aspects of management accounting. In modern days business information plays an important role. Both management and other stakeholders are interested in this information. In this respect accounting information plays the crucial role by supplying cost and profit information to the managers. Management accounting helps in preparing accounting reports to facilitate managerial decision- making. Preparing of various financial reports and budgets are essential for the efficient management of resources of the organisation. The scope of management accounting is wider than any other branch of accounting. All these aspects have been covered in this course to equip the learners with sufficient knowledge in this area.

While going through a unit, you will notice that some along-side boxes, which have been included to help you know some of the difficult, unseen terms. Some ''ACTIVITY'' (s) has been included to help you to apply your own thoughts. Again, we have included some relevant concepts in ''LET US KNOW'' along with the text. At the end of sections, you will get ''CHECK YOUR PROGRESS'' questions. These have been designed to self-check your progress of study. It will be better if you solve the problems put in these boxes immediately after you go through the sections of the units and then match your answers with ''ANSWERS TO CHECK YOUR PROGRESS'' given at the end of each unit.

UNIT 1: INTRODUCTION TO MANAGEMENT ACCOUNTING

UNIT STRUCTURE

1.1 Learning Objectives
1.2 Introduction
1.3 Meaning and Evolution of Management Accounting
1.4 Scope of Management Accounting
1.5 Functions of Management Accounting
1.6 Relationship between Cost Accounting and Management Accounting
1.7 Relationship between Financial Accounting and Management Accounting
1.8 Limitations of Management Accounting
1.9 Management Accounting Principles
1.10 Let Us Sum Up
1.11 Further Reading
1.12 Answers To Check Your Progress
1.13 Model Questions

1.1 LEARNING OBJECTIVES

After going through this unit you will be able to:

- describe the meaning of management accounting
- describe the scope and functions of management accounting
- discuss relationship between management, financial and cost accounting
- explain limitations of management accounting
- explain the principles of management accounting.

1.2 INTRODUCTION

Management accounting is a branch of financial accounting which is concerned with study of the managerial aspects of accounting. Any system

of accounting may be termed as management accounting if it is helpful to management. Any system of accounting which helps the management in its functions of planning, organizing, directing, coordinating and controlling the activities of an organization may be appropriately included within the term management accounting.

1.3 MEANING AND EVOLUTION OF MANAGEMENT ACCOUNTING

Management Accounting, also known as 'Accounting for Management' or 'Management Oriented Accounting' is made up of two words 'management' and 'accounting'. It refers to the study of managerial aspect of accounting. In simple words, we can say that any system of accounting which helps the management in planning, organizing, directing and controlling the operations in an undertaking may be regarded as management accounting. It is that system of accounting which helps the management in conducting their business more efficiently, smoothly and economically.

The term 'management accounting' is of recent origin. The term was first used by a visiting team of accountants in 1950 under the auspices of Anglo-American Council of Productivity. The study group felt that though financial accounting conveys meaningful information to outsiders, it fails to communicate valuable and varied information to management. The evolution of corporate form of business organization has resulted in large scale production and separation of ownership and management. Thus, with growth in the size and ever growing complexities of business environment owing to a number of factors like large scale production, use of advanced sophisticated technology, gradual professionalization of management etc have made the task of management quite complicated. All these factors have necessitated the use of management accounting for planning, decision making, coordinating and controlling the operations in an undertaking. In a small business the owner himself takes responsibilities for decision making as well as their implementation and he does not therefore feel the necessity of setting up a separate communication system. All these information needs are met by the financial accounting system. But evolution of corporate form

of business organization brought about a sea change in the entire business environment. The introduction of professionalism in management led to division of an organization into too many functional areas necessitating the application of the principles of 'delegation of authority and responsibility'. Modern managers need meaningful and timely data for decision making for which a sound information system or network has to be set up for providing information to the management with a view to helping them in planning and controlling the business efficiently. Thus, the role of accounting has radically changed. The change in the business environment has changed the role of accounting from a mere device of recording to a powerful tool of planning, forecasting, budgeting and budgetary control etc. In the circumstances, management accounting gradually emerged in order to overcome the limitations of financial accounting and cost accounting.

Let us have a look at the various definitions given by different authors and authorities:

The American Accounting Association:

"Management Accounting includes the methods and concepts necessary for effective planning, for choosing among alternative business actions and for control through the evaluation and interpretation of performances."

The Institute of Chartered Accountants of England and Wales:

"Any form of accounting which enables a business to be conducted more efficiently can be regarded as management accounting".

The Anglo-American Council of Productivity:

"Management Accounting is the presentation of accounting information in such a way as to assist management in the creation of policy and the day-to-day operation of an undertaking".

The Institute of Chartered Accountants of India:

"Such of its techniques and procedures by which accounting mainly seeks to aid the management collectively have come to be known as management accounting".

Robert N Anthony:

"Management Accounting is concerned with accounting information that is useful to management".

J. Batty:

"Management Accounting is the term used to describe the accounting methods, systems and techniques which, coupled with special knowledge and ability, assist management in its task of maximizing profits or minimizing losses".

Brown and Howard:

"The essential aim of management accounting should be to assist management in decision making and control".

N.K. Bose:

"Management Accounting is accounting for effective management".

Different authors and authorities have made an attempt to define 'Management Accounting' from different angles. It has transpired from almost all the definitions that management accounting deals with presentation of accounting information to the management for the purpose of assisting them in discharging the functions of management more efficiently. The major thrust of the definitions is on presentation of information rather than on collection. There is a general agreement of opinion amongst all the authors that management accounting is basically concerned with recording, analyzing and presentation of accounting information to management in such a way that it becomes more and more useful to them for planning, organizing, directing and controlling the activities of the organization more efficiently and economically. Management accounting is a important tool to achieve the objectives of a business enterprise and Batty's definition suggests that the user should have special knowledge and ability to handle this important tool.

1.4 SCOPE OF MANAGEMENT ACCOUNTING

Management accounting which is considered to be a new approach to accounting is immensely useful to management as it helps the management in planning, directing and controlling the activities of the organization. Besides the above major areas, management accounting helps

the management in other areas too. Hence, the scope of management accounting is wider than any other branch of accounting and broadly it includes the following which form the scope of management accounting:

1. **Financial Accounting**: By nature, financial accounting is based on historical cost as it records only those transactions which have already taken place. Undoubtedly, these records are extremely helpful for planning and control. Planning is of course based on past information or experience, present situation and future expectation while controlling may be done through performance appraisal taking the recorded facts and figures as the basis. So., financial accounting is also included within the scope of management accounting.
2. **Cost Accounting**: Cost accounting methods and techniques are applied basically for the purpose of determination of the true cost of production, fixing the selling price, providing a basis to the management for decision making and controlling the cost. Certain cost accounting tools like standard costing, marginal costing, differential costing, responsibility accounting and budgeting etc are extremely useful to the management for drawing up various plans and programmes, policy formulating and decision making etc .These tools and techniques of cost accounting are frequently used by management accounting and as such management accounting includes within its scope cost accounting also.
3. **Budgeting and Forecasting**: Budgeting refers to preparation of a blue print for future course of action and it lays down the targets to be achieved and policies to be followed during a specified future period. The standards and targets are set for various departments with authority delegated to various departmental heads for fulfilling the same. From time to time actual performance is reviewed and compared with the budged figures and in this way the management gets some idea about the working of the various departments. Forecasting involves predicting the future on the basis of a given set of conditions, like estimating the future demands in order to gear up production. Therefore, management accounting embraces within its scope both budgeting and forecasting.

4. **Inventory Control**: Inventory refer to stock of raw materials held for the purpose of converting them into finished goods, work in progress representing semi manufactured goods lying in the factory, and the stock of finished goods available for sale. Proper valuation of inventory is essential for the purpose of correct determination of profit. Similarly proper control of inventory is also essential for the purpose of overcoming certain problems associated with over and under stocking of inventories. Management accounting helps the management in deciding many important issues connected with buying, storing and holding of inventories from the point of buying till the point of consumption for the purpose of exercising more effective control over inventories. Hence, inventory control is also included within the scope of management accounting.

5. **Reporting to Management**: Reporting to management is an important part of management accounting. The management is posted with information relating to various activities of the organization from time to time which helps the management in controlling the operations. Management accounting reports are prepared and presented in various forms using graphs, charts, diagrams, tables etc so that management can understand and appreciate them in a better way and can initiate control measures on the basis of such reports whenever needed.

6. **Financial Analysis and Interpretation**: Financial statements comprising of the Trading Account, the Profit & Loss Account, the Balance Sheet, the Cash Flow and Fund Flow Statements etc are prepared and presented annually by every undertaking. Such statements are usually prepared in a conventional and technical manner according to requirements of law. Everyone can not understand such technical complicated financial statements. Management accounting undertakes an in-depth analysis of all such statements and interprets them and presents the conclusion drawn to the management in a simple and non-technical manner. It helps the management not only in understanding the significance of the financial information but also in taking appropriate policy decisions. Therefore,

financial analysis and interpretation is also included with the scope of management accounting.

7. **Control Accounting**: Almost all concerns have their own control system. Management accounting helps in developing a control mechanism within the organization in order to enable the management to exercise effective control over the various activities of the organization to ensure optimum, efficient and economic utilization of limited available resources.
8. **Internal Check and Internal Audit**: Internal check, internal audit, efficiency audit and management audit are other devices designed to detect weak-spots, inefficiencies, wastages and losses etc within the organization. Performance evaluation and responsibility accounting will further help the management in fixing the responsibility on those individuals authorized for spending and controlling expenditures in their own department. So, these control devices are also included within the scope of management accounting.
9. **Tax Planning and Administration**: Planning and administration of tax matters like computing the correct taxable income or sales and determining the tax liability thereon, submitting the return of income and turnovers etc and complying with the various statutory obligations, representing the company before the tax authorities etc are also embodied within the scope of management accounting. Management accountant helps the management with his expert advice on tax matters.
10. **Office Administration**: Management accounting helps the management in organizing the office to ensure systematic and quick processing of papers, preserving records and files, using appropriate filing and indexing system and other labour saving devices etc. Setting up a communication network for free and quick flow of information and reporting to management etc. are also included within the ambit of management accounting.



CHECK YOUR PROGRESS

Q 1: Define management accounting.

……..……

……..……

……..……

Q 2: Write five points which are included within the scope of Management Accounting.

i) ……..……

ii) ……..……

iii) ……..……

iv) ……..……

v) ……..……

1.5 FUNCTIONS OF MANAGEMENT ACCOUNTING

Management accounting is essentially a study of managerial aspect of accounting and as such it is primarily concerned with collecting, classifying, analyzing, interpreting and presenting accounting information to the management for the purpose of enabling the management to conduct and control the activities of the undertaking more efficiently, economically and smoothly. The following are the important functions of management accounting:

1. **To help management in planning and forecasting**: Planning involves assessing the future and making provision for it accordingly. Forecasting involves a scientific prediction about the future. Both are essential for achieving the objectives of the organization. Hence the primary function of management accounting is to help the management in planning and forecasting for the future. With tools like budgeting, standard costing, marginal costing, fund flow and cash flow analysis technique, trend ratios and probability analysis etc it can help the management in determining the targets, standards and goals for the undertaking. These tools of management accounting are extremely useful for planning and forecasting.

2. **To help in modifying the crude data**: Function of management accounting includes modifying the crude accounting information with a view to make them more and more useful to management for decision making. Management accounting uses various statistical devices for analyzing, classifying, tabulating and presenting the information in a more clear and concise manner to the management so as to suit their requirement.
3. **To help in analyzing and interpreting financial statements**: Financial statements like the Profit and Loss account and the Balance Sheet etc are usually prepared in a technical manner based on certain accounting concepts and conventions and according to requirements of law which everyone can not understand. Management accounting, with its various tools of financial analysis like comparative statements, common size statements, ratio analysis, trend analysis, cash and fund flow analysis techniques analyses and interprets the financial statements and presents the conclusion drawn from such analysis to the management in a very simple and non technical language so that they can understand and appreciate and utilize the information for policy making.
4. **To help in setting up control devices:** An important function of management accounting is to help the management in controlling the activities of the organization in a most effective manner. This is done by means of performance appraisal and setting up of standards for various individuals and departments. The actual performance is reviewed from time to time and compared with the predetermined standards. The deviations are calculated and corrective measures are taken to control the unfavourable trends. Management accounting tools like standard costing and budgetary control are extremely useful for controlling the operations.
5. **To help in communicating:** Management accounting helps in setting up of a communication network to communicate internally and externally with the outside world. This is done with the help of reports prepared both for internal and external use.

6. **To help in co-coordinating**: Co-ordination is essential for smooth running of the enterprise. It implies linking up one department with the other department in such a way so that all the departments work collectively in a harmonious and systematic way for achieving the objectives of the organization. Management accountant acts as a co-coordinator and co-ordinates the activities of various departments through budgeting. Better co-ordination results in a high degree of efficiency and higher profitability.
7. **To help the management in taking strategic decisions**: There are certain strategic decisions which are extremely difficult for the management to take independently like decision to make or buy, lease or buy, replace or repair, adding a new product, dropping an existing product and diversification etc. Management accounting examines the financial implications of such decisions on the basis of cost –benefit analysis and prepares and presents analytical information of various alternative decisions with a view to enabling the management to choose the best from amongst various alternatives.
8. **To disseminate information to various levels of management**: The function of management accounting is to ensure free flow of information to various levels of management for policy formulation and decision making. The top level management frames the broader policies and passes on the same to the lower level management for execution. Management accountant has to supply information to different levels of management so that any further decision needed may be taken within the policy guidelines framed by the top level management.
9. **To help management with qualitative information**: It should be noted that unlike financial accounting, management accounting is free to use both quantitative and qualitative information to meet the information needs of the management. The use of appropriate qualitative information helps the management to a great extent in framing up plans.



CHECK YOUR PROGRESS

Q 3: Mention five functions of Management Accounting.

i) ……

ii) ……

iii) ……

iv) ……

v) ……

1.6 RELATIONSHIP BETWEEN COST ACCOUNTING AND MANAGEMENT ACCOUNTING

The fundamental objectives of cost accounting are (i) ascertainment of correct cost of production, (ii) fixation of selling price, (iii) providing a basis for managerial decision making and (iv) to enable the management to exercise control over cost. Hence , cost accounting helps the management not only in calculating the cost but also in decision making and control and it is mainly for this reason that most of the tools and techniques of cost accounting are being used by management accounting for helping the management in planning and controlling the operations. In fact management accounting uses the cost information derived from costing records for presenting information to management. However, the scope and functions of management accounting are much wider than that of cost accounting as it has to perform many more functions. Both cost accounting and management accounting are complimentary in nature and both are equally essential for running an enterprise more efficiently, smoothly and economically. The mechanism of management accounting can be successfully operated only if there exists a well established costing system. In spite of some similarity, there are some differences between cost accounting and management accounting

The following are the basic differences between cost accounting and management accounting:

1. Objectives: The fundamental objectives of cost accounting are

ascertainment of cost of production, fixation of selling price, providing a basis for managerial decision making and cost control. But the primary objective of management accounting is to provide information to management for variety of purposes.

2. **Scope:** The scope of management accounting is wider than that of cost accounting as it includes within its scope financial accounting, cost accounting, financial statement analysis, tax planning and administration, revaluation accounting and reporting to management etc while cost accounting includes within its scope the aforesaid four functions.
3. **Nature:** In cost accounting both past and present figures are used while management accounting is more concerned with projection of data for the future.
4. **Type of data used:** In cost accounting only those transactions are recorded which can be quantified or expressed in terms of money but management accounting uses both monetary and non monetary information.
5. **Development:** The great industrial revolution in England contributed a lot in developing cost accounting as financial accounting owing to some inherent limitations failed to satisfy the information needs of the management while management accounting is of recent origin only. It has developed only in the thirty years or so.
6. **Principles and procedures followed**: Cost accounting has certain principles, rules, procedures, methods and techniques of their own which it has to follow strictly at all times and under all circumstances while management accounting is at liberty to adopt and apply any principle, method or technique which better serves the information needs of the management.

1.7 RELATIONSHIP BETWEEN FINANCIAL ACCOUNTING AND MANAGEMENT ACCOUNTING

Financial accounting is basically concerned with recording of day to day transactions of the business in a systematic manner so that the concern

is in a position to compile the Profit and Loss account for the accounting period in order to ascertain their profit and loss and a Balance Sheet as at the close of the accounting period to ascertain the financial position of the business. Management accounting collects the financial information from the financial accounting records and other sources like cost accounting records. Such collected information are modified and presented by management accounting to management in such a way so that they become more useful to management for planning and policy making. Thus, management accounting is only an offshoot of financial accounting. Financial accounting and Management accounting are both complementary to each other and both are essential for smooth and efficient running of the business. In spite of this close relationship between the financial accounting and Management accounting, there are certain fundamental points of difference between them. The main points of distinction are given as under:

1. **Objectives**: The basic object of financial accounting is to record the day to day business transaction in a systematic manner in a set of books for ascertaining the profit and loss earned by the business during a given year and also to ascertain the financial position of the business at the close of the accounting period while the primary object of management accounting is to help the management in planning, forecasting, organizing, co-coordinating and controlling the operations.
2. **Nature:** Financial accounting is based on historical cost. It records only those transactions, which have already occurred. Management accounting on the other hand, is concerned with projection of data for the future. Financial accounting uses actual figures but management accounting uses projected or estimated figures.
3. **Scope**: The scope of management accounting is wider than that of financial accounting. Management accounting includes within its purview cost accounting, statistical methods, administration of tax matters, management information system and financial statement analysis etc But financial accounting includes within its scope only two functions, i.e., ascertainment of profitability for the accounting period and financial position of the concern on a definite date.

