VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI

ACCREDITED A GRADE NAAC

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DCMBA-14

Financial Reporting, Statements and Analysis

MBA
ODL MODE
(Semester Pattern)

School of Management Studies and Commerce

Centre for Distance and Online Education

Vels Institute of Science, Technology and Advanced Studies (VISTAS)
Pallavaram, Chennai - 600117

Vels Institute of Science, Technology and Advanced Studies

Centre for Distance and Online Education

Master of Business Administration (MBA)- ODL Mode

(Semester Pattern)

DCMBA-14: Financial Reporting, Statement and Analysis

(4 Credits)

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FOREWORD

Dr.Ishari K Ganesh
Chancellor

Vels Institute of Science, Technology and Advanced Studies (VISTAS), deemed to be a university, was established in 2008 under section 3 of the Act of 1956 of the University Grants Commission, Government of India, New Delhi.

VISTAS has blossomed into a multi-disciplinary Institute offering more than 100 UG & PG Programmes, besides Doctoral Programmes, through 18 Schools and 46 Departments. All the Programmes have the approval of the relevant Statutory Regulating Authorities such as UGC, UGC-DEB, AICTE, PCI, BCI, NCTE and DGS.

The deemed to be University aims to provide innovative syllabi and industry-oriented courses, and hence, the revision of curricula is a continuous and ongoing process. The revision is initiated by the faculty depending on the requirement and approved by the Board of Studies of the concerned Department/School. The courses are under Choice Based Credit Systems that enable students to get adequate freedom in choosing subjects.

I am pleased to inform you that VISTAS has been rendering its services to society to democratize the opportunities of higher education for those who are in need through Open and Distance Learning (ODL) mode.

VISTAS ODL Programmes offered have been approved by the University Grants Commission (UGC) – Distance Education Bureau (DEB), New Delhi.

The curriculum and syllabi have been approved by the Board of Studies, Academic Council, and the Executive Committee of the VISTAS, and they are designed to help provide employment opportunities to the students.

The ODL Programme (B.Com., BBA and MBA) study material have been prepared in the Self Instructional Mode (SIM) format as per the UGC-DEB (ODL & OL) Regulations 2020. It is highly helpful to the students, faculties and other professionals. It gives me immense pleasure to bring out the ODL programme with a noble cause of enriching learners' knowledge. I extend my congratulations and appreciation to the Programme Coordinator and the entire team for bringing up the ODL Programme in an elegant manner.

At this juncture, I am glad to announce that the syllabus of this ODL Programme has been made available on our website, www.vistas.ac.in, for the benefit of the student fraternity and other knowledge seekers. I wish that this Self Learning Materials (SLM) would be a nice treatise to the academic community and everyone.

CHANCELLOR

FOREWORD

Dr.S.Sriman Narayanan
Vice-Chancellor

My Dear Students!

Open and Distance Learning (ODL) of VISTAS gives you the flexibility to acquire a University degree without the need to visit the campus often. VISTAS-CDOE involves the creation of an educational experience of qualitative value for the learner that is best suited to the needs outside the classroom. My wholehearted congratulations and delightful greetings to all those who have availed themselves of the wonderful leveraged opportunity of pursuing higher education through this Open and Distance Learning Programme.

Across the world, pursuing higher education through Open and Distance Learning Systems is on the rise. In India, distance education constitutes a considerable portion of the total enrollment in higher education, and innovative approaches and programmes are needed to improve it further, comparable to Western countries where close to 50% of students are enrolled in higher education through ODL systems.

Recent advancements in information and communications technologies, as well as digital teaching and e-learning, provide an opportunity for non-traditional learners who are at a disadvantage in the conventional system due to age, occupation, and social background to upgrade their skills.

VISTAS has a noble intent to take higher education closer to the oppressed, underprivileged women and the rural folk to whom higher education has remained a dream for a long time.

I assure you all that the Vels Institute of Science, Technology and Advanced Studies would extend all possible support to every registered student of this deemed to be university to pursue her/his education without any constraints. We will facilitate an excellent ambience for your pleasant learning and satisfy your learning needs through our professionally designed curriculum, providing Open Educational Resources, continuous mentoring and assessments by faculty members through interactive counselling sessions.

This university brings to reality the dreams of the great poet of modern times, Mahakavi Bharathi, who envisioned that all our citizens be offered education so that the globe grows and advances forever.

I hope that you achieve all your dreams, aspirations, and goals by associating yourself with our ODL System for never-ending continuous learning.

With warm regards,

VICE-CHANCELLOR

Course Introduction

The Course **DCMBA-14: Financial Reporting, Statement and Analysis** has been divided into five Blocks consisting of 14 Units.

This subject is encourages to think in a new and more creative way when analyzing or forecasting financial information. Introduce new tools common to financial statement analysis and how to use them in practical applications. Understand how financial statement information can help solve business problems and increase the ability to read and understand financial statements and related information.

Block-1: Introduction to Management Accounting: This Block has five units, Introduction to Management Accounting in Unit-1, Accounting concepts and conventions in Unit-2, Accounting standards in Unit-3, Mechanics of accounting is discussed in Unit-4 and the Preparations of final statements is discussed in Unit-5.

Block-2: **Analysis of Financial Statements** has been divided in to three Units. Financial Statements analysis is discussed in Unit-6, Ratio analysis is discussed in Unit-7 and the Comparative and Common-size statements is discussed in Unit-8.

Block-3: **Funds Flow and Cash Flow Analysis** has been split into two Units, with Unit-9 discussing Fund flow analysis and the Unit-10 discussing Cash flow analysis.

Block-4: Capital Budgeting and Marginal costing has been split into two Units. The Capital Budgeting is discussed in Unit-11 and Marginal Costing is discussed in Unit-12.

Block-5: Budgeting and Financial Reporting has been split into two Units. Unit- 13 works with Group Discussion and Unit- 14 with Time Management.

In all the units of Financial **Reporting , Statements and Analysis** the Check your progress, Glossary, Answers to Check your progress and Suggested Reading has been provided and the Learners are expected to attempt all the Check your progress as part of study.

DCMBA-14: Financial Reporting Statement Analysis

Block-1: Introduction

This Block -1 Introduction to Management Accounting has been divided into five Units (Unit-1 to Unit-5).

Unit-1: Introduction to Management Accounting deals with Introduction, Meaning, Definitions, Emergence, Objectives, Characteristics, Scope, Functions, Distinguish between Management and Cost Accounting and Financial accounting, Importance of Management Accounting, Users of Management Accounting Information, Advantages and Limitations of Management Accounting.

Unit-2:Accounting Concepts and Conventions explains about Accounting Concepts and Conventions and its Introduction, Accounting conventions Meaning, Importance, Types, Differences between accounting concept and accounting convention and the Key characteristics of accounting information.

Unit-3: Accounting Standards describes about the Concepts, Benefits, and Procedure for issuing Accounting Standards in India, Salient features of First Time Adoption of Indian Accounting Standards (Ind-AS): 101, Currently Prevailing Accounting Standards in India, International Financial Reporting Standards, Need and procedure of IFRS, Convergence to IFRS, Distinction between Indian and International Accounting Standards.

Unit-4: Mechanics of Accounting deals with Book- keeping and its System, Types of accounting and accounting rules, Meaning of Journal and its format, Meaning of Ledger and its format, Posting and Balancing the Ledger, Subsidiary Books of Accounts, Meaning and Objectives of Trail Balance, Preparation of Trial Balance and Guidelines for preparing Trail balance.

Unit-5: Preparations of Final Statements presents about Introduction, Income Statement, Method of preparing the Trading Account, Profit and Loss Account, Method of preparing the Profit and Loss Account, Balance Sheet Meaning and Format, Classification of Balance Sheet Items, Distinction between Trial balance and Balance Sheet.

In all the units of Block -1 **Introduction to Management Accounting**, the Check your progress, Glossary, Answers to Check your progress and Suggested Reading has been provided and the Learners are expected to attempt all the Check your progress as part of study.

Unit-1

Introduction to Management Accounting

STRUCTURE

Overview

In this unit the concepts of Management Accounting – Introduction, Management Accounting – Meaning and Definitions, Emergence of Management Accounting, Objectives of Management Accounting, Characteristics of Management Accounting, Scope of Management Accounting, Functions of Management Accounting, Distinguish between management and cost accounting, Distinguish between management and Financial accounting, Importance of Management Accounting, Users of Management Accounting Information, Advantages of Management Accounting, Limitations of Management Accounting has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Explain the need for Management accounting;
- Identify the objectives of Management accounting;
- Outline the scope of Management accounting;
- Distinguish between Cost accounting & Management accounting, Financial accounting & Management accounting;
- Identify the users of management accounting information;
- Describe the functions of management accounting and
- Describe the advantages and limitations of management accounting.

1.1. Management Accounting – Introduction

Management accounting is a modern concept of accounting as a tool of management. The ICMA London has defined management accounting as the presentation of accounting information in such a way so as to assist management in the creation of policy and in day to day operations of an undertaking.

Thus any form of accounting which enables management to conduct business more efficiently is regarded as management accounting. In brief, management accounting is concerned with all such accounting information that is useful to management for performing its functions.

Management accounting makes use of various techniques which include marginal costing, standard costing, budgetary control, break-even analysis, cost- volume-profit relationship, ratio analysis, inter-firm comparison and uniform costing, internal audit, etc. Most of these techniques are also employed by a cost accountant.

Thus, the objectives of cost accounting are quite similar to those of management accounting. In fact management accounting is an extension of cost accounting.

Management accounting is thus, the presenting the account information in such a way as to assist managing the organization in the development of policy and in every day operation of an undertaking. It comprises methods of accounting, systems and techniques which, combined with special knowledge and ability, to assist management in the task of increase in profits or decrease in losses.

Management accounting is mainly concerned with provision of appropriate information for managerial personnel within an organisation to help them run the organisation and make better decisions.

Even the development of cost accounting has not been sufficient enough to provide all that is needed by management for the efficient performance of their functions. It is management accounting which meets the information needs of managerial personnel.

1.2. Management Accounting – Meaning and Definitions

According to its literal meaning, management accounting may be defined as accounting for management. It is, in other words, accounting designed and used for managerial purposes. It is the accounting activity which assists management at all levels in their efficient performance of functions undertaken by them.

Management accounting has been defined in different ways by different authorities. But yet, the central point in these definitions is the provision of accounting information to management for the efficient discharge of their functions of planning, organising, directing, controlling the operations of business. In this context, it is worthwhile to examine some of the well-known definitions of management accounting.

Brown and Howard, in their Book entitled Principles and Practice of Management Accountancy, define the discipline thus: Management Accounting may be defined broadly as that aspect of accounting which is concerned with the efficient management of a business through the presentation to management of such information as will facilitate efficient and opportune planning and control.

According to Kohler, Management Accounting is that portion of accounting which attempts to supply management with quantitative information as basis for decisions.

The definition coined by the National Association of Accountants is similar to the Kohler‘s definition. The subject-matter is defined as that subset of the accounting process which provides planning and control information to the firm or components thereof.

1.3. Emergence of Management Accounting

Till the emergence of cost accounting, financial accounting information communicated through the medium of financial statements was being used even by management. The information conveyed assisted management to control the affairs of their business in a general way. Further, managerial decisions were also based on such information.

With the emergence of cost accounting, however, it was possible for management to ascertain cost per unit of a product, process or operation. Direct costs could be traced to products. As such, the resources consumed by products could also be accurately measured.

In the case of indirect costs, however, the overhead resources consumed could only be estimated since specific items of overheads cannot be traced to individual products.

Consequently, product costs are less likely to be accurate.

In spite of the fact that product costs ascertained as above are not accurate, they can still be used for financial accounting requirements. In fact, such costs were used for the purpose of allocating manufacturing costs incurred during a given period, between the cost of goods sold and inventories.

Even in the case of a multiproduct concern, product costs arrived at, although inaccurately by overstatement of costs some products and understatement of costs of others were used for the same purpose.

Besides the use of product costs to meet financial accounting requirements, cost information provided by cost accounting was also used by management for their own decision making. However, it was soon realized that inaccurate product costs which are sufficient to meet the financial accounting requirements of allocating manufacturing cost between costs of goods sold and inventories, are inadequate and unsuitable for managerial decision making.

This was the main reason for accumulating cost data for use by management in their function of decision making, in a different manner than that for purpose of financial accounting. The shift in emphasis from cost accumulation for stock valuation necessary to meet financial accounting requirements to cost data for managerial decision making, was responsible for the emergence of management accounting.

1.4. Objectives of Management Accounting

Planning and Formulating Policies

In the process of planning and formulating policies, a management accountant provides necessary and relevant information to achieve the targets of the company. Management accounting uses regression analysis and time series analysis as forecasting techniques.

Controlling Performance

In order to assure effective control, various techniques are used by a management accountant such as budgetary control, standard costing, management audit, etc. Management accounting provides a proper managerial control system to the management. Reports are provided to the management regarding the effective and efficient use of resources.

Interpreting Financial Statement

Collecting accounting data and analyzing the same is a key role of management accounting. Management accounting provides relevant information in a systematic way that can be used by the management in planning and decision-making. Cash flow, fund flow, ratio analysis, trend analysis, and comparative financial statements are the tools normally used in management accounting to interpret and analyze accounting data.

Motivating Employees

Management accounting provides a selection of best alternative methods of doing things. It motivates employees to improve their performance by setting targets and starting incentive schemes.

Making Decisions

Success of any organization depends upon accurate decision-making and effective decision-making is based on informational network as provided by management accounting. Applying techniques of differential costing, absorption costing, marginal costing, and management accounting provides useful data to the management to aid in their decision-making.

Reporting to Management

It is the primary role of management accounting to inform and advice the management about the latest position of the company. It covers information about the performance of various departments on regular basis to the management which is helpful in taking timely decisions. A management accountant also works in the capacity of an advisory to overcome any existing financial or other problems of an organization.

Coordinating among Departments

Management accounting is helpful in coordinating the departments of an organization by applying thorough functional budgeting and providing reports for the same to the management on a regular basis.

Administrating Tax

Any organization must comply with the tax systems prevailing in the country they are operating from. It is a challenge due to the ever-increasing complexity of the tax structure. Organization need to file various kinds of returns with different tax authorities. They need to calculate the correct amount of tax and assure timely deposit of tax. Therefore, the management takes guidance from management accountants to comply with the law of the land.

1.5. Characteristics of Management Accounting

Management accounting provides data to the management on the basis of which they take decisions to achieve organizational goals and improve their efficiency. In this section, we will discuss the main characteristics of management accounting.

To Provide Accounting Information

Information is collected and classified by the financial accounting department, and presented in a way that suits managerial needs to review the various policy decisions of an organization.

Cause and Effect Analysis

One step further from financial accounting, management accounting works to know the reasons of profit or loss of an organization. It works to find out the causes for loss and also study the factors which influence the profitability. Therefore, cause and effect is a feature of management accounting.

Special Technique and Concepts

Budgetary control, marginal costing, standard costing are main techniques used in financial accounting for successful financial planning and analysis, and to make financial data more useful.

Decision Making

Studying various alternative decisions, studying impact of financial data on future, supplying useful data to management, helping management to take decisions is a part of management accounting.

Achieving Tasks

Financial data is used to set targets of the company and to achieve them. Corrective measures are used if there is any deviation in actual and targeted task. This all is done through management accounting with the help of budgetary control and standard costing.

No Fixed Norms

No doubt, tools of management accounting are same, but at the same time; uses of these tools depend upon need, size, and structure of any organization. Thus, no fix norms are used in application of management accounting. On the other hand, financial accounting totally depends on certain rules and principals. Therefore, presentation and analysis of accounting data may vary from one organization to another.

Increasing Efficiency

While evaluating the performance of each department of an organization, management accounting can spot the efficient and inefficient sections of an organization. With the help of that, corrective step can be taken to rectify the inefficient part for better performance. Hence, we can say that efficiency of a concern can increase using accounting information.

Informative Instead of Decision Making

Decisions are taken only by top management using information provided by management accountant as classified in a manner which is useful in decision making. Decision making does not come under preview of accountant, it is only the top management, who can take decision. Thus, decision of an organization depends on caliber and efficiency of the management.

Forecasting

Management accountant helps management in future planning and forecasting using historical accounting data.

Check your Progress-1

True or False

a. The information conveyed assisted management to control the affairs of their business in a general way.
b. Management accounting has been defined in different ways by different authorities.
c. Management accounting is a modern concept of accounting as a tool of management.
d. Any organization must comply with the tax systems prevailing in the country they are operating from.
e. Cost accounting is not concerned with the ascertainment of various elements of costs for different business operation and activities.

1.6. Scope of Management Accounting

The main objective of management accounting is to use the accounting information in solving the problems in day to day business and taking decisions scientifically. Moreover, the management accounting has a very wide range of scope. Therefore, it is very difficult of pinpoint the exact scope of management accounting. However, the scope of management accounting are listed below.

Financial Accounting

Financial accounting is relating to the recording of business transactions immediately soon after the transaction taken place or afterwards incurring the expenses. The business transaction may be relating to income, expenses, inventory movement, assets, liabilities, cash receipts and payments and so on.

The process of financial accounting includes the preparation of financial statements regularly at the end of each accounting year for knowing operating results for a definite period. The term financial statements includes profit and loss account and balance sheet.

Management is unable to exercise the coordination and control out of the information supplied by financial accounting system. But, the financial accounting system information is the basis of future business planning and financial forecasting.

Cost Accounting

Cost accounting is concerned with the ascertainment of various elements of costs for different business operation and activities. These cost data are used in the management accounting system for further analysis so as to solve business problems and take quality decision.

Budgeting and Forecasting

Management accounting includes budgetary control and forecasting techniques also. Under budgetary control system, the budgets are prepared on functional basis and measure the actual performance, find the difference between the actual and standard for taking corrective actions. In this way, budgeting assists the management for identifying responsibility and ensuring coordination.

Revaluation Accounting

This type of accounting system is ensuring that the capital is maintained intact in real terms. By keeping this fact in mind, correct amount of profit is calculated and used for managerial decision making.

Cost Control Procedures

Cost control procedures are an integral part of management accounting process. In includes inventory control, cost control, time control, budgetary control, standard costing etc.

Statistical Methods

In order to analyze the financial accounting data, tables, diagrams and graphs are used in the management accounting system. These are nothing but statistical methods.

Inventory Control

Inventory control refers to exercising control over the utilization of raw materials, processing of work in progress and disposal of finished goods for a specific period.

Reporting

Reporting is divided into two types. They are interim reporting and external reporting. Interim reporting is supplying information to the top management. External reporting is supplying information to outsiders i.e. shareholders, banks and financial institutions.

Interim reporting deals with the submission of financial results by means of weekly, fortnightly, monthly, quarterly or half yearly accounts or statements to the top management.

Taxation

It includes the computation of corporate income tax in accordance with the tax laws, filing of returns and making tax payments.

Methods and Procedures Design and Installation

Management accounting is relating to the most efficient and economic system of accounting suitable to any size and type of undertaking. Moreover, it employ best use of mechanical and electronic devices.

Internal Audit

Internal audit is conducted by the business organization with the help of paid employee who has thorough accounting knowledge. All the relevant records are maintained under the management accounting system so that the internal audit is conducted in an effective manner.

Interpretation

Management accounting is relating to the interpretation of financial data to management and advising them on decision-making.

1.7. Functions of Management Accounting

The function of management accounting is to help the management in performing its functions efficiently. The various functions of the management are planning, organizing, directing, and controlling.

Management accounting is a part of accounting itself. It was developed out for the need to make more use of accounting for making managerial decisions.

Management accounting helps in the performance of each of these functions in the following ways:

Provides data

Management accounting plays vital role in giving source of data for management planning. The accounts and documents are a repository of a vast quantity of data and information about the past progress of the enterprise, which is a must for making forecasts for the future.

Modifies data

Management accounting modifies the available accounting data rearranging in such a way that it becomes useful for management.

The modification of data in similar groups makes the data more useful and understandable. The accounting data required for management decisions is properly compiled and classifies.

For example, purchase figures for different months may be classified to know total purchases made during each period product-wise, supplier-wise, and territory-wise.

Communication

Management accounting is an important medium of communication. Different levels of management (top, middle, and lower) need different types of information.

The top management needs concise information at relatively long intervals, middle management needs information regularly, and lower management is interested in detailed information at short-intervals.

Management accounting establishes communication within the organization and with the outside world.

Analyses and interprets data

The accounting data is analyzed meaningfully for effective planning and decision- making. For this purpose, the data is presented in a comparative form, Ratios are calculated, and likely trends are projected.

Serves as a means of communicating

Management accounting functions as a means of communication for management plans upward, downward, and outward through the organization.

It means identifying the feasibility and consistency of the various sectors of the plan. The later stages it keeps all stake holders informed about the plans they have been agreed and their roles in these plans.

Facilitates control

Management accounting helps in transformation of the given objectives and strategy into specified goals attainment in a specified time and secures the effective achievement of these goals proficiently. All this is made possible through budgetary control and standard costing, which is an integral part of management accounting.

Uses also qualitative information

Management accounting does not restrict itself to financial data for helping the management in decision making but also uses such information that may be capable of being measured in monetary terms. Such information may be collected from special surveys, statistical compilations, engineering records, etc.

To assist in planning

Management Accounting assists the management in planning as well as to formulate policies by making forecasts about the production, selling the inflow and outflow of cash, etc.

Not only that, but it may also forecast how much may be needed from alternative courses of action or the expected rate of return from that place and at the same time decides upon the programmed of activities to be undertaken.

To assist in organizing

By preparing budgets and ascertaining specific cost centers, it delivers the resources to each center and delegates the respective responsibilities to ensure their proper utilization.

As a result, an interrelationship grows among the different parts of the enterprise.

Decision-Making

Management accounting furnishes accounting data and statistical information required for the decision-making process, which vitally affects the survival and the success of the business.

Management accounting gives systematic information regarding various alternatives, and the choice for management is made easy.

To assist in motivation

By setting goals, planning the best and economic courses of action, and also by measuring the performances of the employees, it tries to increase their efficiency and, ultimately, motivate the organization as a whole.

To Coordinate

It helps the management in coordination the whole activities of the enterprise, firstly by preparing the functional budgets, then co-coordinating the whole activities of the enterprise, firstly, by preparing the functional budgets, then co-coordinating the whole activities by integrating all functional budgets into one which goes by the name of Master Budget.

In this way, it helps the management by con-coordinating the different parts of the enterprise. Besides, overall coordination is not at all possible without budgetary control.

To Control

The actual work done can be compared with Standards to enable the management to control the performances effectively. Functions of Management Accounting

The basic function of management accounting is to assist the management in performing its functions effectively.

1.8. Distinguish between Management Accounting and Cost Accounting

Management accounting collects data from cost accounting and financial accounting. Thereafter, it analyzes and interprets the data to prepare reports and provide necessary information to the management.

On the other hand, cost books are prepared in cost accounting system from data as received from financial accounting at the end of each accounting period.

S.No	Cost Accounting	Management Accounting
1	The main objective of cost accounting is to assist the management in cost control and decision-making.	The primary objective of management accounting is to provide necessary information to the management in the process of its planning, controlling, and performance evaluation, and decision-making.
2	Cost accounting system uses quantitative cost data that can be measured in monitory terms.	Management accounting uses both quantitative and qualitative data. It also uses those data that cannot be measured in terms of money.
3	Determination of cost and cost control are the primary roles of cost accounting	Efficient and effective performance of a concern is the primary role of management accounting.
4	Success of cost accounting does not depend upon management accounting system.	Success of management accounting depends on sound financial accounting system and cost accounting systems of a concern.
5	Cost-related data as obtained from financial accounting is the base of cost accounting.	Management accounting is based on the data as received from financial accounting and cost accounting.
6	Provides future cost-related decisions based on the historical cost information.	Provides historical and predictive information for future decision-making.
7	Cost accounting reports are useful to the management as well as the shareholders and creditors of a concern.	Management accounting prepares reports exclusively meant for the management.
8	Only cost accounting principles are used in it.	Principals of cost accounting and financial accounting are used in management accounting.

9	Statutory audit of cost accounting reports are necessary in some cases, especially big business houses	No statutory requirement of audit for reports.
10	Cost accounting is restricted to cost- related data.	Management accounting uses financial accounting data as well as cost accounting data.

1.9. Distinguish between Management Accounting and financial accounting

All monetary transactions are recorded in the books of accounts on historical cost basis. Financial statements are prepared to ascertain the actual profit or loss of the firm and to know the financial position of the firm of every accounting period.

Management accounting collects data from financial statements, analyzes, and then provides this data to the management.

S.No.	Financial Accounting	Management Accounting
1	Monitory transactions are the base of financial accounting.	Data as obtained from financial accounting is the base of management accounting.
2	Recognition, classification, recording of financial transactions on actual basis, and preparation of financial statement are the main functions of financial accounting.	Collection of data from financial accounting, provision of necessary information to the management for planning, decision-making, and evaluation are the main functions of management accounting.
3	Support of relevant figures is required in preparing the financial reports.	Subjective and objective, both figures may be present in the management accounting report.
4	Success of financial accounting does not depend on sound management accounting system.	Success of management accounting depends on sound financial accounting system of a concern.
5	Financial reports are used by the management of a company, shareholders,	Financial reports are exclusively used by the management only.

	creditors, and financial institutions.	
6	Statutory audit of financial statements of concerns is required as per applicable law.	No statutory requirement of audit for reports prepared by management accountants.
7	Financial statements of a concern are prepared at the end of every accounting period.	The reports are prepared as and when required by management of the concern.
8	To ascertain profit or loss of a concern on actual basis and to know financial position of a concern financial accounting is used.	Thorough management accounting evaluation of performance is done department and section- wise, as well as whole concern-wise.

1.10. Importance of Management Accounting Helps in making plans

Management accounting helps organization in making better strategies for future activities. It supplies all financial and non-financial data to management on a consistent basis. Managers through the availability of all these information are able to perform better analysis and forecasting which enables them in framing proper plans.

Assist in decision making

Efficient decision making is a major role played by management accounting. It collects and analyses all financial information available within organization and present them in simplified charts, tables or graphs. Management gets better understanding regarding organization affairs and is able to take correct decisions at right time.

Measures the performance

Management accounting monitors and measures the overall performance of organization. It uses various tools like variance analysis which measures the company performance with pre- established standards for finding out the deviations. Managers by identifying all variations in performance of company are able to take corrective measures accordingly for removing them.

Increases the efficiency

This accounting branch aims at raising the overall efficiency of business organizations. Management accounting sets target for each division in advance and checks whether they fulfill all targets. It ensures that all resources are fully utilized which helps in improving the efficiency.

Better service to customers

Management accounting focuses on better service to customers by providing them quality goods at fair prices. It helps in controlling the prices of products by employing cost control devices. In addition to that, it sets various quality standards to be met by organization for producing their goods.

Raises the profitability

It has an efficient role in enhancing the profitability of organizations. It makes companies cost conscious and assist in avoiding all extra expenditures. Management accounting uses techniques such as budgetary control and capital budgeting for reducing the expenses which helps in earning better profits.

Provides reliability

Management accounting adds reliability to management decisions by providing them genuine information. It uses proper scientific tools and techniques for analysis purposes which helps managers in the proper management of business operations.

1.11. Users of Management Accounting Information

The objective of management accounting is to record, analyze and present financial data to the management in such a way that it becomes useful and helpful in planning and running business operations systematically and effectively. Anyone who needs information to plan, to control, to coordinate, to decide and to manage an organisation becomes the user of management accounting

A **production manager** would require information about production-efficiencies, output ratio, quality measures, different raw materials stock-levels, wastage rate etc.

A **sales manager** would require information about sales-trends, profitability, finished goods stock levels, stock turnover rate, salesman's performance, sales volumes etc.

A **director or high level manager** would require information as a guide for the future. It enables the management in performing managerial functions efficiently and effectively. Management accounting as an accounting service to the management through its various functions has to employ a number of tools, techniques and methods-standard costing, Budgetary control. Marginal costing, Ratios, Statistical techniques etc.

1.12. Advantages of Management Accounting Better decision making

Management accounting helps in effective decision making for an organization. It supplies all required information in the form of charts, tables, and forecasts to the management team. All this information enables managers in performing detailed analysis and taking correct decisions.

Increase business efficiency

It aims at increasing the overall efficiency of the business. Management accounting using scientific techniques evaluates the performance of the business and detects deviations and problems. It takes corrective measures accordingly to remove defects that enhance business productivity.

Simplify financial statements

This accounting branch simplifies the information contained in financial statements. Management accountant properly studies financial statements and presents all data to managers in the forms of simplified tables or charts for better understanding.

Raises profitability

Management accounting assists in increasing business profitability. It enables in cutting the extra expenditure involved in business activities using capital budgeting and budgetary control. Companies are able to reduce the cost of their products and earn better profits on them.

Motivates employees

Management accounting serves as a tool for motivating employees. It prepares and presents periodic reports regarding operations of the business to the management team. Managers are easily able to evaluate the performance of employees and takes decision regarding promoting or demoting them accordingly.

Cost transparency

Transparency of cost is another important role played by management accounting. It properly monitors all cash inflows and outflows of business and ensures that there is no misuse of money. Management accounting works closely with the IT department to ensure that all expenses are within budget.

Reliability

The information provides by management accounting is reliable as it uses proper scientific tools for analysis purposes. Accurate and genuine information available to managers enables them to the effective management of business affairs.

1.13. Limitations of Management Accounting Lack of specific procedure

Management accounting does not have any specific rules and principles to follow. In the absence of any guideline, this branch of accounting may provide inaccurate data.

Costly

The installation of a management accounting system requires huge expenses as they need to hire a management accountant. Such high costs cannot be bear by small business organizations.

Dependency

Management accounting is dependent upon financial and cost accounting for various data. The authenticity of the information provided by management accounting completely depends upon the accuracy of records maintained by cost and financial accounting.

Personal bias

This accounting branch is subject to personal bias and prejudices by management. The effectiveness of management accounting may be affected by the interpretation and analysis capability of individuals.

Uncertain

Management accounting is related to the future as it provides data for management and planning of future activities. However, the future is uncertain and management accounting may not provide effective results.

Provides only data

It only supplies data to management but does not provide any plan of action or decision. Management accounting cannot substitute the role of management and can only help them in their role by providing the required data.

Let Us Sum Up

In this unit you have learned about introductory concept of Accounting and its meaning, definition, advantages and limitations.

Check Your Progress-2

1. Using the concept of fair value, an enterprise measures and reports t he value of certain assets and liabilities based on ______ fair market prices:

   a) Actual or estimated
   b) Estimated
   c) Market
   d) Actual

2. An entity shall consistently disclose its policies and processes for det ermining when to transfer between levels of ___________ Deemed i ncurred as per Ind AS 113:

   a) Fair value accounting
   b) Fair Value hierarchy
   c) Fair value chain
   d) Fair value principle

3. Ind AS 113 Appendix A shows that the transportation costs are:

   a) The costs that would be incurred to transport an asset from its current location to its market whether principal or minor.
   b) None of these
   c) The costs that would be incurred to transport an asset from its current location to its principal (or most advantageous) market.
   d) A and C

4. The entity is losing money in its operations and will need immediate cash to fund its operations. So, for immediate cash, he sells one of hi s book assets at a depreciated value of Rs. 8,50,000/. The property i s being sold at Rs.8,00,000/. However, the normal market price for th e same property is Rs. 10,00,000/. What is the fair value of the prope rty according to Ind AS 113?

   a) Rs. 10,00,000/-
   b) Rs. 10,00,000/- less Rs. 8,00,000/-
   c) Rs. 8,00,000/-
   d) Rs. 8,50,000/-

5. The evaluation technique is _____.

   a) Most relevant to a given situation
   b) Maximize the use of relevant observable data and minimize the u se of unobservable data from relevant observable inputs and
   c) minimize the use of unobservable inputs -
   d) None of the above

Glossary

Accounting:	It is the process of recording, classifying, summarizing and reporting the economic business events in a proper manner.
Cost Accounting:	it is concerned with the computation of the aggregate cost of products manufactured and for services provided.
Management Accounting:	It relates to use the financial and cost accounting data for the purpose of evaluating the performance, reviewing policies and planning.
Owner:	Those who have contributed the capital for starting the business**.**

Answers to Check Your Progress-1

a-True

b-True

c-True

d-True

e-False

Answers to Check Your Progress-2

1.a

2.b

3.c

4.a

5.b

Suggested Reading

1. Chandra sekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K.R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-2

Accounting Concepts and Conventions

STRUCTURE

Overview

In this unit the Accounting Concepts and Conventions such as Introduction to Accounting conventions and its Meaning, Important Accounting Conventions, Accounting concepts and its Meaning, Accounting concepts Types, Differences between accounting concept and accounting convention, Key characteristics of accounting information have been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Accounting Concepts and Conventions:
- Introduction Accounting conventions, Meaning
- Important Accounting Conventions
- Accounting concepts: Meaning, Types
- Differences between accounting concept and accounting convention,
- Key characteristics of accounting information

2.1. Accounting Concepts and Conventions: Introduction

In sketching up account statements, whether they are external "financial accounts" or internally-focused "management accounts", a strong objective has to be that the accounts fairly mirror the true "substance" of the business and the results of its operation.

The theory of accounting has, therefore, developed the concept of a "true and fair view". The true and fair view is applied in ensuring and assessing whether accounts do indeed portray accurately the business' activities.

To support the application of the "true and fair view", accounting adopted certain concepts and conventions which help to ensure that accounting information is presented accurately and consistently.

2.2. Accounting Conventions Meaning

The term "Accounting Conventions" refers to the customs or traditions which are used as a guide in the preparation of accounting reports and statements. The conventions are derived by usage and practice. The accountancy bodies of the world may charge any of the convention to improve the quality of accounting information accounting conventions need not have universal application.

2.3. Important Accounting Conventions Consistency

According to this convention the accounting practices should remain unchanged from one period to another. It requires that working rules once chosen should not be changed arbitrarily and without notice of the effect of change to those who use the accounts.

For example, stock should be valued in the same manner every year.

Similarly depreciation is charged on fixed assets on the same method year after year. If this assumption is not followed, the fact should be disclosed together with reasons.

The principle of consistency plays its role particularly when alternative accounting methods is equally acceptable. Any change from one method to another method would result in inconsistency; they may seem to be inconsistent apparently. In case of valuation of stocks if the company applies the principle "at cost or market price whichever is less and if this principle accordingly result in the valuation of stock in one year at cost and the market price in the other year, there is no inconsistency here. It is only an application of the principle.

An Enterprise should change its accounting policy in any of the following circumstances only:

(i) To bring the books of accounts in accordance with the issued accounting standard.

(ii) To compliance with the provision of law.

(iii) When under changed circumstances felt that new method will reflect more true and fair picture financial statement.

Disclosure

Apart from statutory requirement, good accounting practice also demands that significant information be disclosed financial statements. Such disclosures can also be made through footnotes. The purpose of this convention is to communicate all material and relevant facts concerning financial position and results of operations the users. The contents of balance sheet and profit and loss account are prescribed law. These are designed make disclosures materials compulsory. The practice appending notes relative to various facts and items which do not find place in accounting statements pursuance the convention full disclosure material facts.

Example:

- Contingent liability appearing as a note.
- Market value of investments appearing note.

The convention of disclosure also applies to events occurring after the balance sheet date and the date on which the financial statement are authorized for issue. Such events include bad debts, destruction of plant and equipment due to natural calamities', major acquisition of another enterprise, etc., such events are likely to have a substantial influence on the earnings and financial position of the enterprises. Their disclosure would affect the ability of the users for evaluations and decisions.

Conservatism

This is the policy of playing sale game. It takes into consideration all prospective losses but leaves all prospective profits financial statements are usually drawn up on a conservative basis anticipated profit are ignored but anticipated losses are taken into account while drawing the statements following are the examples of the application of the convention of conservatism.

- Making the provision for doubtful debts and discount on debtors.
- Valuation of the stock at cost price or market price whichever is less.

- Charging of small capital items, like crockery to revenue.
- Showing joint life policy at surrender value as against the actual amount paid.
- Not providing for discount on creditors.

Materiality

According to this convention, the accountant should attach importance to material detail and ignore insignificant details in the financial statement. In materiality principle, all the items having significant economics effect on the business of the enterprises should be disclosed in the financial statement.

The term materiality is the subjective term. It is on the judgment, common sense and discretion of the accountant that which item is material and which is not.

Example: Stationery purchased by the organization though not used fully in the concept. Similarly depreciation small items like books, calculator is taken as 100% in the year if purchase through used by company for more than one year. This is because the amount of books or calculator is very small to be shown in the balance sheet. It is the assets of the company.

Check Your Progress-1

True/False

a. According to this convention, the accountant should attach importance to material detail and ignore insignificant details in the financial statement.
b. Depreciation is not charged on fixed assets on the same method year after year.
c. The theory of accounting has, therefore, developed the concept of a "true and fair view".
d. The principle of consistency plays its role particularly when alternative accounting methods is equally acceptable.
e. Business entity means a unit of organised business activity.

2.4. Accounting concepts meaning

Accounting Concepts can be understood as the basic accounting assumption, which acts as a foundation for the preparation of financial statement of an enterprise. Indeed, these form a basis for formulating the accounting principles, methods and procedures, to record and present the financial transactions of these concepts provide an integrated structure and rational approach to the accounting process. Every financial transaction that occurs is interpreted taking into consideration the accounting concepts, which guides the accounting methods.