4. **Subject Matter**: The function of financial accounting is restricted to ascertainment of profitability of the business as a whole for a given period and determination of the financial position of the concern on a definite point of time. Management accounting does the same thing but in greater detail throwing light on the results of each department, division or cost center separately.
5. **Compulsion**: Maintenance of financial accounts is compulsory in case of certain undertakings under various laws but management accounting is not at all compulsory under any law.
6. **Type of data used:** In financial accounting only those transactions are recorded which are capable of being expressed in terms of money while in management accounting the data dealt with may be both quantitative and qualitative.
7. **Precision or degree of accuracy**: In financial accounting only actual figures are used in order to ensure a high degree of accuracy and there is no scope for using approximate figures while in management accounting approximate or projected figures are considered more relevant and useful for decision making.
8. **Reporting**: Financial accounting is usually a matter of legal necessity. Financial accounts are prepared mainly for ascertaining profitability and financial position and its reports are made available to all outsiders interested in the company. Its report is also kept for internal use by management. Management accounting is installed primarily for the benefit of the management. It is usually confidential in nature and therefore its reports are made available only for the exclusive use of the management.
9. **Frequency of reporting**: Financial accounts are prepared at the end of the accounting period and then only it is reported to all concerned. It is reported only once in a year but management accounting reports are prepared and presented to management as and when required by management. It is reported more frequently.
10. **Accounting principles**: Financial accounts are maintained strictly according to some accepted accounting principles, concepts and conventions but no such principles are followed in management

accounting. Management accountant is at liberty to adopt any method or technique, which may be considered appropriate to suit the needs of the management.

11. **Periodicity**: According to periodicity concept, financial accounts are prepared for a period of one year. In management accounting, there is no such specified period fixed for preparation of management accounting reports.
12. **Publication of Reports**: Under the Indian Companies Act, 1956, every registered company is required to furnish a copy of their Profit and Loss Account and Balance Sheet duly audited by the company's auditor to the members of the company before holding the annual general meeting of the company. Copies of annual accounts are also required to be made available to various government departments, financial institutions and banks etc. Therefore, financial accounts are generally published in the form of a printed booklet while management accounting reports are highly confidential in nature and they are meant for internal use of the management. So, there is no question of publication of management accounting reports.
13. **Audit**: financial accounts are compulsorily required to be audited in case of certain undertaking under various statutes but there is no scope for audit of management accounting records, as they are not based on actual figures.

1.8 LIMITATIONS OF MANAGEMENT ACCOUNTING

Management accounting suffers from the following limitations:

1. **It is based on accounting information**: Management accounting information is based on data furnished by cost accounting and financial accounting. Therefore, the correctness of the decisions taken by management depends to a great extent on the reliability, authenticity and accuracy of the data on which the decisions are based. If the data furnished by cost accounting or financial accounting are not reliable then the decisions taken by management accounting on the basis of such data will also be incorrect.

2. **Its user may have lack of knowledge**: The person using management accounting techniques must be well conversant with a number of allied subjects like financial accounting, cost accounting, economics, law, principles of management and statistical methods. Lack of knowledge of any subject on the part of the user will limit the usefulness of management accounting.
3. **Intuitive decisions of the user affect the usefulness**: Under management accounting decisions are made on the basis of some scientific analysis supported by facts and figures. Sometimes, management may avoid such a long drawn process of arriving at a decision adopt a short cut approach of decision making using their intuition. Such intuitive decisions very often limit the utility of management accounting.
4. **It is not a substitute to administration**: The tools and techniques of management accounting are applied for presenting information with a view to helping the management in their decision making process. Management has to take decisions on the basis of such information provided by management accounting. So, management accounting can furnish only the information and not the decision. Hence, it is not an alternative to administration.
5. **It is highly expensive**: The installation of a management accounting system calls for a radical change in the organization structure of the undertaking which is, indeed, a very costly affair beyond the affordable range of small concerns. Only big enterprises can afford to support the cost of using management accounting.
6. **It is still in an evolutionary stage**: Management accounting has not yet reached its finished form. It is still in an evolutionary stage. Hence, the conclusion drawn from analysis of data using the tools and techniques of management accounting may not always be uniform and correct.
7. **It is affected by personal bias of the user**: The conclusions drawn from analysis and interpretation of financial data using the tools and techniques of management accounting should be based on objective

assessment of facts. The correctness of conclusions drawn depends upon the professional competence of the user. It is also essential that the user should be unbiased. But in practice, personal prejudices and biasness of the user very often affect the objectivity of the decisions.

Possibility of psychological resistance from different corners: The installation of a management accounting system calls for a radical change in the organization structure of the company with too many rules and regulations required to be framed for its working. Since its installation affects the present set up so there is a strong possibility of resistance from different corners.

1.9 MANAGEMENT ACCOUNTING PRINCIPLES

Management Accounting Principles are largely internal, but certain accepted principles of financial accounting are applicable to management accounting too. All these accepted principles have been developed over the years and they have now taken the form of conventions and form the very basis of accounting system serving as a guide to sound accounting practices. The important principles of management accounting are as follows:

1. Accounting concerns itself with the recording of business transactions only.
2. As far as possible, costs and revenues should be properly matched.
3. Profits should be credited on realization basis while losses should be provided in advance.
4. The methods, procedures and principles should be consistent.
5. The principles of matching costs with revenues should be strictly followed.
6. The entire accounting information, past, present or future, in any form should be designed to meet the particular needs of the business.
7. The principle of reporting by exceptions should be followed while presenting information to management.
8. The object of control at source accounting be followed. It means that control mechanism should be established at the point where costs are incurred.

9. The accounting records should be kept as objective as possible.
10. A profit can not be said to be earned unless capital employed is maintained intact in real terms.
11. For measuring the efficiency of business, techniques of measuring the returns on capital should be adopted.
12. The management information should be fully integrated.
13. Overhead costs should be apportioned to the cost centers and recovered by products. The basis for recovery may be either the benefit received for fixed costs or responsibility incurred for variable costs.
14. Management accounting must attempt to show whether the resources of the business are most effectively utilized.
15. Responsibility should be identified on the basis of the distinction between controllable and non controllable costs.
16. Management accounting should be forward looking.
17. The means of recording accounting information and presenting it to the management should be most appropriate.
18. Reports and statements should not be used as a substitute for personal contacts with the persons at the higher levels of authority.



1.10 LET US SUM UP

In this unit we have discussed the following:

- The meaning and nature of Management accounting
- The functions performed by management accounting
- The scope of management accounting
- That management accounting suffers from certain limitations
- What distinguishes it from cost accounting
- The difference between financial accounting and management accounting, and the principles of management accounting



1.11 FURTHER READING

1) Management Accounting: Sharma & Gupta, Kalyani Publishers, Delhi.
2) Management Accounting: Pillai & Bhagawathi, S Chand & Co Ltd. Delhi.
3) Management Accounting: Khan & Jain, Tata Mc-graw Hills Ltd. Delhi.



1.12 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: According the Institute of Chartered Accountants of India management accounting means:

"Such of its techniques and procedures by which accounting mainly seeks to aid the management collectively have come to be known as management accounting".

Ans to Q No 2: The scope of management accounting includes:

i) Financial Accounting
ii) Cost Accounting
iii) Budgeting and Forecasting
iv) Inventory Control
v) Reporting to Management

Ans to Q No 3: The five functions of management accounting are:

i) To help management in planning and forecasting
ii) To help in modifying the crude data
iii) To help in analyzing and interpreting financial statements
iv) To help in setting up control devices
v) To help in communicating

1.13 MODEL QUESTIONS

Q 1: Define Management Accounting. Discuss briefly the functions of management accounting.

Q 2: Discuss the scope and limitations of management accounting.

Q 3: Bring out clearly the points of distinctions between cost accounting and management accounting.

Q 4: State the points of differences between management accounting and financial accounting.

Q 5: Narrate the principles of management accounting.

Q 6: What is Internal Check?

Q 7: What is Internal Audit?

Q 8: What is Control Accounting?

Q 9: What do you understand by interpreting financial statement?

Q 10: What do you mean by strategic decisions?

Q 11: How can management accounting help in planning and forecasting?

Q 12: How can management accounting help in coordinating?

Q 13: What are the fundamental objectives of cost accounting?

Q 14: Mention five points of distinction between cost accounting and management accounting.

Q 15: Write two sentences on the scope of cost accounting and management accounting?

Q 16: Does cost accounting follow some accepted principles and procedures?

Q 17: What type of data is being used in management accounting?

Q 18: Mention five distinctions between financial accounting and management accounting.

Q 19: Mention five limitations of management accounting.

Q 20: Why it is said that management accounting is not a substitute to administration?

Q 21: Is management accounting based on data provided by financial accounting and cost accounting?

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UNIT 2 : FINANCIAL STATEMENT ANALYSIS

UNIT STRUCTURE

2.1 Learning Objectives

2.2 Introduction

2.3 Financial Statements

- 2.3.1 Balance Sheet
- 2.3.2 Statement of Profit And Loss
- 2.3.3 Cash Flow Statement
- 2.3.4 Funds flow Statement

2.4 Analysis and Interpretation of Financial Statements

2.5 Objectives of Financial Statements Analysis

2.6 Methods of Analysis of Financial Statements

- 2.6.1 Comparative Statements
- 2.6.2 Common Size Statements
- 2.6.3 Trend Analysis
- 2.6.4 Funds flow analysis
- 2.6.5 Cash flow analysis

2.7 Practical Problems

2.8 Let Us Sum Up

2.9 Further Reading

2.10 Answers To Check Your Progress

2.11 Model Questions

2.1 LEARNING OBJECTIVES

After going through this unit, you will be able to

- analyse financial statements
- explain balance sheet
- define components of balance sheet
- explain profit and loss account
- explain the concept of profit
- outline statement of cash flow
- outline statement of fund flow.

2.2 INTRODUCTION

The financial statements are important source of information available to the public, shareholders, investors and creditors and the governments regarding the activities and affairs of a business entity. But, these statements may not reveal in itself all the vital information required in the decision making process of its stakeholders and prospective investors. As such, they need to be carefully studied, analysed and interpreted to obtain the material and relevant information.

In this unit we are going to discuss about the concept of financial statement. We shall also discuss the different financial statements, like- Balance Sheet, Statement of Profit and Loss, Cash Flow Statement and Fund Flow Statement. We shall also discuss about analysis of these financial statements.

2.3 FINANCIAL STATEMENTS

Financial statements are the sources of information for financial decisions. These statements provide information on how a company has been performing over the years and are useful for financial forecasting and planning. A financial statement is a collection of data organized in accordance with logical and consistent accounting procedures. In the words of John Myer : " The financial statements provide a summary of the accounts of a business organization, the balance sheet reflecting the assets, liabilities and capital as on a certain date and the income statement showing the results of operations during a certain period." Thus financial statements are periodic financial reports of a company.

The provisions of the Indian Companies Act, 2013 have to be followed while preparing the financial statements of a company:

(i) As per Section 2 (40), financial statements include balance sheet, profit and loss account / income and expenditure account, cash flow statement, statement of changes in equity and any explanatory note annexed to the above.

(ii) Section 129 (1) of the Indian Companies Act, 2013 states that the

financial statements shall give a true and fair view of the state of affairs of the company and shall comply with the Accounting Standards notified under section 133.

(iii) Section 129 (1) also states that the financial statements shall be prepared in the form provided in schedule III of Indian Companies Act, 2013.

2.3.1 Balance sheet

Balance Sheet is the most significant financial statement. The balance sheet shows the financial condition of a business at a given point of time. It lists the sources of funds as well as their uses. It is a classified summary of assets and the sources of financing the assets. However, it is a static statement as it shows the position of the business at a certain moment of time. The companies have to show their assets and liabilities in the balance sheet in accordance with the form prescribed under the Companies Act, 2013.

Schedule III of the Companies Act, 2013

PART I – BALANCE SHEET

Name of the Company……..

Balance Sheet as at……...

(Rupees in……..)

Particulars	Note No.	Figures as at the end of current reporting period	Figures as at the end of previous reporting period
1	2	3	4
I. EQUITY AND LIABILITIES			
1. Shareholders' funds			
a) Share capital			
b) Reserves and Surplus			

c) Money received against share warrants			
2. Share application money pending allotment			
3. Non-current liabilities			
a) Long-term borrowings			
b) Deferred tax liabilities (Net)			
c) Other long term liabilities			
d) Long-term provisions			
4. Current liabilities			
a) Short-term borrowings			
b) Trade payables			
c) Other current liabilities			
d) Short-term provisions			
Total			
II. ASSETS			
1. Non-current assets			
a) Fixed assets			
i) Tangible assets			
ii) Intangible assets			
iii) Capital Work-in-progress			
iv) Intangible assets under development			
b) Non-current investments			
c) Deferred tax assets (Net)			
d) Long-term loans and advances			
e) Other non-current assets			
2. Current assets			
a) Current investments			
b) Inventories			
c) Trade receivables			
d) Cash and cash equivalents			
e) Short-term loans and advances			
f) Other current assets			
Total			

2.3.2 Statement of Profit And Loss

The Statement of Profit and Loss represents the summary of revenues, expenses and net income (or net loss) of a company. This statement is a performance report recording the changes in income, expenses, profits and losses as a result of business operations. When the revenues are more than expenditures, there will be a profit. If the expenditures are in excess of revenues, there will be loss. This profit and loss or income statement is prepared for a particular period, generally a year for determining the performance of the company.

The Companies Act, 2013 specifies that the Statement of Profit and Loss must show information as required by Schedule III.

PART II – STATEMENT OF PROFIT AND LOSS

Name of the Company……..

Balance Sheet as at……...

(Rupees in……..)

Particulars		Note No.	Figures for the current reporting period	Figures for the previous reporting period
1		2	3	4
I	Revenue from operations		xxx	xxx
II	Other income		xxx	xxx
III	Total Revenue (I+II)		xxx	xxx
IV	Expenses:			
	Cost of materials consumed		xxx	xxx
	Purchase of Stock-in-Trade		xxx	xxx
	Changes in inventories of finished		xxx	xxx
	goods		xxx	xxx
	Work-in-progress and		xxx	xxx

	Stock-in-trade		xxx	xxx
	Employee benefits expenses		xxx	xxx
	Finance costs		xxx	xxx
	Depreciation and amortisation expenses		xxx	xxx
	Other expenses		xxx	xxx
	Total expenses		xxx	xxx
V	Profit before exceptional and extraordinary items and tax (III-IV)		xxx	xxx
VI	Exceptional items		xxx	xxx
VII	Profit before extraordinary items and tax (V-VI)		xxx	xxx
VIII	Extraordinary items		xxx	xxx
IX	Profit before tax (VII-VIII)		xxx	xxx
X	Tax expense:			
	(1) Current tax		xxx	xxx
	(2) Deferred tax		xxx	xxx
XI	Profit (Loss) for the period from continuing operations (VII-VIII)		xxx	xxx
XII	Profit (Loss) from discontinuing operations		xxx	xxx
XIII	Tax expense of discontinuing operations		xxx	xxx
XIV	Profit (Loss) from discontinuing operations (after tax) (XII-XIII)		xxx	xxx
XV	Profit (Loss) for the period (XI+XIV)		xxx	xxx
XVI	Earnings per equity share:			
	(1) Basic		xxx	xxx
	(2) Diluted		xxx	xxx

2.3.3 Cash Flow Statement

Cash flow signifies the movements of cash in and out of a business concern. A company generates cash and spends cash and as such cash flow analysis is very useful for a company. It is mainly needed for short- run planning. A cash flow helps to make projections of cash inflows and outflows for the near future to determine the availability of cash during a particular time period. A cash flow statement summarises the changes in cash position between dates of two balance sheets. To understand how a company obtains cash and how it spends cash during a given period, one needs to look at the changes in each of the items of the balance sheet over that period. It indicates the sources and uses of cash. Moreover, this statement analyses changes in non-current assets as well as current assets (other than cash) to determine the flow of cash. We shall discuss about preparing the Cash Flow Statement in our fifth unit.

2.3.4 Funds flow Statement

A fund flow statement is a statement which explains the various sources from which funds were raised and the uses to which these fund were put. A fund flow shows the sources from which the funds are received and the uses (or applications) to which these have been put. In other words, a fund flow statement is used to explain the movement of working capital.

Working capital is defined as the difference between current assets and current liabilities. Working capital determines the liquidity position of the company. As a historical analysis, the statement of changes in working capital reveals to management the way in which working capital has been obtained and used. With this insight, management can prepare the estimates of the working capital flows. A statement reporting the changes in working capital is useful in addition to the financial statement.



CHECK YOUR PROGRESS

Q 3: What do mean by profit and loss account?

.....

.....

.....

.....

Q 4. Write down the uses of cash.

.....

.....