2.5. Types of accounting concepts

Concepts to be observed at the Recording Stage

The following concepts will guide us in identifying, measuring and recording transactions.

Business Entity Concept

Business entity means a unit of organised business activity. In that sense, a provision store, a cloth dealer, an industrial establishment or electricity supply undertaking, a bank, a school, a hospital, etc. are all business entities.

From the accounting point of view, every business enterprise is an entity separate and distinct from its proprietor(s)/owner(s). The accounting system gives information only about the business and not about its owner(s). In other words, we record those transactions in the books of account which relate only to the business. The owner‘s personal affairs (his expenditure on housing, food, clothing, etc.) will not appear in the books of account of his business. However, when personal expenditure of the owner is met from business funds it shall also be recorded in the business books. It will be recorded as drawings by the proprietor and not as business expenditure.

The business entity concept is applicable to all forms of business organisations. This distinction can be easily maintained in the case of a limited company because the company has a legal entity of its own. But such distinction becomes difficult in case of a sole proprietorship or partnership because in the eyes of the law, the partner or the sole proprietor are not considered separate entities. They are personally liable for all business transactions. But, for accounting purposes, they are to be treated as separate entities. This enables them to ascertain the profit or loss of business more conveniently and accurately.

Money Measurement Concept

Usually, business deals in a variety of items having different physical units such as kilograms, quintals, tons, meters, liters, etc. If the sales and purchases of different items are recorded in terms of their physical units, adding them together will pose problems. But, if these are recorded in a common denomination, their total becomes homogeneous and meaningful. Therefore, we need a common unit of measurement. Money does this function. It is adopted as the common measuring unit for the purpose of accounting. All recording, therefore, is done in terms of the standard currency of the country where business is set up. For example, in India, it is done in terms of Rupees, in USA it is done in terms of US Dollars, and so on.

Objective Evidence Concept

The term objectivity refers to being free from bias or free from subjectivity.

Accounting measurements are to be unbiased and verifiable independently. For this purpose, all accounting transactions should be evidenced and supported by documents such as bills, invoices, receipts, cash memos, etc. These supporting documents (vouchers) form the basis for making entries in the books of account and for their verification by auditors afterwards. As for the items like depreciation and the provision for doubtful debts where no documentary evidence is available, the policy statements made by management are treated as the necessary evidence.

Historical Record Concept

After identifying the transactions and measuring them in terms of money, we record them in the books of account. According to the historical record concept, we record only those transactions which have actually taken place and not those which may take place (future transactions). It is because accounting record presupposes that the transactions are to be identified and objectively evidenced. This is possible only in the case of past (actually happened) transactions. The future transactions can hardly be identified and measured accurately. You also know that all transactions are to be recorded in chronological (date wise) order. This leads to the preparation of a historical record of all transactions. It also implies that we simply record the facts and nothing else.

Cost Concept

Business activity, in essence, is an exchange of money. The price paid (or agreed to be paid in case of a credit transaction) at the time of purchase is called cost. According to the cost concept, all assets are recorded in books at their original purchase price. This cost also forms an appropriate basis for all subsequent accounting for the assets. For example, if the business buys a machine for Rs. 80,000/- it would be recorded in books at Rs. 80,000/-. In case its market value increases later on to Rs. 1,00,000/- (or decreases to Rs. 50,000/-) it will continue to be shown at Rs. 80,000/- and not at its market value.

This does not mean, however, that the asset will always be shown at cost. You know that with passage of time, the value of an asset decreases. Hence it may systematically be reduced from year to year by charging depreciation and the asset be shown in the balance sheet at the depreciated value. The depreciation is usually charged as a fixed percentage of cost. It bears no relationship with changes in its market value. In other words, the value at which the assets are shown in the balance sheet has no relevance to its market value.

Dual Aspect Concept

This is the basic aspect of accounting. According to this concept, every business transaction has a two-fold effect. In commercial context, it is a famous dictum that —every receiver is also a giver and every giver is also a receiver‖. For example, if you purchase a machine for Rs. 8,000/- you receive the machine on the one hand and give Rs. 8,000/- on the other. Thus, this transaction has a twofold effect i.e., (i) increase in one asset and (ii) decrease in another. Similarly, if you buy goods worth Rs. 500/- on credit it will increase an asset (stock of goods) on the one hand and increase a liability (creditors) on the other. Thus, every business transaction involves two aspects: (i) the receiving aspect, and (ii) the giving aspect. In case of the first example you find that the receiving aspect is machinery and the giving aspect is cash. In the second example the receiving aspect is goods and the giving aspect is the creditor. If a complete record of transactions is to be made, it would be necessary to record both the aspects in books of account. This principle is the core of double entry book-keeping and if this is strictly followed, it is called Double Entry System of Book-keeping about which you will learn in detail later.

Let us understand another accounting implication of the dual aspect concept. To start with, the initial funds (capital) required by the business are contributed by the owner. If necessary, additional funds are provided by the outsiders (creditors). As per the dual aspect.

Liabilities (Equities) = Assets or Capital + Outside Liabilities = Assets

The term assets denotes the resources (property) owned by the business while the term equities denotes the claims of various parties against the business assets. Equities are of two types: (i) owners equity, and (ii) outsiders equity. Owners equity called capital is the claim of the owners against the assets of the business. Outsiders equity called liabilities is the claim of outside parties like creditors, bank, etc. against the assets of the business. Thus, all assets of the business are claimed either by the owners or by the outsiders. Hence, the total assets of a business will always be equal to its liabilities. 10 years. He would charge Rs. 6,000/- (1/10 of its cost) every year to the Profit and Loss Account in the form of depreciation, and show the balance in the Balance Sheet as an asset. This is based on the assumption that the business will continue for long and the asset will be used for its expected life. Thus, this concept is regarded as the basic assumption in accounting according to which the fixed assets are valued at historical cost less depreciation and not at its realisable value.

Accounting Period Concept

After going concern concept assumes that the business will continue for a long period, almost indefinitely. But the businessmen cannot postpone the preparation of financial statements indefinitely. Therefore, he prepares them periodically. This will also enable other interested parties such as owners, investors, creditors, tax-authorities to make periodic assessment of its performance. So, the life of the business enterprise is divided into what are called accounting periods‘. The profit or loss and the financial position at the end of each such accounting period is regularly assessed.

Conventionally, duration of the accounting period is twelve months. It is called an accounting year‘. Accounting year can be a calendar year i.e., January 1 to December 31 or any other period of twelve months, say, April 1 to March 31 or Dewali to Dewali.

Normally, the final accounts are prepared at the end of each accounting year. The Profit and Loss Account is prepared for the year so as to ascertain the profit earned or loss incurred during that year, and the balance sheet is prepared as at the end of the year, so as to show the financial position as on that date. However, for internal management purposes, accounts can be prepared even for shorter periods, say monthly, quarterly or half yearly.

Matching Concept

This is also called Matching of Costs against Revenues Concept‘. To work out profit or loss of an accounting year, it is necessary to bring together all revenues and costs pertaining to that accounting year. In other words, expenses incurred in an accounting year should be matched with the revenues earned during that year. The crux of the problem, therefore, is that appropriate costs must be matched against appropriate revenues. For this purpose, first we have to recognise the inflows (revenues) during an accounting period and the costs incurred in securing those inflows. Then, the sum of the costs should be deducted from the sum of the revenues to arrive at the net result of that period. Let us now understand how to recognise the revenues and costs in relation to an accounting period. For this purpose, the following rules are followed:

Conservatism Concept

This is also known as Prudence Concept understatement of assets or revenues, and overstatement of liabilities or costs. This is in accordance with the traditional view which states

‗anticipate no profits but anticipate all losses'. In other words, you should account for profits only when they are actually realized. But in case of losses, you should take into account even those losses which may be a remote possibility. This is why closing stock is valued at cost price or market price whichever is lower. Provision for doubtful debts and provision for discounts on debtors are also made according to this concept.

Consistency Concept

The principle of consistency means conformity from period to period with unchanging policies and procedures'. It means that accounting method adopted should not be changed from year to year. For example, the principle of valuing closing stock at cost price or market price whichever is lower should be followed year after year. Similarly, if depreciation on fixed assets is provided on straight line basis, it should be followed consistently year after year. Consistency eliminates personal bias and helps in achieving comparable results.

If this principle of consistency is not followed, the accounting information about an enterprise cannot be usefully compared with similar information about other enterprises and so also within the same enterprise for some other period. Consistent use of the same methods and bases from one period to another enhances the utility of the financial statement.

However, consistency does not prohibit change. Desirable changes are always welcome. But such changes should be completely disclosed while presenting the financial statements.

Full Disclosure Concept

Financial statements are the basic means of communicating financial information to all interested parties. These statements are the only source for assessing the performance of the enterprise for investors, lenders, suppliers, and others. Therefore, financial statements and their accompanying foot-notes should completely disclose all relevant information of a material nature which relate to the profit and loss and the financial position of the business. This enables the users of the financial statements to make correct assessment about the profitability and financial soundness of the enterprise. It is therefore, necessary that the disclosure should be full, fair and adequate.

Materiality Concept

This concept is closely related to the Full Disclosure Concept. Full disclosure does not mean that everything should be disclosed. It only means that all relevant and material information must be disclosed. Materiality primarily relates to the relevance and reliability of information. An item is considered material if there is a reasonable expectation that the knowledge of it would influence the decision of the users of the financial statements.

All such material information should be disclosed through the financial statements and the accompanying notes. For example, commission paid to sole selling agents, if any, should be disclosed separately in the Profit and Loss Account. Similarly, if there is a change in the method or rate of depreciation, this fact must be duly reported in the financial statements.

2.6. Differences between accounting concept and accounting convention

Parameter of Comparison	Accounting Concepts	Accounting Conventions
Basic Abstraction	Accounting concepts are theoretical notions on the preparation of financial statements.	Accounting conventions are procedures and methods followed during the preparation of financial statements.
Formulation Process	Set up by accounting bodies with the backing of the law and governance bodies.	They are developed from standard accounting practices.
Purpose	Concerned with the maintenance of accounts and recording, classifying as well as interpretation of transactions.	Accounting conventions are concerned with the preparation and presentation of financial statements.

Legal Recognition	Legally recognized.	They lack formal and legal recognition.
Biasness	There lacks any possible chance for personal judgment or bias.	There is a high probability of personal judgment or bias.

2.7. Key characteristics of accounting information

There is general agreement that, before it can be regarded as useful in satisfying the needs of various user groups, accounting information should satisfy the following criteria:

Understandability: This implies the expression, with clarity, of accounting information in such a way that it will be understandable to users who are generally assumed to have a reasonable knowledge o business and economic activities

Relevance: This implies that, to be useful, accounting information must assist a user to form, confirm or maybe revise a view usually in the context of making a decision (e.g. should I 'invest, should I lend money to this business? Should work for this business?)

Consistency: This implies consistent treatment of similar items and application of accounting policies.

Comparability: This implies the ability for users to be able to compare similar companies in the same industry group and to make comparisons of performance over time. Much of the work that goes into setting accounting standards is based around the need for comparability.

Reliability: This implies that the accounting information that is presented is truthful, accurate, complete (nothing significant missed out) and capable of being verified (e.g. by a potential investor).

Let Us Sum Up

In this Unit, you have learned about the following:

- The accounting concept and conventions outline those points on which the financial accounting is based.
- Accounting concept does not rely on accounting convention, however, accounting conventions are prepared in the light of accounting concept.
- According to business entity concept, the business enterprise and its proprietor are treated as two separate entities, distinct from each other.
- According to money measurement concept, all the transactions

should be recorded in terms of the standard currency of the country.

- According to the historical record concept, only those transactions which have actually taken place should be recorded in the order of their occurrence i.e., date- wise.
- The cost concept states that the amount actually received or paid for any goods or service should be recorded and not its value.
- As per the dual aspect concept, every transaction has two aspects. Both the aspects are to be recorded in the books of account.
- According to the Going Concern Concept, the firm should be considered as a continuing unit and not as one closing down.
- According to the Matching Concept, appropriate costs have to be matched against the appropriate revenues for the accounting period.
- The Concept of Consistency implies that there should be consistency in all accounting methods followed from period to period so as to ensure possibility of meaningful comparisons.
- According to Full Disclosure Concept financial reports should disclose fully all relevant information of material nature, so that the users of those reports can draw rational conclusions about the enterprise.
- The Materiality Concept implies that while measuring income of a business for an accounting period the non-material facts can be ignored.

Check Your Progress-2

1. The fair value hierarchy gives the lowest priority to:

    a) Unquoted prices
    b) Observable inputs
    c) Quoted prices
    d) Unobservable inputs

2. A primary advantage of _______accounting is that it provide accurate assets and liability valuation on a going basis to the user of the companies reported financial information:

    a) Double Entry
    b) Adjustment
    c) Fair Value
    d) Book Keeping

3. _______ is an adjustment to exchange trade pricing for information:

   a) Level 2
   b) Level 4
   c) Level 1
   d) Level 3

4. In acquisition accounting fair value of quoted investment should be based upon:

   a) Cost paid
   b) Sale value
   c) Market Price
   d) Best Price

5. Fair value is a:

   a) Market specific Measurement
   b) Entity specific Measurement
   c) Assets Specific Measurement
   d) All of the Above.

Glossary

Business Entity: A business enterprise.

Accounting concepts: It refers the ground rules for recording the business transactions

Accounting conventions: Customs and traditions which guide the accountants while preparing the accounting statements

Cash system of accounting: Accounting entries are made only when the cash is received or paid

Mercantile system of accounting: Under this system any income or expenses relating to current year are recorded in the books.

Answers to Check Your Progress-1

a-True

b-False

c-True

d-True

e-True

Answers to Check Your Progress-2

1.d

2.c

3.c

4.c

5.a

Suggested Reading

1. Chandra sekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-3
Accounting Standards

STRUCTURE

Overview

In this unit Concepts of Accounting Standards, Benefits of Accounting Standards, Procedure for issuing AS in India, Salient features of First Time Adoption of Indian Accounting Standards (Ind- AS): 101, Currently Prevailing Accounting Standards in India, International Financial Reporting Standards, Need and procedure of IFRS Convergence to IFRS, Distinction between Indian AS and International AS has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Explain the concept of the accounting standards;
- Discuss the benefits of accounting standards;
- Discuss the procedures of issuing accounting Standards in India

- Describe International Financial Reporting Standards, GAAP, IAS etc.;
- Develop the insights about the need and procedure of issuing IFRS;
- Understand how Indian economy is converging towards implementing IFRS.
- Make comparison between Indian AS and International AS;
- Describe the procedure for measuring business income;
- Explain the accounting concepts that are relevant to measurement of business income; and
- State the objectives of measurement of business income of business income.

3.1. Concept of Accounting Standards

Accounting is the language of business. All financial information (i.e. nature of financial activities, financial position, financial results, present trend and further prospects etc.) are available through accounting. The so-called financial information is communicated to the users (both internal as well as external) of accounting information by preparing and presenting the financial statements.

As such, it becomes necessary to develop some Generally Accepted Accounting Principles (GAAP) while preparing the financial statements by which the language of the business can be communicated to the users.

As per section 129 of Companies Act, 2013 the financial statements of a company must present a true and fair view of the income and financial position of the company. However, it does not define what constitutes a true and fair view of a company. Since the beginning of accounting, a number of Generally Accepted Accounting Principles have been developed consisting of accounting concepts and conventions so as to bring comparability and uniformity in the financial statements of various business organizations.

However, even these GAAP allow many alternatives for the treatment of same item that can be followed by the business organizations while preparing financial statements which leads to lack of consistency, uniformity and comparability among the financial statements of different originations. In addition, there must not be any ambiguity and uncertainty relating to the facts, figures and terms which are contained in the financial statements and will be presented to the users of accounting information.

Hence, there is a need to develop some standards which must be followed by all the organizations so as to achieve uniformity in the financial statements. For this purpose, International Accounting Standards Committee (IASC) was established on 29th June, 1973. The Institute of Chartered Accountants of India and Institute of Cost Accountants of India are members of IASC. ICAI is also developing its own accounting standards patterned on International Accounting Standards modified to the requirements of Indian accounting community.

Definition

In the words of Kohler, an accounting standard may be defined as a code of conduct imposed on accountants by custom, law or professional body. '

Thus, accounting standards may be defined as the accounting principles and rules which are to be followed for various accounting treatments while preparing financial statements on uniform basis and which will reveal the same meaning to all the interested groups who will use the same. Thus, the Standards are considered as a guide for maintaining and preparing accounts.

Nature of Accounting Standards

On the basis of forgoing discussion, we can say that accounting standards are guide, dictator, service provider and harmonizer in the field of accounting process.

Serve as a guide to the accountants: Accounting standards serve the accountants as a guide in the accounting process. They provide basis on which accounts are prepared. For example, they provide the method of valuation of inventories.

Act as a dictator: Accounting standards act as a dictator in the field of accounting. Like a dictator, in some areas accountants have no choice of their own but to opt for practices other than those stated in the accounting standards. For example, Cash Flow Statement should be prepared in the format prescribed by accounting standard.

Serve as a service provider: Accounting standards comprise the scope of accounting by defining certain terms, presenting the accounting issues, specifying standards, explaining numerous disclosures and implementation date. Thus, accounting standards are descriptive in nature and serve as a service provider.

3.2. Benefits of accounting standards

There are many benefits of accounting standards. Let us discuss the main benefits of Accounting Standards one by one.

Standardized Accounting: Perhaps the most important advantage of the FASB standard setting for businesses is the uniform set of accounting principles it promotes. The FASB clearly states the generally-accepted accounting principles that businesses must follow to avoid confusion. For example, the FASB prevents businesses from using one method for calculating inventory at the beginning of a fiscal year and finishing the year with another method. Without the accounting standards set forth by the FASB, businesses could use accounting methods that portray financial data inaccurately to investors.

Problem Identification: The FASB standard setting provides a framework upon which potential accounting problems are identified and corrected. Because all businesses in the US use the same accounting principles, any problems or inadequacies in the accounting process are quickly identified and reported to the FASB. The FASB then investigates the problem and, if needed, modifies or writes a new accounting rule for the accounting process. For example, if businesses find that reporting a certain type of liability on their income statement unfairly lowers their net income, they can appeal to the FASB so that it can identify problems with the standard setting.

Private Regulation: The FASB is a private entity with no affiliation to the US government. Despite this, the Securities and Exchange Commission relies on the FASB to set the accounting rules that all companies in the US must follow. The SEC can technically create an accounting oversight board or government agency to set accounting rules. However, using the FASB eases the burden on the US government and lets the private sector dictate accounting rules.

International Accounting Standard: The FASB is advantageous because it actively promotes an internationally recognized set of accounting rules. Globalization has deeply connected foreign financial markets; a standard set of accounting rules would make financial reporting more accurate and fair between countries. One of the goals of the FASB is to make financial reporting more uniform globally with the cooperation of the International Accounting Standards Board (IASB).

3.3. Procedure for issuing as in India

There is a set procedure for issuing AS in India. Let us discuss this procedure in detail.

Determination of the need of an AS

First, the Accounting Standard Board determines the broad areas in which accounting standards needs to be formulated.

Constituting Study Group

Study Group will be constituted consisting the members of the Institute of Chartered Accountants of India. The motive behind constitution of this group is to assist the accounting Standard Board in its activities.

Drafting the Standard

The Study Group Prepares draft of the proposed Standard. The proposed draft enlists the following areas:

a) Objective of the standard.
b) Scope of the Standard.
c) Definitions of the terms used in the standard

Analyzing the Draft

ASB in this stage considers the Preliminary draft prepared by the Study Group. In case anything needs to be revised than Accounting Standard Board takes the following steps.

(a) ASB makes the revision

(b) ASB refers the same to the study Group

Circulation of the Draft

In this step, the ASB circulates the AS draft to the council members of the Institute of Chartered Accountants of India

Holding Discussion and Finalizing Exposure Draft

ASB holds meeting with the representatives of above mentioned bodies for the purpose of determining their views on the Draft Accounting Standard. Based on analyses of the discussion, ASB finalizes the exposure draft of proposed accounting standards.

Circulation of Exposure Draft

The exposure Draft of the proposed standards is issued for comments the members of the ICAI and the public.

Finalizing the Exposure Draft

Based on the comments received, the ASB finalizes the draft of the proposed standards.

Finally ASB submits the same to the council of the ICAI.

Modifying & Issuing the Accounting Standard

The council of the ICAI then considers the finalized draft standard and if necessary modifies the same in consultation with the ASB. The ICAI then issues the Accounting Standard after modification if any on the relevant subject.

3.4. Salient features of first time adoption of Indian Accounting Standards (Ind-AS):101

Ind-AS 101 lays out the accounting principles for first-time adoption of Ind-AS. It prescribes the various requirements to be fulfilled during the transition period when a company adopts Ind-AS for the first time, i.e., when it moves from making the financial statements in accordance with Accounting Standards (Indian GAAP) to make them in accordance with Ind- AS.

Conceptually, the accounting under Ind-AS should be applied retrospectively at the time of transition of companies from applying Accounting Standards (Indian GAAP) to Ind-AS. However, for and easy transition, Ind-AS 101 has provided some exemptions for retrospective application of Ind-AS.

The exemptions are clearly categorised into those which are mandatory in nature (i.e., cases where the company is prohibited to apply Ind-AS retrospectively) and those which are voluntary in nature (i.e., it is upto the company to apply or not to apply certain requirements of Ind-AS retrospectively).

Ind-AS 101 also lists out presentation and disclosure requirements to explain the transition to the users of financial statements. It also requires a company to explain how the transition will affect its reported balance sheet, financial performance and cash flows. It does not provide any exemption from the disclosure requirements in other Ind-AS.

Objective of Ind-AS 101

The objective of Ind-AS 101 is to ensure that the entity‘s first Ind-AS Financial Statements, and its interim financial reports for the period covered by those financial statements, contain high quality information that:

1. Is transparent for users and comparable over all periods presented,
2. Provide a suitable starting point for accounting in accordance with the Indian Accounting Standards (Ind-AS), and
3. Can be generated at a cost that does not exceed benefits.

Scope of Ind-AS 101

An entity shall apply the Indian Accounting Standard-101 (first time adoption of Indian Accounting Standards) in:

a) First Financial Statements after implementing Ind-AS.
b) Each Interim Financial Report in accordance with Ind-AS 34 *Interim Financial Reporting* for the part of the period covered by its first Ind-AS financial Statements.

3.5. Currently prevailing accounting standards in India

Section 133 of Companies Act, 2013 requires the companies to comply with the prevailing accounting standards. As on 1st April, 2016 there are 32 accounting standards specified by ICAI, all of which are mandatory to be complied by the companies.

Check Your Progress-1

True/False

a. The FASB is a private entity with no affiliation to the US government.
b. The Study Group Prepares draft of the proposed Standard.
c. Ind-AS 101 lays out the accounting principles for first-time adoption of Ind-AS.
d. Accounting provides companies, investors, regulators and others with a standardized way to describe the financial performance of an entity.
e. Accounting is not the language of business.

3.6. International Financial Reporting Standards

Accounting provides companies, investors, regulators and others with a standardized way to describe the financial performance of an entity. Accounting standards present and prepares of financial statements with a set of rules to abide by when preparing an entity‘s accounts, ensuring this standardization across the market. Companies listed on public stock exchanges are legally required to publish financial statements in accordance with the relevant accounting standards.

3.7. Need and procedure of IFRS

With the increasing globalization of financial markets and of companies, the use of a single set of financial reporting standards across countries is viewed as having increased the comparability of financial statements across borders.

It also reduces the cost of preparing the consolidated financial statements of groups made up of companies conducting business all around the world.

Financial reporting standards have been in the spotlight since the banking crisis, more specifically those requiring the measurement of financial assets and liabilities at fair value.

In September 2009, G20 leaders in Pittsburgh asked the accounting standard setters IASB and, its US counterpart, the FASB to work towards a single set of high quality global accounting standards by June 2011. Convergence, however, is proving challenging and is likely to be pushed back.

Initially, IFRS begun as an academic project aimed at creating a single set of global standards, their actual use was kick-started by the European Union.

An EU regulation requires listed companies in Europe to adhere to International Financial Reporting Standards (IFRS) from financial years commencing on or after 1 January 2005 when preparing their consolidated accounts.

In implementing this in UK legislation, the Government has not yet made the use of IFRS compulsory for any further categories of accounts, but the legislation permits all companies to use them for individual and consolidated accounts if they wish.

Changes have been made to UK tax legislation to accommodate these new rules for tax purposes. The due process comprises six stages, with the Trustees of the IFRS Foundation having the opportunity to ensure compliance at various points throughout:

1. Setting the agenda
2. Planning the project
3. Developing and publishing the Discussion Paper, including public consultation

4. Developing and publishing the Exposure Draft, including public consultation
5. Developing and publishing the Standard. 6. Procedures after a Standard are issued.

3.8. Convergence to IFRS

For a country, there are two alternatives available for compliance and implementation of the IFRS, which are (i) Adoption, (ii) Convergence

Adoption: It means acceptance of IFRS in its original form. If a country adopts IFRS in its original form, then it is not allowed to make any change in the language or format of the IFRS formed by IASB.

Convergence: It means implementing IFRS with modification wherever necessary so as to suit the requirements of a particular country.

India has decided to converge it existing accounting standards to IFRS. In India, the converged accounting standards are called Ind-AS.

3.9. Distinction between Indian-AS and International -AS

Basic of Distinction	Accounting Standards(AS)	Ind-AS
Need	When businesses were not that complicated and accounting was done at local level, then accounting standards based on local GAAP were enough.	Today, businesses have become complicated and a globalised world is in the need of a comprehensive accounting standards that can be consistently applied globally and facilitate compatibility. Introduction of Ind-AS is the need of the hour for India to compete in this globalized world

Objective	The basic objective of Accounting standards is to remove variation in the treatment of several accounting aspects and to bring about standardization in presentation. They intent to harmonize the diverse accounting policies in the preparation and presentation of financial statements by different reporting enterprises so as to facilitate intra- firm and inter-firm comparison.	Ind-AS are Indian version of IFRS because it will be impractical to just adopt the IFRS blindly without taking into consideration the current Indian scenario. International Financial Reporting Standards are principles based standards, interpretation and the framework adopted by the International Accounting Standards Board(IASB). Since India is a member country so it has to adopt these standards. However, any changes in these IFRS would have an impact on books of Indian companies to adopt these IFRS as and when amended. So to fill the difference, Ind-AS have been introduced which is nothing but IFRS.
Pervasiveness	Aa are not so pervasive or widespread.	Ind-AS are pervasive and cover every area comprising reported revenues, expenses, assets, liabilities and equity.
Basis	AS are driven by legal' form in a number of areas and are rule based.	result in accounting which more closely reflects the underlying business rationale and true economics of transaction.
Disclosure requirements	Disclosure requirements are comparatively less detailed.	Disclosure requirements are more comprehensive and multifold under Ind-AS to enhance the transparency and accountability of financial statements.

Let Us Sum Up

In this unit, you have learned about the the following:

- Benefits of accounting standards – (i) True and fair financial position, (ii) Easy comparability, (iii) Enhances the value of accounting information, (iv) Efficiency of management, (v) Useful to accountants and auditors and (vi) Enhances credibility and reliability.
- The authority to make accounting standards in India is Accounting Standard Board. It follows the prescribed procedure to issue an accounting standard.
- Procedure for issuing accounting standards-ASB assisted by study group exposure draft- circulation- ASB after incorporating suggestions submit to ICAI. After that ICAI will issue standard.
- Ind-AS 101 lays out the accounting principles for first-time adoption of Ind-AS. It prescribes the various requirements to be fulfilled during the transition period in moving from Accounting Standards (Indian GAAP) to Ind-AS.
- Section 133 of Companies Act, 2013 requires the companies to comply with the prevailing accounting standards. As on 1st April, 2016 there are 32 accounting standards specified by ICAI, all of which are mandatory to be complied by the companies.
- International Financial Reporting Standards is a single set of accounting standards, developed and maintained by the International Accounting Standards Board with the intention of those standards being capable of being applied on a globally consistent basis.
- With the increasing globalisation of financial markets and of companies, the use of a single set of financial reporting standards across countries is viewed as having increased the comparability of financial statements across borders.
- India has decided to converge its existing accounting standards to IFRS. In India, the converged accounting standards are called Ind-AS.

Check your Progress-2

1. Accounting method based on materiality

   a) Substance
   b) Caution.
   c) Substance rather than form.
   d) All of these.

2. Who is the founder of double-entry bookkeeping?
   a) Henry Fayol

   b) Lucas Pacilio
   c) Henry Ford
   d) Adam Smith

3. A dual aspect transaction recording system is known as single entry

   a). Book-keeping
   b) Double-entry bookkeeping
   c) Double-entry bookkeeping system
   d) All of the above

4. Accounting policies refer to

   a) Specific accounting principles.

   b) Modalities of application of these principles.
   c) a) and b).
   d) None of the above.

5. The use of the "lower cost and net realizable value method" for inventory valuation is the implementation of which of the following concepts?

   a) Concept of going concern
   b) Concept of separate entity
   c) Prudential concept
   d) Corresponding concept

Glossary

Accounting Standards: Accounting Standards are defined as written statements of accounting rules and guidelines or practices for preparing the uniform and consistent financial statements.

ASB: The board constituted by ICAI to conceive, formulate, examine and review the accounting standards.

GAAP: Generally Accepted Accounting Principles consist of accounting concepts and conventions so as to bring comparability and uniformity in the financial statements of various business organizations.

International Financial Reporting Standards: IFRS is a single set of accounting standards, developed and maintained by the International Accounting Standards Board with the intention of those standards being capable of being applied on a globally consistent basis.

ICAI: Institute of Chartered Accountants of India- the apex body of accounting professionals of India.

Ind-AS: In India, the converged accounting standards are called Ind-AS. Ind-AS 101: Ind- AS 101 lays out the accounting principles for first-time adoption of Ind-AS.

Answers to Check Your Progress-1

a-True

b-True

c-True

d-True

e-False

Answers to Check Your Progress

1. d

2. b

3. b

4. c

5. d

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-4

Mechanics of Accounting

STRUCTURE

Overview

In this unit the concept of Book- Keeping, System of Book – Keeping, Types of accounting and accounting rules, Meaning of Journal and its format, Meaning of Ledger and its format, Posting and Balancing the Ledger, Subsidiary Books of Accounts, Meaning and Objectives of Trail Balance, Preparation of Trial Balance, Guidelines for preparing Trail balance and the Mechanics of Accounting has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- The recording of transactions in the books of accounts.
- Describe the meaning and importance of preparing a trial balance.
- Make posting and prepare a trial balance;
- Learn how errors are disclosed by trial balance
- Learn about the methods of allocating errors in a trial balance

4.1. Book – Keeping

Book-keeping is part of accounting cycle. Business transactions are recorded in a set of books regularly according to prescribed rules and regulations on the basis of some definite system for fulfillment of certain objects.

As we discussed in chapter1, Bookkeeping may be defined as an art of recording transactions of a business in a set of books on a regular and systematic manner. Note that only those transactions related to business are recorded.

All records before preparation of Trial balance is a subject matter of book- keeping. Book- keeping includes Journal & Ledger

4.2. Systems of Book –Keeping

1. **Single Entry System:** As discussed earlier, the business transactions have two effects. But this system is recorded in an unsystematic manner by recording only a single aspect. It records cash and personal accounts only. From this we cannot prepare the final accounts.

2. **Double Entry System:** Business has number of transactions. Transaction means (Trans, Action) two actions or actions between two parties. Therefore two parties are necessary for a transaction. One party receives some value and another party gives the same. This gives rise to two aspects namely, Receiving and Giving.

   The receiving aspects are known as Debit‖ and the giving aspects are known as Credit‖. If a transaction is to be recorded completely, both its receiving and giving aspects must be recorded simultaneously.

   We can say that every debit entry has its corresponding Credit entry. Thus Double entry book-keeping is a system of account keeping by which both the receiving and the giving aspects of each transaction is recorded at a time.

   Approaches of Double Entry System: It has two approaches for the application of this system.

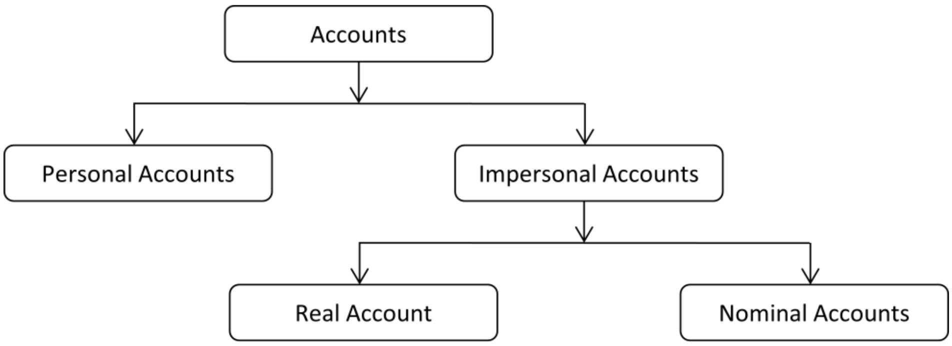
   a) American Approach: According to this system, the transactions are divided into five categories. Categories and rules are given in the table.

Particulars	Debit	Credit
Capital	Decrease	Increase
Liability	Decrease	Increase
Assets	Increase	Decrease
Expenses	Increase	Decrease
Revenue	Decrease	Increase

b) English Approach: According to this system, the transactions are entered in the books based on the debit and credit rules. (Rules are discussed in the next chapter)

4.3. Types of Accounting and accounting rules

An account is a chronological summary of the transactions conducted by business or otherwise relating to persons, property or items of expenditure or gain, the benefits received being on one side and benefits given being on the other side. Accounts are broadly divided into two.



Personal Account: Accounts, which are connected with persons, are called personal accounts. This can be further classified into three categories:

- Natural Personal Account: Natural personal account means persons who are creations of God. For example, Kavi's a/c, Sakthi's a/c etc.
- Artificial Personal Account: Artificial personal account includes accounts of corporate bodies or institutions which are recognized as persons in business dealings. For example, Government, Club, Limited Company etc.
- Representative Personal Account: Representative personal account is the account which represents a person or a group of

persons. For example, when the salary is due for employees, an outstanding salary account represents the account of an employees to whom the salary is payable.

Impersonal Account: Accounts, which are not connected with persons, are called Impersonal accounts. Impersonal accounts are further divided into two.

Real Account/ Property Account/ Asset Account: it can be divided into:

- Tangible Real Account: Tangible real accounts are those things that can be touched, felt and measured. For example, cash a/c, building a/c, furniture a/c etc.
- Intangible Real Account: These accounts represent things which cannot be touched but, however, can be measured in terms of money. For example, patent a/c, goodwill a/c etc.

Nominal Account/Imaginary Account/ Fictitious Account: Nominal accounts explain the nature of the transactions. They do not really exist. For example, salary paid to employee, rent paid to landlord etc. Nominal accounts mainly include accounts of expense, losses, income and gains.

Rules of Accounting

Type of Account	Rules for Accounting
Personal Account	Debit the receiver, credit the giver
Real Account	Debit what comes in, credit what goes out
Nominal Account	Debit all expenses (losses), credit all incomes (gains)

4.4. Meaning of Journal and its format

Journal is a book of first entry. Business transactions are first entered in the journal before they are taken to the appropriate accounts in the ledger. Journalizing is the process of recording journal entries in chronological order by applying the rules of debit and credit. The following is a form of journal.

Date	Particulars	Ledger Folio Number	Debit	Credit

A Journal has five columns. They are:

1.	Date column	Date of the transaction is entered in dd/mm/yyyy format
2.	Particulars column	Debit and credit aspects are entered. While entering the debit entry, it is always ends with Dr. the credit aspects starts with to in addition to this, you have to write about the transaction briefly below the entry is called Narration.
3.	Ledger Folio	It states the page number of account in the ledger where the particular amount is transferred/ posted. (While preparing the journal this column remains blank)
4.	Debit Column	The debit amount will be entered.
5.	Credit Column	The credit amount will be entered.

Advantages of Journal: the following are the important advantages of journal

- Journal gives complete information about the business transactions
- It includes a brief explanation of the transactions
- Since it follows double entry system for recording, the errors are reduced.

Journaling the transactions

To make the correct entry of your business transactions, the following procedures to be adopted:

1. Identify the accounts affected by the transaction and name them.
2. Classify the accounts and identify them as nominal or real or personal
3. Apply the rules of debit and credit to the accounts and
4. Recording them in the journal
5. Narration

Example 1: Mr. Khan commenced business on 1st April 2007, with Rs.1, 60,000/-.

The following are his transactions during the month of April. Journalise these transactions.

Date	Particulars	Amount(Rs.)
April 2	Bought goods for cash	80,000
4	Purchased goods from Rao	32,000
7	Goods sold for cash	64,000
8	Sold goods to Jamal	32,000
10	Machinery purchased for cash	24,000
12	Purchases of Land	8,000
20	Paid freight	8,000
25	Settled Rao‘s a/c with	31,200
26	Insurance paid	4,800
29	Jamal settled his account with	30,800
30	Salaries paid	4,000
30	Sale of Land	4,000

Solution:

Before preparing the journal, you should remember the following:

1. As we discussed earlier, all transactions of the business have to be entered from the business point of view and not from the owner‘s point of view.
2. Follow the procedures or steps.