.....

.....

2.4 ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS

Financial statement analysis is comparison of the various items in the financial statements by establishing and evaluating relationships among them so that, it gives a better understanding of the performance and financial status of the business concern.

It involves rearrangement of data in accordance with the purpose of analysis, application of financial tools, evaluating the relationship among the component parts and drawing conclusion based on the analysis. Thus, financial statement analysis includes both analysis and interpretation. Analysis refers to examination of the figures computed and comparison of the same to establish relationship among them and identifying the reasons for the performance or changes.

Interpretation refers to elucidation and explanation of the results of analysis.

Financial Statement Analysis can be defined as a process of critical evaluation of the financial information contained in the financial statements in order to understand and make decisions regarding the operations of the firm. It is basically a study of relationship among various financial facts and figures as given in a set of financial statements, and the interpretation thereof

to gain an insight into the profitability and operational efficiency of the firm to assess its financial health and future prospects. The term analysis means simplification of financial data by methodical classification given in the financial statements. The process of analysing financial statements involves the rearranging, comparing and measuring the significance of financial and operating data. Interpretation, which follows analysis of financial statements, means explaining the meaning and significance of the data. It is an attempt to reach to logical conclusion regarding the position and progress of the business on the basis of analysis.

2.5 OBJECTIVES OF FINANCIAL STATEMENTS ANALYSIS

Analysis of financial statements reveals important facts regarding financial position, profitability, managerial performance and the efficiency of the firm. The prime objectives of the analysing the financial statements are as follows:

(i) to assess the current profitability and operational efficiency of the firm as a whole as well as its different departments so as to judge the financial health of the firm.

(ii) to ascertain the relative importance of different components of the financial position of the firm.

(iii) to identify the reasons for change in the profitability/financial position of the firm.

(iv) to judge the ability of the firm to repay its debt and assessing the short-term as well as the long-term liquidity position of the firm.

2.6 METHODS OF ANALYSIS OF FINANCIAL STATEMENTS

There are various methods to analyse the financial statements of a business entity. The most commonly used techniques of financial analysis are as follows:

1. Comparative Statements

2. Common Size Statements
3. Trend Ratios
4. Funds Flow Analysis
5. Cash Flow Analysis

In this unit, we shall have a brief idea about the first three techniques, viz., comparative statements, common size statements and trend analysis. The ratio analysis and cash flow analysis is covered in detail in subsequent Units.

2.6.1 Comparative Statements

These are the statements showing the profitability and financial position of a firm for different periods of time in a comparative form to give an idea about the position of two or more periods. It usually applies to the two important financial statements, namely, balance sheet and statement of profit and loss prepared in a comparative form. The financial data will be comparative only when same accounting principles are used in preparing these statements. If this is not the case, the deviation in the use of accounting principles should be mentioned as a footnote. Comparative figures indicate the trend and direction of financial position and operating results. This analysis is also known as 'horizontal analysis'.

Comparative statements are prepared by providing columns for the figures for both the current year as well as for the previous year and for the changes during the year, both in absolute and relative terms. As a result, it is possible to find out not only the balances of accounts as on different dates and summaries of different operational activities of different periods, but also the extent of their increase or decrease between these dates. The figures in the comparative statements can be used for identifying the direction of changes and also the trends in different indicators of performance of an organisation.

2.6.2 Common Size Statements

These are the statements which indicate the relationship of different items of a financial statement with a common item by expressing each item as a percentage of that common item. The percentage thus calculated can be easily compared with the results of corresponding percentages of the previous year or of some other firms, as the numbers are brought to common base. Such statements also allow an analyst to compare the operating and financing characteristics of two companies of different sizes in the same industry. Thus, common size statements are useful, both, in intra-firm comparisons over different years and also in making inter-firm comparisons for the same year or for several years. This analysis is also known as 'Vertical analysis'.

Common Size Statement, also known as component percentage statement, is a financial tool for studying the key changes and trends in the financial position and operational result of a company. Here, each item in the statement is stated as a percentage of the aggregate, of which that item is a part. For example, a common size balance sheet shows the percentage of each asset to the total assets, and that of each liability to the total liabilities. Similarly, in the common size statement of profit and loss, the items of expenditure are shown as a percentage of the net revenue from operations. If such a statement is prepared for successive periods, it shows the changes of the respective percentages over a period of time. Common size analysis is of immense use for comparing enterprises which differ substantially in size as it provides an insight into the structure of financial statements. Inter-firm comparison or comparison of the company's position with the related industry as a whole is possible with the help of common size statement analysis.

2.6.3 Trend Analysis

It is a technique of studying the operational results and financial position over a series of years. Using the previous years' data of a business enterprise, trend analysis can be done to observe the percentage changes over time in the selected data. The trend percentage is the percentage relationship, in which each item of different years bear to the same item in the base year. Trend analysis is important because, with its long run view, it may point to basic changes in the nature of the business. By looking at a trend in a particular ratio, one may find whether the ratio is falling, rising or remaining relatively constant. From this observation, a problem is detected or the sign of good or poor management is detected.

The financial statements may be analysed by computing trends of series of information. Trend analysis determines the direction upwards or downwards and involves the computation of the percentage relationship that each item bears to the same item in the base year. In case of comparative statement, an item is compared with itself in the previous year to know whether it has increased or decreased or remained constant. Common size analysis is to ascertain whether the proportion of an item (say cost of revenue from operations) is increasing or decreasing in the common base (say revenue from operations). But in case of trend analysis, we learn about the behaviour of the same item over a given period, say, during the last 5 years. Take for example, administrative expenses, whether they are exhibiting increasing tendency or decreasing tendency or remaining constant over the period of comparison. Generally trend analysis is done for a reasonably long period. Many companies present their financial data for a period of 5 or 10 years in various forms in their annual reports.

2.6.4 Funds flow analysis

The term 'fund' refers to working capital. Working capital refers to the excess of current assets over current liabilities. The term 'flow' means movement and includes both 'inflow' and 'outflow'. Funds flow analysis is concerned with preparation of funds flow statement which shows the inflow (sources) and outflow (applications) of funds in a given period of time. Funds flow analysis is useful in judging the credit worthiness, financial planning and preparation of budgets.

2.6.5 Cash flow analysis

Cash flow analysis is concerned with preparation of cash flow statement which shows the inflow and outflow of cash and cash equivalents in a given period of time. Cash includes cash in hand and demand deposits with banks. Cash equivalents denote short term investments which can be realised easily within a short period of time, without much loss in value. Cash flow analysis helps in assessing the liquidity and solvency of a business concern.

2.7 PRACTICAL PROBLEMS

1. From the following statement of profit and loss prepare a comparative statement of profit and loss of ABC Ltd.:

Particulars	*Note No.*	*2018-19 Rs.*	*2019-20 Rs.*
(i) Revenue from operations		60,00,000	75,00,000
(ii) Other incomes		1,50,000	1,20,000
(iii) Expenses		44,00,000	50,60,000
(iv) Income tax		35%	40%

Solution:

Comparative statement of profit and loss for the year ended March 31, 2019 and 2020:

Particulars	2018-19	2019-20	Absolute Increase (+) or	Percentage Increase
	Rs.	Rs.	Rs.	%
I. Revenue from operations	60,00,000	75,00,000	15,00,000	25.00
II. Add: Other incomes	1,50,000	1,20,000	(30,000)	(20.00)
III. Total Revenue I+II	**61,50,000**	**76,20,000**	**14,70,000**	**23.90**
IV Less: Expenses	44,00,000	50,60,000	6,60,000	15.00
Profit before tax	**17,50,000**	**25,60,000**	**8,10,000**	**46.29**
V Less: Tax	6,12,500	10,24,000	4,11,500	67.18
Profit after tax	**11,37,500**	**15,36,000**	**3,98,500**	**35.03**

2. From the following statement of profit and loss of XYZ Ltd., prepare comparative statement of profit and loss for the year ended March 31, 2019 and 2020:

Particulars	Note No.	2018-19 Rs.	2019-20 Rs.
Revenue from operations		16,00,000	20,00,000
Employee benefit		8,00,000	10,00,000
expenses Other expenses		2,00,000	1,00,000
Tax rate 40 %			

Solution:

Comparative statement of profit and loss of XYZ Ltd.

for the year ended March 31, 2019 and 2020:

Particulars	2018-19	2019-20	Absolute Increase (+) or	Percentage Increase
	Rs.	Rs.	Rs.	%
I. Revenue from operations	**16,00,000**	**20,00,000**	**4,00,000**	**25**
II. Less: Expenses				
a) Employee benefit	8,00,000	10,00,000	2,00,000	25
expenses b) Other expenses	2,00,000	1,00,000	(1,00,000)	(50)
Profit before tax	**6,00,000**	**9,00,000**	**3,00,000**	**50**
III. Less tax @	2,40,000	3,60,000	1,20,000	50
40% Profit after	**3,60,000**	**5,40,000**	**1,80,000**	**50**
tax				

3. From the following Balance Sheets of ABC Ltd. as at March 31, 2018 and 2019, prepare a comparative balance sheet:

Particulars	*Note No.*	*March 31, 2018 (Rs.*	*March 31, 2019 (Rs.*
I. Equity and Liabilities			
1. Shareholders'			
Funds a) Share		20,00,000	15,00,000
capital		13,00,000	14,00,000
b) Reserve and surplus			
2. Non-current Liabilities		19,00,000	16,00,000
Long-term borrowings			
3. Current liabilities		3,00,000	2,00,000
Trade payables		**55,00,000**	**47,00,000**
Total			
II. Assets			
1. Non-current			
assets a) Fixed		20,00,000	15,00,000
assets		19,00,000	16,00,000
- Tangible assets			
- Intangible assets		13,00,000	14,00,000
2. Current assets		3,00,000	2,00,000
- Inventories		**55,00,000**	**47,00,000**
- Cash and Cash Equivalents			
Total			

Solution:

Comparative Balance Sheet of Amrit Limited as at March 31st, 2018 and March 31st , 2019

Particulars	*March 31, 2018* **Rs.**	*March 31, 2019* **Rs.**	*Absolute Increase (+) or Decrease (–)* **Rs.**	*Percentage Increase (+) or Decrease (–)* **%**
I. Equity and Liabilities				
1) Shareholders' funds a)				
Share capital	15	20	5	33.33
b) Reserves and surplus	14	13	(1)	(7.14)
2) Non-current liabilities				
Long-term borrowings	16	19	3	18.75
3) Current liabilities				
Trade payables	2	3	1	50
Total	**47**	**55**	**8**	**17.02**
II. Assets				
1) Non-current assets				
Fixed assets				
a) Tangible assets	15	20	5	33.33
b) Intangible assets	16	19	3	18.75
2) Current assets				
a) Inventories	14	13	(1)	(7.14)
b) Cash and Cash Equivalents	2	3	1	50
Total	**47**	**55**	**8**	**17.02**

4. From the following information, prepare a Common size Income Statement for the year ended March 31, 2019 and 2020:

Particulars	*2018-19* Rs.	*2019-20* Rs.
Net sales	18,00,000	25,00,000
Cost of good sold	10,00,000	12,00,000
Operating expenses	80,000	1,20,000
Non-operating expenses	12,000	15,000
Depreciation	20,000	40,000
Wages	10,000	20,000

Solution:

Common Size Income Statement for the year ended March 31, 2019 and March 31, 2020

Particulars	*Absolute Amounts*		*Percentage of Net Sales*	
	2018-19 Rs.	*2019-20* Rs.	*2018-19* (%)	*2019-20* (%)
Net Sales	25,00,000	18,00,000	100	100
(Less) Cost of goods Sold*	12,00,000	10,00,000	48	55.56
Gross Profit	**13,00,000**	**8,00,000**	**52**	**44.44**
(Less) Operating Expenses**	1,20,000	80,000	4.80	4.44
Operating Income	**11,80,000**	**7,20,000**	**47.20**	**40**
(Less) Non-Operating expenses	15,000	12,000	0.60	0.67
Profit	**11,65,000**	**7,08,000**	**46.60**	**39.33**

Illustration 6

From the following information, prepare Common size statement of profit and loss for the year ended March 31, 2019 and March 31, 2020:

Particulars	*2018-19* Rs.	*2019-20* Rs.
Revenue from operations	*25,00,000*	*20,00,000*
Other income	*3,25,000*	*2,50,000*
Employee benefit expenses	*8,25,000*	*4,50,000*
Other expenses	2,00,000	1,00,000
Income tax (%) of the profit before tax)	30%	20%

Solution:

Common size statement of Profit and Loss for the year ended March 31, 2019 and March 31, 2020:

Particulars	*Absolute Amounts*		*Percentage of Net Revenue from operations*	
	2018-19	*2019-20*	*2018-19*	*2019-20*
	Rs.	*Rs.*	*(%)*	*(%)*
Revenue from Operations	25,00,000	20,00,000	100	100
(Add) Other income	3,25,000	2,50,000	13	12.5
Total revenue	28,25,000	22,50,000	113	112.5
(Less) expenses:				
a) Employee benefit expenses	8,25,000	4,50,000	33	22.5
b) Other expenses	2,00,000	1,00,000	8	5
Profit before tax	18,00,000	17,00,000	72	85
(Less) taxes	5,40,000	3,40,000	21.6	17
Profit after tax	12,60,000	13,60,000	50.4	68

6. Calculate the trend percentages from the following figures of sales, stock and profit of ABC Ltd., taking 2014 as the base year and interpret them.

(Rs. in lakhs)

Year	*Sales (Rs.)*	*Stock (Rs.)*	*Profit before tax (Rs.)*
2014	1,881	709	321
2015	2,340	781	435
2016	2,655	816	458
2017	3,021	944	527
2018	3,768	1,154	627
2019	4,100	1,500	731

Solution:

Trend Percentages (base year 2014 = 100)

(Rs. in lakhs)

Year	*Sales Rs.*	*Trend %*	*Stock Rs.*	*Trend %*	*Profit Rs.*	*Trend %*
2014	1881	100	709	100	321	100
2015	2340	124	781	110	435	136
2016	2655	141	816	115	458	143
2017	3021	161	944	133	527	164
2018	3768	200	1154	163	627	195
2019	4100		1500		731	

Illustration 9

From the following data relating to the assets of Balance Sheet of ABC Ltd., for the period ended March 31, 2018 to March 31, 2019, calculate trend percentages.

(Rs. in Lakhs)

Particulars	2010-11	2011-12	2012-13	2013-14
Cash	100	120	80	140
Debtors	200	250	325	400
Stock	300	400	350	500
Other current assets	50	75	125	150
Land	400	500	500	500
Buildings	800	1000	1200	1500
Plant	1000	1000	1200	1500

Solution:

Trend Percentages

(Rs. in lakhs)

Assets	*2010-11*	*Trend %*	*2011-12*	*Trend %*	*2012-13*	*Trend %*	*2013-14*	*Trend %*
Current Assets								
Cash	100	100	120	120	80	80	140	140
Debtors	200	100	250	125	325	162.5	400	200
Stock	300	100	400	133.33	350	116.67	500	166.67
Other Current Assets	50	100	75	150	125	250	150	300
	650	**100**	**845**	**130**	**880**	**135.38**	**1,190**	**183.08**
Non-current Assets								
Land	400	100	500	125	500	125	500	125
Buildings	800	100	1,000	125	1,200	150	1,500	187.5
Plant	1000	100	1,000	100	1,200	120	1,500	150
	2,200	**100**	**2,500**	**113.64**	**2,900**	**131.82**	**3,500**	**159.00**
Total Assets	**2,850**	**100**	**3,345**	**117.36**	**3,780**	**132.63**	**4,690**	**164.56**

Interpretation:

1. The assets have exhibited a continuous increasing trend over the period.
2. The current assets increased much faster than the Non-current assets.
3. Sundry debtors and other current assets and buildings have shown higher growth.

Illustration 10

From the following data relating to the Equity and liabilities of balance sheet of X Ltd., for the period March 31, 2010 to 2013, calculate the trend percentages taking 2010-11 as the base year.

(Rs. in lakhs)

Particulars	*2010-11*	*2011-12*	*2012-13*	*2013-14*
Equity Share Capital	1,000	1,000	1,200	1,500
General Reserve	800	1,000	1,200	1,500
12% Debentures	400	500	500	500
Bank Overdraft	300	400	550	500
Trade Payable	100	120	80	140
Sundry Creditors	300	400	500	600
Outstanding Liabilities	50	75	125	150

Solution:

Trend Percentages

(Rs. In Lakhs)

Equity and Liabilities	*2010-11*	*Trend %*	*2011-12*	*Trend %*	*2012-13*	*Trend %*	*2013-14*	*Trend %*
Shareholder Funds								
Equity Share Capital	1,000	100	1,000	100	1200	120	1,500	150
General Reserve	800	100	1,000	125	1200	150	1,500	187.5
	1,800	**100**	**2,000**	**111.11**	**2400**	**133.33**	**3,000**	**166.67**
Long-term Debts								
Debentures	400	100	500	125	500	125	500	125
	400	**100**	**500**	**125**	**500**	**125**	**500**	**125**
Current Liabilities								
Bank Overdraft	300	100	400	133.33	550	183.33	500	166.67
Trade Payable	100	100	120	120	80	80	140	140
Sundry Creditors	300	100	400	133.33	500	166.67	600	200
Outstanding Expenses	50	100	75	150	125	250	150	300
	750	**100**	**995**	**132.67**	**1,255**	**167.33**	**1,390**	**185.33**
Total	**2,950**	**100**	**3,495**	**118.47**	**4,155**	**140.85**	**4,890**	**165.76**

Interpretation:

1. Shareholders' funds have increased over the period because of retention of profits in the business in the form of reserves, and the share capital has also increased, may be due to issue of fresh shares or bonus shares.
2. The increase in current liabilities is more than that of long-term debt. This may be due to expansion of business and/or availability of greater credit activities.



2.8 LET US SUM UP

In this unit we have discussed the following:

- Financial statements are the sources of information for financial decisions
- The balance sheet shows the financial position of a firm at a given point of time.
- The profit and loss account reflects the performance of a firm over a period of time.
- The cash flow and fund flow statements show the change in financial position during a given time period.
- The cash flow statement is prepared to analyse changes in the firm's cash position.
- The funds flow statement provides an analysis of changes in the firm's working capital position.
- Funds flow and cash flow statement are important managerial tools for financial analysis.
- They help the firm to know its liquidity position, capital expenditures incurred, dividend paid and the need for external financing.



2.9 FURTHER READING

1) M.Y Khan & P.K Jain(2017); *Financial Management*; McGraw Hill Education; Seventh edition

2) Prasanna Chandra (2017); *Financial Management Theory and Practice*; McGraw Hill Education; Ninth Edition.

3) I.M Pandey (2016); *Financial Management*; Vikas Publishing House; Eleventh edition.

4) Prasanna Chandra (2016); *Fundamentals of Financial Management*; McGraw Hill Education; 6 edition



2.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Financial statements are the sources of information for financial decisions. These statements provide information on how a company has been performing over the years and are useful for financial forecasting and planning.

Ans to Q No 2: Financial statements are the sources of information for financial decisions. These statements provide information on how a company has been performing over the years and are useful for financial forecasting and planning.



Ans to Q No 3: Profit and loss account represents the summary of revenues, expenses and net income (or net loss) of a company.

Ans to Q No 4: a. the loss from operations,

b. increase in assets (except cash),

c. decrease in liabilities (including redemption of debentures or bonds),

d. redemption of redeemable preference shares, and e. cash dividends

Ans to Q No 5: (i) Source of cash, (ii) source of cash, (iii) use of cash, (iv) use of cash, (v) use of cash.

2.11 MODEL QUESTIONS

Q 1: Distinguish between Balance Sheet and Profit and Loss Statement.

Q 2: Distinguish between Cash Flow and Funds Flow Statement.

Q 3: How Capital Reserve is different from Revenue Reserve?

Q 4: What comes under fixed assets and current assets?

Q 5: Write the different steps for preparation of funds flow statement on cash basis.

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UNIT 3: ACCOUNTING RATIOS

UNIT STRUCTURE

3.1 Learning Objectives

3.2 Introduction

3.3 Meaning of Accounting Ratios and Ratio Analysis

3.4 Importance of Accounting Ratios

3.5 Limitations of Accounting Ratios

3.6 Classification of Accounting Ratios

3.7 Liquidity Ratios

3.8 Profitability Ratios

3.9 Let Us Sum Up

3.10 Further Reading

3.11 Answers To Check Your Progress

3.12 Model Questions

3.1 LEARNING OBJECTIVES

After going through this unit you will be able to

- define the meaning of accounting ratios and ratio analysis
- explain the importance of accounting ratios
- find out the limitations of accounting ratios
- classify various accounting ratios
- analyse the liquidity of a company with the help of Liquidity Ratios
- analyse the profitability of a company with the help of Profitability Ratios.

3.2 INTRODUCTION

In the previous unit we have seen that there are numbers of financial statements which are expressed in absolute monetary terms. For proper analysis and understanding of the financial position these money values may not carry the requisite meaning to the users and interpreters. Ratios can help in this regard.

Suppose we want to compare the profitability of two firms X and Y where firm X earns Rs. 1,50,000 profit with a capital of Rs. 75,000 and firm Y earns Rs. 50,000 with a capital of Rs. 20,000. Apparantly, firm X earns more profit in terms of rupee value. But the profitability of X is (1,50,000÷75,000) x 100 = 200% and the profitability of Y is (50,000÷20,000) x 100 = 250%. Hence, firm Y is more efficient in earning profits. Thus, ratios help us to understand the ability of business firms.

Ratio analysis is the most commonly used tool of financial analysis. In the first part of this unit we will discuss the meaning of Ratio Analysis, importance of Ratio Analysis, Classification of Accounting Ratios, and liquidity and profitability ratios.

Ratio analysis is one of the techniques of financial statement analysis. Financial data by itself may not give the complete picture about a company's performance and financial well being. It is difficult to evaluate company's performance in terms of absolute figure without comparing them to certain norms and standards. Ratios provide a set of standardised parameters which can be compared across companies.

3.3 MEANING OF ACCOUNTING RATIOS AND RATIO ANALYSIS

A ratio is a meaningful quantitative relationship between two variables. In accounting these ratios are called Accounting Ratios because these are taken from the financial statements. According to J.Betty: ''The term accounting ratios is used to describe significant relationships which exist between figures shown in a Balance Sheet, in a Profit and Loss Account, in a budgetary control system or in any other part of the accounting organization.''

Ratio analysis is one of the techniques of financial statement analysis. It is the most widely used tool to interpret quantitative relationship between two variables of one number to another. Ratio is a fixed relationship of two related numbers. In financial analysis ratios are used to express the financial relationship or operating relationship between any two variables of revenue statement and balance sheet.

According to Myers, ratio analysis is a 'study of relationship among the various financial factors in a business." Thus it may be said that ratio analysis is an accounting tool to present accounting variables in simple, concise, intelligible and understandable form.

Ratios are not an end but are media to reach the end. These are used to make decisions by various user groups of financial statements for various purposes. Therefore, users of financial statements, keeping in view their own financial interest, interpret a single ratio differently. This is called interpretational flexibility of a ratio. Again, the interpretation may vary depending upon the time horizon, present condition in the industry and the economy etc.



CHECK YOUR PROGRESS

Q 1: Explain the meaning of Ratio Analysis.

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3.4 IMPORTANCE OF ACCOUNTING RATIOS

The importance of Accounting Ratios can be understood from the following objectives of ratio analysis.

The objectives of accounting ratios are to test the earning capacity, financial soundness and operating efficiency of a business organization. Such tests are done on the basis of varieties of factors, such as (a) purpose of the test, (b) age, nature and size of the enterprise, (c) time horizon, (d) methods of accounting and costing applied by the organisation, (e) the business cycle of the industry, (f) national economy, (g) the industry trend etc.

The importance of ratio analysis lies on the fact that it provides a logical base of information in the process of decision-making. Main importance of accounting ratios can be discussed as under:

(i) **Ratios are helpful in simplifying accounting figures:** In many cases absolute figures fail to provide information in a desired way, Ratios simplify, summarise and systematize accounting figures which can be easily understood by those who do not know the language of accounting. Thus ratios help in communication and enhance the value of the financial statements.

(ii) **Ratios are helpful in Profitability Measurement:** Profit and Loss Account discloses the profit earned or loss incurred during a period, but fails to convey the profit earning capacity in terms of per rupee invested or per rupee of sales. Accounting ratios help measure the profitability, Return on Investment or capital employed etc. are the best measures of profitability.

(iii) **Ratios are helpful in the measurement of Financial Position:** Liquidity and solvency ratios are regarded as the tools to reflect the financial health of an organization. Various ratios, viz, Current ratio and Liquid ratio show the liquidity position of the enterprise when Debt-equity ratio, Proprietary ratio etc. give an idea of solvency position of the organisation.

(iv) **Ratios measure the Operating Efficiency:** The operating efficiency of a business unit can be examined with the help of Activity and Turnover ratios. Stock turnover, current assets turnover, assets turnover etc. are ratios calculated to measure the operating efficiency.

(v) **Ratios help in controlling the affairs of the firm:** Ratio analysis helps in effective control of the business affairs. The ratios report the state of activities and financial position. Ratios help in finding out whether there is any variation in operating results of the concern. The ratios help the management to exercise effective control.

(vi) **Ratios facilitate Business Forecasting:** Ratios help in business planning and forecasting. The trend ratios are analysed and used as guide to future planning What is to be done in the immediate future is decided, many a time, on the basis of trend ratios, i.e. ratios calculated for a number of years.

(vii) Ratios Facilitate Inter-firm and Intra-firm Comparison: Ratio analysis is helpful for comparing the efficiency of various firms in the industry and various divisions of a business firm,. Absolute figures are not suitable for the purpose of comparison. The accounting language simplified through ratios are the best tools to compare the firms and divisions of a firm.

3.5 LIMITATIONS OF ACCOUNTING RATIOS

Accounting Ratios can be helpful for financial analysis. But it has some limitations also. Therefore before applying ratios for arriving at a decision one should know its limitations. The following are the main limitations of ratios and ratio analysis-

1 Ratios are not definitive measures. Ratios need to be interpreted carefully. They can provide clues to the company's performance or financial situation. But on their own, they cannot show whether performance is good or bad.

2 Ratio analysis is a retrospective, not prospective examination. These are historical in nature. Financial statements reflect historical cost. The figures in a set of accounts are likely to be at least several months out of date, and so might not give a proper indication of the company's current financial position. Hence this historical information may not be suitable for decision making.

3 Ratio analysis is based on accounting not economic data.

4 Ratios do not capture significant off-balance sheet items. There may be many information which are not shown in the financial statements. Ratios fail to divulge such information.

5 Ratios fail to convey the impact of price level changes. Inflation renders comparisons of results over time misleading as financial figures will not be within the same levels of purchasing power. Changes in results over time may show as if the enterprise has improved its performance and position when in fact after adjusting for inflationary changes it will show the different picture.



CHECK YOUR PROGRESS

Q 2: Write two advantages and two limitations of accounting ratio?

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3.6 CLASSIFICATION OF ACCOUNTING RATIOS

There are mainly three classes of accounting ratios. This classification is done on the basis of (a) The location of their constituent variables, (b) their function or objective of analysis, and (c) their importance or significance.

(a) Classification on the basis of Location: There are three types of accounting ratios in this category. These are:

(i) Balance Sheet Ratios or Position Statement Ratios: This ratio represents the relationship between the two variables from the Balance Sheet i.e., two items of balance sheet. Examples of Balance Sheet Ratios are: Current Ratio, Debt-Equity Ratio, etc.

(ii) Revenue Statement Ratios: These ratios are computed taking variables from the Revenue Statement. Example of Revenue statement Ratios are: Gross Profit Ratio, Expenses Ratios, Net Profit Ratio etc.

(iii) Composite Ratios or Mixed Ratios or Inter-statement Ratios: To compute these ratios, one variable is taken from the Balance Sheet and the other variable is taken from the Revenue Statement. Examples of Composite Ratios are: Return on Investment, Current Assets Turnover etc.

(b) Functional Classification: Ratios are also classified according to their functions. This is the most important classification of accounting

ratios. Analysis of the financial statements and interpretation thereof have been done generally on the basis of this classification. There are mainly four types of accounting ratios in this classification. These are:

(i) Liquidity ratios;

(ii) Leverage ratios;

(iii) Activity ratios; and

(iv) Profitability ratios.

3.7 LIQUIDITY RATIOS

The ratios which indicate liquidity position of a business firm are called liquidity ratios. In other words liquidity refers to the ability of a firm to meet its short-term financial obligations when and as they fall due.

The main concern of liquidity ratio is to measure the ability of the firms to meet their short-term maturing obligations. Failure to do this will result in the total failure of the business, as it would be forced into liquidation. These ratios indicate how easily current assets can be converted into cash and thereby indicate the firm's ability to pay its current liabilities. Liquidity is generally analysed by taking into account the purpose and period. From this angle we have the following liquidity ratios:

a. Net Working Capital Ratio,

b. Current Ratio,

c. Liquid Ratio

d. Absolute Liquid Ratio

e. Overdue Liability Ratio

f. Defensive Interval Ratio

g. Inventory Turnover Ratio

In this section we will discuss only Current Ratio and Quick Ratio which are mostly used in liquidity analysis.

a. Current Ratio:

The Current Ratio is one of the best-known measures of financial strength.

It is a ratio between current assets and current liabilities. Current assets are those assets which, in the ordinary course of business, can be converted into cash within a short period of time. This short period of time normally consists of twelve months.

Currents assets normally include the following items:

- Inventories,
- Book Debts,
- Bills receivables,
- Marketable securities,
- Short Term Deposits,
- Cash in hand,
- Cash at bank,
- Short term advances,
- Pre-paid expenses,
- Accrued income. etc.

Current liabilities are obligations payable within a year. Current liabilities generally include the following items:

- Trade creditors,
- Bills payable,
- Outstanding liabilities,
- Advance income received,
- Dividend payable,
- Contingent liabilities,
- Bank overdraft
- Short term loan. etc.

Moreover, provisions for taxation and other short-term provision for unseen or unestimated liabilities are also classified as current liabilities.

But so far as financial management is concerned, frequent rolling of current assets is better for a healthy financial position which will push up the profitability. Therefore, more amount blocked in current assets results in loss in profits. On the one hand, low level of current assets will have a negative impact on the liquidity position. So, there is the need for striking balance between these two extremes- profitability and liquidity, while deciding upon an ideal current ratio.

Current ratio is calculated as below:

Current Ratio = Total Current Assets ÷ Total Current Liabilities

When the firm's current ratio is too low, its short-term liquidity is at risk. This may be corrected by:

- Paying some debts,
- Increasing current assets from loans or other borrowings with a maturity of more than one year,
- Converting non-current assets into current assets,
- Increasing current assets from new equity contributions,
- Putting profits back into the business,

b. Quick Ratios:

The Quick Ratio is sometimes called liquid ratio or "acid-test" ratio. It is one of the best measures of very short-term liquidity. It is calculated as shown below:

Quick Ratio = (Cash in hand + Cash at bank + Book debts + Bills Receivables + Short term deposit + Short term advances) ÷ (Total Current Liabilities – Bank Over draft – Advance income received)

Or

Quick Ratio = Quick or Liquid Assets ÷ Quick Liabilities

The Quick Ratio is more rigorous measure of liquidity than Current Ratio. By excluding inventories, it concentrates on the real liquid assets. An acid-test of 1:1 is considered satisfactory.

3.8 PROFITABILITY RATIOS

Capacity to earn profit can be related with two variables- sales and investment. Relationship between profit and sales is shown by computing 'profit margin ratios', whereas relationship between profit and investment is shown through 'rate of return ratios'.

Profitability Ratios Relating to Sales:

- Gross Profit Ratio
- Operating Profit Ratio
- Net Profit Ratio
- Cash Profit Ratio

- Cash Operating Profit Ratio
- Cash Profit to Cash Sale Ratio

Profitability Ratios Relating to Investment:

- Return on investment (ROI)
- Return on Total Assets
- Return on Capital Employed (Return on Total Equity, Return on Common Equity)
- Earning Power
- Earning Per Share (EPS)
- Dividend Per Share (DPS)
- Cash Profit to Dividend Ratio
- Price Earning Ratio
- Dividend Pay out Ratio
- Earnings Yield Ratio
- Dividend Yield Ratio

1. Gross Profit Ratio:

Gross Profit Ratio= Gross Profit /Net Sales X 100

If G/P ratio is 25 p.c. it means 75 p.c. is the cost of goods sold and remaining 25 p.c. is the margin towards administrative and selling expenses and profit.

Generally a G/P ratio of 20 to 30 p.c. is desirable.

2. Operating Profit Ratio:

Operating Profit Ratio = Operating Profit /Net Sales

3. Net Profit Margin Ratio:

This ratio is the percentage of sales value left after subtracting the cost of goods sold and all expenses, except income taxes. It provides a good opportunity to compare company's "return on sales" with the performance of other companies in the industry. It is calculated before income tax because tax rates and tax liabilities vary from company to company for a wide variety of reasons, making comparisons after taxes much more difficult. The Net Profit Margin Ratio is calculated as follows:

Net Profit Margin Ratio = Net Profit Before Tax / Net Sales

4. Return on Assets Ratio

This measures how efficiently profits are being generated from the assets employed in the business when compared with the ratios of firms in a similar business. A low ratio in comparison with industry averages indicates an inefficient use of business assets. The Return on Assets Ratio is calculated as follows:

Return on Assets = Net Profit Before Tax / Total Assets

5. Return on Investment Ratio (ROI)

The ROI is the most important ratio of all profitability ratios. It is the percentage of return on funds invested in the business by its owners. In short, this ratio tells the owner whether or not all the effort put into the business has been worthwhile. The ROI is calculated as follows:

Return on Investment = Net Profit before Tax / Net Worth

6. Earning Per Share (EPS): This is a measure of earnings to the Equity Shareholders.

EPS = Profit after preference Dividend /No. of Outstanding Equity Shares

7. Dividend Per Share (DPS): This is a measure of dividend earnings to the Equity Shareholders on their holding.

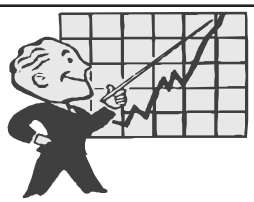
DPS = Amount of Equity Dividend /No. of Outstanding Equity Shares

8. Price Earning Ratio: This ratio shows the relationship between the market price of equity share and the earnings to the Equity shareholders.