Transaction 1: Mr. Khan commenced business on 1st April 2007, with Rs.1, 60,000/-.

In this transaction, the business received Rs. 1, 60,000/-. Ask yourself the question: who has given the sum to the business? The answer is Mr.Khan.

Step 1: Capital account and cash account

Step 2: Capital is personal a/c and cash is real account

Step 3: Capital is to be credited since the owner is a giver and cash account to be debited.

Step 4: The journal entry is

Cash A/C Dr

To Capital A/C Transaction

Transaction 2: Bought goods for cash Rs.80, 000/-

Step 1: Purchases account and cash account

Step 2: Purchases and cash account are real accounts

Step 3: Purchase account should be debited since goods have come into business and Cash is to be credited since the cash has gone out.

Step 4: The journal entry is

Purchases A/C Dr

To Cash A/C

Transaction 3: Bought goods from Rao Rs.32, 000/-

Step 1: Purchases account and Rao account

Step 2: Purchases is real account and Rao is personal account

Step 3: Purchase account should be debited since goods have come into business and Rao account is to be credited since he gives the benefit to us without receiving money.

Step 4: The journal entry is

Purchases A/C Dr

To Rao‘s A/C

Transaction 4: Goods sold for cash Rs.64, 000/-

Step 1: Sales account and Cash account

Step 2: Sales and cash accounts are real accounts.

Step 3: Cash account should be debited since cash comes in and sales account is to be credited since the goods have gone out of the business.

Step 4: The Journal entry is

Cash A/C Dr

To Sales A/C

Transaction 5: Machinery purchased for cash Rs.24, 000/-

Step 1: Machinery account and Cash account

Step 2: Machinery and cash accounts are real accounts.

Step 3: Machinery account should be debited since machinery comes in and cash account is to be credited since the cash have gone out of the business. (See points to remember 1)

Step 4: The journal entry is

Machinery A/C Dr
To Cash A/C

Transaction 6: Salaries paid Rs.4, 000/-

Step 1: Salaries account and Cash account

Step 2: Salaries is nominal account and cash accounts is real account.

Step 3: Salaries account should be debited and cash account is to be credited.

Step 4: The journal entry is

Salaries A/C Dr

To Cash A/C

Date	**Particulars**	**L.F No.**	**Debit Rs.**	**Credit Rs.**
01.04.2007	Cash A/C To Capital A/C (Being cash received from Mr. Khan as a capital)		1,60,000	 1,60,000
02.04.2007	Purchases A/C To Cash A/C (Being goods purchased for cash)		80,000	 80,000
04.04.2007	Purchases A/C To Rao's A/C (Being goods purchased from Mr. Rao on Credit basis)		32,000	 32,000
07.04.2007	Cash A/C To Sales A/C (Being goods sold for cash)		64,000	 64,000
08.04.2007	Jamal A/C To Sales A/C (Being goods sold to Mr.Jamal on credit basis)		32,000	 32,000
10.04.2007	Machinery A/C To Cash A/C (Being machinery purchased for cash)		24,000	 24,000

12.04.2007	Land A/C To Cash A/C (Being land purchased for cash)		8,000	 8,000
20.04.2007	Freight A/C To Cash A/C (Being the amount paid for freight)		8,000	 8,000
25.04.2007	Rao's A/C To Cash A/C To Discount A/C (Being amount paid to Mr.Rao and settled his account)		32,000	 31,200 800
26.04.2007	Insurance A/C To Cash A/C (Being amount paid for Insurance)		4,800	 4,800
29.04.2007	Cash A/C Discount A/C To Jamal A/C (Being amount received from Mr.Jamal and he settled his account)		30,800 1,200	 32,000
30.04.2007	Salaries A/C To Cash A/C (Being amount paid for salary)		4,000	 4,000
30.04.2007	Cash A/C To Land A/C (Being cash received by selling the land)		4,000	 4,000

Points to remember:

1. Normally, Goods purchased for a company is called purchase account. But if the company purchases any fixed assets viz. machinery, furniture, land, building etc. they do not come under the purchases account. It should be mentioned the respective asset name account.
2. Normally, Goods sold for a company is known as sales account. But if the company sold any fixed assets, mentioned the respective asset name itself.
3. It is presumed that if the transaction has the name of the individual or company without specifying whether the transactions are on cash basis or credit basis, it should be treated as credit transaction.
4. Regarding the expenses, the person to whom the money is paid should not be debited, even if their names are specifically given.

5. If the owner withdraws some money or goods for his personal use, it is treated as drawing account. (Drawing is to be debit side; cash means cash account or from bank means Bank account; goods means purchases account to be credited)
6. The payment received or paid without mentioning the word settlement' should be treated as a normal entry. If the word settlement is there, you have to check the following:
   a. Is there any advance payment/receipt?
   b. Is there any return?
   c. Is there any part payment/receipt?

   If you find the answer for the above questions, you should treat the difference amount as a discount. But the total debit should be equal to credit. For example, see the 25th and 29th transactions.
7. Sometimes you may find that there are a number of transactions on the same date relating to one particular account or of one particular nature. You have to record in any the following three ways:
   a. a particular account may be debited while several accounts may be credited
   b. a particular account may be credited while several accounts may be debited

   Several accounts might be debited as well as credited. This is known as compound journal entry.

Check Your Progress-1

True/False

a. The ledger is vertically divided into two equal parts, each of which is sub-divided into four sections as date, particulars, journal folio and amount.
b. Book-keeping is part of accounting cycle.
c. Journal is not a book of first entry.
d. Normally, Goods purchased for a company is called purchase account.
e. The ledger is not the main book of accounts or a book of final entry.

4.5. Meaning of Ledger & its format

The ledger is the main book of accounts or a book of final entry. It refers to a set of books. The business transactions are entered in various subsidiary books (Journal is a subsidiary book), as and when it happens. From these subsidiary books all information connected with any single account cannot be seen at a glance.

Therefore all information connected with one single account-personal, property, expenses or income are grouped together so as to get the desired information immediately. Such grouping of transactions is done in another book called Ledger. Hence it may be defined as a summary statement of all the transactions relating to a person, asset, expenses or income which have taken place during a given period of time and shows their net effect‖. In small organization it is possible to keep all the ledger accounts in one ledger. But in large size organizations, it is convenient to sub-divide the ledger to facilitate easy reference as under:

General ledger: It contains all accounts other than Debtors and creditors which includes owner's account, assets accounts, purchases account, and all the nominal accounts.

Subsidiary Ledger: this can be further divided into two:

- **Debtors Ledger:** It contains credit sales and related activities which enable the businessman to calculate the amount owing by his customers easily.
- **Creditors Ledger:** it contains credit purchases and related activities which enable the businessman to calculate the amount due to each creditor.

Method of writing an account and its format

The ledger thus becomes the permanent store house of all transactions.

The ledger is vertically divided into two equal parts, each of which is sub-divided into four sections as date, particulars, journal folio and amount.

Dr (Left hand side)				(Right hand side) Cr			
Date	**Particulars**	**J.F No.**	**Rs.**	**Date**	**Particulars**	**J.F No.**	**Rs.**

4.6. Posting and Balancing the Ledger

If a particular account is debited, it is posted in the debit side (left hand side) of that account and vice- versa. When a ledger account is balanced, we can really understand the position of that account. From the balance we can easily ascertain the amount due to someone or amount due from someone or total of a particular expense or income is shown.

The procedure of posting is as follows:

1. Enter the debit aspect of the transaction entered in journal on the debit side of the account in the ledger with all the relevant details in the respective column.
2. Similarly, enter the credit aspect of the transaction in the journal on the credit side of the account in the ledger with all the relevant details in the respective column.
3. In the folio column of the journal, the page number of the ledger in which posting is done is entered. (this column remains blank)
4. It is customary to prefix the name of the account credited and entered on the debit side of the account in the ledger with word-To.
5. Similarly, the name of the account debited and entered on the credit side of the account in the ledger is prefixed with –By.

It may be noted that the words -To and -By do not have any special meaning. Hence, the prefix can be conveniently ignored as done by modern accountants.

Steps in Balancing:

1. You have to make a total of both sides separately
2. Difference between the totals of both sides is known as balance.
3. The balance is written on the account in the side for which the total is short. If the credit side is short, the balance is written as-By balance c/d on the credit side. If the Debit side is short, the balance is written as -To balance c/d on the Debit side.

The balance has brought down to the opposite side. The balance written on credit side as -By Balance c/d‖ is brought down to the debit side of the account as -To Balance b/d after completing the totals. Similarly, the balance written on debit side as -To Balance c/d‖ is brought down to the credit side of the account as -By Balance b/d‖ after completing the totals. Now let us discuss how to post and balancing the ledger. For this please consider the above example.

Ledgers Accounts Cash Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
01.04.07	To Capital A/c		1,60,000	02.04.07	By Purchases A/c		80,000
07.04.07	To Sales A/c		64,000	10.04.07	By Machinery A/c		24,000
29.04.07	To Jamal A/c		30,800	12.04.07	By Land A/c By		8,000
30.04.07	Land A./c		4,000	20.04.07	Freight A/c By		8,000
				25.04.07	Rao's A/c		31,200
				26.04.07	By Insurance A/c		4,800
				30.04.07	By Salaries A/C		4,000
				30.04.07	By Balance C/d		98,800
			2,58,800				2,58,800
01.05.07	To Balance b/d		98,800				

Capital Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
30.04.07	To Balance c/d		1,60,000	01.04.07	By Cash A/c		1,60,000
			1,60,000				**1,60,000**
				01.05.07	**By Balance b/d**		**1,60,000**

Purchases Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF| No.	Amount
02.04.07	To Cash A/c		80,000				
04.04.07	To Rao's A/c		32,000	30.04.07	By Balance c/d		1,12,000
			1,12,000				**1,12,000**
01.05.07	**To Balance b/d**		**1,12,000**				

Rao's Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
25.04.07	To Cash A/c To Discount A/c		31,200 800	04.04.07	By Purchases A/c		32,000
			32,000				**32,000**

Sales Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
30.04.07	To Balance c/d		96,000	07.04.07 08.04.07	By Cash A/c By Jamal A/c		64,000 32,000
			96,000				**96,000**
				01.05.07	**By Balance b/d**		**96,000**

Machinery Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
10.04.07	To cash		24,000	30.04.07	By Balance c/d		24,000
			24,000				**24,000**
01.05.07	**To Balance b/d**		**24,000**				

Land Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
10.04.07	To cash		8,000	30.04.07 30.04.07	By Cash A/c By Balance c/d		4,000 4,000
			8,000				**8,000**
01.05.07	**To Balance b/d**		**4,000**				

Freight Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
20.04.07	To cash		8,000	30.04.07	By Balance c/d		8,000
			8,000				**8,000**
01.05.07	**To Balance b/d**		**8,000**				

Insurance Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
26.04.07	To cash		4,800	30.04.07	By Balance c/d		4,800
			4,800				**4,800**
01.05.07	**To Balance b/d**		**4,800**				

Salaries Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
30.04.07	To cash		4,000	30.04.07	By Balance c/d		4,000
			4,000				**4,000**
01.05.07	**To Balance b/d**		**4,000**				

Discount Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
29.04.07	To Jamal's A/c		1,200	25.04.07 30.04.07	By Rao's A/c By Balance c/d		800 400
			1,200				**1,200**
01.05.07	**To Balance b/d**		**400**				

Jamal's Account

Date	Particulars	JF No.	Amount	Date	Particulars	JF No.	Amount
08.04.07	To Sales A/c		32,000	29.04.07	By Cash A/c By Discount A/c		30,800 1,200
			32,000				**32,000**

4.7. Subsidiary Books of Accounts

A journal is subdivided into various books (or journals) is known as sub divisions of the journal or subsidiary books. This division is for the sake convenience and handling of numerous transactions of repetitive nature. It reduces the work involved in the posting and entering of each transaction in the journal and ledger. All similar transactions are recorded in one particular book. For example, all credit sales are recorded in one book known as the sales Day Book. The following are the subsidiary books maintained as follows:

Purchase Book: this book is also called Purchase Journalǁ, Bought Book', Purchase Day Book', Invoice Book'. It is used for credit purchases and not for cash purchases. Here purchases of any assets are not recorded. At the end of every month, all transactions are transferred to general ledger along with the suppliers' invoices. The form of purchases book is as follows:

Date	Name of the Supplier	L.F No.	Inward Invoices No.	Amount

Sales Book: This book is also called Sales Journalǁ, Sold Book', Sales Day Book'. It is used for credit sales and not for cash sales. Here sale of any old assets are not recorded. At the end of every month, all transactions are transferred to general ledger. The form of Sales book is as follows:

Date	Name of the Customer	L.F No.	Outward Invoices No.	Amount

Purchases Return Book: It is also called as return outwards book. The purpose of this subsidiary book is to record transactions relating to return of goods to suppliers. The ruling of the book is similar to that of purchases book except for the fact that column no.3 is provided for debit note numbers. The form of purchases return book is as follows:

Date	Name of the Customer	L.F No.	Debt Note Nos.	Amount

Sales Return Book: It is also called return inwards book. The purpose of this subsidiary book is to record transactions relating to return of goods from our customers. The ruling of the book is similar to that of sales book except for the fact that column no.3 is provided for credit note numbers. The form of Sales returns book is as follows:

Date	Name of the Customer	L.F No.	Credit Note Nos.	Amount

Cash Book: It serves both as a journal and ledger. All cash transactions are recorded in this book. The format is similar to ledger. Debit side is called as receipts and credit side is called as payments. There are three types of cash book:

a) Single column Cash Book – one column on both sides.

b) Double column Cash Book – discount and cash column on both the sides.

c) Three Column Cash Book – discount, cash and bank column on both sides.

Bills receivable and payable Book: transactions regarding bills receivables accepted by our customers are recorded in bills receivables book. At the end of the month, this will transfer to general ledger account. If any outstanding is there, it will appear in the asset side of the balance sheet. Similarly, Transactions regarding bills payable are accepted by us and drawn by our suppliers are recorded in bills payable book. At the end of the month, this will transfer to general ledger account. If any outstanding is there, it will appear in the liability side of the balance sheet. **Journal Proper:** Transactions which cannot be recorded in any of the above mentioned books will be recorded in journal proper. The following are the examples:

a) Opening and closing entries

b) Adjustment entries

c) Transfer entries

d) Rectification entries

Trial Balance

Meaning of Trial Balance

Trial balance is the summary of debit and credit balances extracted from the ledgers on a particular date. It helps us to prove the arithmetical accuracy of the entries recorded in the journal and posted into the ledger. According to M S Gosav in his book, -The Substance of Accounting defines, - Trial balance is a statement containing the balances of all ledger accounts as at any given date, arranged in the form of debit and credit columns placed side by side and prepared with the objective of checking the arithmetical accuracy of ledger postings.

According to Spicer and Poglar's as stated in his book - Book keeping and Accounts‖, - A trial balance is a list of all the balances standing on the ledger accounts and cash books of a concern at any given data‖.

Importance /significance/ objectives of preparing the trial balance

The following are the main objectives of trial balance:

a. It helps in knowing the balance of any particular account in the ledger
b. It helps in preparation of final accounts.
c. It ensures the arithmetical accuracy
d. It helps to prove that double entry has been followed while recoding the transactions

4.8. Preparation of Trial Balance

There are two methods which are widely adopted in the preparation of trial balance.

A. **Balance Method**: while balancing the account, difference amount is known as balance which has been summarized in the trial balance on the respective columns. The totals must be equal in both the sides. This is the most commonly used method of preparing trial balance. The format of the trial balance is as follows:

Trail balance as on

Sl. No.	Name of the Account	L.F No	Debit balance	Credit balance

B. **Total method:** This method is also called ‗gross trial balance method'. The total of debit and credit columns is appeared in the trail balance in the respective column.

Trail balance as on

Sl. No.	Name of the Account	L.F No	Debit total amount	Credit total amount

4.9. Guidelines for preparing Trail balance

Trial balance consists of balances found in various ledger accounts which are appearing in the trial balance as follows:

- An asset is always appeared in debit side of trial balance .
- Liabilities is always appeared in credit side of trial balance
- All the incomes or gains appear in credit side of trial balance.
- All the expenses or losses appear in debit side of trial balance
- Opening stock, purchases, and sales return always appear in debit side of the trial balance.
- Closing stock, sales, and purchases return always appear in credit side of the trial balance.
- Reserves and provisions appear credit side of the trial balance.
- Exercise: consider the problem discussed in chapter 1, prepare a trial balance under the balance method and total method.
- **Preparation of Trial Balance under total method**: Trial Balance of Mr.Khan‘s Books as on 30.04.2007

Sl. No	Name of the Account	L.F No.	Debit total Balance	Credit total balance
1	Cash		2,58,000	1,59,200
2	Capital		0	1,60,000
3	Purchases		1,12,000	0
4	Sales		0	96,000
5	Machinery		24,000	0
6	Land		8,000	4,000
7	Freight		8,000	0
8	Insurance		4,800	0
9	Salaries		4,000	0
10	Rao‘s		32,000	32,000
11	Jamal		32,000	32,000
12	Discount		1,200	800
	TOTAL		**4,84,000**	**4,84,000**

Under Balance Method:

Trial Balance of Mr.Khan‘s Books as on 30.04.2007

Sl. No	Name of the Account	L.F No.	Debit total Balance	Credit total balance
1	Cash		98,800	
2	Capital			1,60,000
3	Purchases		1,12,000	
4	Sales			96,000
5	Machinery		24,000	
6	Land		4,000	
7	Freight		8,000	
8	Insurance		4,800	
9	Salaries		4,000	
12	Discount		400	
Total			**2,56,000**	**2,56,000**

Exercise 2: the following balances are extracted from the books of Mr. Dhasan on 31st December 2007. Prepare a Trial Balance.

Name of Account	Amount	Name of Account	Amount
Dhasan‘s Capital	15,000	Sales	75,000
Dhasan‘s Drawings	2,500	Return Inwards	1,000
Furniture & Fittings	1,300	Discounts (Dr)	800
Bank Overdraft	2,100	Discounts (Cr)	1,000
Sundry Creditors	5,500	Taxes	1,000
Business Premises	10,000	General Expenses	2,000
Stock (1st January ‘07)	11,000	Salaries	4,500
Sundry Debtors	9,000	Commissions (Dr)	1,100
Rent from Tenants	500	Reserve for Bad & doubtful debts	1,000
Purchases	55,000	Carriage on purchases	900

Solution:

Trial Balance as on 30.12.2007

Sl. No	Name of Account	Dr	Cr
1	Dhasan's Capital		15,000
2	Dhasan's Drawings	2,500	
3	Furniture & Fittings	1,300	
4	Bank Overdraft		2,100
5	Sundry Creditors		5,500
6	Business Premises	10,000	
7	Stock (1st January '07)	11,000	
8	Sundry Debtors	9,000	
9	Rent from Tenants		500
10	Purchases	55,000	
11	Sales		75,000
12	Return Inwards	1,000	
13	Discounts (Dr)	800	
14	Discounts (Cr)		1,000
15	Taxes	1,000	
16	General Expenses	2,000	
17	Salaries	4,500	
18	Commissions (Dr)	1,100	
19	Reserve for Bad & doubtful debts		1,000
20	Carriage on purchases	900	
Total		1,00,100	1,00,100

Let Us Sum Up

In this Unit, you have learned about the followings:

- All information connected with one single account-personal, property, expenses or income - are grouped together so as to get the desired information immediately. Such grouping of transactions is done in another book called Ledger.

- Journalizing is the process of recording journal entries in a chronological order by applying the rules of debit and credit.
- Following are the two types of ledger: General ledger and Subsidiary ledger
- The subsidiary ledger is further subdivided into the following: Debtors ledger and Creditors ledger Posting refers to the recording of transactions from journals to the ledger.
- Balancing refers to the closing of the ledger accounts by putting the balance on the appropriate side of the account.
- A journal is subdivided into various books (or journals) is known as sub divisions of the journal or subsidiary books. This division is for the sake of convenience and handling of numerous transactions of repetitive nature.
- Trial balance is the summary of debit and credit balances extracted from the ledgers on a particular date. It helps to prove the arithmetical accuracy of the entries record in the journal and posted into the ledger
- There are two methods in preparation of trial balance namely total method and balance method.

Though the trial balance offers an arithmetic accuracy, it is not free from errors. There are some errors which are not disclosed by the trial balance even when it tallies.

Check Your Progress-2

1. The use of the "lower cost and net realizable value method" for inventory valuation is the implementation of which of the following concepts?

   a) Concept of going concern
   b) Concept of separate entity
   c) Concept of prudential
   d) Concept of matching

2. The concept of separate entity applies to which of the following categ ories of enterprises?

   a) Sole proprietorship
   b) Corporation
   c) Partnership
   d) All

3. The principles of revenue recognition state that all types of revenue s hould be recorded or recognized when______.

   a) Cash received
   b) On end of accounting period
   c) When is earned
   d) When is interest paid

4. Which of the following does the matching concept correspond to?

   a) Assets with liabilities
   b) Capital with income
   c) Income with expenses
   d) Expenses with capital

5. Accounting rules, conventions and practices should remain the same from year to year______.

   a) Uniform Convention
   b) Full Disclosure Convention
   c) Conservative Convention
   d) All of the above.

Glossary

Mercantile system of accounting: Under this system any income or expenses relating to current year are recorded in the books.

Journalizing: It is the process of recording journal entries in chronological order by applying the rules of debit and credit.

Ledger: a summary statement of all the transactions relating to a person, asset, expenses or income which have taken place during a given period of time and show their net effect.

Trial balance: A trial balance is a list of all the balances standing on the ledger accounts and cash books of a concern at any given data

Balance Method: In which ledger has the balances are summarized in the trial balance in respective sides.

Answers to Check Your Progress-1

a-True

b-True

c-False

d-True

e-False

Answers to Check Your Progress-2

1.a

2.d

3.c

4.c

5.a

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam (2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt. limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-5

Preparations of Final Statements

STRUCTURE

Overview

In this unit the concept of Preparations of Final Statements such as Income Statement, Method of preparing the Trading Account, Profit and Loss Account, Method of preparing the Profit and Loss Account, Balance Sheet Meaning and Format, Classification of Balance Sheet Items, Distinction between Trial balance and Balance Sheet has been clearly explained.

Objectives

After studying this unit, the students should be able to:

- Understand their importance, contents and preparation of income statement
- Analyze the relationship between balance sheet and income statement.
- Understand and explain the terms used in a balance sheet

5.1. Introduction

It is necessary to have discussion about the business classification here before starting to discuss about the financial statement. The business concerns can be classified as trading, manufacturing and service organization. Trading business is doing only buying and selling of goods. For example, Retail stores, wholesalers, Dealers, Agencies and so on. Manufacturing organization engages manufacturing activities i.e. buy a raw material, convert them into final goods and the same has been sold to the customers directly or indirectly. For example, TVS Motor company, Lakshimi Mills Limited, etc. Service organizations provide services to the customers. For example, banks, insurance companies etc. Depending upon the forms of organizations, they may be classified as proprietorship, partnership, joint stock Company etc. (Already we discussed in Unit- 1)

As a businessman, irrespective of type, you are interested in knowing about two facts or to find the answer to the following questions:

a. Whether the business earned a profit or loss during the period?

b. Where does the business stand now? To answer these two questions, you have to prepare final accounts. It is the final step in the accounting cycle. Also you know that an important function of accounting is to measure and report the income of the business and financial position as well. In this chapter, you will learn how to prepare the final accounts. Further, you will understand the need for adjustment entries and their effect on these statements.

5.2. Income Statement

The aim of the income statement is to ascertain the net profit/loss during the accounting period. In broad terms, Revenue is the income that mainly accrues to the company either by the sale of goods or rendering of services. In contrast, Expenses are the costs incurred in earning revenues. Thus, income statement is concerned with matching the revenues of a specified period with the expenses of that period. Greater the accuracy of this matching procedure, more correct is the income determination. In other words, preparation of a P & L account is based on the Matching Principle. Depending upon the nature of business, the items in the income statement will vary and also the scope of final accounts will vary. For easy understanding, it is given in the table form.

Nature of Business	Statement	Concern
Trading Organization	Trading Account	Gross Profit
	Profit and Loss Account	Net Profit
Manufacturing Organization	Manufacturing Account	Cost of Production
	Trading Account	Gross Profit
	Profit and Loss Account	Net Profit
Service Organization	Profit and Loss Account	Net Profit

Manufacturing Account: The aim of the account is to ascertain the cost of production of finished goods. Cost of production is the difference between the materials consumed plus factory expenses and closing stocks. A specimen of manufacturing accounts is shown below: *Manufacturing account in T Format* Company name ------------ for the year ending -----------

Particulars	Rs.	Rs.	Particulars	Rs	Rs
To Opening Stock Raw materials Work – in-progress Add: Purchases of raw material Less: Return Outwards/Purchase return <u>To Direct Expenses:</u> To carriage Inwards To Wages and Salaries To Freight and cleaning charges To Gas, Fuel and Water To Royalty on Production			Closing Stock Raw Material Work in progress By Cost of production (Transferred to Trading a/c)		
• To Oil. Grease, Water etc., • To Consumable Stores • To Power • To Coal and coke • To Other factory expenses					

Here we are computing the cost of production. This amount is transferred to trading account in order to compute the gross profit or loss of a business considering the revenues.

Trading Accounts: This is part of profit and loss account. The aim of the account is to find out the gross profit or gross loss of a business. Gross profit or loss is the difference between the cost of goods sold and sales. Trading accounts is also a ledger accounts. It is prepared based on the double entry principle of debit and credit. A specimen of trading accounts is shown below.

Trading account in T Format

Company name ------------ for the year ending -----------

(Ex: Trading Account of Ashok Leyland Ltd for the year ending 31st March 2007)

Particulars	Rs.	Rs.	Particulars	Rs	Rs.
To cost of production # (or) *The following items#* To Opening Stock To Purchases Less: Return Outwards/Purchases return <u>To Direct Expenses:</u> • To carriage Inwards • To Wages and Salaries • To Freight and cleaning charges • To Import Duty • To Customs Duty • To Gas, Fuel and Water • To Royalty on Production • To Oil. Grease, Water etc., • To Consumable Stores • To Power • To Coal and coke • To Other factory expenses To Gross Profit c/d* (Transferred to Profit and Loss a/c)			By Sales Less: Return Inwards / Sales return By Loss on Fire By Closing Stock By Gross Loss c/d* (Transferred to Profit and Loss a/c) (*) & (#) Only one figure will be there.		

Note:

1. Net sales refer sales minus sales return; Net purchases refer purchases minus purchase returns.
2. Direct expenses are those expenses which are directly associated to produce an output.

5.3. Method of preparing the Trading Account

1. Transfer the cost of production from the manufacturing account to the trading account.

2. Transfer all debit balances in the trial balance (only direct expenses/ factory related expenses) to the debit side of trading account.
3. Transfer all credit balances in the trial balance (only sales and returns) to the credit side of trading account.
4. Transfer the balance in the trading account (which represents gross profit or gross loss) to the profit and Loss account.
5. Any expense paid or incurred during the period pertaining to a subsequent period is excluded. (Example prepaid expenses)
6. The purpose of having two columns is that all the adjustments have to made in the first amount column (in accounting, we use to call as an Inner column). The final amount has transferred to second column (outer column).

5.4. Profit and Loss Account

The second section helps to know the Net Profit/Net Loss of business activity during an accounting period. This section starts with gross profit / loss. In other words, the accounts begin with trading accounts ends. All the remaining expenses like management, financial, selling and distribution, etc. are shown in debit side, and gains are shown in credit side of the accounts. The difference amount is called either profit or loss. If the credit side is more than the debit side, it indicates net profit for the period. Conversely, if the debit side is more than the credit side, it indicates net loss for the period. The balancing figure of this account is transferred to balance sheet. (Add or less with capital) A Specimen of profit & Loss account is show & below.

Profit and Loss Account in T Format

Company name ------------ for the year ending -----------

(Ex: Profit and Loss Account of Ashok Leyland Limited for the year ending 31st March 2007)

Particulars	Rs.	Rs	Particulars	Rs	Rs.
To Gross Loss b/d			By Gross Profit b/d		
• To Agent's Commission • To Salesman Commission • To Salesman Expenses • To Unkeep Vehicles • To Export Expenses • To Transportation • To Showroom Expenses					

• To Trade Expenses • To Store Charges • To Samples, Catalog etc., Depreciation & Maintenance • To Depreciation • To Repairs & Maintenance Extraordinary Expenses • To Loss On Fire • (Not covered By Insurance) • To Cash Defalcation • To Loss on Sale of Fixed Assets • To Packing Charges for Finished Goods To Net Profit *					
To Appropriations To Dividends To Transfer to any reserves To balance c/d to Balance Sheet			By Balance b/f By Net Profit for the year		

* Only one figure will be there.

Check Your Progress-1

True/False

a. The aim of the income statement is to ascertain the net profit/loss during the accounting period.
b. The business concerns can be classified as trading, manufacturing and service organization.
c. Any expense paid or incurred during the period pertaining to a subsequent period is excluded.
d. All credit balances of nominal accounts in the trial balance to the credit side of profit and loss account
e. Direct expenses are not those expenses which are directly associated to produce an output

5.5. Method of preparing the Profit and Loss Account

1. Transfer the gross profit or gross loss from the trading account to the profit and loss account.
2. Transfer all the balances are not taken in trading account

3. All debit balances of nominal accounts in the trial balance to the debit side of profit and loss account.
    a. All credit balances of nominal accounts in the trial balance to the credit side of profit and loss account.
    b. Transfer the balance in the profit and loss account (which represents net profit or net loss) to the owner's capital account.
4. Income or gains under each appropriate heading earned during the period (whether actually received or not) are credited.
5. Any expense paid or incurred during the period pertaining to a subsequent period is excluded.
6. Any income received during the period not yet earned but received in advance (expected to be earned during a subsequent period) is excluded.

So far we discussed about the preparation of income statement in T format. Let us discuss the report form or vertical form of presentation. Typically, companies employ the vertical form. A specimen of vertical form has given below:

Particulars	Schedules	Amount
Income Sales		
Other Income		
Expenditure		
Manufacturing & Other Expenditure Administrative Expenses		
Financial Expenses		
Selling & Distribution Expenses Depreciation & Maintenance		
Extraordinary Expenses Profit before Tax Provision for Tax		
Profit after Tax		
Prior period adjustments		
Profit available for appropriations Appropriations		
Debenture redemption reserve Dividend		
General Reserve		
Surplus carried out to Balance Sheet		

Let us discuss the preparation of income statement along with exercise. Consider the following trial balance and prepare the income statement in T format.

Trial Balance as on 30.12.2007

Sl. No	Name of Account	Dr	Cr
1	Dhasan's Capital		15,000
2	Dhasan's Drawings	2,500	
3	Furniture & Fittings	1,300	
4	Bank Overdraft		2,100
5	Sundry Creditors		5,500
6	Business Premises	10,000	
7	Stock (1st January '07)	11,000	
8	Sundry Debtors	9,000	
9	Rent from Tenants		500
10	Purchases	55,000	
11	Sales		75,000
12	Return Inwards	1,000	
13	Discounts (Dr)	800	
14	Discounts (Cr)		1,000
15	Taxes	1,000	
16	General Expenses	2,000	
17	Salaries	4,500	
18	Commissions (Dr)	1,100	
19	Reserve for Bad & doubtful debts		1,000
20	Carriage on purchases	900	
	Total	1,00,100	1,00,100

Solution:

Trading Account for the year ending 31st December 2007

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To opening Stock		11,000	By Sales	75,000	
To Purchases		55,000	Less: Sales Return	1,000	74,000
To Carriage on purchases		900			
To Gross Profit c/d		7,100			
		74,000			74,000

Profit and Loss Account for the year ending 31st December 2007

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Discounts		800	By Gross Profit b/d		7,100
To Taxes		1,000	By Rent from		500
To General Expenses		2,000	Tenants		1,000
To Salaries		4,500	By Discounts		1,000
To Commission		1,100	By Reserve for Bad		
To Net Profit		200	& doubtful debts		
		9, 600			9,600

Let us prepare in vertical format:

Particulars	Schedules	Amount	Amount
Income			
Sales	I	74,000	
Other Income	II	2,500	76,500
Expenditure			
Manufacturing & Other Expenditure	III	66,900	
Administrative Expenses	IV	7,500	
Financial Expenses	V	800	
Selling & Distribution Expenses	VI	1,100	76,300
Profit			200

Schedules:

The details of various items are shown separately in schedules. A number of schedules are prepared to supplement the information supplied in the Profit and loss. It is used as part of financial statements.

Schedule I: Computation of Net sale

Particulars	amount
Sales	75,000
Less Returns	1,000
	74,000

Schedule II: Computation of income

Particulars	amount
Rent from Tenants	500
Discounts	1,000
Reserve for Bad & doubtful debts	1,000
	2,500

Difference between Trading and Profit and Loss account

Trading Account	Profit and Loss account
In order to calculate Gross Profit or Loss Deals with Direct Expenses	In order to calculate Gross Profit or Loss Deals with indirect Expenses
The results of this account is transferred to Profit and Loss account	The results of this account is transferred to owner's capital account

Distinction between revenue and capital expenditure

In the preparation of financial statements, one must be clear regarding the nature of an item of expenditure and receipts. In a business, the expenditures are classified into Capital Expenditure and Revenue Expenditure.

Capital Expenditure: The expenditure results in the acquisition of an asset (tangible or intangible) which can be later sold and converted into cash or which results in an increase in the earning capacity of a business. Usually, the capital expenditure benefits not only in the current accounting year but also many years in the future. The expenditure is generally non-recurring and the amount spent is normally huge. However, it should be noted that all the huge expenditure is not a capital expenditure. Capital expenditures are shown in balance sheet.

Examples:

1. It is the expenditure which results in the purchase or acquisition of asset (land, building, machinery, patents, etc)
2. Expenditure incurred in connection with the purchase of asset (installation charges, wages etc).

Expenditures
- → Revenue Expenditure
- → Capital Expenditure
- → Deferred Capital Expenditure

Receipts
- → Capital Receipts
- → Revenue Receipts

3. Expenditure incurred to bring an old asset into working condition (Ex: Repairs expenses).
4. Expenditure incurred for extending or improving an existing asset to increase its productivity or to increase the earning capacity of business or to decrease working expenditure.

Revenue Expenditure: The benefits of expenditure expire within the year or expenditure which merely seeks to maintain the business or keep the assets in good working conditions. It is not carried forward to the next year or years. Therefore, revenue expenditure is a recurring expenditure made to maintain the business. All revenue expenditure are charged to trading and profit and loss account.

Examples:

1. Expenditure incurred in the normal course of business to run the business and to maintain the fixed assets of business (administrative, finance, selling expenses etc.).
2. Expenditure incurred on purchase of goods which will be used to convert them into final product (direct expenses listed in trading account).

Deferred Revenue Expenditure: Deferred revenue expenditure is the expenditure which is originally revenue in nature but the amount spent is so large that the benefit is received for not a year but for many years. A proportionate amount is charged to profit and loss account of each year and balance is carried forward to subsequent years as deferred revenue expenditure. It is shown as an asset in the balance sheet, e.g., expenditure incurred on advertisements.

Capital Receipts: Capital receipts are the receipts which are not received in the ordinary course of business. These are non-recurring receipts. For example, the sale of fixed assets or investments, issue of shares or debentures, loans taken are some of the examples of capital receipts.

Revenue Receipts: Revenue receipts are receipts obtained in the normal course of business. It is a receipt against supply of goods or services. For examples, Sales, interest, dividend, transfer fees etc. are examples of revenue receipts. Revenue receipts are credited to profit and loss account.

5.6. Balance Sheet

Balance Sheet is one of the important financial statements that will help you to know the financial position of a business. The balances of real and personal accounts are grouped as assets and liabilities and arranged a proper way and it is called Balance sheet.