Price Earning Ratio = Market price per equity share / Earning Per Share

9. Dividend Pay Out Ratio: This ratio shows the amount of dividend paid to the Equity shareholders out of the profit available to them.

Dividend Pay Out Ratio =Total dividend paid to the Eq. Shareholders/ Profit available to them



CHECK YOUR PROGRESS

Q 3: Fill in the blanks-

i. current ratio= Total Current …… / Total Current Liabilities.

ii. Quick ratio is also known as …….. ratio

iii. Bills Payable is a current ……

iv. Bank overdraft is a current ……..

v. Liquidity ratios indicate ……. position of a business.

EXAMPLE 1

From the following information calculate (i) Current Ratio, (ii) Quick ratio, (iii) Gross profit Ratio

Share Capital: 10,000 equity shares of Rs. 10 each

Sales:	Rs.	12,00,000
Inventory:	Rs.	50,000
Current Assets;	Rs.	1,50,000
Current Liabilities:	Rs.	90,000
Closing Inventory:	Rs.	70,000
Bank Over Draft:	Rs.	30,000
Cost of goods sold:	Rs.	7,00,000
Fixed Assets	Rs.	2,50,000

(i) Current Ratio:

Current Ratio =

Total Current Assets ÷ Total Current Liabilities

(1,50,000 ÷ 90,000) = 5:

(ii) Liquid Ratio:

Liquid Ratio = Quick or Liquid Assets ÷ Quick Liabilities

[Current Assets - Closing Inventory]

÷

[Current Liabilities – Bank Overdraft]

= Rs. [1,50,000 – 70,000] ÷ [Rs. 90,000 – 30,000]

= 1.33

(iii) Gross Profit Ratio:

Gross Profit Ratio = Gross Profit ÷ Net Sales x 100

Gross Profit = Sales- Cost of goods sold

= Rs. (12,00,000 – 7,00,000)

= 5,00,000

Gross Profit Ratio = [5,00,000 ÷ 12,00,000] x 100 = 41.67



3.9 LET US SUM UP

In this unit we have discussed the following-

- Accounting ratios are prepared from the financial statements to make financial decisions.
- Importance and limitations of accounting ratios.
- Ratios can be classified on the basis of location like, Balance Sheet Ratios, Revenue Statement Ratios and Composite Ratios.
- Ratios can also be classified on the basis of functions like, Liquidity Ratios, Leverage Ratios, Activity Ratios and Profitability Ratios.
- Profitability ratios relating to sales are Gross Profit Ratio, Net Profit Ratio, Cash Profit Ratio etc.
- Profitability ratios relating to investment arereturn on Investment, Return on Total Assets, Earning per Share etc.



3.10 FURTHER READING

1) Financial Statement Analysis By S Sikidar and H C Gautam
2) Management Accounting by Khan and Jain
3) Management Accounting by Sharma and Gupta



3.11 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Ratio analysis is one of the techniques of financial statement analysis. It is a study of relationship among the various financial factors in a business.

Ans to Q No 2: Two advantages of accounting ratio are:

Ratios measure the operating efficiency

Ratios are helpful in profitability measurement.

Two limitations of accounting ratio are:

Ratios are not definitive measures

Ratio analysis is a retrospective, not prospective examination.

Ans to Q No 3: i) assets ii) acid- test iii) liability

iv) liability v) liquidity.

3.12 MODEL QUESTIONS

Q 1: Discuss briefly the importance of accounting ratios.

Q 2: Discuss briefly the limitations of accounting ratios.

Q 3: Discuss briefly the classifications of accounting ratios.

Q 4: Discuss the role of accounting ratios in analysis of financial statements.

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UNIT 4 : FUNDS FLOW STATEMENT

UNIT STRUCTURE

4.1 Learning Objectives

4.2 Introduction

4.3 Concept of Fund and Flow of Fund

4.4 Meaning, Importance and Limitations of Funds Flow Statement

4.5 Sources and Applications of Funds

4.6 Preparation of Funds Flow Statement

4.7 Funds Flow Statement and Cash Flow Statement: Similarities and Dissimilarities

4.8 Let Us Sum Up

4.9 Further Reading

4.10 Answers To Check Your Progress

4.11 Model Questions

4.1 LEARNING OBJECTIVES

After going through this unit, you will be able to

- discuss the meaning, importance and limitations of funds flow statement
- prepare funds flow statements
- understand the distinction between fund flow and cash flow.

4.2 INTRODUCTION

We are aware that profit and loss account and the balance sheet are the basic financial statements. One of the important concepts applied while preparing these financial statements is going concern concept. This concept infuses the element of dynamism. But these two most important constituents of financial statements, Balance sheet and profit and loss account fail to reflect the changes that have taken place in between two points of time. A balance sheet reports the firm's assets and liabilities at a point of time. The profit and loss account gives the summary result of

transactions relating to revenue and expenses.

Both the statements fail to reflect the nature of transactions that have taken place during the period to finance the financial and operational activities of the firm. These only provide some information relating to financial sources and application thereof. Some of these information are explicit and some are hidden in the statements. To overcome these limitations and to provide more transparent information to the user of financial statements regarding the sources of financial resources, now-a-day other two statements are prepared as complementary to the basic financial statements. This unit is prepared to familiar the students with the concept and technique of preparing Fund Flow Statement.

4.3 CONCEPT OF FUND AND FLOW OF FUND

Dictionary meaning of the word 'fund' (singular) is 'permanent stock of something ready to be drawn upon or stock of money and the meaning of the word 'funds' (plural) is 'pecuniary resources' (Oxford Encyclopedic dictionary, 1991 edition). Different writers in financial accounting have used the term in various ways. But in general it may be said that the following four approaches to the concept of funds will serve the purpose of using the techniques of funds flow and cash flow in financial statement analysis. These four concepts are:

(i) Cash and bank

(ii) Cash, bank and cash equivalent

(iii) Total current assets or gross working capital

(iv) Current assets minus current liabilities or net working capital (generally called working capital)

In order to evaluate the cash flows, a cash flow statement is prepared. For this purpose, 'Fund' is defined as cash, bank and cash equivalent. These represent highly liquid resources This concept of funds is very much useful to analyse the demand liability and to assess the credibility of the firm.

'Total current assets' concept of funds represents the funds from the operating point of view. This is also known as gross working capital

concept of funds. A business firm actually operates on the current assets for its day to day activities. In other words, these are the assets acquired for sale or are created out of the operating transactions. Therefore, current assets are the key resources, i.e. funds, which represent the useable resources available to a firm for day to day operations. The major constituents of current assets are inventory, accounts receivables, short term investments, cash and bank balances. From this, it is logically appears that the liabilities created out of the day to day operating transactions shall be met out of the assets acquired for sale or created out of operating transactions. Therefore, the amount of current assets to the extent of the amount of current liabilities is not available for day to day use. For this reason total current assets (Gross working capital) concept of funds is generally not used while preparing funds flow statement.

Therefore for the purpose of Fund Flow Statement 'Fund' is defined as current assets minus current liabilities or net working capital. Thus -

Funds for Cash Flow Statement = Cash, bank and cash equivalent

Funds for Fund Flow Statement = Current Assets - Current Liabilities = Net Working Capital

Flow of Fund

Flow (verb) means to circulate or to come or to go and flow (noun) means amount that flows. Flow of funds means circulation of funds - to come and to go. To be more specific it means inflow (come) and outflow (go) of funds, i.e. working capital. 'Inflow of funds' means increase, i.e, source of funds from various sources and outflow of funds means application of funds. The concept will be more clear by taking a few examples.

(i) Issue of shares, debentures etc. for cash are sources - inflow of funds.

(ii) Purchase of assets, payment of tax and dividend are application of fund- outflow of fund.

Inflow of funds will increase the amount of funds (working capital) and outflow of funds will decrease the amount of funds. As stated earlier, inflow and outflow of funds are the result of some transactions, therefore it is necessary to understand the nature of these transactions.

Transactions Affecting Flow of Funds:

In order to understand the nature of transactions affecting the flow of funds, we have divided the items of balance sheet into four parts.

(i) Long term sources representing capital and long term liabilities, to be called **'Non-current items'**.

(ii) Short term sources representing current liabilities, to be called **'Current items'**.

(iii) Long term applications representing fixed assets and long term investments, to be called **'Non-current items'**.

(iv) Short term applications representing short term investments and current assets, to be Called **'Current items'**.



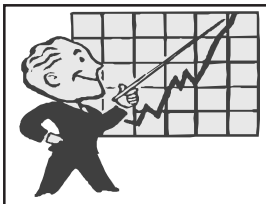
LET US KNOW

When a transaction is effected between a current item and non-current item then there will be a flow of fund.

This is shown below:

1. Transactions between Non-Current and Non-Current Items – No. flow of Funds.
2. Transactions between Current and Current Items – No Flow of Funds.
3. Transactions between non-current and current or current or current and non-current items – flow funds.

A transaction between a current item and non-current item results a flow of fund which may be either source or application of fund.



CHECK YOUR PROGRESS

Q 1: What is the meaning of Fund as used in Fund Flow Statement?

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4.4 MEANING, IMPORTANCE AND LIMITATIONS OF FUNDS FLOW STATEMENT

Meaning of Fund Flow Statement

Funds Flow Statement (FFS) is a technique of analysis of financial position of a company. It is a widely used technique by financial analysts. FFS is a summary of transactions indicating sources and applications of funds, and for this it is also known as 'statement of sources and uses of funds'. In this context Almand Coleman defines it as 'a statement summarizing the significant financial changes which have occurred between the beginning and the end of company's accounting period'.

R.A. Foulke defines it as 'a statement of the sources and applications of funds is a technical device designed to highlight the changes in the financial condition of a business enterprise between two' dates (Practical Financial Statement Analysis, p. 473.)

Funds, as used here, is the excess of current assets over current liabilities, i.e. net working capital. Therefore, FFS is a statement showing the causes of the change in working capital between two points of time, generally the two consecutive Balance Sheet dates. Thus, preparation of FFS involves two important factors - (a) what is the net change in working capital and (b) what are the reasons for such change. Broadly, the reasons for change in working capital are divided into two parts - (i) Sources, i.e. reasons that cause increase in working capital and (ii) Applications or uses, i.e., reasons that cause decrease in working capital.

Importance of Fund Flow Statement

FFS is very important in financial management. The importance of Funds Flow Statement can be discuss as under-

- It helps to formulate a sound financial policy, short term, medium term and long term.
- It helps the management to understand the various reasons for changes in funds position.
- With the help of a well drawn Funds Flow Statement, the management can determine the available funds to be allocated among various assets that will be acquired in future.

- Working capital management is one of the complex problems in financial management. Funds Flow Statement and its analysis helps the management to prepare a well devised working capital plan.
- The information provided by a Fund Flow Statement regarding the amount of working capital, its changes and reasons thereof, reflect the creditworthiness of the enterprise.
- Funds Flow Statement provides a basis for estimating the amount of funds needed for future growth.
- It helps the management in preparing the schedule to meet its obligation. This helps in eliminating unnecessary interest costs.
- A Funds Flow Statement also helps to earn additional income. A well analyzed statement helps in planning the temporary investment of idle funds. This will reduce the lost in value of rupee.

Limitations of funds flow Statement

Despite wide ranges of uses of funds Flow Statement, it has certain limitations. These limitations are as follows:

- Funds Flow Statement is prepared on the basis of recorded facts. Therefore, it reflects a historical financial position (working capital). Therefore, in a rapidly changing economy and financial situation, its relevancy is limited.
- Funds Flow Statement in isolation is of little importance in financial planning. It provides only additional information as regards changes in working capital.
- It is not a substitute of Balance Sheet and profit and loss account. It only supplements these conventional statements for a better analysis of financial position.
- Non-fund items are not taken into account while Funds Flow Statement is prepared. But these items have important bearing on financial analysis. For example, depreciation is one of the most important issues in financial planning but it is not taken into account in preparation of Funds Flow Statement.
- Funds Flow Statement is a static statement. It is prepared by taking into account figures of two points of time. Thus, it can not reveal continuous changes.

- Funds Flow Statement may be said as the by-product of the two primary financial statements - income statement and Balance Sheet. So it is not an original statement.
- In recent times, the importance of Funds Flow Statement is getting down in comparison to the Cash Flow Statement. Due to inflation and rapidly changing financial instruments and financial charges, cash is regarded more crucial than fund in financial planning.



LET US KNOW

Funds Flow provides the following information:

- Funds From operation.
- Funds generated through financing activities, viz. issue of shares debentures or bonds.
- Funds used in acquisition of fixed assets.
- Funds used in investment, viz. in purchasing shares, debentures or bond of other companies.
- The extent of working capital used in acquisition of assets or in payment of liabilities.
- The amount of working capital increased due to excess generation of funds over their application.
- The solvency, liquidity and financial soundness (flexibility) of the organization.
- The amount of funds used in payment of income taxes and dividend.



CHECK YOUR PROGRESS

Q 2: Write two advantages of Funds Flow Statement.

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4.5 SOURCES AND APPLICATIONS OF FUNDS

- Funds are collected from different sources and added to the existing funds (working capital). The following are some of the important sources of funds-
- Funds from operations or trading profit.
- Issue of shares
- Issue of debentures and bonds
- Loan from financial institutions (Long term)
- Sale of fixed assets
- Sale of investments
- Non-operating receipts.
- Decrease in working capital.

The following are some important applications of funds.

- Operating loss or trading loss.
- Purchase of fixed assets
- Purchase of investments
- Redemption of debentures
- Repayment of bonds and long-term loans.
- Redemption of preference shares
- Payment of non-operating expenses like dividend.
- Payment of income tax.
- Increase in working capital.

Examples of some of Transactions are given below which may or may not result in Sources and Applications of fund:

Sl. No.	Transactions	Debit Account and Credit Account	Type of Account NA/CA	Whether flow of Fund	Source or Application
1	2	3	4	5	6
1	Issue of shares for cash	Bank Dr Share capital Cr	CA NCA	Yes	Source
2	Land purchased and price paid by issuing shares	Land Dr. Share Capital Cr	NCA NCA	No	-
3	Debentures converted into share capital	Debentures Dr. Share Capital Cr	NCA NCA	No	-
4	Gen Reserve created or Transfer to Gen Reserve	P/L Appro Dr. Genl Reserve Cr.	NCA NCA	No	
5	Goodwill written off	P/L A/c Dr. Goodwill Cr.	NCA NCA	No	-
6	Land purchased and cash paid	Land Dr. Bank Cr.	NCA CA	Yes	Application
7	Preference shares redeemed	Pref Sh. Cap Dr. Bank Cr.	NCA CA	Yes	Application
8	Issue of Debentures against purchase of stock	Inventory Dr. Debenture Cr.	CA NCA	Yes	Source
9	Conversion of fixed assets into stock-in trade	Stock in trade Dr. Fixed assets Cr.	CA NCA	Yes	Source
10	Debentures redeemed	Debenture Dr Bank Cr.	NCA NCA	Yes	Application
11	Interim/Final dividend proposed	P/L Appropriation Dr. Interim/final Div. Cr.	NCA NCA	No	-
12	Dividend/Tax paid	Dividend/Tax Dr. Bank Cr.	NCA CA	Yes	Application

4.6 PREPARATION OF FUNDS FLOW STATEMENT

There are two parts of Funds Flow Statement. The one part is the 'Schedule of Changes in Working Capital' and is generally is prepared first and then the other part is 'Sources and Application of Funds or Funds Flows Statement'. For the preparation of Funds Flow Statement, there would be two balance sheets, one at the beginning and the other at the end along with other information.

Preparation of Funds Flow Statement involves mainly, listing of various sources and applications of funds. So, it is necessary to examine carefully the items in the balance sheets and information provided. By and large, sources and applications of funds may be found out from the following:

1. Transactions of non-current items.
2. Transactions of current items or working capital
3. Operating profit or loss or funds from operation
4. Payment of dividend and tax etc.
5. Increase/Decrease in Working Capital

Funds from Operation

There are three approaches to calculate Funds from Operation.

1. Sales Approach,
2. Capital Approach and
3. Net Profit Approach.

Capital Approach is generally applied in single proprietorship and partnership where generally accounts are kept under Single Entry System. However, Net Profit Approach is the mostly used method. In Net Profit Approach generally Adjusted Profit and Loss Account is prepared to find out Funds from Operation.

Adjusted Profit and Loss Account

Dr.			Cr.
To Non-Cash expenses	Rs.		Rs.
Depreciation	----------	By Balance B/d	-----
Goodwill Written-off	--------	(Opening balance)	
Preliminary Expenses Written-off	----------	By Non-operating gain or profit	
To Non-operating expenses/losses		Profit on sale of Fixed	-----
Loss on sale of Fixed Assets	-----	Assets	-----
Discount on Issue of		By Funds from operation	
Shares/Debentures	-----	(Balance figure)	
To Balance c/d	-------		
(Closing balance)			

Dr.		Cr.	
Particulars	Rs.	Particulars	Rs.
To Depreciation--	1,000	By, Gross Profit	19,000
To Salaries	8,000	By, Profit on sale of Plant	3,500
To Loss on sale of machine	400		
To Goodwill written off	2,350		
To Preliminary exp. written off-	600		
To Sundry expenses--	2,500		
To Net Profit--	7,650		
	22,500		22,500

EXAMPLE 1

From the following Profit and Loss account of East and West Ltd., Calculate funds from operation.