Meaning and format: According to The American Institute of Certified Public Accountants defines balance sheet as ―a tabular statement of summary of balances (debits and credits) carried forward after an actual and constructive closing of books of account and kept according to the principles of accounting.‖ It has two sides, Liabilities and Assets. Assets are shown on right hand side and liabilities are shown on left hand side. The total of these two sides is always equal i.e. Assets=Liabilities. The Companies Act, 1956 has prescribed a particular form for showing assets and liabilities in the balance sheet for companies registered under this act. These companies are also required to give figures for the previous year along with the current year‗s figures. A specimen of balance sheet is shown below

Balance Sheet in T Format

Company name ------------ as on -----------

(Ex: Balance Sheet of Ashok Leyland Limited as on 31st March 2007)

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
Capital Add: Interest on Capital Less: Drawings Less: Interest on Drawings			Fixed Assets Goodwill Land & Buildings Loose Tools Furniture & Fitting		
Reserves & Surplus:			Motor Vehicles		

Capital Reserves			Plant & Machinery		
Capital Redemption Reserve Share Premium			Patent & Trademarks Long-Term Loans - (Advances)		
General Reserve			Investments		
Profit & Loss Account			Current Assets		
			Stock/Stock - in - Trade		
Secured Loan			Sundry Debtors		
Loan On Montages			Bills/Accounts Receivable		
Bank Loan			Prepaid Expenses		
Debentures			Accrued Income		
Unsecured Loan			Cash in Hand		
Fixed Deposits			Cash at Bank		
Short term loans and advances			Fictitious Assets Preliminary Expenses		
			Advertising Expenses		
			Underwriting Commission		
Current Liabilities			Discount on Issue of Share		
Sundry Creditors Bills/Accounts Payable			Discount on Issue of Debentures		
Bank Overdraft Outstanding Expenses			Loss on Fire (Claimed Amount)		
Income Received in			Advertisement Written off		
Advance			Samples Written off		
Unclaimed dividends					
Provisions					
Provision for taxation					
Proposed Dividends					
For Provident funds					
For Insurance					
Pension and other benefits					

Balance Sheet in vertical Format

Company name ------------ as on -----------

(Ex: Balance Sheet of Ashok Leyland Limited as on 31st March 2007)

Particulars	Schedules	Amount	Amount
<u>Sources of funds</u>			
Shareholders‘ fund			
Capital	I II III		

Reserves and Surplus Loan Funds			
Secured Loans	IV		
Unsecured Loans			
Total	V		
Application of Funds Fixed Assets			
Gross Block Less: Depreciation	VI VII		
Net Block			
Capital work in progress			
Investments Current Assets & Loans and Advances Inventories Sundry Debtors Cash and Bank Balances Loans and Advances	VIII IX		
Less: Current Liabilities and provisions Net current Assets Miscellaneous Expenditure Total			

5.7. Classification of Balance Sheet Items

Share Capital: Share capital is the first item on the liabilities side of a balance sheet. Authorized, issued, subscribed, called up and paid up capital is shown in giving the number of shares and their amount. If the capital is issued for other than cash, the amount of such capital is mentioned. The fact of issue of bonus share is also mentioned. Any unpaid calls are deducted from the called up capital. If forfeited shares are reissued, this amount is added to the paid-up capital.

Reserves and Surplus: Reserves have been created out of undistributed profits and accumulated profits are shown. Reserves are classified as capital reserves and revenue reserves. Capital reserves are the reserves which are not free for distribution as profits whereas revenue reserves are created out of appropriations of profits.

Secured Loans: All those loans against securities are known as secured loan. For example, Debentures, Loans and advances from bank, subsidiary companies etc. Any interest outstanding on such loans is also shown here because the interest is also secured.

Unsecured Loans: Those loans and advances have not given any security are known as unsecured loan. The items included here are deposits, loans and advances from subsidiary companies and loans and advances from other sources. Short-term loans from banks and other sources are also shown in this category.

5.8. Distinction between Trial balance and Balance Sheet

Trial Balance (TB)	Balance Sheet
1. It is a list of balances debit & credit from the ledger accounts	1. It is a statement of assets and liabilities.
2. It contains balances of all personal, real nominal accounts	2. It contains balances of only those personal and real accounts, which represents assets and liabilities
3. It is prepared before preparation of Trading, Profit & Loss account	3. It is prepared after the preparation of Trading, P & L etc.
4. It is prepared to check the arithmetic accuracy of the posting into ledger	4. It is prepared to indicate the financial position of the business on a particulars date.
5. Closing stock does not appear in the TB.	5. It is shown on the Assets side.
6. Outstanding and prepaid expenses and incomes are not shown.	6. Outstanding, prepaid expenses and income are shown in Balance sheet.
7. Debit and credit balances are shown side by side.	7. It is prepared on-T' form; Balances left hand side shows liabilities. Right hand side shows assets

Let us prepare the balance sheet for the above example:

Liabilities	***Rs.***	***Rs.***	***Assets***	***Rs.***	***Rs.***
Dharsan's Capital	***15,000***		***Fixed Assets Furniture & Fittings***		
Less: Drawings	2,500				
Add: Net Profit	12,500		Business Premises	1,300	
Current Liabilities:			Current Assets Sundry		
Bank Over draft	200	12,700	Debtors	10,000	11,300
Creditors					
					9,000
	2,100				
	5,500	7,600			
		20,300			20,300

Adjustments

The objective of financial statements is true and fair viewǁ about the business transactions. This objective cannot be achieved without taking into consideration of left out transactions at the time of trial balance preparation. Thus, the transactions which pertain to the period of final accounts but are not considered while preparing the trial balance are called adjustments. You have to record in the books of journal and ledger, with the result that the effects of each of the adjustments have to be recorded. Therefore, the effect of nominal account appears in the trading or profit and loss account.

At the same time, the effect concerning an asset or liability appears in the balance sheet. The exception will be in the cases where an adjustment is such that it affects two nominal accounts only and when both the effects of the adjustment will have to be dealt with in the trading and profit and loss account. The following table shows the effects of adjustments in final accounts:

Sl. No.	Adjustment for	Meaning	Journal Entry
1	Closing Stock	Closing stock refers that the stocks (raw material, WIP, Finished goods) remain unsold at the end of the year	Closing stock Dr To Trading Account
2	Outstanding Expenses	Those expenses have incurred during the accounting period but are not yet paid.	Expenses a/c Dr To Outstanding Expenses a/c
3	Prepaid Expenses / unexpired Expenses	The expenses paid in advance for the subsequent accounting period	Prepaid Expenses a/c Dr To Expenses a/c
4	Depreciation	Depreciation is the decrease in the value of fixed assets due to lapse of time and ‗wear and tear'.	Depreciation a/c Dr To Respective Asset a/c
5	Accrued income/ income earned but not received	The income are earned during the current account year but have not been actually received by the end of the same year.	Accrued Income a/c Dr To Income a/c
6	Income received in advance	A portion of income of the subsequent period but received during the current year	Income a/c Dr To Income received in advance a/c

7	Bad Debts	The amount is due from the debtors which is irrevocable	Bad debts a/c Dr To Debtor a/c
8	Provision for Doubtful debts	There is a possibility that some of the debtors may not pay and prove to become irrevocable. The amount is provided to meet such losses.	Profit and Loss a/c Dr To provision for doubtful debts
9	Provision for discount on debtors	Allowing discount to our customer for their prompt payment is known as discount on debtors. So provision is created to meet such expenses	Profit and loss a/c Dr To provision for discount on debtors a/c
10	Provision for discount creditors	Receiving discount for our prompt payment from our creditors is known as discount on debtors. So provision is created to meet such expenses	Reserve for discount on creditors a/c Dr To Profit and loss a/c
11	Interest on capital	Interest is paid to owner's capital	Interest on Capital a/c Dr To Capital a/c
12	Interest on drawings	Interest is charged on drawings made by the owner.	Drawings a/c Dr To Interest on Drawing a/c

Let us discuss the method of treatment in final accounts for the above adjustments.

Sl. No.	Adjustment for	Treatment in Final Accounts
1	Closing Stock	1. To be credited to trading account. 2. To be shown on the assets side of the balance sheet.
2	Outstanding Expenses	1. Amount to be added to particular item in the trading or profit and loss accounts. 2. To be shown on the liabilities side of the balance sheet.
3	Prepaid Expenses / unexpired Expenses	1. Amount to be deducted from particular item in the profit and loss accounts. 2. To be shown on the assets side of the balance sheet.
4	Depreciation	1. To be debited to profit and loss account. 2. To be deducted from the value of an asset in the balance sheet.

5	Accrued income/ income earned but not received	1. Amount to be deducted from the particular item in the trading or profit and loss accounts. 2. To be shown on asset side of the balance sheet.
6	Income received in advance	1. To be debited to profit and loss account. 2. To be shown on liability side of the balance sheet.
7	Bad Debts	1. Amount of bad debts to be debited to profit and loss account. 2. To be deducted from sundry debtors in the balance sheet
8	Provision for Doubtful debts	1. To be debited to profit and loss account. 2. To be shown by way of deduction from sundry debtors in the balance sheet.
9	Provision for discount on debtors	1. To be debited to profit and loss account. 2. To be shown by way of deduction from sundry debtors in the balance sheet.
10	Provision for discount creditors	1. To be credited to profit and loss account. 2. To be deducted from sundry creditors in the balance sheet.
11	Interest on capital	1. To be debited to profit and loss account. 2. To be added to capital in the balance sheet.
12	Interest on drawings	1. To be credited to profit and loss account. 2. To be deducted from capital in the balance sheet.
13	Loss of goods by fire or accidents	1. Trading account, credit side (full cost value). 2. Profit and loss account, debit side, the loss amount/or the amount not recovered through insurance claim. 3. Balance sheet, asset side, amount of insurance claim if received.

Example: 1 From the following data, prepare a profit and loss account and a balance sheet as on31.03.2007.

Particulars	Rs.	Particulars	Rs.
Drawings	10,000	Capital	30,000
Purchases	30,000	Purchase returns	1,000
Sales Returns	5,000	Sales	60,000
Carriage in	2,000	Wage outstanding	2,000
Carriage out	3,000	Rent received	1,000
Depreciation on plant	4,000	Reserve for doubtful debts	1,000
Plant	20,000	Interest	5,000
Salaries and wages	3,000	Sundry creditors	6,000
Bad debts	2,000	Loans	38,000
Premises	20,000		
Interest	5,000		
Stock 1.4.2006	25,000		
Sundry debtors	15,000		
	1,44,000		1,44,000

Adjustments:

1. Stock on 31.03.2007 was Rs.40, 000/-. A broke out in the godown and destroyed stock worth Rs.5,000/-. Insurance company had accepted the claim full.
2. Provide for bad debts @10% and provide for discount on debtors @5% and on creditors - @10%.
3. Depreciate buildings at the rate of 15% p.a.
4. Rent outstanding amounted to Rs.1,000/-
5. Closing stock includes samples worth of Rs.2,000/-
6. Provide interest on drawings @ 10% and on capital -@10%.

Solutions:

Trading, profit and loss account for the year ending 31.03.2007

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock To		25000	By Sales	60000	
Purchases	30000		Less: Returns	5000	55000
Less: Purchase returns	1000				
	29000				38000
			By Closing Stock		5000
Less: Samples	2000	27000			
To carriage inwards		2000	By Stock destroyed by fire		
To Gross Profit c/d		44000			
		98000			98000
To Salaries	2000	3000	By Gross Profit b/d By Rent		44000
To Rent Out standings	1500	1000	Received By Interest		1000
To carriage outward		3,000	By Reserve for doubtful debts		5000
To Bad debts		1000	By Provision for discount on		1000
Add: new Bad debts			creditor		
To provision for		3000	By Interest on drawings		600
Discount on debtors					
To Interest		3500			
To Depreciation Plant		675			
Building		5000			
To interest on Capital					
To Net Profit					1000
	4000	7000			
	3000	3000			
	26425	52600			52600

Balance sheet as on 31.3.2007

Particulars	**Rs.**	**Rs.**	**Particulars**	**Rs.**	**Rs.**
Capital	30000		Debtors	15000	
Add: Net Profit	26425		Less: Provision for Bad debts	1500	
	56425				
				16500	
Add: Interest on Capital	30000	48425	Less: Provision for discount	675	
	59425		Debtors		12825
Less: Interest on	10000	5400	Closing Stock		38000
Drawings			Samples in stock		2000
Sundry Creditors	6000	38000	Insurance claim receivable		5000
Less: Provision for Loans			Plant		20000
Discount	600	2000	Premises		
Wages Out standings		1000	Less: Depreciation		17000
Rent Out standings					
		94825			94825

Let Us Sum Up

In this unit, you have learned about the following:

- The profit and loss account and the balance sheet are together known as final accounts. These are the final steps in the accounting process.
- The profit and loss account is prepared to show the financial results of a business.
- Adjustments given outside the trial balance represent entries yet to be made in the journal and the ledger.
- All the adjustments given outside the trial balance will appear in both the trading or profit and loss account and the balance sheet.
- Balance sheet shows the position of assets and liabilities of a business entity as on a particular date

Check Your Progress-2

1. Year IASC established

   a) 1963
   b) 1973
   b) 1983
   d) 1993

2. IASB representative

   a) International accounting standard Board
   b) International accounting standard Board
   c) Indian accounting standard Board
   d) None of the above

3. The IASB was not created in the year

   a) 2000
   b) 2001
   c) 2003
   d) 2004

4. ICAI established under

   a) Chartered accountant act 1949
   b) Company act 1956
   c) Partnership act 1930
   d) Company act 2013

5. When accounting standard board has been constitute

    a) 21 Feb 1977
    b) 21 March 1977
    c) 21 April 1977
    d) 21 May 1977

Glossary

Revenue:	**Revenue** is the income that mainly accrues to the firm either by the sale of goods and services or by investing the resources of the firm outside.
Expenses :	**Expenses** are the costs incurred in earning revenues.
Direct Expenses:	**Direct Expenses** are the costs incurred in earning revenues.
Revenue Expenditure:	The benefits of expenditure expire within the year or expenditure which merely seeks to maintain the business or keep the assets in good working conditions.
Capital Expenditure:	The expenditure results in the acquisition of an asset (tangible or intangible) which can be later sold and converted into cash or which results in an increase in the earning capacity of a business.

Answers to Check Your Progress-1

a-True

b-True

c-True

d-True

e-False

Answers to Check Your Progress-2

1.b

2.a

3.b

4.a

5.c

Block-2: Introduction

This Block-2: **Analysis of Financial Statements** has been divided in to three Units (Unit-6 to Unit-8).

Unit-6: Financial Statements Analysis deals with Financial Statements analysis and its Meaning and Definition, Objectives of Financial Analysis, Uses of Financial Analysis, Process of Financial Statement Analysis, Tools or Techniques of Financial Statement Analysis and also the Limitations of Financial Statement Analysis.

Unit-7: Ratio Analysis explains about the Introduction, Meaning of accounting Ratio, Procedure for computation of ratios, Objectives of ratio analysis, Types of ratio, Profitability ratio, Liquidity ratio, Activity ratio, Solvency ratio, Advantages of ratio analysis and also the Limitations of ratio analysis.

Unit-8: Comparative and Common-Size Statements describes about the Introduction, Meaning of Comparative Statements, Features of Comparative Statements, Types of Comparative Statements, Advantages of Comparative Statements, Disadvantages of Comparative Statements, Meaning of Common-Size Statement, Features of Common-Size Statement, Types of Common-Size Statement, Advantages of Common-Size Statement, Limitations of Common-Size Statement, Trend Analysis and the Procedure for Calculating Trends.

In all the units of **Block -2 Analysis of Financial Statements**, the Check your progress, Glossary, Answers to Check your progress and Suggested Reading has been provided and the Learners are expected to attempt all the Check your progress as part of study.

Unit-6

Financial Statements Analysis

STRUCTURE

Overview

In this unit the Financial Statements analysis Meaning and its Definition, Objectives and Uses of Financial Analysis, Process of Financial Statement Analysis, Tools or Techniques of Financial Statement Analysis, Limitations of Financial Statement Analysis and the Preparations of Financial Statements Analysis has been clearly explained.

Objectives

After studying this unit, the students should be able to:

- Assess the quality of the firm's financial statements
- Analyze current profitability and risk
- Prepare forecasted financial statements
- Stepwise procedure for financial analysis
- Briefs the types and techniques of financial statement analysis

6.1. Financial Statements Analysis Meaning & Definition

Financial Statements analysis is a systematic process of studying the relationship among the various financial factors contained in the financial statements to have a better understanding of the working and the financial position of a business.

Definition

Financial analysis consists in separating facts according to some definite plan, arranging them in groups according to certain circumstances and then presenting them in a convenient and easily read and understandable form. –Finney and Miller.

In simple words analysis of financial statements is a more comprehensive study of balance sheet and profit and loss account using the tools of analysis to get a proper understanding of profitability and financial position of business.

6.2. Objectives of Financial Analysis

Following are the Purposes (Objectives) and Significance of Financial Analysis:

To Assess the Earning Capacity or Profitability: Earning Capacity and Profitability of the enterprise can be assessed from the financial statement analysis. It also facilitates forecasting of the same for the future years. External users are interested in earnings and hence, this is their prime objective of analysing financial statement.

To Assess the Managerial Efficiency: This assessment is possible because financial statement analysis identifies the areas where managers have been efficient and where not. Favourable and unfavourable variations can be identified to pinpoint the managerial inefficiency.

To Assess the Short-term and Long-term Solvency of the Enterprise: This assessment is possible by analysing the financial statements minutely. Creditors or suppliers are interested to know the ability of the entity to meet the short-term liabilities and Debenture holders and lenders are interested to know the long term and short term solvency of the enterprise to assess the ability of the company to repay the principal and interest thereon.

To facilitate Inter-firm Comparison: Inter-firm Comparison helps an enterprise to assess its own performance as well as that of others if mergers and acquisitions are to be considered.

To Forecast and Prepare Budgets: Analysis of historical data in the financial statements helps in assessing developments in future. It facilitates forecasting and preparing budgets for the future years.

To Understand Complicated Matter: Financial Statement analysis helps the users in understanding the complicated matter. This can be facilitated by using charts, graphs and diagrams which are easy to explain and understand.

6.3. Uses of Financial Analysis

Financial Statements Analysis assists in making accurate decisions in various areas which are as follows:

***Security Analysis**:* It is a process used by the investor to identify whether the firm is fulfilling his expectations with regard to dividends, capital appreciation, etc. Such analysis is done by a security analyst who is interested in cash generating ability, dividend pay-out policy and the behaviour of share prices.

***Credit Analysis**:* It is useful when a firm or bank offers credit to a new customer or a dealer. Management is always interested to know credit worthiness of client so as to take decisions regarding whether to allow or extend credit to them or not.

Debt Analysis: It is useful when a firm wants to know its borrowing capacity.

Dividend Decision: It is useful in determining the rate of dividend in order to decide how much of the earnings are to be distributed in the form of dividends and how much is to be retained. Dividend decisions have a direct impact on profitability of the firm and behaviour of its share prices so are to be taken wisely using Financial Statement Analysis.

***General Business Analysis*:** It is useful in identifying the key profit drivers and business risks in order to assess the profit potential of the firm and also assist in future growth scenarios.

6.4. Process of Financial Statement Analysis

Following are the main functions that are used in the process of analysis and interpretation of Financial Statement.

***Rearrangement of Financial Statements*:** It is necessary to reclassify the complex data contained in the financial statement into purposive classes so that maximum desired information from every data for analysis can be obtained.

Comparison: Once the classification of the complex data is done, it is necessary to obtain comparative data of the same enterprise of the past periods if it is a time series analysis. If it is a cross sectional analysis, it is necessary to obtain comparative data of the same accounting period of similar or comparable enterprises.

Analysis: The comparative financial data is then analysed with reference to financial characteristics like profitability, solvency and liquidity.

Interpretation: This is the concluding part of the financial statement analysis. The interpretation should be precise and directed towards indicating the movement if various financial characteristics.

Check Your Progress-1

True/False

a. Earning Capacity and Profitability of the enterprise cannot be assessed from the financial statement analysis.

b. Ratio Analysis is a study of relationship among various financial factors in a business.

c. Debt Analysis is useful when a firm wants to know its borrowing capacity.

d. Analysis of historical data in the financial statements helps in assessing developments in future.

e. Credit Analysis is useful when a firm or bank offers credit to a new customer or a dealer.

6.5. Tools or Techniques of Financial Statement Analysis

Following are the Tools or Techniques used to Analyse Financial Statements:

i. Comparative Statements:
   - It means a comparative study of individual components or elements or items of Balance Sheet and Statement of Profit or Loss for two or more years.
   - At first, the value of each component or element or item of two or more financial years is placed alongside each other.
   - After this, differences between the two amounts is determined.
   - Lastly percentage change in the amount from the base year is ascertained.
   - Such comparative statements can be Intra-Firm or Inter-Firm Comparisons.

ii. Common Size Financial Statements:
   - It is a vertical analysis of Financial Statements in which amounts of individual items of Balance Sheet or Statement of

Profit or Loss are written. These amounts are further converted into percentages to a common base.

- These percentages can be compared with the corresponding percentages in other periods and meaningful conclusions can be drawn.
- Such statements may be prepared for intra-firm and inter-firm comparison.
- Such statements may be prepared for Balance Sheet as well as Income Statement.

iii. Ratio Analysis:

- It is a study of relationship among various financial factors in a business.
- It is a technique of analysing the financial statements with the help of accounting ratio.
- It is a process of determining and interpreting relationships between items of financial statements to provide a meaningful understanding of the financial performance and position of an enterprise.

iv. Cash Flow Statement:

- It is a statement that shows the inflows and the outflows of Cash and Cash Equivalents during the period.
- Inflows are those transactions that increase the Cash and Cash Equivalents and outflows are those transactions that decrease the Cash and Cash Equivalents.
- Such statement is prepared in accordance with the Accounting Standard-3(Revised) on Cash Flow Statement. As per this accounting standard, cash flows are showed under the following 3 heads:

  a. Cash Flow from Operating Activities;
  b. Cash Flow from Investing Activities; and
  c. Cash Flow from Financing Activities.

6.6. Limitations of Financial Statement Analysis

Following are the limitations of Financial Statement Analysis:

Historical Analysis: Financial Statements are prepared using the historical information of the financial transactions that have already taken place. As a result financial statements are correctly termed as historical records of financial transactions. Analysis of such transactions is therefore, a historical analysis. Therefore, the statement is incorrect as it makes reference to use of future data.

Price Level Changes are not considered: If there is a change in the price level, analysis of financial statements of different accounting years become invalid as accounting records ignore change in value of money.

Qualitative Aspect Ignored: Financial Statements record only monetary transactions which are quantitative in nature. Other important qualitative elements which affect the financial statements are not considered.

Financial Statements Limitations: Financial Statements are not always accurate and are subject to some limitations. Since, analysis is based on the information provided by financial statements, such limitations will therefore, have an impact on the decisions taken based on the analysis of information provided by such financial statement.

Not free from bias: Financial statements are the outcome of accounting concepts and conventions combined with estimates. Estimates cannot be relied upon completely as there are chances that the amounts may fluctuate and hence, are not free from bias. Therefore, the financial statements are not completely reliable.

***Accounting Practices**:* In order to compare the profitability and the financial position of different firms, it is necessary that these firms follow same accounting practices. If different accounting practices are followed, inter-firm comparison is not possible.

Window Dressing: It refers to the presentation of a better financial position than what it actually is by way of manipulating the books of accounts. Such false representation will provide misleading information for analysis which will result in wrong decision making.

Symptoms**:** Financial statements analysis facilitates identifying symptoms or problems but it fails to provide solution or remedy for the same. Rectification of the error or problem has to be taken care of by the management based on their respective analysis.

Let Us Sum Up

In this unit, you have learned about the following:

- Financial statements are a collection of summary-level reports about an organization's financial results, financial position, and cash flows.

- Financial statements the income statement, balance sheet, and statement of cash flows.
- Financial analysis determines a company's health and stability, providing an understanding of how the company conducts its business.
- It is important to know that financial statement analysis has its limitations as well
- Financial ratio analysis analyzes specific financial line-items within a company's financial statements to provide insight as to how well the company is performing.
- Financial analysis is a process of selecting, evaluating, and interpreting financial data, along with other pertinent information, in order to formulate an assessment of a company‘s present and future financial condition and performance.
- Firms employ financial analysts to read, compare and interpret the data as necessary for quantitative analysis and decision making.

Check Your Progress-2

---

1. National advisory committee on accounting standard (NACAS) established in the year

   a) August 2001
   b) August 2002
   c) August 2003
   d) August 2004

2. IAS in accounting stands for

   a) Indian Administrative Services
   b) International Accounting Standard
   c) Indian Accounting Standard
   d) None of the above

3. How many Ind-AS are there in India

   a) 39
   b) 38
   c) 42
   d) 41

4. Income taxes Comes under

   a) Ind AS 11
   b) Ind AS 12
   c) Ind AS 13
   d) Ind AS 14

5. Intangible assets come under

   a) AS 22
   b) AS 23
   c) AS 24
   d) AS 26

Glossary

Balance Sheet:	Financial statement that reports a company's assets, liabilities and shareholder equity at a specific point in time
Profitability:	The ability of a business to earn a profit
Solvency :	Ability of a company to meet its long-term debts and financial obligations
Inter-firm Comparison:	Comparison of two or more similar business units with the objective of finding the competitive position to improve the profitability and productivity of those business units
Cash flow statement:	Financial statement that provides aggregate data regarding all cash inflows a company receives from its ongoing operations and external investment sources.
Window Dressing:	Occurs when a fund manager sells underperforming stocks and replaces them with attractive stocks for appearances' sake.
Financial statement analysis:	Process of analyzing a company's financial statements for decision-making purposes.

Answers to Check Your Progress-1

a-False

b-True

c-True

d-True

e-True

Answers to Check Your Progress-2

1.a

2.b

3.d

4.b

5.d

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam (2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India

Unit-7
Ratio Analysis

STRUCTURE

Overview

In this unit the Introduction, the Meaning of accounting Ratio, the Procedure for computation of ratios, Objectives of ratio analysis, Types of ratio, Profitability ratio, Liquidity ratio, Activity ratio, Solvency ratio, Advantages of ratio analysis, Limitations of ratio analysis and the Preparations of Ratio Analysis has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Explain the meaning, objectives and limitations of accounting ratios.
- Identify the various types of ratios commonly used.
- Calculate various ratios to assess solvency, liquidity, efficiency and profitability of the firm.

- Interpret the various ratios calculated for intra-firm and inter firm comparisons.
- Assess the operating efficiency of the business.
- Analyze the profitability of the business

7.1. Introduction

Ratio analysis refers to the analysis and interpretation of the figures appearing in the financial statements (i.e., Profit and Loss Account, Balance Sheet and Fund Flow statement etc.). It is a process of comparison of one figure against another. It enables the users like shareholders, investors, creditors, Government, and analysts etc. to get better understanding of financial statements.

Ratio analysis is a very powerful analytical tool useful for measuring performance of an organisation. Accounting ratios may just be used as symptom like blood pressure, pulse rate, body temperature etc. The physician analyses these information to know the causes of illness. Similarly, the financial analyst should also analyse the accounting ratios to diagnose the financial health of an enterprise.

7.2. Meaning of financial ratios

As stated earlier, accounting ratios are an important tool of financial statements analysis. A ratio is a mathematical number calculated as a reference to relationship of two or more numbers and can be expressed as a fraction, proportion, percentage and a number of times. When the number is calculated by referring to two accounting numbers derived from the financial statements, it is termed as accounting ratio.

It needs to be observed that accounting ratios exhibit relationship, if any, between accounting numbers extracted from financial statements. Ratios are essentially derived numbers and their efficacy depends a great deal upon the basic numbers from which they are calculated. Hence, if the financial statements contain some errors, the derived numbers in terms of ratio analysis would also present an erroneous scenario.

Further, a ratio must be calculated using numbers which are meaningfully correlated. A ratio calculated by using two unrelated numbers would hardly serve any purpose. For example, the furniture of the business is Rs. 1,00,000/- and Purchases are Rs. 3,00,000/-. The ratio of purchases to furniture is 3 (3,00,000/1,00,000) but it hardly has any relevance. The reason is that there is no relationship between these two aspects.

Metcalf and Tigard have defined financial statement analysis and interpretations as a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm's position and performance.

Khan and Jain define the term ratio analysis as —the systematic use of ratios to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial conditions can be determined.

7.3. Procedure for computation of ratios

Generally, Ratio Analysis involves four steps:

i) Collection of relevant accounting data from financial statements.

ii) Constructing ratios of related accounting figures.

iii) Comparing the ratios thus constructed with the standard ratios which may be the corresponding past ratios of the firm or industry average ratios of the firm or ratios of competitors.

iv) Interpretation of ratios to arrive at valid conclusions.

7.4. Objectives of ratio analysis

Ratio analysis is indispensable part of interpretation of results revealed by the financial statements. It provides users with crucial financial information and points out the areas which require investigation. Ratio analysis is a technique which involves regrouping of data by application of arithmetical relationships, though its interpretation is a complex matter. It requires a fine understanding of the way and the rules used for preparing financial statements. Once done effectively, it provides a lot of information which helps the analyst:

1. To know the areas of the business which need more attention.
2. To know about the potential areas which can be improved with the effort in the desired direction.
3. To provide a deeper analysis of the profitability, liquidity, solvency and efficiency levels in the business.
4. To provide information for making cross-sectional analysis by comparing the performance with the best industry standards.
5. To provide information derived from financial statements useful for making projections and estimates for the future.

Check Your Progress-1

True/False

a. Profit is not the primary objective of all businesses.

b. A ratio of two variables from the statement of profit and loss is known as statement of profit and loss ratio.

c. Ratio analysis is indispensable part of interpretation of results revealed by the financial statements.

d. When the number is calculated by referring to two accounting numbers derived from the financial statements, it is termed as accounting ratio.

e. Ratio analysis is a very powerful analytical tool useful for measuring performance of an organisation.

7.5. Types of ratios

There is a two way classification of ratios: (1) traditional classification, and (2) functional classification. The traditional classification has been on the basis of financial statements to which the determinants of ratios belong. On this basis the ratios are classified as follows:

Statement of Profit and Loss Ratios: A ratio of two variables from the statement of profit and loss is known as statement of profit and loss ratio. For example, ratio of gross profit to revenue from operations is known as gross profit ratio. It is calculated using both figures from the statement of profit and loss.

Balance Sheet Ratios: In case both variables are from the balance sheet, it is classified as balance sheet ratios. For example, ratio of current assets to current liabilities known as current ratio. It is calculated using both figures from balance sheet.

Composite Ratios: If a ratio is computed with one variable from the statement of profit and loss and another variable from the balance sheet, it is called composite ratio. For example, ratio of credit revenue from operations to trade receivables (known as trade receivables turnover ratio) is calculated using one figure from the statement of profit and loss (credit revenue from operations) and another figure (trade receivables) from the balance sheet.

Although accounting ratios are calculated by taking data from financial statements but classification of ratios on the basis of financial statements is rarely used in practice. It must be recalled that basic purpose of accounting is to throw light on the financial performance (profitability) and financial position (its capacity to raise money and invest them wisely) as well as changes occurring in financial position (possible explanation of changes in the activity level). As such, the alternative classification (functional classification) based on the purpose for which a ratio is computed, is the most commonly used classification which is as follows:

A. Profitability Ratios

B. Liquidity Ratios

C. Activity (or Turnover) Ratios

D. Solvency Ratios

7.6. Profitability ratios

Profit is the primary objective of all businesses. All businesses need a consistent improvement in profit to survive and prosper. A business that continually suffers losses cannot survive for a long period.

Profitability ratios measure the efficiency of management in the employment of business resources to earn profits. These ratios indicate the success or failure of a business enterprise for a particular period of time. Profitability ratios are used by almost all the parties connected with the business. A strong profitability position ensures common stockholders a higher dividend income and appreciation in the value of the common stock in future. Creditors, financial institutions and preferred stockholders expect a prompt payment of interest and fixed dividend income if the business has good profitability position.

Management needs higher profits to pay dividends and reinvest a portion in the business to increase the production capacity and strengthen the overall financial position of the company. Some important profitability ratios are given below:

i) Net profit (NP) ratio

ii) Gross profit (GP) ratio

iii) Price earnings ratio (P/E ratio)

iv) Operating ratio

v) Expense ratio

vi) Dividend yield ratio

vii) Dividend payout ratio

viii) Return on capital employed ratio

ix) Earnings per share (EPS) ratio

x) Return on shareholder‘s investment/Return on equity

xi) Return on common stockholders‘equity ratio.

(i) ***Net profit ratio*** (NP ratio) is a popular profitability ratio that shows relationship between net profit after tax and net sales. It is computed by dividing the net profit (after tax) by net sales.

$$\text{Net Profit (NP) ratio} = \frac{\text{Net profit after tax}}{\text{Net sales}}$$

For the purpose of this ratio, net profit is equal to gross profit minus operating expenses and income tax. All non-operating revenues and expenses are not taken into account because the purpose of this ratio is to evaluate the profitability of the business from its primary operations.

Net profit (NP) ratio is a useful tool to measure the overall profitability of the business. A high ratio indicates the efficient management of the affairs of business.

(ii) ***Gross profit ratio*** (GP ratio) is a profitability ratio that shows the relationship between gross profit and total net sales revenue. It is a popular tool to evaluate the operational performance of the business. The ratio is computed by dividing the gross profit figure by net sales.

The following formula/equation is used to compute gross profit ratio:

$$\text{Gross profit Ratio} = \frac{\text{Gross profit}}{\text{Net sales}}$$

When gross profit ratio is expressed in percentage form, it is known as gross profit margin or gross profit percentage. The formula of gross profit margin or percentage is given below:

$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Net sales}} \text{ X } 100$$

The basic components of the formula of gross profit ratio (GP ratio) are gross profit and net sales. Gross profit is equal to net sales minus cost of goods sold. Net sales are equal to total gross sales less returns inwards and discount allowed. The information about gross profit and net sales is normally available from income statement of the company.

(iii) ***Price earnings ratios*** (P/E ratio) measures how many times the earnings per share (EPS) have been covered by current market price of an ordinary share. It is computed by dividing the current market price of an ordinary share by earnings per share.

The formula of price earnings ratio is given below:

$$\text{Price earning ratio (P/E ratio)} = \frac{\text{Market price per equity share}}{\text{Earnings per share (EPS)}}$$

A higher P/E ratio is the indication of strong position of the company in the market and a fall in ratio should be investigated.

(iv) ***Operating ratio*** is computed by dividing operating expenses by net sales. It is expressed in percentage.

Operating ratio is computed as follows:

$$\text{Operating ratio} = \frac{\text{Operating cost}}{\text{Net sales}} \times 100$$

The basic components of the formula are operating cost and net sales. Operating cost is equal to cost of goods sold plus operating expenses. Non-operating expenses such as interest charges, taxes etc., are excluded from the computations. This ratio is used to measure the operational efficiency of the management. It shows whether the cost component in the sales figure is within normal range. A low operating ratio means high net profit ratio i.e., more operating profit.

The ratio should be compared: (1) with the company‘s past years ratio, (2) with the ratio of other companies in the same industry. An increase in the ratio should be investigated and brought to attention of management. The operating ratio varies from industry to industry.

(v). Expense ratio (expense to sales ratio) is computed to show the relationship between an individual expense or group of expenses and sales. It is computed by dividing a particular expense or group of expenses by net sales. Expense ratio is expressed in percentage.

$$\text{Expense ratio} = \frac{\text{Particular expense}}{\text{Net sales}} \times 100$$

The numerator may be an individual expense or a group of expenses such as administrative expenses, sales expenses or cost of goods sold. Expense ratio shows what percentage of sales is an individual expense or a group of expenses. A lower ratio means more profitability and a higher ratio means less profitability.

(vi) Return on shareholders' investment ratio is a measure of overall profitability of the business and is computed by dividing the net income after interest and tax by average stockholders‘ equity. It is also known as return on equity (ROE) ratio and return on net worth ratio. The ratio is usually expressed in percentage.

$$\begin{array}{c}\text{Return on shareholders or}\\ \text{return on equity ratio}\end{array} = \frac{\text{Net income after interest and tax}}{\text{Average stockholders' equity}} \times 100$$

The numerator consists of net income after interest and tax because it is the amount of income available for common and preference stockholders. The denominator is the average of stockholders‘ equity (preference and common stock). The information about net income after interest and tax is normally available from income statement and the information about preference and common stock is available from balance sheet.

Return On Equity (ROE) is widely used to measure the overall profitability of the company from preference and common stockholders‘ view point. The ratio also indicates the efficiency of the management in using the resources of the business.

(vii) ***Return on common stockholders' equity ratio*** measures the success of a company in generating income for the benefit of common stockholders. It is computed by dividing the net income available for common stockholders by common stockholders‘ equity. The ratio is usually expressed in percentage.

$$\text{Return on common stockholders' equity} = \frac{\text{Net income} - \text{Preferred dividend}}{\text{Average common stockholders' equity}} \text{ X } 100$$

The numerator in the above formula consists of net income available for common stockholders which are equal to net income less dividend on preferred stock. The denominator consists of average common stockholders‘ equity which is equal to average total stockholders‘ equity less average preferred stockholders equity. If preferred stock is not present, the net income is simply divided by the average common stockholders‘ equity to compute the common stock equity ratio. Like Return On equity (ROE) ratio, a higher common stock equity ratio indicates high profitability and strong financial position of the company and can convert potential investors into actual common stockholders.

(viii) Earnings per share (EPS) ratio measures how many dollars of net income have been earned by each share of common stock. It is computed by dividing net income less preferred dividend by the number of shares of common stock outstanding during the period. It is a popular measure of overall profitability of the company and is usually expressed in dollars. Earnings per share ratio (EPS ratio) is computed by the following formula:

$$\text{Earnings per share (EPS) ratio} = \frac{\text{Net income} - \text{Preferred dividend}}{\text{Weighted average number of shares outstanding}}$$

The numerator is the net income available for common stockholders‘ (net income less preferred dividend) and the denominator is the average number of shares of common stock outstanding during the year.

The formula of EPS ratio is similar to the formula of return on common stockholders‘ equity ratio except the denominator of EPS ratio formula is the number of average shares of common stock outstanding rather than the average common stockholders‘ equity. The higher the EPS figure, the better it is. A higher EPS is the sign of higher earnings, strong financial position and, therefore, a reliable company to invest money.

*(ix)**Return on capital employed ratio*** is computed by dividing the net income before interest and tax by capital employed. It measures the success of a business in generating satisfactory profit on capital invested. The ratio is expressed in percentage.

$$\text{Return on capital employed ratio} = \frac{\text{Net income – before interest and tax}}{\text{Capital employed}} \text{ X 100}$$

Formula:

The basic components of the formula of return on capital employed ratio are net income before interest and tax and capital employed.

Net income before the deduction of interest and tax expenses is frequently referred to as operating income. Here, interest means interest on long term loans. If company pays interest expenses on short-term borrowings, that is deducted to arrive at operating income.

Return on capital employed ratio measures the efficiency with which the investment made by shareholders and creditors is used in the business. Managers use this ratio for various financial decisions. It is a ratio of overall profitability and a higher ratio is, therefore, better.

*(x) **Dividend yield ratio*** shows what percentage of the market price of a share a company annually pays to its stockholders in the form of dividends. It is calculated by dividing the annual dividend per share by market value per share. The ratio is generally expressed in percentage form and is sometimes called dividend yield percentage.

Since dividend yield ratio is used to measure the relationship between the annual amount of dividend per share and the current market price of a share, it is mostly used by investors looking for dividend income on continuous basis.

Formula:

$$\text{Dividend yield ratio} = \frac{\text{Dividend per share}}{\text{Market value per share}} \text{ X 100}$$

The following formula is used to calculated dividend yield ratio:

*(xi) **Dividend payout ratio*** discloses what portion of the current

earnings the company is paying to its stockholders in the form of dividend and what portion the company is ploughing back in the business for growth in future. It is computed by dividing the dividend per share by the earnings per share (EPS) for a specific period. The formula of dividend payout ratio is given below:

$$\text{Dividend payout ratio} = \frac{\text{Dividend per share}}{\text{Earnings per share}}$$

The numerator in the above formula is the dividend per share paid to common stockholders only. It does not include any dividend paid to preferred stockholders.

Example on Profitability Ratios

Following is the Profit and Loss Account of Samir Auto Ltd., for the year ended 31st March, 2016.

Dr. Cr.

Particulars	Amount in Rs.	Particulars	Amount in Rs.
To Opening Stock	1,00,000	By Sales	5,60,000
To Purchases	3,50,000	By Closing Stock	1,00,000
To Wages	9,000		
To Gross Profitc/d	2,01,000		
	6,60,000		6,60,000
To Administrative Expenses	20,000	By Gross Profit b/d	2,01,000
To Selling and Distribution Expenses	89,000	By Interest on Investments	10,000
To Non-Operating Expenses	30,000	By Profit on sale of Assets	8,000
To Net Profit Transferred to Capital	80,000		
	2,19,000		2,19,000

You are required to calculate:

i. Gross Profit Ratio

You are required to calculate:

ii. Gross Profit Ratio
iii. Net Profit Ratio
iv. Operating Ratio
v. Operating Profit Ratio
vi. Administrative Expenses Ratio

Solution:

(i) Gross Profit Ratio = $\frac{\text{Gross Profit}}{\text{Net Sales}}$ X 100

$$= \frac{2,01,000}{5,60,000} = \text{X } 100 = 35.9\%$$

(ii) Net Profit Ratio = $\frac{\text{Net Profit After Tax}}{\text{Net Sales}}$ X 100

$$= \frac{80,000}{5,60,000} = \text{X } 100 = 14.3.\%$$

(iii) Operating Ratio = $\frac{\text{Cost of Goods Sold + Operating Exp.}}{\text{Net Sales}}$

Cost of Goods Sold= Op.Stock + Purchases + Wages – Closing Stock

= 1,00,000 + 3,50,000 + 9,000- 1,00,000= Rs.3,59,000

Operating Expenses= Administrative Exp. + Selling and Distribution Exp.
=Rs.20,000 + Rs.89,000 = Rs.1,09,000

Operating Ratio = $\frac{3,59,000 + 1,09,000}{5,60,000}$ X 100 = 83.6%

(iv) ***Operating Profit Ratio***= 100- Operating Ratio= 16.4%

(v) ***Administrative Expense Ratio*** = $\frac{\text{Administrative Exp}}{\text{Net Sales}}$ X 100

$$= \frac{20,000}{5,60,000} \text{ X } 100 = 3.6\%$$

7.7. Liquidity Ratios

Liquidity ratios measure the adequacy of current and liquid assets and help evaluate the ability of the business to pay its short-term debts. The ability of a business to pay its short-term debts is frequently referred to as short-term solvency position or liquidity position of the business.

Generally a business with sufficient current and liquid assets to pay its current liabilities as and when they become due is considered to have a strong liquidity position and a businesses with insufficient current and liquid assets is considered to have weak liquidity position.

Short-term creditors like suppliers of goods and commercial banks use liquidity ratios to know whether the business has adequate current and liquid assets to meet its current obligations. Financial institutions hesitate to offer short-term loans to businesses with weak short-term solvency position.

Three commonly used liquidity ratios are given below:

(i) Current ratio or working capital ratio

(ii) Quick ratio or acid test ratio

(iii) Absolute liquid ratio

(i) ***Current ratio*** (also known as working capital ratio) is a popular tool to evaluate short- term solvency position of a business. Short-term solvency refers to the ability of a business to pay its short-term obligations when they become due. Short term obligations (also known as current liabilities) are the liabilities payable within a short period of time, usually one year.

Current ratio is computed by dividing total current assets by total current liabilities of the business. This relationship can be expressed in the form of following formula or equation:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Above formula comprises of two components i.e., current assets and current liabilities. Both the components are available from the balance sheet of the company. Some examples of current assets and current liabilities are given below:

Current Assets	**Current Liabilities**
Cash Cash Equivalents Stock or Inventory Accounts Receivable Marketable Securities Prepaid Expenses	Accounts payable. Interest payable. Income taxes payable. Bills payable. Bank account overdrafts. Accrued expenses. Short-term loans.

(ii) ***Quick ratio*** (also known as ―acid test ratio‖ and ―liquid ratio‖) is used to test the ability of a business to pay its short-term debts. It measures the relationship between liquid assets and current liabilities. Liquid assets are equal to total current assets minus inventories and prepaid expenses.

The formula for the calculation of quick ratio is given below:

$$\text{Quick ratio} = \frac{\text{Liquid assets}}{\text{Current liabilities}}$$

Quick ratio is considered a more reliable test of short-term solvency than current ratio because it shows the ability of the business to pay short term debts immediately.

Inventories and prepaid expenses are excluded from current assets for the purpose of computing quick ratio because inventories may take long period of time to be converted into cash and prepaid expenses cannot be used to pay current liabilities.

(iii) ***Absolute Liquid ratio***-some analysts also compute absolute liquid ratio to test the liquidity of the business. Absolute liquid ratio is computed by dividing the absolute liquid assets by current liabilities.

The formula to compute this ratio is given below:

$$\text{Absolute liquid ratio} = \frac{\text{Absolute liquid assets}}{\text{Current liabilities}}$$

Absolute liquid assets are equal to liquid assets minus accounts receivables (including bills receivables). Some examples of absolute liquid assets are cash, bank balance and marketable securities etc.

Example on Liquidity Ratios:

The following is the Balance Sheet of Samir Auto. Ltd., for the year ending 31st March, 2016.

Liabilities	Amount in Rs.	Assets	Amount in Rs.
10% preference Share		Goodwill	1,00,000
capital	5,00,000	Land and Building	6,50,000
Equity Share Capital	10,00,000	Plant	8,00,000
9% Debentures	2,00,000	Furniture and Fixtures	1,50,000
Long-term Loan	1,00,000		
Bills Payable	60,000	Bills Receivables	70,000
Sundry Creditors	70,000	Sundry Debtors	90,000
Bank Overdraft	30,000	Bank Balance	45,000
Outstanding Expenses	5,000	Short-term	
		Investments	25,000
		Prepaid Expenses	5,000
		Stock	30,000
	19,65,000		19,65,000

From the balance sheet calculate:

(i) Current ratio

(ii) Acid test ratio

(iii) Absolute liquid ratio

(iv) Comment on these ratios

Solution

i) Current Ratio = $\frac{\text{Current Assets}}{\text{Current liabilities}}$

Current Assets= Rs.70,000 + Rs.45,000 + Rs.25,000 + Rs.5,000 + Rs.30,000 = Rs.2,65,000

Current Liabilities = Rs.60,000 + Rs.70,000 + Rs.30,000 + Rs.5,000 =Rs.1,65,000

Current Ratio = $\frac{\text{Current Assets}}{\text{Liabilities}} = \frac{\text{Rs. 2,65,000}}{\text{Rs. 1,65,000}}$ = 1.61 Current

ii) Acid test ratio = $\frac{\text{Liquid Assets}}{\text{Current Liabilities}}$

Liquid Assets = Current Assets- (Stock + Prepaid Expenses)

= Rs.2,30,000

Liquid Assets = $\frac{\text{Current Assets}}{\text{Liabilities}} = \frac{\text{Rs. 2,30,000}}{\text{Rs. 1,65,000}}$ = 1.39 Current

(iii) ***Absolute liquid ratio =*** $\frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}}$

Absolute Liquid Assets= Rs.45,000 + Rs.25,000 =Rs.70,000

Absolute liquid ratio = $\frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}} = \frac{70{,}000}{1{,}65{,}000}$ = 0.42

(iv) Comments: Current ratio of the company is not satisfactory because the ratio (1.61) is below the generally accepted standard of 2:1. Acid- Test ratio, on the other hand, is more than normal standard of 1:1. Liquid assets are quite sufficient to provide a cover to the current liabilities. The absolute liquid ratio is 0.42 which is slightly less than the accepted standard of 0.5.

7.8. Activity Ratios

Activity ratios (also known as turnover ratios) measure the efficiency of a firm or company in generating revenues by converting its production into cash or sales. Generally a fast conversion increases revenues and profits.

Activity ratios show how frequently the assets are converted into cash or sales and, therefore, are frequently used in conjunction with liquidity ratios for a deep analysis of liquidity. Some important activity ratios are:

(i) Inventory turnover ratio

(ii) Receivables turnover ratio

(iii) Average collection period

(iv) Accounts payable turnover ratio

(v) Average payment period

(vi) Asset turnover ratio

(vii) Working capital turnover ratio

(viii) Fixed assets turnover ratio

(i) Inventory Turnover Ratio (ITR) is an activity ratio is a tool to evaluate the liquidity of inventory. It measures how many times a company has sold and replaced its inventory during a certain period of time.

Inventory turnover ratio is computed by dividing the cost of goods sold by average inventory at cost. The formula/equation is given below.

$$\text{Inventory turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average inventory at cost}}$$

Two components of the formula of inventory turnover ratio are cost of goods sold and average inventory at cost. Cost of goods sold is equal to cost of goods manufactured (purchases for trading company) plus opening inventory less closing inventory. Average inventory is equal to opening balance of inventory plus closing balance of inventory divided by two.

Inventory turnover ratio varies significantly among industries. A high ratio indicates fast moving inventories and a low ratio, on the other hand, indicates slow moving or obsolete inventories in stock. A low ratio may also be the result of maintaining excessive inventories needlessly. Maintaining excessive inventories unnecessarily indicates poor inventory management because it involves tiding up funds that could have been used in other business operations.

(ii) Receivables turnover ratio (also known as debtors turnover ratio) is computed by dividing the net credit sales during a period by average receivables. Accounts receivable turnover ratio simply measures how many times the receivables are collected during a particular period. It is a helpful tool to evaluate the liquidity of receivables.

$$\text{Accounts receivable turnover ratio} = \frac{\text{Net credit sales}}{\text{Average trade receivables (net)}}$$

Two components of the formula are - net credit sales‖ and - average trade accounts receivable‖. It is clearly mentioned in the formula that the numerator should include only credit sales. But in examination questions, this information may not be given. In that case, the total sales should be used as numerator assuming all the sales are made on credit.

Average receivables are equal to opening receivables (including notes receivables) plus closing receivables (including notes receivables) divided by two. But sometimes opening receivables may not be given in the examination questions. In that case closing balance of receivables should be used as denominator.

(iii) Average collection period is computed by dividing the number of working days for a given period (usually an accounting year) by receivables turnover ratio. It is expressed in days and is an indication of the quality of receivables.

The formula is given below:

$$\text{Average collection period} = \frac{\text{Number of working days}}{\text{Debtors turnover ratio}}$$

A short collection period means prompt collection and better management of receivables. A longer collection period may negatively effect the short-term debt paying ability of the business in the eyes of analysts.

(iv) Accounts payable turnover ratio (also known as creditors turnover ratio or creditors' velocity) is computed by dividing the net credit purchases by average accounts payable. It measures the number of times, on average, the accounts payable are paid during a period. Like receivables turnover ratio, it is expressed in times.

$$\text{Accounts payable turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average accounts payable}}$$

In above formula, numerator includes only credit purchases. But if credit purchases are not known, the total net purchases should be used.

Average accounts payable are computed by adding opening and closing balances of accounts payable (including notes payable) and dividing by two. If opening balance of accounts payable is not given, the closing balance (including notes payable) should be used.

Accounts payable turnover ratio indicates the creditworthiness of the company. A high ratio means prompt payment to suppliers for the goods purchased on credit and a low ratio may be a sign of delayed payment. Accounts payable turnover ratio also depends on the credit terms allowed by suppliers. Companies who enjoy longer credit periods allowed by creditors usually have low ratio as compared to others.

(v) Average payment period means the average period taken by the company in making payments to its creditors. It is computed by dividing the number of working days in a year by creditors turnover ratio. Some other formulas for its computation are given below:

Formula:

This ratio may be computed in a number of ways:

1. $$\text{Average accounts payables} = \frac{\text{Accounts payables (including notes payable)}}{\text{Debtors turnover ratio}}$$

$$\text{*Average daily credit purchases} = \frac{\text{Credit purchases}}{\text{Number of working days in a year}}$$

2. $$\text{Average payment period} = \frac{\text{(Accounts payable x Number of working days)}}{\text{Net credit purchases}}$$

3. $$\text{Average payment period} = \frac{\text{Number of working days}}{\text{Payables turnover ratio}}$$

Any of the above formulas may be used to compute average payment period. If credit purchases are unknown, the total purchases may be used. A shorter payment period indicates prompt payments to creditors. Like accounts payable turnover ratio, average payment period also indicates the creditworthiness of the company. But a very short payment period may be an indication that the company is not taking full advantage of the credit terms allowed by suppliers.

(vi) Working capital turnover ratio is computed by dividing the cost of goods sold by net working capital. It represents how many times the working capital has been turned over during the period.

$$\text{Working capital turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Net working capital}}$$

The formula consists of two components – cost of goods sold and net working capital. If the cost of goods sold figure is not available or cannot be computed from the available information, the total net sales can be used as numerator. Net working capital is equal to current assets minus current liabilities. This information is available from the balance sheet.

Generally, a high working capital turnover ratio is better. A low ratio indicates inefficient utilization of working capital. The ratio should be carefully interpreted because a very high ratio may also be a sign of insufficient working capital.

(vii) Fixed assets turnover ratio (also known as sales to fixed assets ratio) is a commonly used activity ratio that measures the efficiency with which a company uses its fixed assets to generate its sales revenue. It is computed by dividing net sales by average fixed assets.

$$\text{Fixed assets turnover ratio} = \frac{\text{Net sales}}{\text{Average fixed assets}}$$

Generally, a high fixed assets turnover ratio indicates better utilization of fixed assets and a low ratio means inefficient or under-utilization of fixed assets. The usefulness of this ratio can be increased by comparing it with the ratio of other companies, industry standards and past years.

7.9. Solvency Ratios

Solvency ratios (also known as long-term solvency ratios) measure the ability of a business to survive for a long period of time. These ratios are very important for stockholders and creditors.

Solvency ratios are normally used to:

- Analyze the capital structure of the company
- Evaluate the ability of the company to pay interest on long term borrowings
- Evaluate the ability of the company to repay principal amount of the long term loans
- (debentures, bonds, medium and long term loans etc.).
- Evaluate whether the internal equities (stockholders‘ funds) and external equities (creditors‘ funds) are in right proportion.

Some frequently used long-term solvency ratios are given below:

(i) Debt to equity ratio

(ii) Proprietary ratio

(iii) Fixed assets to equity ratio (iv)Capital gearing ratio

(i) ***Debt to equity ratio*** is a long term solvency ratio that indicates the soundness of long-term financial policies of a company. It shows the relation between the portion of assets financed by creditors and the portion of assets financed by stockholders. As the debt to equity ratio expresses the relationship between external equity (liabilities) and internal equity (stockholder‘s equity), it is also known as ―external-internal equity ratio‖.

Debt to equity ratio is calculated by dividing total liabilities by stockholder‘s equity.

$$\text{Debt to equity ratio} = \frac{\text{Total liabilities}}{\text{Stockholder's equity}}$$

The numerator consists of the total of current and long term liabilities and the denominator consists of the total stockholders' equity including preferred stock. Both the elements of the formula are obtained from company's balance sheet.

A ratio of 1 (or 1: 1) means that creditors and stockholders equally contribute to the assets of the business. A less than 1 ratio indicates that the portion of assets provided by stockholders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the portion of assets provided by creditors is greater than the portion of assets provided by stockholders.

Creditors usually like a low debt to equity ratio because a low ratio (less than 1) is the indication of greater protection to their money. But stockholders like to get benefit from the funds provided by the creditors therefore they would like a high debt to equity ratio.

(ii) ***The proprietary ratio*** (also known as net worth ratio or equity ratio) is used to evaluate the soundness of the capital structure of a company. It is computed by dividing the stockholders' equity by total assets.

Formula:

$$\text{Proprietary ratio} = \frac{\text{Stockholders' equity}}{\text{Total assets}} \times 100$$

The proprietary ratio shows the contribution of stockholders' in total capital of the company. A high proprietary ratio, therefore, indicates a strong financial position of the company and greater security for creditors. A low ratio indicates that the company is already heavily depending on debts for its operations. A large portion of debts in the total capital may reduce creditors interest, increase interest expenses and also the risk of bankruptcy.

(iii) ***Fixed assets to equity ratio*** measures the contribution of stockholders and the contribution of debt sources in the fixed assets of the company. It is computed by dividing the fixed assets by the stockholders' equity.

Other names of this ratio are fixed assets to net worth ratio and fixed assets to proprietors fund ratio.

Formula:

$$\text{Fixed assets to stockholders' equity ratio} = \frac{\text{Fixed assets}}{\text{Stockholders' equity}}$$

The numerator in the above formula is the book value of fixed assets (fixed assets less depreciation) and the denominator is the stockholders' equity that consists of common stock, preferred stock, paid in capital and retained earnings. Information about fixed assets and stockholders‘ equity is available from balance sheet.

(iv) ***Capital gearing ratio*** is a useful tool to analyze the capital structure of a company and is computed by dividing the common stockholders‘ equity by fixed interest or dividend bearing funds.

Analyzing capital structure means measuring the relationship between the funds provided by common stockholders and the funds provided by those who receive a periodic interest or dividend at a fixed rate.

A company is said to be low geared if the larger portion of the capital is composed of common stockholders‘ equity. On the other hand, the company is said to be highly geared if the larger portion of the capital is composed of fixed interest/dividend bearing funds.

Formula:

$$\text{Capital gearing ratio} = \frac{\text{Common stockholders' equity}}{\text{Fixed interest bearing funds}}$$

Or

Capital gearing ratio = common stockholders' equity :
Fixed interest bearing funds

In the above formula, the numerator consists of common stockholders‘ equity that is equal to total stockholders‘ equity less preferred stock and the denominator consists of fixed interest or dividend bearing funds that usually include long term loans, bonds, debentures and preferred stock etc. All the information required to compute capital gearing ratio is available from the balance sheet.

Example on Solvency Ratios

From the following Balance Sheet Calculate Debt-Equity Ratio.

Liabilities	**Amount in Rs.**	**Assets**	**Amount in Rs.**
3,000 Equity shares of Rs.100 each	3,00,000	Fixed Assets	6,00,000
		Current Assets	2,00,000
2,000 10% Preference shares of Rs.100 each	2,00,000		

1,000 11% Debentures of Rs.100 each General Reserves	1,00,000		
Reserves for contingencies Current Liabilities	50,000 50,000 1,00,000		
	8,00,000		8,00,000

Solution:

(i) Debt-Equity Ratio = $\dfrac{\text{Outsiders' Funds}}{\text{Shareholders' fund}}$

$$= \frac{\text{1,00,000 (Debentures) + 1,00,000}}{\text{(Current Liabilities) 3,00,000 + 2,00,000 + 50,000 + 50,000}}$$

$$= \frac{\text{Rs. 2,00,000}}{\text{Rs. 6,00,000}} = 1:3$$

(ii) Debt-Equity Ratio (excluding current liabilities)

$$= \text{Long-term Debt} = \frac{\text{Rs. 1,00,000}}{\text{Rs. 6,00,000}} = 1:6 \text{ Shareholders' funds}$$

7.10. Advantages of Ratio analysis

Ratio analysis is widely used as a powerful tool of financial statement analysis. It establishes the numerical or quantitative relationship between two figures of a financial statement to ascertain strengths and weaknesses of a firm as well as its current financial position and historical performance. It helps various interested parties to make an evaluation of certain aspect of a firm's performance.

The following are the principal advantages of ratio analysis:

Forecasting and Planning:

The trend in costs, sales, profits and other facts can be known by computing ratios of relevant accounting figures of last few years. This trend analysis with the help of ratios may be useful for forecasting and planning future business activities.

Budgeting:

Budget is an estimate of future activities on the basis of past experience. Accounting ratios help to estimate budgeted figures. For example, sales budget may be prepared with the help of analysis of past sales.

Measurement of Operating Efficiency:

Ratio analysis indicates the degree of efficiency in the management and utilisation of its assets. Different activity ratios indicate the operational efficiency. In fact, solvency of a firm depends upon the sales revenues generated by utilizing its assets.

Communication:

Ratios are effective means of communication and play a vital role in informing the position of and progress made by the business concern to the owners or other parties.

Control of Performance and Cost:

Ratios may also be used for control of performances of the different divisions or departments of an undertaking as well as control of costs.

Inter-firm Comparison:

Comparison of performance of two or more firms reveals efficient and inefficient firms, thereby enabling the inefficient firms to adopt suitable measures for improving their efficiency. The best way of inter-firm comparison is to compare the relevant ratios of the organisation with the average ratios of the industry.

Indication of Liquidity Position:

Ratio analysis helps to assess the liquidity position i.e., short-term debt paying ability of a firm. Liquidity ratios indicate the ability of the firm to pay and help in credit analysis by banks, creditors and other suppliers of short-term loans.

Indication of Long-term Solvency Position:

Ratio analysis is also used to assess the long-term debt-paying capacity of a firm. Long- term solvency position of a borrower is a prime concern to the long-term creditors, security analysts and the present and potential owners of a business. It is measured by the leverage/capital structure and profitability ratios which indicate the earning power and operating efficiency. Ratio analysis shows the strength and weakness of a firm in this respect.

Indication of Overall Profitability:

The management is always concerned with the overall profitability of the firm. They want to know whether the firm has the ability to meet its short-term as well as long-term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilisation of the assets of the firm. This is possible if all the ratios are considered together.

Signal of Corporate Sickness:

A company is sick when it fails to generate profit on a continuous basis and suffers a severe liquidity crisis. Proper ratio analysis can give signal of corporate sickness in advance so that timely measures can be taken to prevent the occurrence of such sickness.

Aid to Decision-making:

Ratio analysis helps to take decisions like whether to supply goods on credit to a firm, whether bank loans will be made available etc.

Simplification of Financial Statements:

Ratio analysis makes it easy to grasp the relationship between various items and helps in understanding the financial statements.

7.11.Limitations of Ratio analysis

The technique of ratio analysis is a very useful device for making a study of the financial health of a firm. But it has some limitations which must not be lost sight of before undertaking such analysis.

Some of these limitations are:

Limitations of Financial Statements:

Ratios are calculated from the information recorded in the financial statements. But financial statements suffer from a number of limitations and may, therefore, affect the quality of ratio analysis.

Historical Information:

Financial statements provide historical information. They do not reflect current conditions. Hence, it is not useful in predicting the future.

Different Accounting Policies:

Different accounting policies regarding valuation of inventories, charging depreciation etc. make the accounting data and accounting ratios of two firms non-comparable.

Lack of Standard of Comparison:

No fixed standards can be laid down for ideal ratios. For example, current ratio is said to be ideal if current assets are twice the current liabilities. But this conclusion may not be justifiable in case of those concerns which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities.

Quantitative Analysis:

Ratios are tools of quantitative analysis only and qualitative factors are ignored while computing the ratios. For example, a high current ratio may not necessarily mean sound liquid position when current assets include a large inventory consisting of mostly obsolete items.

Window-Dressing:

The term ‗window-dressing' means presenting the financial statements in such a way to show a better position than what it actually is. If, for instance, low rate of depreciation is charged, an item of revenue expense is treated as capital expenditure etc. the position of the concern may be made to appear in the balance sheet much better than what it is. Ratios computed from such balance sheet cannot be used for scanning the financial position of the business.

Changes in Price Level:

Fixed assets show the position statement at cost only. Hence, it does not reflect the changes in price level. Thus, it makes comparison difficult.

Causal Relationship Must:

Proper care should be taken to study only such figures as have a cause-and-effect relationship; otherwise ratios will only be misleading.

Ratios Account for one Variable:

Since ratios account for only one variable, they cannot always give correct picture since several other variables such Government policy, economic conditions, availability of resources etc. should be kept in mind while interpreting ratios.

Seasonal Factors Affect Financial Data:

Proper care must be taken when interpreting accounting ratios calculated for seasonal business. For example, an umbrella company maintains high inventory during rainy season and for the rest of year its inventory level becomes 25% of the seasonal inventory level. Hence, liquidity ratios and inventory turnover ratio will give biased picture.

Let Us Sum Up

In this unit, you have earned the following:

- Ratios are a powerful tool in the interpretation of the accounts and can discover issues and problems not immediately evident from the accounts and financial information provided in the annual report.
- They can provide the basis for inter- firm comparisons allowing managers to benchmark the performance and efficiency of the firm against its competitors.
- Accounting ratios are very helpful in analyzing any company's performance but on the flip side, these ratios calculated using balance sheet on a specific date.
- Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement. Ratio analysis is also a cornerstone of fundamental equity analysis.
- Profitability ratios are calculated to analyse the earning capacity of the business which is the outcome of utilization of resources employed in the business.
- Solvency ratios are calculated to determine the ability of the business to service its debt in the long run instead of in the short run. They include debt equity ratio, total assets to debt ratio, proprietary ratio and interest coverage ratio.

Check Your Progress-2

1. The revenues and expenses of a company are displayed in which statement?

   a)Balance Sheet
   b) Cash Flow Statement
   c) Income Statement
   d) None of the above

2. The main Purpose of Financial Accounting is?

   a) To Provide financial information to shareholders
   b) To maintain balance sheet
   c) To minimize taxes.
   d) To keep track of liabilities

3. The expanded accounting equation is used by which statement?

   a) Cash Flow Statement
   b) Balance Sheet
   c) Income Statement
   d) None of the above

4. What type of balance do asset accounts have?

   a) Contra
   b) Credit
   c) Debit
   d) All of the above

5. The kind of debts which are needed to be repaid in a short term is known as?

   a) Fixed Liabilities
   b) Current Liabilities
   c) Depreciating Assets
   d) Intangible Assets

Glossary

Profitability ratios: Financial metrics used to assess a business's ability to generate profit relative to items such as its revenue or assets.

Liquidity ratios: Liquidity ratios are a class of financial metrics used to determine a debtor's ability to pay off current debt obligations without raising external capital.

Activity ratios: Measure a firm's ability to convert different accounts within its balance sheets into cash or sales.

Solvency ratios: It enables us to determine whether the company can meet its financial obligations in the long term.

Answers to Check Your Progress-1

a-False

b-True

c-True

d-True

e-True

Answers to Check Your Progress-2

1.c

2.a

3.b

4.c

5.b

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-8

Comparative and Common-Size Statements

STRUCTURE

Overview

In this unit the Introduction, Meaning of Comparative Statements, Features of Comparative Statements, Types of Comparative Statements, Advantages of Comparative Statements, Disadvantages of Comparative Statements, Meaning of Common-Size Statement, Features of Common-Size Statement, Types of Common-Size Statement, Advantages of Common-Size Statement, Limitations of Common-Size Statement, Trend Analysis, Procedure for Calculating Trends and also the details about Comparative and Common-Size Statements has been clearly explained.

Objectives

After completion of this unit, you will be able to explain:

- Explain the meaning and classification of comparative financial statements.
- Narrate the merits of comparative statements.
- Elucidate the meaning of common size statement.
- Calculate various ratios to assess solvency, liquidity, efficiency and profit ability of the firm
- Elaborate the use of trend analysis in analyzing financial statement

8.1. Introduction

Comparative Financial Statement analysis provides information to assess the direction of change in the business. Financial statements are presented as on a particular date for a particular period. The financial statement Balance Sheet indicates the financial position as at the end of an accounting period and the financial statement Income Statement shows the operating and non- operating results for a period. But financial managers and top management are also interested in knowing whether the business is moving in a favorable or an unfavorable direction. For this purpose, figures of current year have to be compared with those of the previous years. In analyzing this way, comparative financial statements are prepared.

Common Size Statement involves representing the income statement figures as a percentage of sales and representing the balance sheet figures as a percentage of total assets. Financial statements represent absolute figures and a comparison of absolute figures can be misleading.

For example, the cost of goods sold might have increased but as a percentage of sales it might have decreased. So, to have a perfect understanding about these increases and decreases, the figures reported are converted into percentages to some common base. In Income Statement, Sales figure is assumed to be 100% and all other figures are expressed as a percentage of sales. In Balance Sheet, the total of assets is taken as 100% and all other figures are expressed as a percentage of total assets. This type of Statement so prepared is called as the Common Size Statement and the analysis performed on the Common Size Statement is called as the Common Size Financial Statement Analysis or otherwise called as Vertical Analysis.

8.2. Meaning of Comparative Statements

Comparative financial statements are statements that reflect the financial position at different periods; time. The elements of the financial position are presented in comparative form to give an idea of the financial position over two or more periods. Any statement prepared in comparative form will be included in the comparative statement.

From a practical point of view, usually two financial statements (balance sheet and income statement) are prepared in comparative form for the purpose of financial analysis. Not only comparing data from two periods, but also the relationship between the balance sheet and the income statement provides insight into the financial position and operating results.

The comparative statement may show:

(i) Absolute figures (rupee amounts).

(ii) Changes in absolute figures i.e. increase or decrease in absolute figures.

(iii) Absolute data in terms of percentages.

(iv) Increase or decrease in terms of percentages.

The analyst is able to draw useful conclusions when figures are given in a comparative position. The figures of sales for a quarter, half -year or one year may tell only the present position of sales efforts. When sales figures of previous periods are given along with the figures of current periods then the analyst will be able to study the trends of sales over different periods of time. Similarly, comparative figures will indicate the trend and direction of financial position and operating results.

The financial data will be comparative only when same accounting principles are used in preparing these statements. In case of any deviation in the use of accounting principles this fact must be mentioned at the foot of financial statements and the analyst should be careful in using these statements.

8.3. Features of Comparative Statements

(i) A comparative statement adds meaning to the financial data.

(ii) It is used to effectively measure the conduct of the business activities.

(iii) Comparative statement analysis is used for intra firm analysis and inter-firm analysis.

(iv) A comparative statement analysis indicates change in amount as well as change in percentage.

(v) A positive change in amount and percentage indicates an increase and a negative change in amount and percentage indicates a decrease.

(vi) If the value in the first year is zero then change in percentage cannot be indicated. This is the limitation of comparative statement analysis. While interpreting the results qualitative inferences need to be drawn.

(vii) It is a popular tool useful for analysis by the financial analysts.

(viii) A comparative statement analysis cannot be used to compare more than two years financial data.

8.4. Types of Comparative Statements

The two comparative statements are

(i) Balance sheet, and

(ii) Income statement.

Comparative Balance Sheet:

Balance sheet benchmarking is the study of changing trends of the same items, groups of items, and calculation items in two or more balance sheets of the same company at different dates. The evolution of the periodic balance sheet items reflects the behavior of the company.

The changes that can be observed by comparing the opening and closing balance sheets give an idea of the evolution of the company. The comparative balance sheet has two columns of data taken from the initial balance sheet. The third column is used to show the increase in number.

A fourth column can be added to give the percentage increase or decrease.

Guidelines for Interpreting Comparative Balance Sheets

Interpreters should consider the following aspects when interpreting comparative balance sheets:

(1) To study a company's current or near-term financial condition, working capital of the past two years is required. The excess of current assets over current liabilities will give a number for

working capital. An increase in working capital would mean an improvement in the company's current financial situation. An increase in current assets accompanied by an increase in current liabilities of the same amount does not indicate any improvement in short-term financial conditions.

The student must study the increase or decrease in current assets and current liabilities which will allow him to analyze the current financial situation. The second aspect of the current financial situation to consider is the company's liquidity situation. Such as cash, bank deposits, accounts receivable, accounts receivable and other current assets. The increase in the second year compared to the first year will improve the company's liquidity position.

Increased inventory may be due to inventory accumulation due to fewer customers, reduced demand, or insufficient promotional efforts.

Higher inventory can increase a business' working capital, but it's bad for the business.

(2) The long-term financial condition of a company can be analyzed by studying changes in fixed assets, long-term liabilities and capital. An appropriate financial policy is to finance fixed assets by issuing long-term securities such as bonds, borrowing from financial institutions or issuing new shares.

Capital increases should be compared to long-term borrowings and capital increases. If the increase in fixed assets is greater than the increase in long-term securities, then part of the fixed assets has been financed by working capital.

On the other hand, if the increase in long-term securities is greater than the increase in fixed assets, then not only fixed assets are financed from long-term sources, but part of the working capital is also financed from long-term sources. A sensible policy is to finance fixed assets by raising long-term funds.

The nature of the increased or decreased assets must also be studied to get an idea of the possibilities of future production. The addition of factories and machinery will increase the company's production capacity. On the liability side, an increase in borrowed funds means an increase in interest liabilities, while an increase in equity does not increase interest-paying liabilities.

Opinions on the long-term financial position should be formed after considering the above aspects.

(3) The next step to study in the comparative balance sheet problem is the profitability by the enterprise. Research on the increase and decrease in retained earnings, miscellaneous resources, surplus, etc. Will allow performers to see if profitability has improved. An increase in the balance of the income statement and other profit-producing resources will result in an increase in the profitability of the company. A reduction in these accounts could mean dividends, free shares or a drop in the company's profitability.

(4) After studying the various assets and liabilities, an opinion must be formed on the financial situation of the enterprise. We cannot say that a good financial situation in the short term is also a good financial situation in the long term, and vice versa. Closing remarks on the overall financial situation should be given at the end. Illustration of the comparative balance sheet **Illustrations on Comparative Balance Sheet**

Comparative Balance Sheets as on 31st March 2014 & 31st March 2015

(Amount in 000)

	31st March 2014	**31st March 2015**	**Increase / (Decrease)**	**% of increase / (decrease)**
Current Assets:				
Cash	Rs.500	Rs.600	Rs.100	20.00%
Accounts Receivables	Rs.2,000	Rs.3,000	Rs.1,000	50.00%
Inventory	Rs.1,500	Rs.2,500	Rs.1,000	66.67%
Total Current Assets	Rs.4,000	Rs.6,100	Rs.2,100	52.50%
Fixed Assets:				
Buildings	Rs.3,000	Rs.4,000	Rs.1,000	33.33%
Furniture & office equipment	Rs.1,000	Rs.1,500	Rs.500	50.00%
Total Fixed Assets	Rs.4,000	Rs.5,500	Rs.1,500	37.50%
Total Assets	**Rs.8,000**	**Rs.11,600**	**Rs.3,600**	**45.00%**
Liabilities:				

Current Liabilities:				
Accounts Payable	Rs.1,000	Rs.1,200	Rs.200	20.00%
Notes Payable	Rs.500	Rs.500	Rs.0	0.00%
Interest Payable	Rs.100	Rs.120	Rs.20	20.00%
Total Current Liabilities	Rs.1,600	Rs.1,820	Rs.220	13.75%
Shareholder's Equity:				
Common Stock	Rs.5,000	Rs.7,500	Rs.2,500	50.00%
Retained earnings	Rs.1,400	Rs.2,280	Rs.880	62.86%
Total Stockholder's equity	Rs.6,400	Rs.9,780	Rs.3,380	52.81%
Total Liabilities & Stockholder's equity	**Rs.8,000**	**Rs.11,600**	**Rs.3,600**	**45.00%**

In this example, the financial position of 2014 and 2015 has been compared. Compared to 2014, the total assets have increased 45% in 2015. There is increase in all the components of current assets and fixed assets. There is significant increase in shareholders' equity.

(iii) Comparative Income Statement:

The income statement gives the results of the company's operations. A comparative income statement shows the progress of a business over a period of time. Absolute data changes in monetary values and percentages can be determined to analyze the profitability of a business. Like the comparative balance sheet, the income statement has four columns. The first two columns give the figures for the various items for the two years. The third and fourth columns express the increase or decrease figures in absolute amounts and percentages respectively.