Profit and Loss A/c for the year ending 31st March' 09

Solution:

Calculation of Fund from operation

		Rs.
Net Profit as per Profit & loss Account:		**7,650**
Add, Items not resulting in the application of funds:	Rs.	
(a) Depreciation--	1,000	
(b) Loss on sale of machine	400	
(c) Goodwill written off	2,350	
(d) Preliminary expenses written off	600	4,350
		12,000
Less, Items which are not a source of funds:		
Profit on sale of plant--		3,500
Funds from operations		**8,500**

EXAMPLE 2

From the following Balance Sheet of Katrina Co. Ltd., Prepare a Statement of Sources and Uses of Funds and the Schedule of Changes in Working Capital.

Items	**Assets**	
	31st Mar, 2009	31st Mar. 2008
Cash in hand	7500	35,00
Accounts receivable	9000	9800
Stocks	1,20,00	8700
Land	3000	2000
Long-term investments	1000	1500
	3,2500	**2,5500**
	Liabilities	
Equity Capital	1,5000	12,500
Accounts payable	1,0000	7000
General Reserve	7500	6000
	32,500	**25,500**

Solution:

Statement of Sources and Uses of Funds			
Sources	Rs.	**Uses**	Rs.
Increase in capital	2500	Purchase of Land	1000
Funds from operations**	1500		
Sale of investments	500	Increase in working Capital	3500
	4500		**4500**

****Note:** Funds from operation is assumed to be the increase in General Reserves by Rs. 1500 (Rs. 7500 Rs. 6000) as there is no Profit & loss account figure.

Schedule of Changes in Working Capital

Current Assets	2008	2009	Effect on W.C Increase(+) Decrease(-)
	Rs.	Rs.	Rs.
Cash-	3500	7500	(+)4000
Accounts Receivable	9800	9000	(-) 800
Stocks	8700	1,2000	(+) 3300
TOTAL (a)	**2,2000**	**2,8500**	(+) 6500
Current Liabilities			
Accounts Payable	7000	1,0000	(-) 3000
TOTAL (b)	**7000**	**10000**	**(-) 3000**
Workingcapital-{(a) –(b)}	15000(c)	18500(d)	(+) 3500
Increase in working Capital--{(c) –(d)}	**3500**		****3500**

4.7 FUNDS FLOW STATEMENT AND CASH FLOW STATEMENT: SIMILARITIES AND DISSIMILARITIES

Fund Flow Statement and Cash Flow Statement are both together called Statement of Changes in Financial Position. Inputs for the preparation

of both the statements are taken from the balance sheets and profit and loss account. Generally Cash Flow Statement is prepared as a complementary to Funds Flow Statement. Funds Flow Statement is prepared for long range planning and Cash Flow Statement is prepared for short range planning. Fund Flow Statement is based on accrual concept of accounting while Cash Flow Statement is prepared on cash concept of accounting. Cash Flow Statement is mandatory as per the Companies Act and as per the Accounting Standard 3 while Funds Flow Statement is not mandatory. From the view point of decision making Cash Flow Statement is widely used since most of the business decisions are based on cash flow.



4.8 LET US SUM UP

In this unit we have discussed the following-

- Financial statements are the end products of the accounting system.
- Besides trading and profit and loss accounts and balance sheet, the companies also prepare funds flow and cash flow statements as a part of financial statements.
- 'Net working capital' concept is used in preparing funds flow statement.
- Importance and limitations of funds flow statement.
- Funds flow statement is prepared in two parts: 'Schedule of Changes in Working Capital' and 'Sources and Application of Funds'.
- Cash flow statement provides information regarding cash receipts and cash disbursements over a period of time.
- The similarities and dissimilarities between cash flow and funds flow statements.
- Benefits and preparation of cash flow statement.



4.9 FURTHER READING

1) Financial Statement Analysis By S Sikidar and H C Gautam.

2) Management Accounting by Khan and Jain.

3) Management Accounting by Sharma and Gupta.



4.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: For Funds Flow statement, 'Net Working Capital' concept of fund is used.

Net Working Capital = Current Assets - Current Liabilities

Ans to Q No 2: a. Fund Flow Statement helps to formulate a sound financial policy, short term, medium term and long term.



b. Fund Flow Statement helps the management to understand the various intricacies of and reasons for changes in funds position.

4.11 MODEL QUESTIONS

Q 1: Explain the difference between Funds Flow Statement and Cash Flow Statement

Q 2: What are the benefits of Fund Flow Statement?

Q 3: How is Fund Flow Statement prepared?

Q 4: Write a brief note on preparation of funds flow statements.

Q 5: State the various sources and applications of funds.

*** ***** ***

UNIT 5: CASH FLOW STATEMENT

UNIT STRUCTURE

5.1 Learning Objective

5.2 Introduction

5.3 Meaning of Cash Flow Statement

5.4 Purpose of Cash Flow Statement

5.5 Preparation of Cash Flow Statement

5.6 Format of Cash Flow Statement (AS3: Revised Method)

5.7 Cash Flow Statement under Direct Method

5.8 Differences between Cash Flow Statement and Fund Flow Statement

5.9 Practical problems on Cash Flow Statement

5.10 Let Us Sum Up

5.11 Further Reading

5.12 Answer To Check Your Progress

5.13 Model Questions

5.1 LEARNING OBJECTIVES

After going through this unit, you will able to-

- discuss the meaning and purpose of Cash Flow Statement
- learn about Cash Flow from Operating Activities
- prepare the Cash Flow Statement under Direct Method
- outline the distinction between Cash Flow Analysis and Fund Flow Analysis
- discuss the uses of Cash Flow Statement.

5.2 INTRODUCTION

In the earlier unit we have discussed the concept of Financial Statement Analysis and Funds Flow Analysis. In this unit, we will discuss the concept of cash flow analysis. Cash flow helps us to make projections of cash inflows and outflows for the near future to determine the availability

of cash during a particular time period. You will find this unit very interesting because, after going through this unit you will able to analyse the financial position of different companies.

5.3 MEANING OF CASH FLOW STATEMENT

In a business organisation, hundreds and thousands of transactions are done every day. Out of those transactions some are executed on cash and some are executed on credit basis. Some transactions are executed on partial cash basis and the balance amount on credit basis. So at the end of each day, week, month, quarter or a year, the organisation is left with huge number of transactions. If the management wants to know the status of the cash and cash equivalents available in the organisation, then neither Profit and Loss Account nor Balance Sheet or any other statements of accounts servers the purpose. In this circumstance, Cash Flow Statement shows the cash and cash equivalents position of an organisation which includes cash transactions. In the preparation of balance sheet and income statement, accounting is done on accrual basis but in cash flow statement, accounting is done on cash basis. Moreover, Cash Flow Statement also shows the source of cash receipts and it also reveals the purposes for which payments are made.

Cash flow statement shows the movement of cash and cash equivalents from the business as well as into the business which results out of the business activities. Cash Flow Statement basically shows the cash inflows and cash out flows. When cash comes into the books of accounts in the organisation, then it is referred to as cash inflow. Similarly, when cash goes out from the books of accounts of the organisation, then it is referred to as cash outflow. The difference between the cash inflow and cash outflow is referred to as net cash flow. Cash Flow Statement explains the reasons for the changes in cash balance of a business between the two consecutive Balance Sheet dates.

5.4 PURPOSE OF CASH FLOW STATEMENT

The main objective of preparing the Cash Flow Statement is to deliver information about cash receipts, cash payments, and the difference in cash position out of business activities from the operations, investments, and financing activities of a company during a particular financial year. In other words, the Cash Flow Statements where an organisation's cash is being generated, and where its cash is being paid during a particular period of time. Thus, the Cash Flow Statements helps the management to analyse the liquidity as well as long term solvency of the business. The main purpose of Cash Flow Statement is to transform the accrual basis income statement to a cash flow statement.

Information about the cash flows of a business 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 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 timing and certainty of their generation. The Standard deals with the provision 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.

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.

There are basically three components of Cash Flow Statements which are briefly given below:

(a) **Cash Flow from Operating Activities**: In this case, all the business transactions resulting from operating activities of the business that are executed only in terms of cash are considered. Operating activities basically represents the revenue generating activities of a business. Some examples of operating activities are the cash receipts from the sale of goods and services like salaries and wages, rents, transportation and any other operating expenses for the smooth running of its business.

(b) **Cash Flow from Investing Activities:** In this case, all the business transactions resulting from investment activities of the business that are executed only in terms of cash are considered. Investment activities basically represent the payments made to purchase of long term assets and thereby cash receipts from the sale of long term assets. Some examples of investment activities are the cash receipts from sale of fixed assets or any other assets, plants, machineries, equipment, the purchase or sale of a equities, debts or debentures etc.

(c) **Cash Flow from Financing Activities**: Here, all the business transactions resulting from financing activities of the business that are executed only in terms of cash are considered. Financing activities are transactions between a business and its creditors and investors. Financing activities basically represents those activities that will change the equity share holding or borrowings of a business. Some examples of financing activities are the sale or purchase of a company's own shares, announcement of dividends and its payment to its shareholders, repayment of short-term loans and long-term loans, the retirement of bonds payable etc.

5.5 PREPARATION OF CASH FLOW STATEMENT

After ascertaining information regarding different sources and uses of cash, we can easily prepare the Cash Flow Statement. There is no specific format of preparing Cash Flow Statement but usually it is prepared in report form. The information for the Cash Flow Statement is derived from the income statement and balance sheets for the current and past financial

years. In preparing the Cash Flow Statement, the three components viz., operating, investment and financing activities are considered. As already discussed, operating activities are the principal revenue-producing activities of the enterprise and other activities that are not investing or financing activities. Let us now cite some examples of cash flows that are generated from operating activities:-

(a) cash receipts from the sale of products and services

(b) cash receipts from patents, royalties, fees, commissions and from such sources.

(c) cash payments to suppliers for products and services

(d) cash payments to the employees of the organisation

(e) cash receipts and cash payments of an insurance enterprise for premiums and claims

(f) cash payments or refunds of income taxes unless they can be specifically identified with financing and investing activities

(g) cash receipts and payments relating to advanced derivative products like futures contracts, forward contracts, option contracts and swap contracts when the contracts are held for dealing or trading purposes.

The second component of Cash Flow Statement is all those cash that are generated from investing activities. Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents. Let us now cite some examples of cash flows that are generated from investing activities:-

(a) Cash payments to possess fixed assets including intangible assets as well as assets acquired to capitalised research and development activities and self-constructed fixed assets

(b) Cash receipts from the sale of fixed assets including intangible fixed assets

(c) Cash payments to acquire shares, warrants or debt instruments of other enterprises and interests in joint ventures other than cash payments for trading activities

(d) Cash receipts from disposal of shares, warrants or debt instruments of other enterprises and interests in joint ventures other than cash receipts from trading activities

(e) Cash advances and loans made to third parties other than advances and loans made by a financial enterprise

(f) Cash receipts from the repayment of advances and loans made to third parties other than advances and loans of a financial enterprise

(g) Cash payments for advanced financial products like futures contracts, forward contracts, option contracts and swap contracts other than the payments made for trading activities

(h) Cash receipts from futures contracts, forward contracts, option contracts and swap contracts other than receipts generated from trading activities

Financing activities are activities that result in changes in the size and composition of the owners' capital (including preference share capital in the case of a company) and borrowings of the enterprise. Let us now cite some examples of cash flows that are generated from financing activities:-

(a) Cash proceeds from issuing shares or other similar financial instruments

(b) Cash proceeds from issuing debentures, loans, notes, bonds, and other short or long-term borrowings

(c) Cash repayments of amounts borrowed

The Cash Flow Statement begins with the opening balance of cash and after adding different sources of cash and subtracting application of cash, the cash balance at the end of the particular period is found. This is explained in detail in the next section.

5.6 FORMAT OF CASH FLOW STATEMENT (AS3: REVISED METHOD)

This Accounting Standard is not mandatory for Small and Medium Sized Companies, as defined in the Notification. Such companies are however encouraged to comply with the Standard.

Cash Flow Statement of … (Name of the Company) for the Year … (Current Financial Year)

Particulars	Amount (in Rs.)	Amount (in Rs.)
Cash Flows From Operating Activities		
Cash receipts from customers		
Cash paid to suppliers and employees		
Cash generated from operations		
Income taxes paid		
Cash flow before extraordinary item		
Net cash from operating activities		
Cash Flows From Investing Activities		
Purchase of fixed assets		
Proceeds from sale of equipment		
Interest received		
Dividends received		
Net cash from investing activities		
Cash Flows From Financing Activities		
Proceeds from issuance of share capital		
Proceeds from long-term borrowings		
Repayment of long-term borrowings		
Interest paid		
Dividends paid		
Net cash used in financing activities		
Net increase in cash and cash equivalents		
Cash and cash equivalents at beginning of period		

CHECK YOUR PROGRESS

Q 1: Write the main objective of preparing the cash flow statement.

.....

.....

Q 2: What are the three components of cash flow statement?

.....

.....

Q 3: Give some examples of operating activities?

.....

.....

Q 4: State true or false for the following statements:

(i) Cash flow statement shows the movement of cash and cash equivalents from the business as well as into the business which results out of the business activities.

(ii) Cash advances and loans made to third parties other than advances and loans made by a financial enterprise are an example of operating activity.

(iii) Investing activities are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

5.7 CASH FLOW STATEMENT UNDER DIRECT METHOD

Cash flow statement from the operating activities can be found out using direct method. Cash flow statement under direct method basically considers major classes of gross cash receipts and gross cash payments. Under direct method, major cash inflows and outflows are considered like cash proceeds related to trades, employees, expenses, etc. In the profit and loss account, some items are expressed on accrual basis which are converted to cash equivalent with the following adjustments:-

(1) Cash expenses = Expenses on accrual basis + Prepaid expenses in the beginning and
Outstanding expenses in the end – Prepaid expenses in the end and Outstanding expenses in the beginning.

(2) Cash payments to suppliers = Purchases + Trade Payables in the beginning – Trade Payables in the end.

(3) Cash receipts from customers = Revenue from operations + Trade receivables in the beginning – Trade receivables in the end.

(4) Purchases = Cost of Revenue from Operations – Opening Inventory +Closing Inventory.



Exercise 1

Let us take one example to understand the preparation of cash flow statement from operating activities using direct method from the information given below:-

Statement of Profit and Loss of Expan Types Ltd.

for the year ended on March 31, 2017

Particulars	Amount (Rs.)
Cash receipts from customers	137600
Cash paid to suppliers and employees	120550
Dividends paid	80550
Factory Expenses	68000
Income taxes paid	29000
Purchase of fixed assets	180000
Interest paid	9500
Proceeds from issuance of share capital	350000
Proceeds from long-term borrowings	125000
Sale of old furniture	44000
Commissions paid	28000
Interest received	90000
Repayment of long-term borrowings	28000
Dividends received	19000
Opeing Cash Balance	25000
Loans repaid	100000
Proceeds from sale of equipment	53000

Solution:

Let us now prepare the Cash Flows Statement from Operating Activities of Expan Types Ltd. using direct method as below:

Cash Flows Statement from Operating Activities of Expan Types Ltd.

(A) Cash flow from Operating Activity		Amount (Rs.)
Receipts: Cash Sales from customers	1,37,600	
Payments: Cash Purchases	(1,20,550)	
Factory expenses	(68,000)	
Income tax	(29,000)	
Commission Paid	(28,000)	
Net Cash from Operating Activities: Total (A)		(1,07,950)
(B) Cash flow from Investment Activity		
Receipts: Proceeds from sale of equipment	53,000	
Dividends received	19,000	
Interest received	90,000	
Sale of old furniture	44,000	
Payments: Purchase of Fixed assets	(180,000)	
Net Cash from Investment Activities: Total (B)		26,000
(C) Cash flow from Financing Activity		
Receipts: Equity shares issued	3,50,000	
Proceeds from long-term borrowings	125000	
Payments: Loan repaid	(100000)	
Dividend disbursed	(80,550)	
Repayment of long-term borrowings	(28000)	
Interest paid	(9,500)	
Net Cash from Financing Activities: Total (C)		3,56,950
Net increase in cash and cash equivalents Total Cash Flow (A+B+C)		2,75,000
Add: Opening Cash Balance		25,000
Closing Cash Balance		2,00,000

5.8 DIFFERENCE BETWEEN CASH FLOW STATEMENT AND FUND FLOW STATEMENT

The basic differences between cash flow statement and fund flow statement are pointed out below:-

(a) Cash Flow Statement shows the cash and cash equivalents position of an organisation which includes cash transactions. On the other

hand, fund flow statement is a statement of changes in financial position. Here, the word 'fund' represents the working capital of the business.

(b) Cash flow statement shows the movement of cash and cash equivalents from the business as well as into the business which results out of the business activities. Cash Flow Statement basically shows the cash inflows and cash out flows. Fund flow statement is a statement summarising the significant financial changes which have occurred between the beginning and the end of company's accounting period.