Tips for interpreting the income statement:

The analysis and interpretation of the income statement will include the following steps:

(1) Increases or decreases in sales should be compared to increases or decreases the cost of goods sold. Increased sales do not always mean increased profits. If the increase in sales exceeds the increase in cost of goods sold, profitability will improve. The first step should be to study the gross profit amount.

(2) The second stage of the analysis should be the study of the operating result. Operating expenses such as office and administrative costs, selling and distribution costs must be deducted from gross profit to arrive at operating profit.

The increase in operating profit is due to the increase in turnover and the control of operating expenses. The decrease in operating profit could be due to an increase in operating expenses or a decrease in sales. The evolution of personal expenditure should also be studied. Some costs may increase due to business expansion, while others may increase due to management inefficiencies.

(3) The increase or decrease in net profit may reflect the overall profi tability of the business Non-operating expenses such as interest paid, losses on sale of assets, write offs of deferred expenses, payment of taxes, etc. Lower operating income figures. When all non-operating expenses are deducted from operating profit, we get a net profit figure.

Some non-operating income may also exist which will add to the net profit. The increase in net profit gives us an idea of how business is doing.

(4) An opinion on the profitability of the business must be formed and must be given at the end. It should be mentioned whether the overall profitability is good or not.

Illustrations on Comparative Income Statement

Comparative Income Statement as on 31st March 2014 & 31st March 2015 (Amount in _000)

	31st March 2014	**31st March 2015**	**Increase/ (Decrease)**	**% of increase / (decrease)**
Sales	Rs.7,000	Rs.9,000	Rs.2,000	28.57%
Less: Cost of goods sold	Rs.5,000	Rs.6,400	Rs.1,400	28.00%
Gross profit	Rs.2,000	Rs.2,600	Rs.600	30.00%
Less: Operating expenses				
General & administrative expenses	Rs.200	Rs.300	Rs.100	50.00%
Selling &distribution expenses	Rs.400	Rs.500	Rs.100	25.00%
Other operating expenses	Rs.100	Rs.150	Rs.50	50.00%

Operating profit	Rs.1,300	Rs.1,650	Rs.350	26.92%
Less: Interest expenses	Rs.300	Rs.400	Rs.100	33.33%
Net income before taxes	Rs.1,000	Rs.1,250	Rs.250	25.00%
Less: Taxes at 30%	Rs.300	Rs.375	Rs.75	25.00%
Net Income after taxes	**Rs.700**	**Rs.875**	**Rs.175**	**25.00%**

The sales have increased in 2015 as compared to 2014, and also the cost of goods has increased. There is a 25% increase in net profit after tax.

8.5. Advantages of Comparative Financial Statement

The following advantages may be advocated:

Comparison: The comparative statements show the figures of various firms or number of years side by side i.e. both for inter-firm comparison and intra-firm comparison.

Horizontal Analysis*:* The variables are arranged horizontally for the purpose of analysis and interpretations of data taken from financial statements for assessing profitability, overall efficiency and financial position of a firm.

Trend Analysis: The comparative financial statement helps to ascertain the trend' relating to sales, cost of goods sold, operating expenses etc. so that a proper comparison can easily be made which helps the analyst to understand the overall performance of a firm.

Trend and Directions*:* The comparative financial statement provides necessary information for comparison of trends in related items e.g. the analyst can compare the trend of sales with the trend of accounts receivable which gives very useful information. A 20% increase in accounts receivable and an increase of sales by only 10% warrants investigation into the reasons for this difference in the rate of increase.

***Evaluation* of:** The comparative financial statement helps the analyst to compare Performance the performance of one firm with that of other similar firm in the industry and also compare the performance of the competitors in the line. This comparison helps to find out the weakness or strength of a firm and to take adequate steps.

***Measuring Financial*:** Comparative financial statements help to measure important Distress financial ratios which are used for predicting financial distress and predicting corporate failure with the help of Multivariate Model.

Check Your Progress-1

True/False

a. Comparative financial statements do not recognise the change in prices level and, as such, it will be of no use.

b. A common size statement analysis indicates the relation of each component to the whole.

c. The income statement gives the results of the company's operations.

d. The excess of current assets over current liabilities will give a number for working capital.

e. Financial statements are not presented as on a particular date for a particular period.

8.6. Disadvantages of Comparative Financial Statement

Comparative financial statements are not even free from snags. Some of them are:

Inter-firm Comparison:

Inter firm comparison will only be effective if both the firms follow the same accounting principles, method of valuations of stocks, assets etc. i.e. all the accounting concepts and conventions, which in real world situation, are not identically followed by both the firms e.g. Firm A follows the FIFO method of valuing stock whereas Firm B follows LIFO method for the same.

Inflationary Effect:

Comparative financial statements do not recognise the change in prices level and, as such, it will be of no use.

Ascertaining Correct Trend:

It is very difficult to ascertain the correct trend if there is a structural changes in a firm which are frequently happened.

***Supply Misleading Information*:**

Sometimes a comparative financial statement provides meaningless information, e.g. if a negative amount comes in base year, and a positive amount in the next year, it is not possible to find out the change in percentage.

Uniformity in Principle:

There must be a consistency while following accounting principles, concepts and convention. But in practice, this is not done and as such, multi-year analysis becomes useless.

8.7. Meaning of Common-Size Statement

The common-size statements, balance sheet and income statement are shown in analytical percentages. The figures are shown as percentages of total assets, total liabilities and total sales. The total assets are taken as 100 and different assets are expressed as a percentage of the total. Similarly, various liabilities are taken as a part of total liabilities.

These statements are also known as component percentage or 100 per cent statements because every individual item is stated as a percentage of the total 100. The short-comings in comparative statements and trend percentages where changes in items could not be compared with the totals have been covered up. The analyst is able to assess the figures in relation to total values.

The common-size statements may be prepared in the following way:

(1) The totals of assets or liabilities are taken as 100.

(2) The individual assets are expressed as a percentage of total assets, i.e., 100 and different liabilities are calculated in relation to total liabilities. For example, if total assets are Rs. 5 lakhs and inventory value is Rs. 50,000/-, then it will be 10% of total assets (50,000×100/5,00,000)

8.8. Features of Common Size Statement

(i) A common size statement analysis indicates the relation of each component to the whole.

(ii) In case of a Common Size Income statement analysis Net Sales is taken as 100% and in case of Common Size Balance Sheet analysis total funds available/total capital employed is considered as 100%.

(iii) It is used for vertical financial analysis and comparison of two business enterprises or two years financial data.

(iv) Absolute figures from the financial statement are difficult to compare but when converted and expressed as percentage of net sales in case of income statement and in case of Balance Sheet as percentage of total net assets or total funds employed it becomes more meaningful to relate.

(v) A common size analysis is a type of ratio analysis where in case of income statement sales is the denominator (base) and in case of Balance Sheet funds employed or total net assets is the denominator (base) and all items are expressed as a relation to it.

(vi) In case of common size statement analysis the absolute figures are converted to proportions for the purpose of inter-firm as well as intra-firm analysis.

8.9. Types of Common-Size Statements Common-Size Balance Sheet

A statement in which balance sheet items are expressed as the ratio of each asset to total assets and the ratio of each liability is expressed as a ratio of total liabilities is called common-size balance sheet.

For example, following assets are shown in a common-size balance sheet:

Assets	Amount in Rs.	Percentage
Cash in Hand and at Bank	5,000	2.50
Sundry Debtors	20,000	10.00
Stock	25,000	12.50
Land and Buildings	50,000	25.00
Plant and Machinery	1,00,000	50.00
Total Assets	2,00,000	100.00

Illustration on Common-Size Balance Sheet

	31st March 2014	Percentage	31st March 2015	Percentage
Current Assets:				
Cash	Rs.500	6.25%	Rs.600	5.17%
Accounts Receivables	Rs.2,000	25%	Rs.3,000	25.86%
Inventory	Rs.1,500	18.75%	Rs.2,500	21.55%
Total Current Assets	Rs.4,000	50%	Rs.6,100	52.59%
Fixed Assets:				
Buildings	Rs.3,000	37.50%	Rs.4,000	34.48%
Furniture & office equipments	Rs.1,000	12.50%	Rs.1,500	12.93%
Total Fixed Assets	Rs.4,000	50%	Rs.5,500	47.41%
Total Assets	**Rs.8,000**	**100%**	**Rs.11,600**	**100%**
Liabilities:				

Current Liabilities:				
Accounts Payable	Rs.1,000	12.50%	Rs.1,200	10.34%
Notes Payable	Rs.500	6.25%	Rs.500	4.31%
Interest Payable	Rs.100	1.25%	Rs.120	1.03%
Total Current Liabilities	Rs.1,600	20%	Rs.1,820	15.69%
Shareholder's Equity:				
Common Stock	Rs.5,000	62.50%	Rs.7,500	64.66%
Retained earnings	Rs.1,400	17.50%	Rs.2,280	19.66%
Total Stockholder's equity	Rs.6,400	80%	Rs.9,780	84.31%
Total Liabilities & Stockholder's equity	**Rs.8,000**	**100%**	**Rs.11,600**	**100%**

From the above common size balance sheet, it can be pointed out that the percentage of fixed asset has decreased in 2015 as compared to fixed assets. There has been significant increase in stakeholder‘s equity in 2015 as compared to 2014.

Common Size Income Statement

The items in income statement can be shown as percentages of sales to show the relation of each item to sales. A significant relationship can be established between items of income statement and volume of sales. The increase in sales will certainly increase selling expenses and not administrative or financial expenses. In case the volume of sales increases to a considerable extent, administrative and financial expenses may go up. In case the sales are declining, the selling expenses should be reduced at once. So, a relationship is established between sales and other items in income statement and this relationship is helpful in evaluating operational activities of the enterprise.

Illustration: Common-size Income Statement as on 31st March 2014 & 31st March 2015 (Amount in 000)

	31st March 2014	**Percentage**	**31st March 2015**	**Percentage**
Sales	Rs.7,000	100%	Rs.9,000	100%
Less: Cost of goods sold	Rs.5,000	71.53%	Rs.6,400	71.11%
Gross profit	Rs.2,000	28.47%	Rs.2,600	28.89%
Less: Operating expenses				
General & administrative expenses	Rs.200	2.86%	Rs.300	3.33%

Selling & distribution expenses	Rs.400	5.71%	Rs.500	5.56%
Other operating expenses	Rs.100	1.43%	Rs.150	1.67%
Operating profit	Rs.1,300	18.57%	Rs.1,650	18.33%
Less: Interest expenses	Rs.300	4.29%	Rs.400	4.44%
Net income	Rs.1,000	14.29%	Rs.1,250	13.89%
before taxes				
Less: Taxes at 30%	Rs.300	4.29%	Rs.375	4.17%
Net Income after taxes	Rs.700	10.00%	Rs.875	9.72%

It can be analysed that percentage of net income after tax has minimally decreased, even though percentage of gross profit has increased from 2014 to 2015. This is mainly due to increase in operating expenses and interest expenses.

8.10. Advantages of Common-Size Statement

The advantages of Common-Size Statement are:

Easy to Understand:

Common-size Statement helps the users of financial statement to make clear about the ratio or percentage of each individual item to total assets/liabilities of a firm. For example, if an analyst wants to know the working capital position he may ascertain the percentage of each individual component of current assets against total assets of a firm and also the percentage share of each individual component of current liabilities.

Helpful for Time Series Analysis:

A Common-Size Statement helps an analyst to find out a trend relating to percentage share of each asset in total assets and percentage share of each liability in total liabilities.

Comparison at a Glance:

An analyst can compare the financial performances at a glance since percentage of increase or decrease of each individual component of cost, assets, liabilities etc. are available and he can easily ascertain his required ratio.

Helpful in analysing Structural Composition:

A Common-Size Statement helps the analyst to ascertain the structural relations of various components of cost/expenses/assets/liabilities etc. to the required total of assets/liabilities and capital.

8.11. Limitations of Common-Size Statement

Common-Size Statement is not free from snags. Some of them are:

Standard Ratio:

Common-Size Statement does not help to take decisions since there is no standard ratio/percentage regarding the change of percentage in the various component of assets, liabilities, sales etc.

Change in Price-level:

Common-Size statement does riot recognise the change in price level i.e. inflationary effect. So, it supplies misleading information‘s since it is based on historical cost.

Following Consistency:

If consistency in the accounting principle, concepts, conventions is not maintained then Common Size Statement becomes useless.

Seasonal Fluctuation:

Common-Size Statement fails to convey proper records during seasonal fluctuations in various components of sales, assets liabilities etc. e.g. sales and closing stock significantly vary. Thus, the statement fails to supply the real information to the users of financial statements.

Window Dressing:

Effect of window dressing in financial statements cannot be ignored and Common- Size Statements fail to supply the real positions of sales, assets, liabilities etc. due to the evil effects of window dressing appearing in the financial statements.

Qualitative Element:

Common-Size Statement fails to recognise the qualitative elements, e.g. quality of works, customer relations etc. while measuring the performance of a firm although the same should not be ignored.

Liquidity and Solvency Position:

Liquidity and solvency position cannot be measured by Common-Size Statement. It considers the percentage of increase or decrease in various components of sales, assets, liabilities etc. In other words it does not help to ascertain the Current Ratio, Liquid Ratio, Debt Equity Capital Ratio, Capital Gearing Ratio etc. which are applied in testing liquidity and solvency position of a firm.

8.12. Trend Analysis

Trend analysis involves collecting information over different time periods and plotting the information on a horizontal line for further examination. The purpose of this analysis is to uncover actionable patterns in the information provided. Revenue and cost information in a company's income statement can be arranged on a trend line for different reporting periods and checked for inconsistencies between trends and For example, a sudden increase in expenses in one period and a sharp drop in expenses in the next may indicate that the expense was billed twice in the first month. Therefore, trend analysis is very useful for checking inaccuracies in preliminary financial statements to see if any adjustments are needed before the statements are released for general use. When used internally (revenue and cost analysis functions), trend analysis is one of the most useful management tools available. The following are examples of such uses:

- Examine revenue models to see if sales are declining for certain products, customers, or sales territories. Examine expense claims for evidence of fraudulent claims.
- Review expense items to see if there are any unusual expenses during the reporting period that require further investigation.
- Extending income and expense items into the future for budgeting purposes to estimate future results.

When using trend analysis to forecast the future, keep in mind that factors that previously affected a data point may no longer affect it to the same degree. This means that extrapolation of historical time series does not necessarily produce valid predictions for the future. Therefore, considerable additional research should be done when forecasting using trend analysis.

8.13. Procedure for Calculating Trends

(i) One year is taken as a base year. Generally, the first or the last is taken as base year.

(ii) The figures of base year are taken as 100.

(iii) Trend percentages are calculated in relation to base year. If a figure in other year is less than the figure in base year the trend percentage will be less than 100 and it will be more than 100 if figure is more than base year figure. Each year‘s figure is divided by the base year‘s figure.

The interpretation of trend analysis involves a cautious study. The mere increase or decrease in trend percentage may give misleading results if studied in isolation. An increase of 20% in current assets may be treated favorable. If this increase in current assets is accompanied by an equivalent increase in current liabilities, then this increase will be unsatisfactory. The increase in sales may not increase profits if the cost of production has also gone up.

The base period should be carefully selected. The base period should be a normal period. The price level changes in subsequent years may reduce the utility of trend ratios. If the figure of the base period is very small, then the ratios calculated on this basis may not give a true idea about the financial data. The accounting procedures and conventions used for collecting data and preparation of financial statements should be similar otherwise the figures will not be comparable.

Example on Trend Analysis

Calculate the trend percentages from the following figures of Samir Auto Ltd. Taking 2010 as the base and interpret them:

Year	Sales (Rs.in Thousand)	Profit After tax (Rs.in Thousand)
2010	1,000	150
2011	1,200	185
2012	1,500	210
2013	2,000	220
2014	2,900	240

Solution:

Trend Percentages (Base year 2010 as 100)

Year	Sales	Trend percentage	PAT	Trend Percentage
2010	1,000	100	150	100
2011	1,200	120	185	123.33
2012	1,500	150	210	140
2013	2,000	200	220	146.67
2014	2,900	290	240	160

Interpretation:

(i) The sales have continuously increased in all the years upto 2014. The percentage in 2014 is 290 compared to 100 of base year. The increase in sales is quite satisfactory.

(ii) The figures of profit have also increased over the years

(iii) But if critically examined, it can be concluded that profit has not soared in the same manner as of sales. This may be because of increase in cost of production.

Let Us Sum Up

In this unit, you have learned about the following:

- Comparative Financial Statement Analysis is also called as Horizontal analysis.
- The Comparative Financial Statement provides information about two or more years' figures as well as any increase or decrease from the previous year's figure and it's percentage of increase or decrease.
- This kind of analysis helps in identifying the major improvements and weaknesses. For example, if net income of a particular year has decreased from its previous year, despite an increase in sales during the year, is a matter of serious concern.
- Comparative financial statement analysis in such situations helps to find out where costs have increased which has resulted in lower net income than the previous year.

Check You Progress-2

1. The account which increases equity is known as?

   a) Debit Account
   b) Credit Account
   c) Revenue
   d) Treasury Stock

2. What are the long-term assets which do not have any physical existence?

   a) Intangible Assets
   b) Tangible Assets
   c) Current Liabilities
   d) Current Assets

3. What is the supporting evidence in a business transaction called?
    a) Journal
    b) Ledger
    c) Voucher
    d) Contra Voucher
4. The Expenses, Profit & Loss of an organisation are recorded in which account?
    a) Current Account
    b) Personal Account
    c) Nominal Account
    d) None of the above
5. Which person owes an amount to a business organization for buying goods and services on a credit basis?
    a) Creditors
    b) Debtors
    c) Owner
    d) None of the above

Glossary

Comparative Balance Sheet : Presents side-by-side information about an entity's assets, liabilities, and shareholders' equity as of multiple points in time.

Comparative Income Statement: It is the horizontal analysis of Balance Sheet in which each item of assets, equity and liabilities is analyzed horizontally

Common-Size Balance Sheet: It displays the numeric value of all entries and the percentage each entry is relative to the total value of related entries.

Common-Size Income Statement: A common size income statement is an income statement whereby each line item is expressed as a percentage of revenue or sales.

Trend analysis: It is based on the idea that what has happened in the past gives traders an idea of what will happen in the future.

Answers to Check Your Progress-1

a-True

b-True

c-True

d-True

e-False

Answers to Check Your Progress-2

1.c,

2.a,

3.c,

4.c,

5.b

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam (2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Block-3: Introduction

The Block-3: Funds Flow and Cash Flow Analysis has been split into two Units(Unit- 9 and Unit-10).

The Unit-9: Funds Flow Analysis deals with the Introduction, Concept of Funds, Flow of Funds, Importance and Utility of Funds Flow Analysis, Preparation of Funds Flow Statement, Procedures for Preparing Funds Flow Statement, Advantages of Fund Flow Statement and Limitations of Fund Flow Statement.

Unit-10: Cash Flow Analysis describes about the Introduction, Objective of Cash Flow Statement, Uses of cash flow statement, Difference between Fund Flow Statement and Cash Flow Statement, Limitations of Cash Flow Statements, Classification of cash flow statement and Preparation of a cash flow statement.

In all the units of **Block -3 Funds Flow and Cash Flow Analysis**, the Check your progress, Glossary, Answers to Check your progress and Suggested Reading has been provided and the Learners are expected to attempt all the Check your progress as part of study.

Unit-9

Funds Flow Analysis

STRUCTURE

Overview

In this unit the Introduction, Concept of Funds, Flow of Funds, Importance and Utility of Funds Flow Analysis, Preparation of Funds Flow Statement, Procedures for Preparing Funds Flow Statement, Advantages of Fund Flow Statement, Limitations of Fund Flow Statement and the details about Funds Flow Analysis has been clearly explained.

Objectives

After completion of this Unit, you will be able to:

- State the purpose and preparation of statement of cash flow statement.
- Distinguish between operating activities, investing activities and financing activities.
- Prepare the statement of cash flows using direct method.
- Prepare the cash flow statement using indirect method.

9.1. Introduction

At the end of each accounting period, preparation and presentation of financial statements are undertaken with an objective of providing as much information as possible for the public. The balance sheet presents a snapshot picture of the financial position at a given point of time and the income statement shows a summary of revenues and expenses during the accounting period.

Though these are significant statements especially in terms of the principal goals of the enterprise, yet there is a need for one more statement which will indicate the changes and movement of funds between two balance sheet dates which are not clearly mirrored in the balance sheet and income statement. That statement is called as funds flow statement. The analysis which studies the flow and movement of funds is called as funds flow analysis.

Similarly one more statement has to be prepared known as cash flow statement. This requires the doing of cash flow analysis. The focus of cash flow analysis is to study the movement and flow of cash during the accounting period.

9.2. Concept of Funds

How are funds defined? Perhaps the most ambiguous aspect of funds flow statement understands what is meant by funds. Unfortunately there is no general agreement as to precisely how funds should be defined. To a lay man the concept of funds means `cash‟. According to a few, `funds‟ means `net current monetary assets‟ arrived at by considering current assets (cash + marketable securities + short term receivables) minus short term obligations. A third view, which is the most acceptable one, is that concept of funds means `working capital‟ and in this lesson the term `funds‟ is used in the sense of Working capital.

Working Capital Concept of Funds

The excess of an enterprise's total current assets over its total current liabilities at some point of time may be termed as its net current assets or working capital. To illustrate this, let us assume that on the balance sheet date the total current assets of an enterprise are Rs.3,00,000/- and its total current liabilities are Rs.2,00,000/-. Its working capital on that date will be Rs.3,00,000/- – Rs.2,00,000/- = Rs.1,00,000/-. It follows from the above, that any increase in total current assets or any decrease in total current liabilities will result in a change in working capital.

9.3. Flow of Funds

The term `flow" means change and therefore, the term `flow of funds" means `change in funds" or `change in working capital". According to Manmohan and Goyal, —the flow of funds‖ refers. To movement of funds described in terms of the flow in and out of the working capital area. In short, any increase or decrease in working capital means `flow of funds". Many transactions which take place in a business enterprise may increase its working capital, may decrease it or may not affect any change in it. Let us consider the following examples.

(i) ***Purchased Machinery for Rs.3,00,000/-*:** The effect of this transaction is that working capital decreases by 3,00,000 as cash balance is reduced. This change (decrease) in working capital is called as application of funds. Here the accounts involved are current assets (cash a/c) and fixed asset (machinery a/c).

(ii) ***Issue of Share Capital of Rs.10,00,000/-*:** This transaction will increase the working capital as cash balance increases. This change (increase) in working capital is called as source of funds. Here the two accounts involved are current assets (cash a/c) and long-term liability (share capital a/c).

(iii) ***Sold Plant For Rs.3,00,000/-:*** This transaction will have the effect of increasing the working capital by Rs.3,00,000/- as the cash balance increases by Rs.3,00,000/-. It is a source of funds. Here the accounts involved are current assets (cash a/c) and fixed assets (plant a/c).

(iv) ***Redeemed Debentures worth Rs.1,00,000/-****:* This transaction has the effect of reducing the working capital, as the redemption of debentures results in reduction in cash balance. Hence this is an example of application of funds. The two accounts affected by this transaction are current assets (cash a/c) and long-term liability (debenture a/c).

(v) ***Purchased Inventory Worth Rs.10,000/-:*** This transaction results in decrease in cash by Rs.10,000/- and increase in stock by Rs.10,000/- thereby keeping the total current assets at the same figure. Hence there will be no change in the working capital (there is no flow of funds in this transaction). Both the accounts affected are current assets.

(vi) **Notes Payable Drawn by Creditors Accepted for Rs.30,000/-:** The effect of this transaction on working capital is nil as it results in increase in notes payable (a current liability) and decreases the creditors (another current liability). Since there is no change in total current liabilities there is no flow of funds.

(vii) ***Building Purchased for Rs.30,00,000/- And Payment Is Made By Shares*****:** This transaction will not have any impact on working capital as it does not result in any change either in the current asset or in the current liability.

Hence there is no flow of funds. The two accounts affected are fixed assets (building a/c) and long term liabilities (capital a/c).

(a) Sources and Application of Funds: the following are the main sources of funds:

(i) **Funds From Operations**: the operations of the business generate revenue and entail expenses. Revenues augment working capital and expenses other than depreciation and other amortizations. The following adjustments will be required in the figures of net profit for finding out the real funds from operations:

	Rs.
Funds from Operations Net profit for the year	x x x
Add*: depreciation of fixed assets	x x x
Preliminary expenses, goodwill, etc. Written off	x x x
Loss on sale of fixed assets	x x x
Transfers to reserve	x x x
Less: profit on sale or revaluation	x x x
Dividends received, etc.	x x x
Funds from operations	x x x

*these items are added as they do not result in outflow of funds. In case of „net loss" for the year these items will be deducted.

(ii) ***Issue of Share Capital*****:** an issue of share capital results in an inflow of funds.

(iii) ***Long-Term Borrowings*****:** when a long-term loan is taken, there is an increase in working capital because of cash inflow. A short term loan, however, does not increase the working capital because a short-term loan increases the current assets (cash) and the current liability (short term loan) by the same amount, leaving the size of working capital unchanged.

(iv) ***Sale of Non-Current Assets*:** when a fixed asset or a long-term investment or any other non- current asset is sold, there will be inflow represented by cash or short-term receivables.

b) Uses of Funds: The following are the main uses of funds:

(i) **Payment of Dividend:** the transaction results in decrease in working capital owing to outflow of cash.

(ii) **Repayment of Long-Term Liability:** The repayment of long-term loan involves cash outflow and hence it is used for working capital. The repayment of a current liability does not affect the amount of working capital because it entails an equal reduction in current liabilities and current assets.

(iii) **Purchase of Non-Current Assets:** when a firm purchases fixed assets or other non- current assets, and if it pays cash or incurs a short-term debt, its working capital decreases. Hence it is a use of funds.

Check Your Progress-1

True/False

a. Funds flow analysis helps financial managers to find answers to questions.
b. Three statements is involved in funds flow analysis.
c. The analysis which studies the flow and movement of funds is called as funds flow analysis.
d. The purpose of the funds flow statement is to provide information about the enterprise‘s investing and financing activities.
e. The term `flow‟ means change and therefore, the term `flow of funds‟ means `change in funds‟ or `change in working capital‟.

9.3. Importance and Utility of Funds Flow Analysis

Funds flow analysis provides an insight into the movement of funds and helps in understanding the change in the structure of assets, liabilities and owners‟ equity. This analysis helps financial managers to find answers to questions like:

(i) How far capital investment has been supported by long term financing?

(ii) How far short-term sources of financing have been used to support capital investment?

(iii) How much funds have been generated from the operations of a business?

(iv) To what extent the enterprise has relied on external sources of financing?

(v) What major commitments of funds have been made during the year?

(vi) Where did profits go?

(vii) Why were dividends not larger?

(viii) How was it possible to distribute dividends in excess of current earnings or in the presence of a net loss during the current period?

(ix) Why are the current assets down although the income is up?

(x) Has the liquidity position of the firm improved?

(xi) What accounted for an increase in net current assets despite a net loss for the period?

(xii) How was the increase in working capital financed?

9.4. Preparation of Funds Flow Statement

Two statements is involved in funds flow analysis.

(I) Statement or Schedule of Changes in Working Capital

(II) Statement of Funds Flow

(I) Statement of Changes in Working Capital: This statement when prepared shows whether the working capital has increased or decreased during two balance sheet dates. But this does not give the reasons for increase or decrease in working capital. This statement is prepared by comparing the current assets and the current liabilities of two periods.

Rules for preparing the schedule:

1. Increase in current asset → Increase in Working capital
2. Decrease in current asset → Decrease in Working capital
3. Increase in current Liabilities → Decrease in Working capital

4. Decrease in current Liabilities → Increase in Working capital

Current Assets	Current Liabilities
Cash in Hand Cash at Bank Sundry Debtors / A/C 'S Receivable Bills Receivable Short Term Investments Inventories / Stocks Prepaid Expenses Accrued Incomes	Sundry Debtors/ A/C' S Payable Bills Payable Bank Overdrafts Short Term Loans Outstanding Expenses Income Received In Advance

Format of Statement showing Changes in Working Capital

Items	As on	As on	Changes Increase Decrease
Current Assets Cash Balances Bank Balances Marketable Securities Stock in Trade Pre-paid Expenses **Current Liabilities** Bank Overdraft Outstanding Expenses Accounts Payable Provision for Tax Dividend Increase / Decrease in Working Capital			

(a) Funds Flow Statement:

Funds Flow Statement is also called as Statement of Changes in Financial Position or Statement of Sources and Applications of Funds or where got, where gone Statement. The purpose of the funds flow statement is to provide information about the enterprise's investing and financing activities. The activities that the funds flow statement describes can be classified into two categories:

(i) Activities that generate funds, called Sources, and

(ii) Activities that involve spending of funds, called Uses.

When the funds generated are more than funds used, we get an increase in working capital and when funds generated are lesser than the funds used, we get decrease in working capital. The

(b) ***Funds Flow Statement***: Funds flow statement is also called as statement of changes in financial position or statement of sources and applications of funds or where got, where gone statement. The purpose of the funds flow statement is to provide information about the enterprise's investing and financing activities. The activities that the funds flow statement describes can be classified into two categories:

(i) Activities that generate funds, called sources, and

(ii) Activities that involve spending of funds, called uses. When the funds generated are more than funds used, we get an increase in working capital and when funds generated are lesser than the funds used, we get decrease in working capital. The increase or decrease in working capital disclosed by the schedule of changes in working capital should tally with the increase or decrease disclosed by the funds flow statement.

The funds flow statement may be prepared either in the form of a statement or in `t" shape form. When prepared in the form of statement it would appear as follows:

Sources of Funds	Application of Funds
• Funds from Operations • Issue of Share Capital • Issue of Debentures • Raising of long-term loans • Receipts from partly paid shares, called up • Sale of non-current (fixed)assets : • Non-trading receipts such as dividends • Sale of long-term Investments • Net Decrease in Working Capital	• Funds lost in Operations • Redemption of Preference , Share capital • Redemption of Debentures: • Repayment of long-term loans • Purchase of non-current (fixed) assets • Purchase of long-term Investments • Purchase of long-term investments • Payment of Dividends • Payment of tax • Net Increase in Working Capital

9.5. Procedures for Preparing Funds Flow Statement

Funds flow statement is a method by which we study changes in the financial position of a business enterprise between beginning and ending financial statement dates.

Hence, the funds flow statement is prepared by comparing two Balance sheets and, with the help of such, other information derived from the accounts, as may be needed. The preparation of a funds flow statement consists of three steps

1. Schedule of changes in working capital which shows whether there is increase in working capital or decrease in working capital.
2. Funds from operation or adjusted profit and loss account which exhibits funds from operation
3. Funds flow statement reveals the sources and uses of funds

Fund flow statement proforma (or) Format

Sources of Funds		**Application of Funds**	
Capital Funds	xxx	Funds utilised in Fixed assets.	xxx
Loans and Debts	xxx	Funds utilised in other Non-current assets.	xxx
Operations generated Funds	xxx	Funds used for repaying loans existing.	xxx
Sale of assets (if any)	xxx		
*(Bal fig) Excess of sources minus funds used.		Funds used for paying taxes, dividends, etc.	**xxx**
[**Working capital Decrease**]		*(Bal fig) Funds minus the application of funds shortage. **[Working capital increase]**	
Total	**xxx**		**xxx**

The preparation of Statement of Schedule of Changes in Working Capital is as follows.

The statement of schedule of changes in working capital deals with the current assets and current liabilities alone, as they are shown in the Balance Sheets of the current and the previous years. All non-current assets and non-current liabilities, and profits and losses ignore additional information available. Each current asset and current liability in the period's Balance sheet is compared with that shown in the previous period's Balance Sheet.

Increase or decrease in each of the assets and liabilities is noted. The effect of such increase or decrease during the period in each item is recorded individually on the working capital. Finally, the overall change in the working capital is calculated. It is possible that working capital might have increase or decrease as the final result.

The following interpretations have to be taken into consideration when schedule of changes in working capital is prepared.

1. An increase in current assets and decrease in current liabilities will result in increase in working capital.
2. A decrease in current assets and increase in current liabilities will result in decrease in working capital.

9.6. Advantages of Fund Flow Statement

Shows Changes in the Financial Position of the Company

The fund flow statement portrays the movement of the funds and changes in the company's financial position between two accounting periods, which the balance sheet or the profit and loss statement fails to provide.

Reason for Changes in the Financial Position between Two Accounting Periods

The funds flow statement helps analyze the reasons for changes in the company's financial position. It helps the analyst to understand if the increase in funds is due to the sale of assets or an improvement in company performance. It also does help to answer questions like why the firm is making a loss despite being financially sound and vice versa.

Level of Working Capital Adequacy

This statement shows the working capital position of the company. This statement helps test whether working capital has been effectively used or not. It helps to understand if short-term sources of funds are used to build long-term assets and vice versa. Overall it aids in better working capital management for the firm.

Future Business and Budget Projections

Projected fund flow statements can be used for putting up necessary controls and budgetary allocations. Projected statements aid in deciding future financial policies like credit period, inventory requirement, etc., for the company.

Company Image

A well-managed working capital firm earns high respect among shareholders and increases creditworthiness among creditors. An effectively managed fund flow activity of the firm can help the company to build a good reputation for itself with respect to its efficiency and creditworthiness.

9.7. Limitations of Fund Flow Statement

Lacks Originality

The fund Flow statement is said to lack originality because this statement is merely a systematic rearrangement of items in financial statements over two accounting periods. Because of this, many companies avoid the preparation of fund flow statements.

Based on Historical Data

This statement only shows how the company has performed in the previous year and does not give much clarity on the current and future costs of the company. Hence, it does not reveal a realistic comparison of the profit position of the company. Also, the projected fund flow statement is not very accurate.

Goes Hand In Hand with the Cash Flow Statement

The fund flow statement does not give the cash position of the company. It does not even classify the financing and investing activities of the company. Hence, most of the time, a fund flow statement is prepared by a company along with the cash flow statement to get an idea about the company‘s liquidity position.

Cannot be used on Standalone Basis

Since this statement only gives an idea of changes in the company‘s working capital, it cannot be used standalone without a balance sheet and profit and loss statement. Hence, a fund flow statement can, in no way, substitute financial statements.

Static

A fund flow statement takes into consideration two particular time periods for the purpose of analysis of working capital. Hence, it cannot depict continuous changes. Also, it does not consider non-cash items in the company, which, in actual accounting, play an important role in many companies.

Illustration

1.From the following balance sheets, prepare a statement of changes in working capital.

Liabilities	2010	2011	Assets	2010	2011
Share Capital	2,00,000	2,10,000	Land	1,00,000	1,20,000
P & L a/c	28,000	49,000	Investments	28,000	48,000
Bank Loan	---	10,000	Stock	58,000	54,000
Creditors	39,000	30,000	Debtors	53,000	59,000
			Cash at bank	28,000	18,000
	2,67,000	2,99,000		2,67,000	2,99,000

<u>Solution</u>

Statement of changes in working capital

Particulars	2010 Rs.	2011 Rs.	Effects on Working capital	
			Increase	**Decrease**
Current Assets :				
Stock	58,000	54,000	-	4,000
Debtors	53,000	59,000	6,000	-
Cash at bank	28,000	18,000	-	10,000
Current Assets	**1,39,000**	**1,31,000**		
Current Liabilities:				
Creditors	39,000	30,000	9,000	
Current Liabilities	**39,000**	**30,000**		
			15,000	**14,000**
Net Working Capital	**1,00,000**	**1,01,000**		**1,000**
(CA- CL)	**1,000**		**15,000**	**15,000**
Net Increase in Working capital	**1,01,000**	**1,01,000**		

2.From the following balance sheets prepare a schedule of changes in working capital

Liabilities	31st December		Assets	31st December	
	2015 Rs.	2016 Rs.		2015 Rs.	2016 Rs.
Share Capital	10,000	15,000	Cash	5,000	8,000
P & L a/c	5,000	8,000	Debtors	10,000	15,000
General Reserve	4,000	6,000	Stock	10,000	12,000
Sundry Creditors	8,000	12,000	Machinery	3,000	5,000
Bills Payable	5,000	3,000	Land	4,000	4,000
	32,000	44,000		32,000	44,000

Solution

Statement of changes in working capital

Particulars	2015 Rs	2016 Rs	Effects on Working capital	
			Increase	Decrease
Current Assets :				
Cash	5,000	8,000	3,000	
Debtors	10,000	15,000	5,000	
Stock	10,000	12,000	2,000	
Current Assets	25,000	35,000		4000
Current Liabilities :				---
Sundry Creditors	8,000	12,000	-- 2,000	
Bills Payable	5,000	3,000		
Current Liabilities	13,000	15,000		4,000
Net Working Capital (CA- CL)	12,000	20,000	12,000	8,000
Net Increase in Working capital	8,000			

3.Compile a schedule of Changes in Working Capital from the following details of ABC Ltd

Particulars	31.3.2016	31.3.2017
8% Debentures Outstanding Rent Cash	40000	40000
in Hand Cash at Bank Accounts	8000	12000
Payable Machinery	4000	8000
Accounts Receivable Prepaid	12000	15000
Commission Inventories	20000	26000
Share Premium Equity Capital	25000	16000
	30000	34000
	4000	--
	22000	27000
	15000	15000
	50000	50000

Solution

Statement of changes in working capital

Particulars	2016	2017	Effects on Working capital	
	Rs	Rs	Increase	Decrease
Current Assets:				
Cash in Hand	4000	8,000	4,000	
Cash at Bank	12,000	15,000	3,000	4,000
Accounts Receivable	30,000	34,000	4,000	
Prepaid Commission	4,000	-	-	
Inventories	22,000	27,000	5,000	
	72,000	84,000		4,000
Current Assets				6,000
Current Liabilities:	8000	12,000		
Outstanding Rent	20,000	26,000		14,000
Accounts Payable	28,000	38,000	16,000	
Current Liabilities	44,000	46,000		
				2,000
Net Working Capital	2,000	46,000		16,000
(CA- CL)	46,000			
Net Increase in				
Working capital				

4.From the following Profit & Loss a/c compute the funds from operations.

	Rs		Rs
To Salaries	5,000	By Gross Profit	50,000
To Rent	3,000	By Profit on sale of Buildings	5,000
To Depreciation on plant	5,000		
To printing & Stationary	3,000		
To Preliminary expenses written off	2,000		
To Good Will written off	3,000		
To Provision for Tax	4,000		
To Proposed dividends	6,000		
To Net Profit	24,000		
	55,000		55,000

Solutions

Calculations of Funds from Operation

PARTICULARS	Amount (Rs)	Amount (Rs)
Net Profit		24,000
Add: Non-Operating Expenses		
Depreciation of plant	5,000	
Preliminary expenses written off	2,000	
Goodwill written off	3,000	
Provision for tax	4,000	
Proposed dividend	6,000	20,000
Less: Non-Operating Income		44,000
Profit on sale of Building		5,000
Funds from operation		39,000

5.From the following Profit & Loss a/c compute the funds from operations.

	Rs		Rs
To Salaries	13,000	By Gross Profit	2,00,000
To Rent	3,000	By Profit on sale of	5,000
To Provision for depreciation	14,000	machinery	
To Transfer to reserve	20,000	By Refund of tax	5,000
To Preliminary expenses	5,000		
To Loss on sale of investments	5,000		
To Selling expenses	20,000		
To Provision for tax	10,000		
To Net Profit	1,20,000		
	2,10,000		2,10,000

Solutions

Calculations of Funds from Operation

PARTICULARS	Amount (Rs)	Amount (Rs)
Net Profit		1,20,000
Add: Non Operating Expenses		
Provision for depreciation	14,000	
Transfer to reserve	20,000	
Preliminary expenses	5,000	
Loss on sale of investments	5,000	
To Provision for tax	10,000	54,000
		1,74,000
Less: Non Operating Income	5,000	
Profit on sale of machinery Refund of tax	5,000	10,000
Funds from operation		1,64,000

6.From the following balance sheets prepare fund flow statement.

Liabilities	31st December		Assets	31st December	
	2014 Rs.	2015 Rs.		2014 Rs.	2015 Rs.
Share Capital	3,00,000	4,00,000	Machinery	50,000	60,000
Creditors	1,00,000	70,000	Furniture	10,000	15,000
P & L a/c	15,000	30,000	Stock in trade	85,000	1,05,000
			Debtors	1,60,000	1,50,000
			Cash	1,10,000	1,70,000
	4,15,000	5,00,000		4,15,000	5,00,000

Solutions

Statement of changes in working capital

Particulars	**2014 Rs**	**2015 Rs**	**Effects on Working capital**	
			Increase	**Decrease**
Current Assets :				
Stock in Trade	85,000	1,05,000	20,000	10,000
Debtors	1,60,000	1,50,000	-	
Cash	1,10,000	1,70,000	60,000	
	3,55,000	4,25,000		
Current Assets				----
Current Liabilities :	1,00,000	70,000		
			30,000	
Creditors	1,00,000	70,000		10,000
Current Liabilities				
	2,55,000	3,55,000	1,10,000	
Net Working Capital (CA- CL)	1,00,000			1,00,000
Net Increase in Working capital				

Fund Flow Statement

Sources	Amount (Rs)	Application	Amount (Rs)
Issue of Shares	1,00,000	Net Increase in Working Capital	1,00,000
Funds from operations (Rs30,000 – Rs 15,000)	15,000	Purchase of Machinery (Rs 60,000 – Rs 50,000)	10,000
		Purchase of Furniture (Rs 15,000 – Rs 10,000)	5,000
	1,15,000		1,15,000

Note: Non-Operating items are not given. Hence, the difference between the P & L a/c treated as funds from operations

Let Us Sum Up

In this unit, you have learned about the following:

- A fund flow statement is used to analyse changes in the financial position of a business when comparing two balance sheets and inflow & outflow of funds.
- A fund flow statement reveals the reasons for changes or anomalies in the financial position of a company between two balance sheets.
- Fund flow statements portray the inflow and outflow of funds - or the sources and applications of funds over a particular period.
- The main aim of preparing a fund flow statement is to cite the reasons for changes in the liabilities, assets, or equity capital. It is done by comparing the two balance sheets for different accounting periods.
- Working capital is calculated by subtracting current liabilities from current assets, as listed on the company's balance sheet.
- Current assets include cash, accounts receivable and inventory. Current liabilities include accounts payable, taxes, wages and interest owed.
- Working capital is referred to as the capital that is essential for running the day to day operations of a business.
- Working capital serves as a metric for how efficiently a company

is operating and how financially stable it is in the short-term.

- Fund flow is the sum of all cash inflows/outflows from and into different financial assets.
- Fund flow is usually calculated on a monthly or quarterly basis; no account is taken of the output of an asset or fund.

Check Your Progress-2

1. Which report gives a review on the profitability of a business?

   a) Statement of changes in equity
   b) Cash flow statement
   c) Balance sheet
   d) Income statement

2. When assets are subtracted from liabilities it will be equal to?

   a) Capital
   b) Net income
   c) Working capital
   d) Goodwill

3. P&L statement is also known as?

   a) Statement of earnings
   b) Statement of balance sheet
   c) Statement of operations
   d) Statement of income

4. Which of the following options is not recorded in the Balance sheet?

   a) Cash
   b) Rent expenses
   c) Building
   d) Goodwill

5. Current assets are also known as:

   a) Cash
   b) Assets
   c) Invested capital
   d) Working capital

Glossary

Balance Sheet: Financial statement that contains details of a company's assets or liabilities at a specific point in time.

Accounting Information: Data about a business entity's transactions.

Fund Statement: Portray the inflow and outflow of funds - or the sources and applications of funds over a particular period.

Working Capital: The money available to meet your current, short-term obligations.

Funds: A fund is a pool of money set aside for a specific purpose.

Funds flow: The net of all cash inflows and outflows in and out of various financial assets.

Answers to Check Your Progress-1

a-True

b-False

c-True

d-True

e-True

Answers to Check Your Progress-2

1.d,

2.a,

3.d,

4.b,

5.d

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-10

Cash Flow Analysis

STRUCTURE

Overview

In this unit the Introduction, the Objective of Cash Flow Statement, the Uses of cash flow statement, Difference between Fund Flow Statement and Cash Flow Statement, Limitations of Cash Flow Statements, Classification of cash flow statement, Preparation of a cash flow statement and the details about Cash Flow Analysis has been clearly explained.

Objectives

After completion of this Unit, you will be able to:

- State the purpose and preparation of statement of cash flow statement.
- Distinguish between operating activities, investing activities and financing activities.
- Prepare the statement of cash flows using direct method.
- Prepare the cash flow statement using indirect method.
- State the meaning of cash flow statement.

- Explain objectives of cash flow statement.
- Explain the method of preparing cash flow statement as per format.
- State the limitations of cash flow statement.

10.1. Introduction

Cash flow statement provides information about the cash receipts and payments of a firm for a given period. It provides important information that compliments the profit and loss account and balance sheet. The information about the cash-flows of a firm is useful in providing users or financial statements with a basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize these 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 certainly of their generation. The statement deals with the provision of information about the historical changes in 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.

10.2. Objective of Cash Flow Statement

The objective of Cash flow statement as given in AS-3 (Revised) are as follows: Information about the cash flows of an enterprise are useful to the users of financial statements because these are the basis to assess the ability of the enterprise to generate cash and cash equivalents and the needs of the enterprise to utilize those cash flows.

The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generation.

This statement deals with the provision of information about the historical changes in cash and cash equivalent of enterprise by means of a cash flow statement which classified cash flows during the period from operating, investing and financing activities.

10.3. Uses of cash flow statement

A Cash Flow Statement is of primary importance to the financial management. It is a tool of short-term financial analysis. Its main uses are as follows:

1. Cash Flow Statement facilitates to prepare sound financial policies. It also helps to evaluate the current cash position.

2. A projected Cash Flow Statement can be prepared in order to know the future cash position of a concern so as to enable a firm to plan and coordinate its financial operations properly.
3. It helps in taking loan from Banks and other financial institutions. The repayment capacity of the firm can be understood by going through the Cash Flow Statement.
4. It helps the management in taking short-term financial decisions.
5. Cash is the soul and heart of the business. Cash is pivot of all business activities. Everyone is cash minded. The aim of business is to gather cash. Business is a source while cash is the end. Therefore, it is very useful.
6. The statement explains the causes for poor cash position in spite of substantial profits in a firm by throwing light on various applications of cash made by the firm.

10.4. Difference between Fund Flow Statement and Cash Flow Statement

1. The Fund Flow Statement shows the causes of changes in net Working Capital whereas the Cash Flow Statement shows the causes for the changes in cash.
2. Cash Flow Statement is started with the opening and closing balances of cash while there no opening or closing balances in Fund Flow Statement.
3. Cash Flow Statement deals only with cash whereas Fund Flow Statement deals with all the components of Working Capital.
4. Cash Flow Statement is useful for short-term financing while Fund Flow Statement is useful for long-term financing.
5. Cash Flow Statement is based on cash basis of accounting while the Fund Flow Statement is based on accrual basis of accounting.
6. Cash is a part of Working Capital. Improvement in cash position, as indicated by Cash Flow Statement can be taken as an indicator of improved working capital position. But the reverse is not true. That is, sound Fund position may not necessarily mean sound cash position.

10.5. Limitations of Cash Flow Statements

Cash flow statement is used as a tool of financial statement analysis. Even though, cash flow statement suffers from some limitations. Such limitations re listed below.

1. Cash flow statement shows only cash inflow and cash outflow. But, the cash balance disclosed by the statement cannot reveals the true liquid position of the business.
2. Net Cash Flow disclosed by Cash Flow Statement does not necessarily mean net income of the business because net income is determined by taking into account both cash and non-cash items.
3. It does not give complete picture of the financial position of the business concern.
4. The preparation of cash flow statement is only postmortem analysis. There is no projection of cash in future in this method.
5. It is not a substitute of Income Statement.
6. The accuracy of cash flow statement is based on the balance sheet. If balance sheet is wrong, the cash flow statement is also wrong.
7. It is not prepared on the basic accounting concept of accrual basis. Hence, the accuracy of cash flow statement is questionable.
8. It is not suitable for judging the profitability of a firm as non-cash items are not included in the calculation of cash flow from operating activities.

Check Your Progress-1

True/False

a. Financing activities can be defined activities involving in the rise of the company‘s capital.

b. Cash flow statement provides information about the cash receipts and payments of a firm for a given period.

c. A Cash Flow Statement is not of primary importance to the financial management.

d. Cash flow activities majorly classified into five categories

e. Cash flow statement shows only cash inflow and cash outflow.

10.6. Classification of Cash Flow Statement

Cash flow activities majorly classified into three categories they are:

- Operating activities
- Investment activities
- Financing activities

These three activities help us to assess the financial position of a firm and also helps to know various cash and cash equivalent transactions incurred.

Operating Activities

These are the main or primary activities of a business. Operating activities mainly deals with major activities of buying and selling of goods and services of a business firm. These activities include manufacturing, distributing, selling, marketing etc. Even though these activities does not include investing and financing activities but provides a major cash flow in the organization and also helps in better assessing the profitability of the firm.

Cash Flow from Operating Activities = Earnings before interest and Tax + depreciation – Taxes +/- Change in working capital

Cash Inflows from Operating Activities

- Receipts from the sale of goods and services.
- Cash receipts from the sale of patents.

Cash Outflows from Operating Activities

- Payments made on salaries to the employees.
- Cash payments made to suppliers.

Investment Activities

Investment activities are the other type of cash flow statement activities in which cash transactions made on purchasing or sale of investments. These activities include money spent on long-term assets, shares, debentures etc.

These activities provide minor cash flow in the firm when compared with operating activities but have a great impact on the profitability of the firm. Cash flow from investment activities helps in the growth of capital also creates stability of the firm.

Cash Inflow from Investment Activities

- Investment activities cash inflow include the sale of assets.
- Cash received on interest on loans and advances given to the third parties.
- Cash receipts received on the investment made in the other companies or firms.
- Receipts received on trading of shares, debentures, bonds etc.

Cash Outflow from Investment Activities

- Cash payments on purchasing long-term assets and other intangible goods like patents.
- Payments made on acquiring of other company shares, debentures and other debt issues.
- Advances and loans given to third parties.

Financing Activities

Financing activities can be defined activities involving in the rise of the company‘s capital. Even though these lie at the bottom of the statement but had its own importance. These activities are confined mainly financial activities of the firm like trading of company‘s shares, repaying investors, adding or changing loans, or issuing more stock whenever required. Most importantly these activities change the capital and borrowings of the firm.

Cash Flow from Financing activity = Cash Received from Issuing shares or debts – Cash Paid as Dividends and Reacquiring of shares or debts

Cash Inflow from Financing Activities

- Receipts on the issuing of shares and other debt instruments.
- Cash received from issuing of debentures, loans and other borrowings.

Cash Outflow from Financing Activities

- Interest paid on long-term borrowings and debentures.
- Dividends paid to the shareholders of the company.
- Repaid borrowings made by the firm.

10.7. Preparation of a cash flow statement

Comparative Balance Sheets: Balance Sheets at the beginning and at the end of the accounting period indicate the amount of changes that have taken place in assets, liabilities and capital.

Profit and Loss Account: The profit and loss account of the current period enables to determine the amount of cash provided by or used in operations during the accounting period after making adjustments for non-cash, current assets and current liabilities.

Additional Data: In addition to the above statements, additional data are collected to determine how cash has been provided or used e.g., Sale or purchase of assets for cash.

Cash Flow Statement of XYZ Ltd. for the year ending 31" March 2001

Source	***Rs.***	***Application***	**Rs.**
Opening Balances		Opening Balances	
Cash	XXX	Bank overdraft	
Bank	XXX	Cash outflows	
Cash Inflows		Redemption of Redeemable Preference Shares	XXX
Cash from Operations	XXX	Redemption of Debentures	XXX
Issue of Shares	XXX	Repayment of Loans	XXX
Raising of Long Term		Non-Operating Expenses	XXX
Loans/Debentures	XXX	Closing Balances	XXX
Sale of Fixed Assets and Investments	XXX	Cash	XXX
Non Trading Receipts	XXX	Bank	XXX
	XXX		**XXX**

Note: The Cash Flow Statement can also be presented in the vertical form. However, the horizontal form given above is convenient and is more commonly used.

Illustration: 1

From the following information, you are required to ascertain cash flow operation

Particulars	***31.12.2000***	***31.12.2001***
Net Profit		70,000
Debtors	42,000	40,000
Bills Receivable	8,000	13,000
Creditors	47,000	50,000
Bills payable	15,000	10,000
Stock	**58,000**	**65,000**

Calculation of Cash from operations

Profit made during the year		70,000
Add: Decrease in debtors	2,000	
Increase in Creditors	3,000	5,000
		75,000
Less: Increase in Bill Receivable	5,000	
Increase in stock	7,000	
[Decrease in Bills payable	5,000	17,000
Cash from operations		**58,000**

Illustration: 2

From the following balances, you are required to calculate cash from operations:

Particulars	***December 31 2000***	***December 31 2001***
Debtors	50,000	47,000
Bill Receivable	10,000	12,500
Creditors	20,000	25,000
Bills Payable	8,000	6,000
Outstanding Expenses	1,000	1200
Prepaid Expenses	800	700
Accrued Income	600	750
Income Received in Advance	300	250
Profit made during the year	-	1,30,000

Calculation of Cash from operations

Profit made during the year		1,30,000
Add: Decrease in debtors		3,000
Increase in Creditors		5,000
Increase in Outstanding Expenses		200
Decrease in Prepaid Expenses		100
		1,38,000
Less: Increase in Bill Receivable	2,500	
Increase in Accrued Income	150	
Decrease in Bills Payable	2,000	
Decrease in Income Receive in Advance	50	4,700
Cash from Operations		**1,33,600**

Illustration: 3

From the following information, calculate cash from operations

Particulars	***2000***	***2001***
P&LA/c (credit)	40,000	50,000
Debtors	20,000	26,000
Bills Receivable	20,000	12,000
Prepaid Rent	2,000	3,000
Prepaid Insurance	1,000	800
Goodwill	20,000	14,000
Depreciation	32,000	40,000
Creditors	20,000	30,000

Statement showing Cash from operations

Closing balance P&L A/c		50,000
Add: Decrease in Bill Receivable	8,000	
Decrease in Prepaid Insurance	200	
Increase in Creditors	10,000	
Depreciation	8,000	
Goodwill	6,000	32,200
		82,200
Less: Increase in debtors	6,000	
Increase in prepaid rent	1,000	
Opening balance of P&L A/c	40,000	47,000
Cash from Operations		**35,200**

Illustration: 4

From the following balance sheets of Sulekha Ltd. you are required to prepare a cash flow statement

Liabilities	**2000** ***Rs.***	***2001*** ***Rs.***	***Assets***	***2000*** ***Rs.***	**2007** ***Rs.***
Share capital	3,00,000	3,75,000	Cash	45,000	70,500
Trade editors	1,05,000	67,500	Debtors	1,80,000	1,72,500
P&L A/c	15,000	34,500	Stock in Trade	1,20,000	1,35,000
			Land	75,000	99,000
	4,20,000	**4,77,000**		**4,20,000**	**4,77,000**

Cash flow Statement of Sulekha Ltd. for the year 2001

Sources	*Rs.*	*Application*	*Rs.*
Opening Balance of cash	45,000	Purchase of Land	24,000
Issue of Share Capital	75,000	Decrease in Trade Creditors	37,500
Cash Operating Profit (Diff. In P&L A/c)	19,500	Closing balance	70,500
Decrease in Debtors	7,500		
	1,47,000		**1,47,000**

Illustration: 5

From the following balance sheets of Zindal Ltd/prepare cash flow statement.

Liabilities	2000	2007	*Assets*	2000	2007
Share Capital	600	800	Goodwill	230	180
8% redeemable Pref.	300	200	Land & Buildings	400	340
Shares					
General reserve	80	140	Plant	160	400
P&L Account	60	96	Debtors	320	400
Proposed dividend	84	100	Stock	154	218
Creditors	110	166	Bills Receivable	40	60
Bills Payable	40	32	Cash in hand	30	20
Provision for tax	80	100	Cash at Bank	20	16
Total	**1354**	**1634**		**1354**	**1634**

Additional information:

1. Depreciation of Rs.20,000/- and Rs.40,000/- have been charged on plant account and land and buildings account, respectively in 2001.
2. An interim dividend of Rs.40,000/- has been paid in 2001.
3. Income tax Rs.70,000/- was paid during the year 2001.

Solutions

1. Plant Account

Particulars	***Rs.***	***Particulars***	***Rs.***
To Opening Balance on 1-1-2001	1,60,000	By Depreciation	20,000
To Purchases-cash	2,60,000	By closing balance on 31-12-2001	4,00,000
	4,20,000		**4,20,000**

2. Land and Building Account

Particulars	***Rs.***	***Particulars***	***Rs.***
To Opening Balance on 1-1-2001	4,00,000	By Depreciation	40,000
		By cash (sales-balancing figure)	
		By closing balance on 31- 12-2001	3,40,000
	4,00,000		**4,00,000**

3. Provision for taxation Account

Particulars	***Rs.***	***Particulars***	***Rs.***
Cash	70,000	By Opening Balance on 1- 1- 2001	80,000
To closing balance on 31-12-2001	1,00,000	By P&L Account (balancing figure)	90,000
	1,70,000		**1,70,000**

Calculation of cash from operations

Closing balance P&L A/c on 31-12-2001:	96,000	
Less: Balance of P&L A/c on 1-1-2001:	60,000	36,000
Add: Profit used for reserves & provisions:		
Proposed dividend	1,00,000	
Interim dividend	40,000	
Provisions for taxation	90,000	
Transfer to general reserve	60,000	2,90,000

		3,26,000
Add : Profit used for writing off non-cash A/c:		
Goodwill	50,000	
Depreciation:		
Plant	20,000	
Land & Building	40,000	
		1,10,000
		4,36,000
Add: increase in creditors		**56,000**
Funds from operations		**4,92,000**
Less: Increase in current assets:		
Debtors	80,000	
Stock	64,000	
Bills Receivable	20,000	**1,64,000**
		3,28,000
Less: Decrease in current liabilities:		
Bills Payable		**8,000**
Cash from Operations		**3,20,000**

Cash flow statement for the year ended December 31,2001

Cash in-flows	**Rs.**	***Cash out-flows***	**Rs.**
Op. Bal. As on 1-1-2001			
Cash	30,000	Purchase of plant	2,60,000
Bank	20,000	Payment of final dividend for 2000	84,000
		Payment of interim dividend	40,000
Add: Cash inflows:		Income-tax paid	70,000
Operations	3,20,000	Redemption of Pref. Shares	1,00
Sale of land & bldg.	20,000		1,00,000
Issue of shares	2,00,000		
			5,54,000
		Closing balance on 31-12-2001	

		Cash in hand	20,000
		Cash in bank	16,000
	5,90,000		5,90,000

Illustration: 6

From the following information you are required to prepare a Cash Flow Statement of Shanti Stores Ltd for the year ended 31" December, 2001

Balance Sheets

Liabilities	***2000***	***2001***	***Assets***	***2000***	***2001***
Share Capital	70,000	70,000	Plant Machinery	50,000	91,000
Secured Loans			Inventory	15,000	40,000
Repayable (2001)		40,000	Debtors	5,000	20,000
Creditors	14,000	39,000	Cash	20,000	7,000
Tax payable	1,000	3,000	Prepaid General Exp.	2,000	4,000
P&L A/c	7,000	10,000			
	92,000	**1,62,000**		**92,000**	**1,62,000**

Profit & Loss A/c for the year ended 31" December, 2001

Particulars	***Rs.***	***Particulars***	***Rs.***
To Opening Inventory	15,000	By sales	1,00,000
To Purchases	98,000	By Closing inventory	40,000
To Gross Profit c/d	27,000		
	1,40,000		1,40,000
To General Expenses	11,000	By Gross Profit b/d	27,000
To Depreciation	8,000		
To Taxes	4,000		
To Net Profit c/d	4,000		
	27,000		27,000
To Dividend	1,000	By Balance b/d	7,000
To Balance c/d	10,000	By Net Profit b/d	4,000
	11,000		11,000

Working Notes:

Machinery A/c

Particulars	***Rs.***	***Particulars***	***Rs.***
To Balance b/d		By Depreciation a/c	8,000
(Opening balance)	50,000	By Balance c/d –(closing balance)	91,000
To Bank a/c -			
Purchases (bal. Fig.)	49,000		
	99,000		**99,000**

Provision for Taxation

Particulars	***Rs.***	***Particulars***	***Rs.***
To Bank a/c - tax Paid (bal. Fig.)	2,000	By Balance b/d	1 ,000
To Balance c/d - closing balance	3,000	By P & L a/c -(current year)	4,000
	5,000		5,000

*

Net Profit	4,000
Add: Depreciation	8,000
Taxes	4,000
Funds from Operations	**16,000**

Cash from Operations

Funds from Operations		16,000
Add: Increase in Creditors		25,000
		41,000
Less: Increase in Debtors	15,000	
Increase in Inventory	25,000	
Increase in Prepaid General Expenses	2,000	42,000
Cash lost in Operations		1,000

Cash Flow Statement of M/s Shanti Stores Ltd. for the year ending 31" December, 2001

Sources	Rs.	Application	Rs.
To Balance c/d -		**Cash Outflow**	
Opening Cash Balance	20,000	Machine Purchased	49,000
Cash Inflows			
Secured Loans raised	40,000	Taxes Paid	2,000
		Dividends paid	1,000
		Cash lost in Operations	1,000
		Closing cash Balance	7,000
	60,000		**60,000**

Illustration: 7

The following are the balance Sheets of X Ltd. For the year ending 31st December 2000 and 2001

Particulars	***2000***	***2001***
Liabilities	Rs.	*Rs.*
Share Capital	2,00,000	3,00,000
Profit and Loss Account	1,20,000	1,60,000
Sundry creditors	60,000	50,000
Provision for taxation	40,000	50,000
Proposed Dividend	20,000	30,000
	4,40,000	**5,90,000**

	Rs.	Rs.
Particulars	***2000***	***2001***
Assets: Fixed Assets	1,60,000	2,00,000
Add: Additions	40,000	60,000
	2,00,000	2,60,000
Less: Depreciation	18,000	24,000
	1,82,000	2,36,000
Investments	8,000	16,000
Stock	1,60,000	2,18,000
Debtors	60,000	80,000
Cash	30,000	40,000
	4,40,000	5,90,000

Additional information:

1. Taxes Rs. 44,000/- and dividend Rs. 24,000/- were paid during the year 2001
2. The net profit for the year 2001 before depreciation Rs. 1,34,000/-

Cash Flow Statement for the year ending 31st December, 2001

Sources	***Rs.***	***Application***	***Rs.***
Opening Balance of Cash		Cash Outflows	
(1-1-2001)	30,000	Purchase of fixed assets	60,000
Cash inflows:		Taxes paid	44,000
Issue of share capital	1,00,000	Dividend paid	24,000
Cash from operations	1,34,000	Purchase of investments	8,000
		Increase in Stock	58,000
		Increase in debtors	20,000
		Decrease in creditors	10,000
		Closing balance of cash	40,000
	2,64,000		**2,64,000**

Working Notes:

Fixed Assets a/c

Particulars	***Rs.***	***Particulars***	***Rs.***
To Balance	2,00,000	By Balance c/d	2,60,090
To Bank a/c	60,000		
	2,60,000		**2,60,000**

Investments a/c

Particulars	***Rs.***	***Particulars***	***Rs.***
To Balance b/d	8,000	By Balance c/d	16,000
To Bank	50,000		
(Balancing figure)	**94,000**		**16,000**

Provision for taxation a/c

Particulars	***Rs.***	***Particulars***	***Rs.***
To Bank	44,000	By Balance c/d	44,000
To Balance c/d	50,000	By P & L a/c	50,000
	94,000		94,000

Proposed dividends a/c

Particulars	***Rs.***	***Particulars***	***Rs.***
To Bank	24,000	By Balance c/d	24,000
To Balance c/d	30,000	By P & L a/c	30,000
	54,000		**54,000**

Calculation of cash from operations

Profit and Loss a/c balance on (3 1-12-2001)		1,60,000
Add: Non-cash and non-operating items already debited to Profit and Loss a/c :		
Depreciation on fixed assets	6,000	
Proposed dividend	34,000	
Provision for taxation	54,000	94,000
		2,54,000
Less: Non-cash and non-operating items which have already been credited to P&L a/c		
Profit and Loss a/c on 1-1-2001	1,20,000	1,20,000
Cash operating profit		**1,34,000**

Let Us Sum Up

In this Unit, you have learned about the following:

- Cash flow statement deals with flow of cash which includes cash equivalent as well as cash.
- Cash flow statement is a summary of cash receipts and

disbursements during a certain period.

- Cash flow statement is prepared as per AS-3 (Revised).
- There are two methods for preparing cash flow statement: (i) Direct method (ii) Indirect method.
- Cash flow statement shows three categories of cash inflows and outflows i.e. (i) Operating activities (ii) Investing activities (iii) Financing activities
- Operating activities are the revenue generating activities of the enterprise.
- Investing activities constitute the acquisition and disposal of long term assets and other investments not included in cash and its equivalents.
- Financing activities are activities that result in change in the size and composition of the share capital and borrowings of the enterprise.
- The cash flows from extraordinary items are to be stated separately as arising from operating, investing and financing activities.

Check Your Progress-2

1. The main operation expenses of a business are termed as:

   a) Operating expenses
   b) Non-administration expense
   c) Selling expenses
   d) Administration expense

2. Cash receipt received from the sales fixed assets are recorded under the head of:

   a) Other activities
   b) Investing activities
   c) Financing activities
   d) Operating activities

3. A current asset that can be transferred into cash within three months is known as:

   a) Cash equivalent
   b) Intangible asset
   c) Operating asset
   d) Cash asset

4. A method used in a comparative analysis of financial statement is:

   a) Returning analysis
   b) Common size analysis
   c) Preference analysis
   d) Graphical analysis

5. Which statement shows the flow of cash and cash equivalents during the financial period?

   a) Statement of changes in equity
   b) Cash flow statement
   c) Balance sheet
   d) Income statement

Glossary

Cash:	Cash refers to cash and bank balances.
Cash Flow:	Cash flow refers to the actual movement of cash in and out of an organisation.
Operating activities:	Functions of a business directly related to providing its goods and/or services to the market.
Investing activities:	An investment is an asset or item acquired with the goal of generating income or appreciation.
Financing activities:	Transactions involving debt, equity, and dividends.
Cash flow statement:	financial statement that provides aggregate data regarding all cash inflows a company receives from its ongoing operations and external investment sources.

Answers to Check Your Progress-1

a-True

b-True

c-False

d-False

e-True

Answers to Check Your Progress-2

1.a

2.b,

3.a

4.b

5.b

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam (2020) Financial Statement Analysis, 11th Edition, McGraw Hill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Block-4: Introduction

The Block-4: Capital Budgeting and Marginal Costing has been split into two Units (Units-11 and Unit- 12).

Unit-11: Capital Budgeting deals with the Introduction, Capital Budgeting Meaning and Definition, Objectives of Capital Budgeting, Nature of capital budgeting, Significance of capital budgeting, Scope of the capital budgeting, Process of capital budgeting, Kinds of capital Budgeting Decisions, Methods of capital budgeting and the Limitations of Capital Budgeting.

Unit-12: Marginal Costing explains about the Introduction, Marginal Cost and Marginal Costing, Characteristics of Marginal Costing, Advantages of Marginal costing, Limitations of Marginal Costing, Absorption costing and marginal costing, Distinction between absorption costing and marginal costing, Cost-Volume-Profit analysis, and the Application of Marginal Costing Techniques.

In all the units of **Block -4 Capital Budgeting and Marginal costing**, the Check your progress, Glossary, Answers to Check your progress and Suggested Reading has been provided and the Learners are expected to attempt all the Check your progress as part of study.

Unit-11
Capital Budgeting

STRUCTURE

Overview

In this unit, the concept of Capital Budgeting Meaning and Definition, Objectives of Capital Budgeting, Nature of capital budgeting, Significance of capital budgeting, Scope of the capital budgeting, Process of capital budgeting, Kinds of capital Budgeting Decisions, Methods of capital budgeting, Limitations of Capital Budgeting and also the details about Capita Budgeting has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Understand the concept of the capital budgeting.
- Techniques of capita budgeting.
- Non- discounting Technique: Payback period and accounting rate of return, Calculation and interpretation.

- Discounting Technique: Net present value (NPV), Internal Rate of Return (IRR), Profitability Index (PI), Calculation and , interpretation.
- Comparing NPV and IRR techniques, conflict in rankings and strengths of each approach.

11.1. Introduction

Working capital is the flesh and blood of the business. It is the portion of capital that makes a company work. It is not just possible to carry on the business with only fixed assets. Working capital is must. Working capital is also known as circulating capital.

- Which is the amount we require to fulfill day-to-day financial obligations of the company is called as working capital‖
- The day-to-day financial obligations or the regular needs refer to the purchase of material, payment of wages and salaries, expenses like rent, advertising, power Etc.

11.2. Capital Budgeting Meaning and Definition

Capital budgeting is the process a business undertakes to evaluate potential major projects or investments. Construction of a new plant or a big investment in an outside venture are examples of projects that would require capital budgeting before they are approved or rejected.

As part of capital budgeting, a company might assess a prospective project's lifetime cash inflows and outflows to determine whether the potential returns that would be generated meet a sufficient target benchmark. The capital budgeting process is also known as investment appraisal.

Capital Budget consists of capital receipts and payments. It also incorporates transactions in the Public Account.

Capital budgeting, also known as an investment appraisal, is a financial management tool you can ensure it is adding the expected value and continue to measure the progress of the project. It determines the number of years it takes for a project‘s cash flow to pay back the initial cash investment, an assessment of risk, and various other factors

Capital budgeting is an important financial management tool because when you need to assess and rank the value of projects or investments that require a large capital investment to determine whether they are worth pursuing. For example, investors can use capital budgeting to analyze investment options and decide which ones are worth investing.

11.3. Objectives of Capital Budgeting

Control of Capital Expenditure: Estimating the cost of investment provides a base to the management for controlling and managing the required capital expenditure accordingly.

Selection of Profitable Projects: The Company has to select the most suitable project out of the multiple options available to it. For this, it has to keep in mind the various factors such as availability of funds, project's profitability, the rate of return, etc.

Identifying the Right Source of Funds: Locating and selecting the most appropriate source of funds required to make a long-term capital investment is the ultimate aim of capital budgeting. The management needs to consider and compare the cost of borrowing with the expected return on investment for this purpose.

11.4. Nature of capital budgeting

- Capital expenditure plans involve a huge investment in fixed assets.
- Capital budgeting decisions involve the exchange of current funds for the benefits to be achieved in future.
- The future benefits are expected and rate to be realized over a series of years.
- The funds are invested in non-flexible long term funds.
- Preparation of capital budget plans involve forecasting of several years profits in advance in order to judge the profitability of projects.
- In view of the investment of large amount for a fairly long period of time, any error in the evaluation of investment projects, may lead to serious consequences, the problem will be followed a series of years.

11.5. Significance of capital budgeting

Substantial capital outlays: Capital budgeting decisions involve substantial capital outlays. ***Long term implications*****:** Capital budgeting proposals are of longer and hence have long term implications. For instance the cash flows for next 5 to 15 years have to be forecast.

Strategic in nature**:** Capital budgeting decisions can affect the future of the company significantly as it constitutes the strategic determinant for the success of the company. A right investment decision is the secret of the success of many business enterprises.

Irreversible**:** Once the funds are committed to a particular project, we cannot take back the decision. If the decision is to be reversed, we may have to lose a significant portion of the funds already committed. If many involve loss of time and efforts. In other words, the capital budgeting decisions are irreversible or may not be easily reversible.

11.6. Scope of the capital budgeting

- Construction of new building.
- Renovation of existing building.
- Purchase of technology from a foreign country.
- Building a production facility.
- Buying a new delivery truck.
- Building a bridge.
- Making a new product.
- Starting a new business.
- Expansion decision of existing plant and equipment.
- Labor agreements.

11.7. Process of capital budgeting

In capital budgeting process, main points to be borne in mind how much money will be needed of implementing immediate plans, how much money is available for its completion and how are the available funds going to be assigned to various capital projects under consideration. The financial policy and risk policy of the management should be clear in mind before proceeding to the capital budgeting process. The following procedure may be adopted in preparing capital budget.

Organization of investment proposal: The first step in capital budgeting process is the conception of a profit making idea. The proposals may come from rank and file worker of any department or from any line officer. The department head collects all the proposals and reviews them in the light of financial and risk policies of the organization in or to send them to the capital expenditure planning committee for consideration.

Screening of proposals*:* In large organizations, a capital expenditure planning committee is established for the screening of various proposals received by it from the heads of various departments and the line officers of the company. From the heads of various departments and the line officers of the company the committee screens the various proposals within the long-range policy-frame work of the organization. It is to be ascertained by the committee whether the proposals are within the criterion of the firm, or they do no lead to department imbalances or they are profitable.

Evaluation of projects: The next step in capital budgeting process is to evaluate the different proposals in term of the cost of capital the expected returns from alternative investment opportunities and the life of the assets with any of the following evaluation techniques

- Degree of urgency method (Accounting rate of return method)
- Pay-back method
- Discounted cash flow method

***Establishing priorities*:-** After proper screening of the proposals, uneconomic or unprofitable proposals are dropped. The profitable projects or in other words accepted projects are then put in priority. It facilitates their acquisition or construction according to the sources available and avoids unnecessary and costly delay and serious and cot-overruns. Generally, priority is fixed in the following order.

- Current and incomplete projects are given first priority.
- Safety projects and projects necessary to carry on the legislative requirements.
- Projects of maintaining the present efficiency of the firm
- Projects for supplementing the income
- Projects for the expansion of new product.

Final approval:- proposals finally recommended by the committee are sent to the top management along with the detailed report, both of the capital expenditure and of the sources of funds to meet them. The management affirms its final seal to proposals taking in view the urgency, profitability of the projects and the available financial resources. Project are then sent to the budget committee for incorporating them in the capital budget.