(c) In the preparation of balance sheet and income statement, accounting is done on accrual basis but in cash flow statement, accounting is done on cash basis. Moreover, Cash Flow Statement also shows the source of cash receipts and it also reveals the purposes for which payments are made. Fund Flow Statement is a supplementary statement and shows the sources of mobilisation of the funds and their detailed utilisation during a particular financial year. Fund Flow Statement also deal with the non-cash items.

(d) Cash Flow Statement explains the reasons for the changes in cash balance of a business between the two consecutive Balance Sheet dates. On the other hand, the Fund Flow Statements clearly identify the changes in working capital and also help the management to find out the factors responsible for this working capital changes.

(e) The main objective of preparing the Cash Flow Statement is to deliver information about cash receipts, cash payments, and the difference in cash position out of business activities from the operations, investments, and financing activities of a company during a particular financial year. In other words, the Cash Flow Statements where an organisation's cash is being generated, and where its cash is being paid during a particular period of time. Thus, the Cash Flow Statements helps the management to analyse the liquidity as well as long term solvency of the business. The main purpose of Cash Flow Statement is to transform the accrual basis income statement to a cash flow

statement. On the other hand, Fund Flow Statement helps management about the allocation of resources and shows the operational aspects of the business activities which are not available in Profit and Loss Account and Balance Sheet.

(f) Cash flow statement helps to find out the capacity of an organisation to meet its short-term obligations and liquidity position whereas fund flow statement helps to find out the capacity of an organisation to meet its long-term obligations.

5.9 PRACTICAL PROBLEMS ON CASH FLOW STATEMENT

Cash flow statement is used to identify and explain the difference profits and cash and assesses the current liquidity position of a company. Let us now understand the usage of cash flow statement with some illustrations.

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
Gross Pro	96,000	Sales	198,000
Expenses on Wage, Power (Direct)	24,000		
Purchases for the year	78,000		
Total	198,000	Total	198,000
Net Profit	19,200	Gross Profit b/d	78,000

Exercise 2

Expan Telecom Ltd. provided the following financial information. Prepare the cash flow statement.

Profit & Loss Account for the year ended 31 March 2017

Start-up expenses written-off	1,800	Profit on sale of furniture	15,600
Tax Provisions	3,000		
Dividends Proposed (withdrawals)	12,000		
Provisions for bad debt	6,000		
Depreciation	18,000		
Salary	24,000		
Rent	9,600		

Solution:

Let us prepare the cash flow statement as per the direct method. Under the direct method, cash receipts from the customers and cash payments to the vendors and employees are disclosed. So, let us prepare the cash flow statement below –

Note: Sale of furniture is not considered as a part of operating activity. It is a part of investment activity.



Exercise 3

Prepare a cash flow account for Expan Telecommunications Ltd. for the year ended 31-03-2017 from the following information –

Cash Account for the year ended 31-03-2017

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
Opening Cash balance	175,000	Cash Purchases of Goods	3500,000
Equity shares issued	262,500	Administrative expenses	437,500
Preference shares issued	262,500	Factory expenses	262,500
Cash sales	4025,000	Income tax	87,500
Sale of old machineries	1050,000	Dividend disbursed	262,500
		Loan repaid	700,000
		Closing Cash Balance	525,000
Total	5775,000	Total	5775,000

Solution:

Let us prepare the cash flow statement as per the direct method. Under the direct method, cash receipts from the customers and cash payments to the vendors and employees are disclosed. So, let us prepare the cash flow statement below –

Expan Telecommunications Ltd.

Cash Flow Statement of for the year ended 31-03-2017

(A) Cash flow from Operating Activity			Amount (Rs.)
Receipts: Cash Sales from customers		4025,000	
Payments: Cash Purchases		(3500,000)	
Administrative expenses		(437,500)	
Factory expenses		(262,500)	
Income tax		(87500)	
Net Cash from Operating Activities: Total (A)			(262,500)
(B) Cash flow from Investment Activity			
Sale of old machineries		1050,000	
Net Cash from Investment Activities: Total (B)			1050,000

(C) Cash flow from Financing Activity			
Receipts: Equity shares issued		262,500	
Preference shares issued		262,500	
Payments: Loan repaid		(700,000)	
Dividend disbursed		(262,500)	
Net Cash from Financing Activities: Total (C)			(437,500)
Net increase in cash and cash equivalents Total Cash Flow (A+B+C)			350,000
Add: Opening Cash Balance			175,000
Closing Cash Balance			525,000



Exercise 4

Prepare a cash flow account for Excell Tyres Ltd. for the year ended 31-03-2017 from the following information–

Cash Account for the year ended 31-03-2017

Solution:

Let us prepare the cash flow statement as per the direct method. Under the direct method, cash receipts from the customers and cash

payments to the vendors and employees are disclosed. So, let us prepare the cash flow statement below –

Excell Tyres Ltd Ltd.

Cash Flow Statement of for the year ended 31-03-2017

(A) Cash flow from Operating Activity	Amount (Rs.)	Amount (Rs.)
Receipts: Cash Sales from customers	80,50,250	
Payments: Cash Purchases	-43,76,025	
Administrative expenses	-4,37,500	
Factory expenses	-12,62,500	
Income tax	-2,50,000	
Commission Paid	-3,50,500	
Legal Fees Paid	-25,00,000	
Net Cash from Operating Activities: Total (A)		-11,26,275
(B) Cash flow from Investment Activity		
Sale of old furniture	2,25,500	
Sale of old machineries	9,50,000	
Net Cash from Investment Activities: Total (B)		11,75,500
(C) Cash flow from Financing Activity		
Receipts: Equity shares issued	10,50,275	
Preference shares issued	5,25,500	
Payments: Loan repaid	-6,50,000	
Dividend disbursed	-9,50,000	
Net Cash from Financing Activities: Total (C)		-24,225
Net increase in cash and cash equivalents Total Cash Flow (A+B+C)		25,000
Add: Opening Cash Balance		75,000
Closing Cash Balance		1,00,000

CHECK YOUR PROGRESS

Q 5: What are operating activities?

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Q 6: What are the main differences between cash flow statement and fund flow statement?

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Q 7: State true or false for the following statements:

(i) Fund flow statement explains the reasons for the changes in cash balance of a business between the two consecutive Balance Sheet dates.

(ii) Cash flow statement under direct method basically considers major classes of gross cash receipts and gross cash payments.



5.10 LET US SUM UP

In this unit we have discussed the purpose of Cash Flow Statement. The main objective of preparing the Cash Flow Statement is to deliver information about cash receipt cash payments, and the difference in cash position out of business activities from the operations, investments, and financing activities of a company during a particular financial year. In other words, the Cash Flow Statements where an organisation's cash is being generated, and where its cash is being paid during a particular period of time. The unit also helps to learn the preparation of Cash Flow Statement under Direct Method. The unit also discusses the difference between Cash Flow Analysis and Fund Flow Analysis. The Cash Flow Statements helps the management to analyse the liquidity as well as long term solvency of

the business. The main purpose of Cash Flow Statement is to transform the accrual basis income statement to a cash flow statement. On the other hand, Fund Flow Statement helps management about the allocation of resources and shows the operational aspects of the business activities which are not available in Profit and Loss Account and Balance Sheet.



5.11 FURTHER READING

1) Srinivasan, N.P & Murugan, M.S.(2011), '*Accounting for Management',* S Chand Publishing, India

2) Ramachandran, N. & Kakani, R.K. (2011), '*Financial Accounting for Management*', McGraw Hill Education

3) Bhattacharya, A.K. (2012), '*Financial Accounting for Business Managers*',PHI.



5.12 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The main objective of preparing the Cash Flow Statement is to deliver information about cash receipts, cash payments, and the difference in cash position out of business activities from the operations, investments, and financing activities of a company during a particular financial year. The main purpose of Cash Flow Statement is to transform the accrual basis income statement to a cash flow statement.

Ans to Q No 2: There are basically three components of Cash Flow Statement which are briefly given below:

(a) Cash Flow from Operating Activities

(b) Cash Flow from Investing Activities

(c) Cash Flow from Financing Activities

Ans to Q No 3: Some examples of cash flows that are generated from operating activities:-

(a) cash receipts from the sale of products and services

(b) cash receipts from patents, royalties, fees, commissions and from such sources.

(c) cash payments to suppliers for products and services

Ans to Q No 4: (i) True; (ii) False; (iii) True

Ans to Q No 5: Operating activities are those activities which are the primary drivers of an organisation. For example, for a company producing mobile phones, operating activities are purchase of raw material in the form of different types plastics, chips, camera lense, monitor glass etc., other of manufacturing expenses, sale and distribution of phones, etc. All these activities are referred to as operating activities and earn the principal revenue for the organisation.

Ans to Q No 6: The basic differences between cash flow statement and fund flow statement is pointed out below:-

(a) Cash Flow Statement shows the cash and cash equivalents position of an organisation which includes cash transactions. Fund Flow statement is a statement of changes in financial position.

(b) Cash flow statement shows the movement of cash and cash equivalents from the business as well as into the business which results out of the business activities. Fund flow statement is a statement summarising the significant financial changes which have occurred between the beginning and the end of company's accounting period.

(c) In the preparation of balance sheet and income statement, accounting is done on accrual basis but in cash flow statement, accounting is done on cash basis. Moreover, Cash Flow Statement also shows the source of cash receipts and it also reveals the purposes for which payments are made. Fund Flow Statement is a supplementary statement and shows the sources of mobilisation of the funds and their detailed utilisation during a

particular financial year. Fund Flow Statement also deal with the non-cash items.

Ans to Q No 7: (i) True; (ii) False; (iii) True.



5.13 MODEL QUESTIONS

Q 1: Explain the cash concept.

Q 2: Define the cash flow statement and explain how it is different from fund flow statement.

Q 3: How do you compute cash from financing activities?

Q 4: How do you compute cash from operating activities?

Q 5: Discuss the purpose of a cash flow statement.

Q 6: Write a brief note on preparation of cash flow statement.

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UNIT 6: BUDGET AND BUDGETARY CONTROL

UNIT STRUCTURE

6.1 Learning Objectives

6.2 Introduction

6.3 Meaning and Uses of Budget and Budgetary Control

6.4 Classification and Types of Budgets

6.5 Advantages and Limitations of Budgetary Control

6.6 Flexible Budget

6.7 Let Us Sum Up

6.8 Further Reading

6.9 Answers To Check Your Progress

6.10 Model Questions

6.1 LEARNING OBJECTIVES

After going through this unit, you will able to-

- explain the meaning of the term budget and budgetary control
- describe the objectives and/or uses of budget and budgetary control
- describe the concept of fixed, flexible and master budget and the nature or characteristics thereof
- explain the advantages and limitations of budget and budgetary control.

6.2 INTRODUCTION

Planning is considered to be the most important function of management. In the words of Prof. J. P. Bose, “Planning means assessing the future and making provision for the same”. It helps in determining the course of action to be followed for achieving the objectives and fulfilling the targets and goals of the organization. Hence, one of the essential features of modern business management is planning and control. There are number of tools and devices, which assist management in planning, and controlling business operations. Budgeting is considered to be the

most common, useful and widely practiced standard device of planning and control.

6.3 MEANING AND USES OF BUDGET AND BUDGETARY CONTROL

The word 'budget' is derived from a French term "Bougette" which denotes a leather pouch in which funds are appropriated for meeting anticipated expenses. The same meaning applies to business management. Thus, a budget is a numerical statement expressing the plans, policies and goals of the enterprise for a definite period in future. It is a plan laying down the targets to be achieved within a specified period. It is a final and approved shape of a forecast. Forecasts are statements expressed in quantitative or financial terms and indicate possible production, sales, costs, or other expenses etc. When forecasts are approved by the management as a tentative plan for the future, they become budgets.

The following are some important definitions of a budget:

1. "A budget is a written plan covering projected activities of a firm for a defined time period". Dickey.
2. "Budget is an estimate of future needs arranged according to an orderly basis, covering some or all the activities of an enterprise for a defined period of time." George R Terry
3. "A budget is a pre-determined statement of management policy during a given period which provides a standard for comparison with the results actually achieved." J.L. Brown & L.R. Howard.
4. "A financial and/or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during that period for the purpose of a given objective." ICMA, England.

An analysis of the above definitions reveals the following essential features of a budget:

a) A budget may be expressed in terms of money or quantity or both.

b) It should be developed prior to the period during which it is to operate.

c) It is set for a definite future period of time.

d) The objectives to be achieved and the policy to be pursued to achieve the pre-determined objective are to be clearly laid down in advance.

e) It provides yardsticks and measures for the purpose of comparison.

The following are the objectives/uses of a budget:

1. A budget is a blue print of the desired plan of action. Plans covering the entire organization together with all its functions such as purchase, production, sales, finance, labour and research and development etc are expressed through budgets. The budget serves as a declaration of policies, plans and programmes for executives at all levels of management.
2. Budget serves as a good means of coordination of the business as a whole. In the course of budgeting, the various factors such as production capacity, sales potentialities, procurement of materials, labour etc are balanced and coordinated so that all activities of the organization proceed in a harmonious and systematic way for fulfillment of the given objectives.
3. Budgets also serve as a good means of communication. Complex plans laid down by the top level management are passed on to those who are responsible for translating them into action. Similarly, reports and feed back on the same are passed on by them to the top level management for controlling the operations.
4. Budgets facilitate centralized control with delegated authority and responsibility. Budgets are instruments of managerial control by means of which the management can measure performances of various departments, divisions etc for taking corrective action in case any deviations are observed between budgeted and actual performances.

MEANING OF BUDGETARY CONTROL :

Budgetary control is a means of control in which the actual state of affairs is compared with the budgets so that appropriate action may be

taken with regard to any deviations before it is too late. Thus, budgetary control is a continuous process which helps in planning, coordinating and controlling the operations of an undertaking. In the words of Terry, "Budget is a means and budgetary control is the end result." According to Prof. Van Sickle "A budget is an integral part of the budgetary control system. The budget is the financial plan, budgetary control results from the administration of financial plans."

According to Brown and Howard, "Budgetary control is a system of controlling costs which includes the preparation of budgets, coordinating the departments and establishing responsibilities, comparing actual performances with the budgeted and acting upon results to achieve maximum profitability."

J. Batty puts it as "A system which uses budgets as a means of planning and controlling all aspects of production and/or selling commodities and services".

The following points emerge from the definitions given above:

1. Budgets are prepared for each department and then the plans and objectives are presented before the management.
2. The budgetary control coordinates the plans of various departments and then the master budget is prepared.
3. The essential features of budgetary control are to conduct continuous comparison of actual performance with budgeted figures in order to reveal the deviations.
4. Budgets are revised, whenever considered necessary according to changed conditions.

OBJECTIVES/USES OF BUDGETARY CONTROL:

The main objectives of budgetary control are as follows:

1. To ensure planning for future by formulating various functional budgets.
2. To coordinate the activities of the various departments.
3. To operate various divisions, units, departments and cost centers efficiently and economically.
4. To pre-determine the capital expenditures of the business for future.

5. To prevent waste, reduce expenses and to obtain the desired income.
6. To centralize the control system.
7. To establish divisional as well as individual responsibilities.
8. To correct the deviations from the established standards.



CHECK YOUR PROGRESS

Q 1: What is a budget?

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6.4 CLASSIFICATION AND TYPES OF BUDGETS

The following are the types and classification of budgets:

(A) Classification According to Time:
   1. Long –term budgets
   2. Short-term budget
   3. Current budget

(B) Classification on the Basis of Functions
   1. Operating budget
   2. Financial budget
   3. Master budget

(C) Classification on the Basis of Flexibility
   1. Fixed budget
   2. Flexible budget

(A) Classification according to time:

Long Term Budget: These budgets are usually prepared for the purpose of long term business planning by the top level management and not allowed to be known to lower level management and the budget covers certain activities like capital expenditure projects, long term financing and research and development projects etc. The period covered by long term budget normally ranges from five to ten years. Long term budgeting is mostly used by those industries where the gestation period is longer than others.

Short Term Budget: The period covered by this type budget ranges from one to two years only and these budgets are expressed in monetary terms. The industries producing consumer goods use this type of budgets.

Current Budget: The period covered by this type of budget may comprise of a few months or a few weeks only. These budgets are usually concerned with the current activities of the organization.

(B) Classification on the basis of functions:

Operating Budget: These budgets are prepared to cover different activities or operations of the organization and its number depends upon the nature of the business and the volume of transactions. The most common operating budgets are Sales Budget, Production Budget, Production Cost Budget, Purchases Budget, Raw Material Consumption Budget, Labour Budget, Plant Utilisation Budget, Administrative Overhead Budget and Sales Overhead Budget etc. These budgets may be expressed either in terms of programmes or in terms of responsibility centers.

Financial Budget: The financial budgets are concerned with receipts and payments of cash, determination of working capital requirements, evaluation of capital expenditure proposals, projection of financial position and profit and loss etc. The most common financial budgets are Cash Budget, Working Capital Budget, Capital Expenditure Budget, Projected Income Statement and Balance Sheet etc.

Master Budget: Master Budget is the outcome of integration of various functional budgets. According to ICWA, London, "The Master Budget is the summary budget incorporating its functional budgets." It is prepared by the Budget Officer and is kept in the custody of the top level management as it contains matters of a confidential nature. This budget is mainly used to coordinate and control the activities of the various departments.

(C) Classification on the basis of flexibility:

Fixed Budget: This budget has been designed in such a way that it remains unchanged even when there is a change in the level of activity. This budget is prepared for a given level of activity and is not adjusted for any change in the level of activity actually attained. This budget has very

limited use and it is not an effective tool for cost control. This budget can be put into use under some static conditions only, but in practical life conditions never remain static.

Flexible Budget: This is a dynamic budget which is designed to change in accordance with change in the level of activity. The budget is prepared in such a way that it presents the budgeted cost for different levels of activity. It is considered to be a more realistic and practical budget because any change expected in the level of activity is given due weightage. This budget is more useful for those concerns where the level of activity changes from time to time and where the concern has to operate under conditions of uncertainties. The flexible budget facilitates ascertainment of cost of production at various levels of activity, fixation of selling price, preparation of tenders and quotations and profits etc at various changed levels of activity.



CHECK YOUR PROGRESS

Q 2: What is a fixed budget?

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Q 3: What do you mean by flexible budget?

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6.5 ADVANTAGES AND LIMITATIONS OF BUDGETARY CONTROL

The budgetary control helps in fixing goals for the organization as a whole and concerted efforts are made for achieving the objectives laid down in the budget.

The following are the advantages of budgetary control:

1. **MAXIMISATION OF PROFIT**: The budgetary control aims at profit maximization and in order to do this proper planning and coordination of functions of different departments becomes necessary. Also a proper control system becomes highly necessary in order to put the

limited available resources to its best possible use. The budgetary control system extends useful services in this regard.

2. **COORDINATION**: The working of departments is properly coordinated in order to make them to work in a concerted manner with a spirit of co-operation. For achieving this objective budget of one department has to be linked up with another department. Here, budgetary control system is of much help.
3. **SPECIFIC AIMS**: The plan, policies, objectives, targets and goals etc are decided upon by the top management. All efforts are put together to reach the common goal of the enterprise. Every department has some own objectives to be achieved and accordingly the efforts are being directed to achieve the common objectives.
4. **TOOLS FOR MEASURING PERFORMANCES**: It is an important tool for measuring performances. The actual performances of the departments are periodically reviewed and compared with the budgeted standards and their deviations, if any, are calculated for initiating remedial action.
5. **ECONOMY:** By means of budgets and budgetary control the planning of expenditure is made more systematic so as to put the limited available resources to its best possible use with a view to achieving economy in respect of various cost.
6. **DETERMINING WEAKNESSES:** With the application of the budgetary control technique the weak spots can be pinpointed for taking specific measures for their elimination.
7. **CORRECTIVE ACTION**: The deficiencies as observed through budgetary control techniques may be taken up for corrective action whenever required.
8. **CONCIOUSNESS:** The system of budgetary control makes everyone in the organization conscious of their duties and responsibilities as these are already defined in the budget. Thus everyone becomes aware as to what they actually have to do.
9. **REDUCTION OF COST:** The purpose of budgetary control is to enable the management to exercise a better and more effective control

over cost which ultimately leads to reduction in cost.

10. **INTRODUCTION OF INCENTIVE SCHEMES:** Budgetary control enables the introduction of various inventive remuneration schemes of wage payment by laying down budgeted limited and standards as to time and volume of work etc.

The following are the limitations of Budgetary Control System.

1. **UNCERTAINITY:** The budgets are always prepared for the future and future being uncertain, the budgeted results may not always come to our expectation.
2. **BUDGETARY REVISION REQUIRED:** Budgets are always prepared in anticipation of certain assumed conditions but such conditions may change requiring revision in the budget. Too much of revision reduce the importance of the budget.
3. **DISCOURAGES EFFICIENT PERSONS:** Under the system of budgetary control budgeted limits, standards and targets are well defined for everyone. The workers have to fulfill the targets given to them. There may be efficient workers who are capable of going beyond the targets set. Thus budgetary control limits the capabilities and discourages the good and efficient workers.
4. **PROBLEM OF COORDINATION**: The success of budgetary control depends upon the coordination of all the departments. If such coordination is lacking, the budgetary control system will fail.
5. **CONFLICT AMONG DIFFERENT DEPARTMENTS**: Budgetary control system leads to conflict of interest amongst the various departments because one department will only think about itself and ignore the interest of the other departments.
6. **IT DEPENDS ON THE SUPPORT OF TOP MANAGEMENT**: The success of budgetary control depends upon the attitude of the top level management. If they support, the system will operate well and if they do not support the system will fail.

6.6 FLEXIBLE BUDGET

We have already discussed above the concept of Flexible Budget. Let us remember again:

1. This is a dynamic budget which is designed to change in accordance with change in the level of activity.
2. The budget is prepared in such a way that it presents the budgeted cost for different levels of activity.
3. It is considered to be a more realistic and practical budget because any change expected in the level of activity is given due weightage.
4. This budget is more useful for those concerns where the level of activity changes from time to time, and
5. Where the concern has to operate under conditions of uncertainties.
6. The flexible budget facilitates ascertainment of cost of production at various levels of activity, fixation of selling price, preparation of tenders and quotations and profits etc at various changed levels of activity.

1. The following are budgeted expenses for production of 10,000 units of a product:

	Rs per unit
Direct material	60
Direct labour	30
Variable overheads	25
Fixed overhead (Rs 150,000)	15
Variable expenses(direct)	5
Selling expenses(10% fixed)	15
Administrative expenses	
(Rs 50,000 rigid for all levels of production)	5
Distribution expenses(20% fixed)	5
	160

Prepare a budget for production of 6,000, 7,000 and 8,000 units howing distinctly marginal cost and total cost.

Solution:

Flexible Budget

	Per Unit	6,000 units	7,000units	8,000Units
	Rs	Rs	Rs	Rs
Direct Material	60	360000	420000	480000
Direct Labour	30	180000	210000	240000
Direct Variable Expenses	5	30000	35000	40000
Variable Overhead:				
Production	25	150000	175000	200000
Selling	13.5	81000	94500	108000
Distribution	4	24000	28000	32000
	137.5	825000	962500	1100000
Fixed Cost:				
Production Overhead		150000	150000	150000
Administrative Overhead		50000	50000	50000
Selling Overhead		15000	15000	15000
Distribution Overhead		10000	10000	10000
		225000	225000	225000
Total Cost:		**1050000**	**1187500**	**1325000**
Cost per unit:		**175**	**169.64**	**165.63**
Solution:				



6.7 LET US SUM UP

In this unit we have discussed the following:

- The meaning and concept of budget and budgetary control.
- The objectives and uses of budgets and budgetary control.
- Classification of budgets from the point of view of time, flexibility and functions.

- The usefulness/advantages and limitations of budgets and budgetary control, and
- Preparation of flexible budget.



6.8 FURTHER READING

1) Management Accounting: Sharma & Gupta, Kalyani Publishers, Delhi.
2) Management Accounting: Pillai & Bhagawathi, S Chand & Co Ltd. Delhi.
3) Management Accounting: Khan & Jain, Tata Mc-graw Hills Ltd. Delhi.



6.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: A budget is a numerical statement expressing the plans, policies and goals of the enterprise for a definite period in future.

Ans to Q No 2: Fixed budget is a budget which is unchanged even where there is a change in the level of activity.

Ans to Q No 3: Flexible budget is a dynamic budget which is designed to change in accordance with the change in the level of activity.



6.10 MODEL QUESTIONS

Q 1: What do you mean by budget and budgetary control? Discuss the objectives/uses of budgetary control.

Q 2: Discuss the concept of fixed, flexible and functional budgets.

Q 3: Briefly state the advantages and limitations of budgets and budgetary control.

Q 4: Write notes on fixed budget and flexible budget.

Q 5: What do you mean by operating budgets? Briefly state various operating budgets prepared by an organization.

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UNIT 7 : STANDARD COSTING

UNIT STRUCTURE

7.1 Learning Objectives

7.2 Introduction

7.3 Meaning and concept of Standard Cost and Standard Costing

- 7.3.1 Difference between Estimating Costs and Standard Costs
- 7.3.2 Comparison between Standard Costing and Budgetary Control
- 7.3.3 Advantages and limitations of Standard Costing
- 7.3.4 Determination of Standard Costs

7.4 Let Us Sum Up

7.5 Further Reading

7.6 Answers To Check Your Progress

7.7 Model Questions

7.1 LEARNING OBJECTIVES

After going through this unit, you will able to-

- explain the meaning of Standard Cost and Standard Costing
- describe the advantages and limitations of Standard Costing
- discuss the determination of Standard Cost
- explain the concept of variance analysis and its various types.

7.2 INTRODUCTION

In the earlier unit we discussed about process costing. Now in this unit we are going to discuss the concept of Standard Costing and variance analysis.

Standard Costing is a technique which helps us to control costs and business operations. It aims at elimination wastes and increasing efficiency in performance through setting up standards or formulating cost plans. We will also discuss the difference between estimated Costs and

Standard Costs and the advantages and limitations of Standard Costing. Again, we will get a fair idea on determination of Standard Cost.

Also, at the end of this unit we will discuss the variance analysis, its various types and its classifications.

7.3 MEANING OF STANDARD COST AND STANDARD COSTING

Standard Cost : The word "Standard" means a "Yardstick" or "Bench Mark". The term "Standard Costs" refers to Pre-determined costs. Brown and Howard defined Standard Cost as a predetermined Cost which determines what each product or service should cost under given circumstances. This definition states that standard costs represent planned cost of a product.

Standard cost as defined by the "Institute of Cost and Management Accountant", London "is the Pre-determined Cost based on technical estimate for materials, labour and overhead for a selected period of time and for a prescribed set of working conditions."

Standard Costing : Standard Costing is a concept of accounting for determination of standard for each element of costs. These predetermined costs are compared with actual costs to find out the deviations known as "Variances." Identification and analysis of causes for such variances and remedial measures should be taken in order to overcome the reasons for variances.

'Chartered Institute of Management Accounts England' defines Standard Costing as "the Preparation and use of standard costs, their comparison with actual costs and the analysis of variances to their causes and points of Incidence."

From the above definition, Standard Costing may be summarized as follows :

1) Determination of appropriate standards for each element of cost.
2) Ascertainment of information about actuals and use of Standard Costs.

3) Comparison of actual costs with Standard Costs, the differences is known as Variances.
4) Analysis of Variances to find out the causes of Variances.
5) Reporting to the responsible authority for taking remedial measures.

7.3.1 Difference between Estimated Costs and Standard Costs

Although, Pre-determination is the essence of both Standard Costing and estimated Costing, the two differ from each other in the following respects:

Standard Costing	*Estimated Costing*
1) It is used on the basis of scientific.	1) It is used on the basis of statistical facts and figures.
2) It emphasises "What the cost should be".	2) It emphasises "What the cost will be".
3) It is used to evaluate actual performance and it serves as an effective tool of cost.	3) It is used to cost ascertainment for fixing sales price.
4) It is applied to any industry engaged in mass production	4) It is applicable to concern engaged in construction work.
5) It is a part of accounting system and standard costing variances are recorded in the books of accounts.	5) It is not a part of accounting system because it is based on statistical facts and figures.

7.3.2 Comparison between Standard Costing and Budgetary Control

Relationship : The following are certain basic principles common to both Standard Costing and Budgetary Control :

1) Determination of standards for each element of costs in advance.

2) For both of them measurement of actual performance is targeted.
3) Comparison of actual costs with standard cost to find out deviations.
4) Analysis of variances to find out the causes.
5) Give the periodic report to take corrective measures.

Differences : Though Standard Costing and Budgetary Controls aims at the maximum efficiencies and Marginal Cost, yet there are some basic differences between the two from the objectives of using the two costs.

Budgetary Control	*Standard Costing*
1) Budgets are projections of financial accounts.	1) Standard Costing is projection of cost accounts.
2) As a statement of both income and expenses, it forms part of budgetary control.	2) Standard costing is not used for the purpose of forecasting.
3) Budgets are estimated costs, They are "What the cost will be".	3) Standard Cost are the "Norms" or "What cost should be".
4) Budget can be operated with standards.	4) Standard Costing cannot be used without budgets.
5) In budgtetary control, variances are not revealed through the accounts.	5) Under standard costing variances are revealed through different accounts.
6) Budgets are prepared on the basis of historical facts and figures.	6) Standard cost are planned and prepared on the basis of technical estimates.

7.3.3 Advantages and limitations of Standard Costing

Advantages of Standard Costing

The following are the important advantages of standard costing:

1) It guides the management to evaluate the production performance.
2) It helps the management in fixing standards.
3) Standard costing is useful in formulating production planning and price policies.
4) It guides as a measuring rod for determination of variances.
5) It facilitates eliminating inefficiencies by taking corrective measures.
6) It acts as an effective tool of cost control.
7) It helps the management in taking important decisions.
8) It facilitates the principle of "Management by Exception."
9) Effective cost reporting system is possible.

Limitations of Standard Costing

Besides all the benefits derived from this system, it has a number of limitations which are given below :

1) Standard costing is expensive and a small concern may not meet the cost.
2) Due to lack of technical aspect, it is difficult to establish standards.
3) Standard costing cannot be applied in the case of a concern where non-standardised products are produced.
4) Fixing of responsibility is difficult. Responsibility cannot be fixed in the case of uncontrollable variances.
5) Frequent revision is required while insufficient staff is incapable of operating this system.
6) Advers psychological effects and frequent technological changes will not be suitable for standard costing system.

7.3.4 Determination of Standard Costs

The following preliminary steps must be taken before determination of standard cost :

1) Establishment of Cost Centers.
2) Classification and Codification of Accounts.

3) Types of Standards to be applied.

a) Ideal Standard

b) Basic Standard

c) Current Standard

d) Expected Standard

e) Normal Standard

4) Organization for Standard Costing.

5) Setting of Standards.

1) Establishment of Cost Centres : It is the first step required before setting of Standards. According to CIMA, London Cost centre is "a location, person or item of equipment for which costs may be ascertained and used for the purpose of cost control." Cost centre is necessary for the determination of standard costs for each product and comparison of actual cost with the predetermined standards to ascertain the deviations to take corrective measures.



Codification: A set of rules or principles or laws (especially written ones).

2) Classification and Codification of Accounts : Classification of Accounts and Codification of different items of expenses and incomes help quick ascertainment and analysis of cost information.

3) Types of Standards to be Applied : Determination of the type of standard to be used is one of the important steps before setting up of standard cost. The different types of standards are given below :

a) Ideal Standard

b) Basic Standard

c) Current Standard

d) Expected Standard

e) Normal Standard

a) Ideal Standard : The term "Ideal Standard" refers to the standard which can be attained under the most favorable conditions possible. In other words, ideal standard is based on high degree of efficiency. It assumes that there

is no wastage, no machine breakdown, no power failure, no labour ideal time in the production process. In practice it is difficult to attain this ideal standard.

b) Basic Standard : This standard is otherwise known as Bogey Standard. Basic Standard which is established for use is unaltered over a long period of time. In other words this standard is fixed in relation to a base year and is not changed in response to changes in material costs, labour costs and other expenses as the case may be. The application of this standard has no practical importance from cost control and cost ascertainment point of view.

c) Current Standard : The term "Current Standard" refers to a "a standard established for use over a short period of time related to current conditions which reflects the performance that should be attained during the period." These standards are more suitable and realistic for control purpose.

d) Expected Standard : Expected Standard may be defined as "The standard which may be anticipated to be attained during a future specified budget period." These standards set targets which can be achieved in a normal situation. As such, it is more realistic than the Ideal Standard.



Anticipated:
Expected hopefully
Resent: Wish ill

e) Normal Standard : This standard resents an average standard in past which, it is anticipated, can be attained over a future period of time, preferably long enough to cover one trade cycle. The usefulness of such standards is very limited for the purpose of cost control.

4) Organization for Standard Costing : The success of the standard costing system depends upon the reliability of standards. Hence, the responsibility for setting standard is vested with the Standard Committee. It consists of



Vested: Fixed

a) Purchase Manager

b) Production Manager

c) Personal Manager

d) Time and Motion study Engineers

e) Marketing Manager and Cost Accountant

5) Setting of Standard : The Standard Committee is responsible for setting standards for each element of costs as given below:

I. Direct Material

II. Direct Labour

III. Overheads

a) Fixed Overheads

b) Variable Overhead

1. Standard for Direct material Cost :

The following are the standard involved in direct materials cost:

a) Material Quantity or Usage Standard.

b) Material Price Standard.

i) Material Usage Standard : Material Usage Standard is prepared on the basis of material specifications and quality of materials required to manufacture a product. While setting of standards proper allowance should be provided for normal losses due to unavoidable occurrence of evaporation breakage etc.

ii) Material price Standard : Material Price Standard is calculated by the Cost Accountant and the Purchase Manager for each type of materials. When this type of standard is used, it is essential to consider the important factors such as market conditions, forecasting relating to the trends of prices, discounts etc.

II. Standard for Direct Labour Cost

The following standards are established :

i) Fixation of Standard Labour Time

ii) Fixation of Standard Rate