Evaluation:- Last but not the least important step in capital budgeting process is an evaluation of the program after it has been fully implemented. Budget proposals and the net investment in the projects are compared periodically and on the basis of such evaluation, the budget figures may be reviewer and presented in a more realistic way.

Check Your Progress-1

True/False

a. Capital budgeting decision is not made under different criteria.

b. The profitable projects or in other words accepted projects are then put in priority.

c. The first step in capital budgeting process is the conception of a profit making idea.

d. Capital budgeting is the process a business undertakes to evaluate potential major projects or investments.

e. Working capital is the flesh and blood of the business.

11.8. Kinds of capital Budgeting Decisions

1. Replacement
2. Expansion
3. Diversification
4. Research and development

11.9. Methods of capital budgeting

Capital budgeting decision is made under different criteria. How are these criteria determined? These criteria differ in concepts. Some use thumb rules and some use logic and scientific approach. So based on these criteria, the methods of capital budgeting can be classified as

1. ***Traditional methods***
    a. Payback Period
    b. Accounting Rate of Return
2. ***Discounted cash flow methods or modern methods***
    a. Internal Rate of Return (IRR)
    b. Net Present Value (NPV)
    c. Profitability Index (PI)

Payback Period

Payback period is the time period which we require to recover our initial investment. Payback period refers to the period within which the original cost of the project is recovered.

It is calculated by dividing the cost of the project by the annual cash inflows.

Payback period = cost of the project Annual cash flows

The shorter the length of the payback period, the better is the project in terms of paying back the original investment particularly where the future is uncertain the companies favour this method the better it is in terms of safety and liquidity.

Where the cash flows are uniform (even) throughout, then we can measure the payback period like.

Payback period= <u>Cost of the project</u>

Annual cash flows Where the cash flows are uneven

$$\textit{Payback period} = \frac{\textit{based year} + \textit{amount to be recouped}}{\textit{Next year cash flows}}$$

Advantages of Payback period

***Easy to calculate an understand*:-** calculation of payback period does not involve any complicated formulae. It is easy to calculate and understand.

Liquidity is emphasized:- it emphasizes on the earlier cash flows which are more likely to be accurate than later cash flow, in other words a short payback period also reduces the risk.

Reliable technique in volatile business conditions:- it is a reliable technique for projects appraisal, particularly in the areas of volatile business conditions such as change in technology,

changing fashions or customers fasts /preferences.

Disadvantages of Pay Back Period

Post-payback earnings ignored:- This method ignores the earnings after the payback period. It ignores the total life of the project and the total profitability of the investment.

Timing of cash flows ignored:- This method does not consider the timing of cash flows, all the cash flows are given equal weight age.

Liquidity is over-emphasized:- The liquidity of the proposal is over-emphasized by choosing only the cash inflows. Other factors such as cost of the proposal or cost of the proposal are ignore.

Despite the above limitations the payback method continues to be very popular and widely put to use particularly where there is a high degree of uncertainty.

Accounting Rate of Return

Accounting rate of return refers to the ratio of annual profits after taxes to the average investment. The average investment equal to half of the original investment. According rate of return is also called average rate of return.

$$ARR = \frac{Average\ income}{Average\ investment}$$

Where the average investment is half of the outlay. Average capital employed is calculated to the usual accounting convention that the original investment gets exhausted steadily to zero over the life of the project.

It is assumed that the asset is depreciated as per straight line method usually it is expressed in terms of percentage. The higher the ARR is the better is the profitability and hence the projects with higher accounting rate of return are short listed for implementation.

Advantages

1. It is easy to understand and calculate.
2. It can be compared with the cutoff point of return and hence the decision to accept or reject is made easier.
3. It considers all the cash inflows during the life of the projects, not like payback method.
4. It is a reliable measure because it considers net earnings after depreciation interest and taxes.

Disadvantages

1. The concept of time value of money is ignored.
2. Unless we have a cutoff point of return, accounting rat of return cannot be meaningful and effective.
3. The average concept is not reliable particularly in terms of high or wild fluctuations in the returns.
4. The average concept dilutes the profitability of the project.

Discounted cash flow methods

Discounted cash flows are the future cash inflows reduced to their present value based on a discounting factor. The process of reducing the future cash inflows to their present value based on a discounting factor or cut-off return is called discounting.

Net Present Value (NPV)

Net present value refers to the excess of present value of future cash inflows over and above the cost of original investment.

NPV=(PVcFAT) MINUS (PVc)

Where

PVcFAT refers to the present value of cash flows after taxes. PVc refers to the present value of original investment or capital

The concept of NPV is a logical extension to the concept of present value. Here the decision is based on the size of net present value. The projects with higher NPV‟S are selected. If the NPV is negative, that means the projects is not profitable.

In other words, the NPV should always be positive and should be maximum. The present value factor tables are used here to determine the present value of the future cash inflows.

How is NPV calculated

The following are the stages in the determination of NPV

1. From the PV factor table, identify the PV factors of Re 1 for the given discount rate.
2. Multiply the cash flows with the corresponding PV factor to find the product. DCF=(PV)*(CFAT)
3. Find the sum of products.
4. If the sum is positive, that means the project is profitable. In case of projects with different NPV‟S choose the project with higher NPV because the higher the NPV, the higher is the profitability.

Acceptance Rule

According to NPV method the project should be accepted, if the NPV is positive or equal to zero. If the NPV is negative the project should be rejected.

NPV>1 which means that the project earns more than the discount rate. NPV =1 which means that the project earns the same as the discount rate. NPV<1 which means that the project earns less than the discount rate.

Advantages

1. Since the PV factor tables are available determination of NPV is relatively easier. It is easy to understand.

2. The goal of the financial management is wealth maximization and this method enables the finance manager to pursue this goal.
3. It is based on the concept of time value and considers the total earnings and expenses of the project.
4. NPV is a superior technique to IRR in case of mutually exclusive proposals.
5. Each project can individually be evaluated.

Disadvantages

1. It is difficult to determine the appropriate discount rate.
2. The calculations are easier when compared to IRR, but is beyond the comprehension of a common businessman
3. It does not indicate the cost of capital.
4. Where projects differ in their duration and their cash flows, this method cannot be used.

Internal Rate of Return (IRR)

Internal rate of return is that rate of return at which the present value of expected cash flows of a project exactly equals the original investment. In other words, it equals the present value of a given project with its outlay. This is the cut –off point at which the income equals the expenditure or the investment breaks even.

At IRR, the net present value of a project is zero. The net present value refers to the excess of the present value of the future cash flows over and above the original investment.

Evaluation of IRR

The internal rate of return is compared with the cost of the capital. If the IRR is more than the cost of the capital the project is profitable otherwise it is not where there are two projects with different IRR"S select the project with higher IRR.

Advantages

1. IRR is based on the time value of money.
2. It is based on the earnings of all the years of the project.
3. It is a valuable tool to compare the projects with different cash flows and different life span.
4. It is independent of cost of capital.

5. Such projects with higher IRR are recommended. Hence it directly contributes to the ―wealth maximization goal‖ of the finance manager.

Disadvantages

1. It is difficult to understand and tedious to calculate IRR by even trial and error.
2. It is based on certain assumptions one of which is that the intermediate cash flows are reinvested at IRR. This assumption may not hold good.
3. There could be cases of non-conventional projects with multiple IRR‟S which are difficult to understand.
4. There are cases where higher IRR does not necessarily contribute to wealth maximization

Profitability Index (PI)

1. This is the ratio of the present value of cash inflows and the present value of cash outflows. It is used to indicate the profitability at a glance.
2. Where the projects differ in their duration and the cash flows these can be compared based on the profitability index.

Interpretations

- If the profitability index is less than one reject the proposal.
- If the profitability index is equal to one, the proposal is just break eve. If the profitability is more than one accept the proposal.
- The higher the index, the more profitable the proposal is

Advantages

1. It is easy to calculate given the present values of cash flows.
2. Projects of different magnitude in terms of duration and cash flows can be short listed based on their profit is recommended for use particularly when there is shortage of funds because it correctly ranks the proposal.

11.10. Limitations of Capital Budgeting

Uncertainty in the future: The capital budgeting proposals are invested with the uncertainty in the future .All data is used in evaluation of proposals is the estimates .the data is error phone more with human judgment, bias or discretion in the identification of cash inflows and outflows. Even advanced capital budgeting techniques such as sensitivity analysis cannot be useful if the data is erroneous.

Qualitative factors ignored: in capital budgeting, we consider only such factors which can be qualified in terms of money. Factors such as improved morale employees as a result of implementation of proposals are not focused the other factors in the business environment such as social, political, economic conditions and are not reflected.

Volatile business conditions: the factors influencing investment decision include the technological advancements, government policies (such as fiscal policy, monetary policy)sales forecast , attitude of management (conservative &progressive),estimated cash flows, discount factor &rate of return.

Unrealistic assumptions: There are certain unrealistic assumptions underlying capital budgeting processes they are

1. There is no risk in uncertainty in the business environment this is not correct the future of business is full of uncertainty &we apply the management techniques to minimize the risks.
2. The cash flows are received in lump sum at the end of given period .
3. The key variables such as sales revenue, cost, price or investment are taken based on past data particularly in terms of rising prices , these seldom hold good for future.
4. The cost of the capital & discount rate are one and the same.

Illustration

A project costs Rs 4,50,000/- and yields an annual cash inflow of Rs 1,50,000/- for 10 years. Calculate its payback period.

Solutions

$$\text{Payback period} = \frac{\text{Original investment}}{\text{Annual cash inflow}} = \frac{4,50,000}{1,50,000}$$

Payback period = 3 Years

1.Determine the Average Rate of Return from the following data.

Cost of Machine	Rs 1,00,000
Net Profit for first year Second year	Rs 13,000 Rs 15,000

Third year	Rs 11,000
Fourth year	Rs 19,000
Fifth Year	Rs 17,000

Solutions

$$\text{ARR} = \frac{\text{Average income}}{\text{Average Investment}} *100$$

$$\text{Average income} = \frac{13000 + 15000 + 11000+19000+ 17000}{5} = \frac{75000}{5}$$

Average income = Rs 15000

$$\text{Average Investment} = \frac{\text{original investment}}{2} = \frac{1,00,000}{2}$$

Average Investment = Rs 50,000

$$\text{ARR} = \frac{\text{Average income}}{\text{Average Investment}} *100 = \frac{15000}{50000 *100}$$

ARR = 30 %

2.Choose the best from the two alternate projects by calculating PB, ARR, NPV and PI. The discount rate is 10%.

	Project A	**Project B**	**Discount rate**
Cost of project	Rs. 8,000	Rs. 7,000	
Cash inflows			
1	Rs. 4,000	Rs. 2,500	0.909
2	Rs. 3,000	Rs. 2,500	0.826
3	Rs. 2,000	Rs. 2,500	0.751
4	Rs. 2,000	Rs. 2,500	0.683

Solutions

3.Calculation of Pay back period

Year	Project A		Project B	
	Cash inflow Rs	Cumulative Cash Inflow Rs	Cash inflow Rs	Cumulative Cash Inflow Rs
1	4000	4000	2500	2500
2	3000	7000	2500	5000
3	2000	9000	2500	7500
4	2000	11000	2500	10000

PROJECT A PAY BACK PERIOD

$$\text{Pay back Period} = \frac{2\text{ years} + 1000}{2000} = 2\text{ Years} + 0.5$$

PAY BACK PERIOD OF PROJECT A = 2.5 Years

PROJECT B PAY BACK PERIOD

$$\text{Pay back Period} = \frac{2\text{ years} + 1000}{2000} = 2\text{ Years} + 0.5$$

$$\text{Pay back Period} = \frac{2\text{ years} + 2000}{2500} = 2\text{ Years} + 0.8$$

PAY BACK PERIOD OF PROJECT A = 2.8 Years

Decision: Project A Should be accepted. Since Pay Back period is Less

I. CALCULATION OF ARR

Project A

$$\text{ARR} = \frac{\text{Avg Income}}{\text{Avg Investment}} \text{ *100 Avg Income}$$

$$= \frac{4000+3000+2000+2000}{4} = \frac{11000}{4}$$

Avg Income = Rs 2750

$$\text{Avg Investment} = \frac{\text{Original Investment}}{2} = \frac{8000}{2}$$

Avg Investment = Rs 4000

$$\text{ARR for Project A} = \frac{\text{Avg Income}}{\text{Avg Investment}} \text{ *100}$$

$$= \frac{2750}{4000} \text{ *100}$$

ARR for Project A = 69%

Project B

$$\text{ARR} = \frac{\text{Avg Income}}{\text{Avg Investment}} \text{ *100 Avg Income}$$

$$= \frac{2500+2500+2500+2500}{4} = \frac{10000}{4}$$

Avg Income = Rs 2500

$$\text{Avg Investment} = \frac{\text{Original Investment}}{2} = \frac{7000}{2}$$

Avg Investment = Rs 3500

$$\text{ARR for Project B} = \frac{\text{Avg Income}}{\text{Avg Investment}} \text{ * 100} = \frac{2500}{3500} \text{ * 100}$$

ARR for Project B = 71%

Decision: Return on investment of Project B is Higher than Project A . So Project B is to considered for investment .

II. CALCULATION OF NPV

PROJECT A

Year	Cash flow	PV Factor @ 10%	Present Value
1	4000	0.909	3636
2	3000	0.826	2478
3	2000	0.751	1502
4	2000	0.683	1366
	TOTAL PRESENT VALUE		8982
	LESS : CASH OUTFLOW		8000
	NET PRESENT VALUE		**982**

PROJECT B

Year	Cash flow	PV Factor@ 10%	Present Value
1	2500	0.909	2273
2	2500	0.826	2065
3	2500	0.751	1878
4	2500	0.683	1708
	TOTAL PRESENT VALUE		7924
	LESS : CASH OUTFLOW		7000
	NET PRESENT VALUE		**924**

Decision: Project A Should be accepted because of its higher NPV

III. CALCULATION OF PI PROJECT A

Year	Cash flow	PV Factor @ 10%	Present Value
1	4000	0.909	3636
2	3000	0.826	2478
3	2000	0.751	1502
4	2000	0.683	1366
	TOTAL PRESENT VALUE		**8982**

$$\text{Profitability Index (PI)} = \frac{\text{Present value of future cash inflows}}{\text{Present value of future Cash outflows}} = \frac{8982}{8000}$$

Profitability Index (PI) for Project A = 1.12

PROJECT B

Year	Cash flow	PV Factor @ 10%	Present Value
1	2500	0.909	2273
2	2500	0.826	2065
3	2500	0.751	1878
4	2500	0.683	1708
TOTAL PRESENT VALUE			**7924**

$$\text{Profitability Index (PI)} = \frac{\text{Present value of future cash inflows}}{\text{Present value of future Cash outflows}} = \frac{7924}{7000}$$

Profitability Index (PI) for Project B = 1.13

Decision: Project B Should be accepted because of its higher PI

Let Us Sum Up

In this unit, you have learned about the following:

- Capital budgeting is the process by which investors determine the value of a potential investment project. The three most common approaches to project selection are payback period (PB), internal rate of return (IRR), and net present value (NPV).
- The payback period determines how long it would take a company to see enough in cash flows to recover the original investment. The internal rate of return is the expected return on a project, if the rate is higher than the cost of capital, it's a good project.
- The net present value shows how profitable a project will be versus alternatives and is perhaps the most effective of the three methods.
- Capital budgeting is a predominant function of management. Right decisions taken can lead the business to great heights. However, a single wrong decision can inch the business closer to shut down due to the number of funds involved and the tenure of these projects.

Check Your Progress-2

1. The cash flow statement analysis is described in terms of which of the following activities?

   a) Operating activities
   b) Financing activities
   c) Investing activities
   d) All of the above

2. In the cash flow statement if the company invests more in fixed assets and short term financial investments, it would result to:

   a) Decreased cash
   b) Increased cash
   c) Increased equity
   d) Increased liability

3. Which of the following are regarded as financial activities in the cash flow?

   a) The interest that is paid
   b) The issue of preference share
   c) The redemption of the preference share
   d) All of the above

4. An activity that falls under operating activity in the cash flow statement is:

   a) The sales of the fixed asset
   b) The interest that is paid on term deposits by a bank
   c) The purchase of the own debenture
   d) The sewing of equity share capital

5. The cash flow statement will define the cash flow concerning which of the following?

   a) The operating and non-operating flows
   b) The outflow and inflow
   c) The investing and non-operating floors
   d) The investing, operating, and financing activities

Glossary

Capital Budgeting: Process a business undertakes to evaluate potential major projects or investments.

Net present value : Difference between the present value of cash inflows and the present value of cash outflows over a period of time.

Internal Rate of Return : It is a metric used in financial analysis to estimate the profitability of potential investments.

Profitability Index: Measure of a project's or investment's attractiveness.

Capital Expenditure: Funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment

Investment proposal: Carefully constructed presentation, crafted for potential investors, that describes the business's purpose and goals.

Answers to Check Your Progress-1

a-False

b-True

c-True

d-True

e-True

Answers to Check Your Progress-2

1.d

2.a

3.d

4.b

5.d

Unit-12

Marginal Costing

STRUCTURE

Overview

In this unit the Introduction, the Marginal Cost and Marginal Costing, Characteristics of Marginal Costing, Advantages of Marginal costing, Limitations of Marginal Costing, Absorption costing and marginal costing, Distinction between absorption costing and marginal costing, Cost-Volume-Profit analysis, Application of Marginal Costing Techniques and also the details about marginal costing has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Define marginal cost and marginal costing.
- Describe how marginal costing differs from absorption costing.
- Discuss the relationship between selling price, variable costs and the contribution
- Calculate the contribution and profit volume ratio and use them to calculate Break-Even Point and Draw the Break-Even chart.

12.1. Introduction

Apply cost-volume-profit analysis to solve problems involving decision making Introduction Two general approaches are used for costing products for the purpose of valuing inventories and cost of goods sold. One approach is called absorption costing. Absorption costing is generally used for external financial reports. The other approach called variable costing, is preferred by some companies for internal decision making and must be used when an income statement is prepared in the contribution format.

Ordinarily, absorption costing and variable costing produce different figures for net income and the difference can be quite large. Under variable costing, only those cost of production that vary with output and treated as product cost. This would generally include direct material, direct labour and the variable portion of manufacturing overhead. Fixed manufacturing overhead is treated as cost of the period and charged to the period. Variable costing is sometimes referred to as direct costing, marginal costing, differential costing, incremental costing and comparative costing. The break-even profit analysis examines the behaviour of total revenues, total costs and operating income as changes occur in the output level, the selling price, the variable cost per unit and/or the fixed costs of a product. Mangers use cost volume analysis to help answer questions such as. How will total revenues and total costs be affected if the output level changes. In this way marginal costing and break even analysis guides manager‘s planning.

12.2. Marginal Cost and Marginal Costing

The Institute of Cost and Management Accountants, London, has defined -marginal cost‘ as the amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit‖. In this context, a unit may be a single unit, a batch of articles, an order, a stage of production capacity, a process or a department. Suppose the cost of production of 1,000 units is Rs. 6,000/- and that of 1,001 units is Rs. 6,004/- the marginal cost is Rs. 4/-. Marginal cost is the variable cost comprising the cost of direct materials consumed, direct wages paid and the variable overhead incurred for producing the additional unit.

The ICMA, England has defined marginal cost as the cost for producing one additional unit of product. It has also been defined as, the amount charges in the aggregate cost due to changes in the existing level production by one unit. An alalysis of these definitions reveals that the marginal cost is the cost producing an additional unit. That means, marginal cost refer to the extra costs for the production of an additional unit.

Marginal Costing

The institute of Cost and Works Accountants of India (ICWAI) defines marginal costing as, a method considers only the variable cost as cost of production, leaving out period costs to be absorbed from the marginal contribution. Batty defines marginal costing as, a technique of cost accounting which pays special attention to the behaviour of costs with charges in the volume of output‖. When compared to the definition by the ICWAI, the definition by the chartered institute of Management Accountants (CIMA), England appears to be more comprehensive. Because, the ICWA, England defines marginal cost and effect of changes in volume or type of output on the company‘s profit, by segregating total costs into variable and fixed costs.

12.3. Characteristics of Marginal Costing

1. Marginal costing is a technique or working of costing, which is used in conjunction with other methods of costing (process or job).
2. Fixed and variable costs are kept separate at every stage. Semi variable costs are also separated into fixed and variable.
3. As fixed costs are period costs, they are excluded from product cost or cost of production or cost of sales.
4. Only variable costs are considered as the cost of the product.
5. When evaluation of finished goods and work-in-progress are taken into account, they will be only variable costs.
6. As fixed costs are period costs, they recharged to profit and loss account during the period in which they are incurred. They are not carried forward to the next year‘s income.
7. Marginal income or marginal contribution is known as the income or the profit.
8. The difference between the contributions is known as the income or the profit.
9. Fixed costs remain constant irrespective of level of activity.
10. Sales price and variable cost per unit remain the same.

11. Cost-volume-profit relationship is fully employed to reveal the state of profitability at various levels of activity.

12.4. Advantages of Marginal costing

1. ***Constant in nature:*** Variable costs fluctuate from time to time, but in the long run, marginal costs are stable. Marginal costs remain the same, irrespective of the volume of production.
2. **Effective cost control:** It divides cost into fixed and variable. Fixed cost is excluded from product. As such, management can control marginal cost effectively.
3. **Treatment of overheads simplified:** It reduces the degree of over or under- recovery of overheads due to the separation of fixed overheads from production cost.
4. **Uniform and realistic valuation:** As the fixed overhead costs are excluded from product cost, the valuation of work-in-progress and finished goods becomes more realistic.
5. **Helpful to management:** It enables the management to start a new line of production which is advantageous. It is helpful in determining which is profitable – whether to buy or manufacture a product. The management can take decision regarding pricing and tendering.
6. **Helps in production planning:** It shows the amount of profit at every level of output with the help of cost volume profit relationship. Here the break-even chart is made use of.
7. **Better result:** When used with standard costing, it gives better results.
8. **Fixation of selling price:** The differentiation between fixed costs and variable costs is very helpful in determining the selling price of the products or services. Sometimes, different prices are charged for the same article in different markets to meet varying degrees of competition.
9. **Helpful in budgetary control:** The classification of expenses is very helpful in budgeting and flexible budget for various levels of activities.
10. **Preparing tenders:** Many business enterprises have to compete in the market in quoting the lowest price. Total variable cost, when separately calculated, becomes the ‗floor price'. Any price

above this floor price may be quoted to increase the total contribution.

11. **Make or Buy" decision:** Sometimes a decision has to made whether to manufacture a component or a product or to buy it readymade from the market. The decision to purchase it would be have taken if the price paid recovers some of the fixed expenses.

12. **Better presentation:** The statements and graphs prepared under marginal costing are better understood by management executives. The break-even analysis presents the behaviour of cost, sales, contribution etc. in terms of charts and graphs. And, thus the results can easily be grasped.

Check Your Progress-1

True/False

a. The ICMA, England has defined marginal cost as the cost for producing one additional unit of product.

b. When new plants and equipment are introduced, fixed costs and variable costs will vary.

c. Only variable costs are considered as the cost of the product.

d. Many business enterprises have to compete in the market in quoting the lowest price.

e. Absorption costing is not generally used for external financial reports.

12.5. Limitations of Marginal Costing

1. **Difficulty to analyse overhead:** Separation of costs into fixed and variable is a difficult problem. In marginal costing, semi-variable or semi-fixed costs are not considered.

2. **Time element ignored:** Fixed costs and variable costs are different in the short run; but in the long run, all costs are variable. In the long run all costs change at varying levels of operation. When new plants and equipment are introduced, fixed costs and variable costs will vary.

3. **Unrealistic assumption:** Assumption of sale price will remain the same at different levels of operation. In real life, they may change and give unrealistic results.

4. **Difficulty in the fixation of price:** Under marginal costing,

selling price is fixed on the basis of contribution. In case of cost plus contract, it in very difficult to fix price.

5. **Complete information not given:** It does not explain the reason for increase in production or sales.
6. **Significance lost:** In capital, intensive industries, fixed cost occupy major portions in the total cost. But marginal costs cover only variable costs. As such, it loses its significance in capital industries.
7. **Problem of variable overheads:** Marginal costing overcomes the problem of over and under- absorption of fixed overheads. Yet there is the problem in the case of variable overheads.
8. **Sales-oriented:** Successful business has to go in a balanced way in respect of selling production functions. But marginal costing is criticized on account of its attaching over- importance to selling function. Thus it is said to be sales-oriented. Production function is given less importance.
9. **Unreliable stock valuation:** Under marginal costing stock of work-in-progress and finished stock is valued at variable cost only. No portion of fixed cost is added to the value of stocks. Profit determined, under this method, is depressed.
10. **Claim for loss of stock:** Insurance claim for loss or damage of stock on the basis of such a valuation will be unfavorable to business.
11. **Automation:** Now-a-days increasing automation is leading to increase in fixed costs. If such increasing fixed costs are ignored, the costing system cannot be effective and dependable. Marginal costing, if applied alone, will not be much in use, unless it is combined with other techniques like standard costing and budgetary control.

12.6. Absorption costing and marginal costing

Absorption costing is the practice of charging all costs, both fixed and variable to operations, process or products. In marginal costing, only variable costs are charged to production.

The Institute of Cost and Management Accountants (U.K.) defines it as, the practice of charging all costs, both variable and fixed to operations, processes or products‖. This explains why this technique is also called full costing. Administrative, selling and distribution overheads as much form part of total cost as prime cost and factory burden.

12.7. Distinction between absorption costing and marginal costing

Points of Distinction	Absorption Costing	Marginal Costing
1. Charging of costs	Fixed costs form part of total costs of production and distribution.	Variable costs alone form part of cost of production, and sales whereas fixed costs are charged against contribution for determination of profit.
2. Valuation of stocks	Stocks and work-in- progress are valued at both fixed and variable costs i.e., total cost.	Stocks are valued at variable cost only.
3. Variation in profits	When there is no sales the entire stock is carried forward and there is no trading profit or loss.	If there is no sales, the fixed overhead will be treated as loss in the absence of contribution. It is not carried forward as part of stock value.
4. Purpose	Absorption costing is more suitable for long- term decision making and for pricing policy over long-term.	Marginal costing is more useful for short-term managerial decision making.
5. Emphasis	Absorption costing lays emphasis on production.	Marginal costing emphasizes selling and pricing aspects.

12.8. Cost-Volume-Profit analysis

Cost-volume-profit analysis is the analysis of three variables viz., cost, volume and profit. This analysis measures variations of costs and volumes and their impact on profit. Profit is affected by several internal and external factors which influence sales revenue and costs.

Cost-volume-profit analysis helps the management in profit planning. Profit of a concern can be increased by increasing the output and sales or reducing cost. If a concern produces to the maximum capacity and sell, contribution is also increased to the maximum level.

Heiser puts it is the following words: The most significant single factor in planning of the average business is the relationship between the volume of business, its costs and profit‖.

Thus, cost volume and profit analysis is an attempt to measure the effect of changes in volume, cost, price and product mix on profits. With the increase in volume unit cost of production decreases and vice versa, because the fixed costs are constant. With the decrease in fixed cost per unit profit will be more. Cost-volume-profit analysis is made with the objective of ascertaining the following:

1. The cost for various levels of production.
2. The desirable volume of production
3. The profit at various levels of production.
4. The difference between sales revenue and variable cost.

To know the cost volume profit relationship, a study of the following is essential.

1. Marginal cost formulae,
2. Contribution,
3. Profit volume ratio,
4. Break-even analysis
5. Margin of safety
6. Angle of Incidence

1. Marginal Cost Equations

Sales = Variable Cost + Fixed Cost ± Profit or loss Sales – Variable Cost = Fixed Cost ± Profit or loss Sales – Variable Cost = Contribution

Contribution = Fixed Cost + Profit

From the above equation, we can understand that in order to earn profit, the contribution must be more than the fixed cost. To avoid any loss, the contribution must be equal to fixed cost.

2. Contribution

Contribution is the difference between sales and marginal cost. It is the contribution towards fixed cost and profit. In marginal costing technique contribution is a very important concept as it is used to find the profitability of products, processes, departments and divisions. Practically all decisions are based on and oriented towards contribution.

Contribution is different from the profit which is the net margin remaining after reducing fixed expenses from the total contribution. Contribution can be ascertained as given below:

Contribution = Selling price – Marginal cost

Contribution = Fixed cost + Profit Contribution – Fixed Cost = Profit.

3. Contribution to Sales (or) P/V (Profit Volume) Ratio

This is the ratio of contribution to sales. It is an important ratio analysis the relationship between sales and contribution. A high P/V ratio indicates high profitability and low P/V ratio indicates low profitability. This ratio helps in comparison of profitability of various products. Since high P/V ratio indicates high profits, the objective of every organization should be to improve or increase the P/V ratio.

P/V Ratio can be improved by:

6. Decreasing the variable cost by efficiently utilizing material, machines and men.
7. Selecting most profitable product mix for production and sales.
8. Increasing the selling price per unit. Formula for P/V Ratio

   P/V Ratio = $\frac{\boldsymbol{Contribution}}{\boldsymbol{Sales}} = \frac{\boldsymbol{C}}{\boldsymbol{S}}$

$$\frac{\text{Sales} -}{\text{Sales}} = \frac{\boldsymbol{C}}{\boldsymbol{S}}$$

$$= \frac{Sales - Variable\ costs}{Sales} = \frac{S - V}{S}$$

(or) (or)

$$= \frac{Fixed\ costs + Profit}{Sales} = \frac{F+P}{S}$$

When two periods' profits and sales are given, the P/V ratio is calculated as given below:

$$\frac{\boldsymbol{P}}{\boldsymbol{V}}\boldsymbol{Ratio} = \frac{\boldsymbol{Change\ in\ profit}}{\boldsymbol{Change\ in\ Sales}}$$

P/V Ratio is generally expressed as a percentage.

Break even Analysis and Break-even Point

Break even analysis is a method of studying relationship between revenue and costs in relation to sales volume of a business enterprise and determination of volume of sales at which total costs are equal to revenue. According to Matz Curry and Frank ‑a break-even analysis determines at what level cost and revenue are in equilibrium‖. Thus, break even analysis refers to a system of determination of that level of activity where total sales are just equal to total costs.

This level of activity is generally termed as break-even point (B.E.P). At the break-even point a business man neither earns any profit nor incurs any loss. Break-even point is also called –No profit, no loss point‖ or –Zero profit & zero loss point‖.

In the words. J. Wayne Keller –The Break-even point of a company or a unit of a company is the level of sales income which will equal the sum of its direct costs (variable costs) and its period expenses (fixed expenses)‖.

Formula for calculating breakeven point

$$\text{Break-even point (in Unit)} = \frac{\text{Fixed expenses}}{\text{Selling price per unit – Marginal cost per unit}}$$

(or)

$$\frac{\text{Fixed cost}}{\text{Contribution per unit}}$$

(or)

$$\frac{\text{Breakeven sales value}}{\text{Selling price per unit}}$$

Break-even point (in rupees)

(or)

Break even sales value

Break even sales value = Break-even point in units x selling price per unit

Margin of Safety

Break even analysis includes the concept of margin of safety. Margin of safety is the difference between actual sales and break even sales. Margin of safety is calculated in rupees, units or even in percentage form. Margin of safety indicates the value/volume of sales which directly contribute of profit, as fixed costs have already been recovered at break even point. Margin of safety is calculated by the following formula

Margin of Safety = Actual sales – Break even sales

$$\text{(or)} \quad = \frac{\text{Profit}}{\text{P/V Ratio}} = \frac{\text{P}}{\text{P/V}}$$

Margin of safety ratio: Sometimes margin of safety is expressed as a ratio. It is the ratio of margin of safety to actual sales.

$$\text{Margin of Safety ratio} = \frac{\text{Margin of safety}}{\text{Actual sales}} \times 100$$

Angle of Incidence

In graphic presentation of marginal cost data, i.e., a break-even chart, the total cost line and sales line cross each other. The point of their crossing is termed Break-even point'. The angle at which the sales line crosses the total cost line is called the Angle of incidence'.

The bigger is the angle, the more will be the contribution and profit with every additional sale. Firms with higher P/V ratio and comparatively less variable costs have a higher angle of incidence. Such firms can magnify their profits in high demand conditions.

The angle of incidence at a glance can signify or reveal the ability of a firm to earn higher profits with every increase in sales.

Break-even Chart

The technique of break-even analysis can be made with the help of graph. Graphical representation of break-even point (or cost column-profit) is known as the break-even chart. Dr. Vance is of the opinion that ‑it is a graph showing the amounts of fixed variable costs and the sales revenue at different volumes of operation. It shows at what volume the firm first covers all costs with revenue of break-even.ǁ B.E.C. shows the profitability or otherwise of an undertaking at various levels of activity, and indicates the point at which neither profit nor loss is made. Break-even point is known as no profit, no loss pointǁ. So the Chart is also known as break- even chart. At this point, the total costs are recovered and profit begins.

Significance of Break-even Chart

1. It will show the variable costs, fixed costs and total costs.
2. Sales unit or value can be known.
3. Profit or loss can be known.
4. Margin of safety can be known.
5. Angle of incidence or the intersection of sales line with costs line can also be known.

Thus, it is very useful for managerial decision.

Assumptions of Break-even Chart

1. Fixed costs remain the same and do not change with level of activity.
2. Costs are divided into fixed and variable costs. Variable costs change according to the volumeof production.

3. Variable cost vary with the volume of output but price of variable costs such as wage rate, price of materials, supplies, will be unchanged.
4. Selling price remains the same at different levels of activity.
5. There is no change in the product mix.
6. There is no change in the level of efficiency.
7. Policies of management do not change.
8. No change in the manufacturing process is due to non-static operating efficiency.
9. As the number of units produced and sold are the same, there is no closing or opening stock.

Advantages of Break-Even Analysis and Chart

1. Total cost, variable cost and fixed cost can be determined.
2. B.E. output or sales value can be determined.
3. Cost, volume and profit relationship can be studied, and they are very useful to the managerialdecision – making.
4. Inter-firm comparison is possible.
5. It is useful for forecasting plans and profits.
6. The best products mix can be selected.
7. Total profits can be calculated.
8. Profitability of different levels of activity, various products or profit, i.e., plans can be known.
9. It is helpful for cost control.

Limitations of Break Even Chart

B.E.C. is constructed under some unrealistic assumptions:

1. Exact and accurate classification of cost into fixed and variable is not possible. Fixed costsvary beyond a certain level or output.
2. Constant selling price is not true.
3. Detailed information cannot be known from the chart. To know all the information about fixed cost, Variable cost and Selling price, a number of charts must be drawn.
4. No importance is given to opening and closing stocks.
5. Various product mix on profits cannot be studied as the study is

concerned with only one salesmix or product mix.

6. Cost, volume and profit relation can be known; capital amount,
7. Market aspects, effect of government policy etc., which are important for decision- makingcannot be considered from B.E.C.
8. If the business conditions change during a period, the B.E.C becomes out of date as it assumes no change in business condition.

Illustrations 1:

1. A company estimates that next year it will earn a profit of Rs. 50000/-. The budgeted fixed costsand sales are Rs. 25,0000/- and Rs. 99,3000/- respectively. Find out the breakeven point.

Solution

Estimated profit = 50000Fixed cost = 250000 Sale = 993300

breakeven point = fixed cost / p/ v ratio

= 250000 / 30% = 8, 33,333

Illustration 2 :

In 2002 the position of Y Ltd., was as follows:

	Rs.
Sales	1,20,000
Variable Overheads	96,000
Gross Profit	24,000
Fixed Overhead	16,000
Net profit	8,000

Find out:

(a) P/V ratio

(b) B.E.P

(c) Net profit from the sales of Rs.1,30,000

Solution:

a) P/V Ratio = $\frac{\text{Fc + profit}}{\text{Sales}}$ ***100**

= $\frac{16000 + 8000}{120000}$ ***100**

$$= \frac{24000}{120000} \mathbf{*100}$$

<u>P/V Ratio = 20 %</u>

b) BEP = $\frac{\text{Fixed cost}}{\text{P/V Ratio}}$ $\frac{8000}{20\%}$

BEP = Rs. 80,000

(i) Net profit from the sales of Rs.1,30,000

Net profit (if sales) = Estimated Sales * P/V Ratio – Fixed Cost

= 130000 * 20 % - 16000

= 26000 - 16000

<u>Net profit from the sales of Rs.1,30,000= Rs. 10000</u>

$$\text{P/V RATIO} = \frac{\text{Contribution}}{\text{Sales}} *100$$

$$= \frac{\text{Fixed Cost + Profit}}{\text{Sales}} *100$$

$$= \frac{16000+8000}{120000} *100 = \frac{24000}{120000} * 100$$

<u>P/V Ratio = 20 %</u>

(b) BEP

BEP = FIXED COST =	$\frac{16000}{20\ \%}$

P/V RatioBEP = Rs 80,000

(c) When the sales are Rs.1,30,000

Net profit (if sales) = Sales * P/V Ratio – Fixed Cost

= 130000 * 20% - 16000

=26000 - 16000

<u>Net profit from the sales of Rs.1,30,000= Rs 10000</u>

The sales turnover and profit during two years were as follows

YEAR	SALES IN RS	PROFIT IN RS
2015	140000	15000
2016	160000	20000

Calculate

(a) P/V ratio (b) Fixed cost (c) Breakeven point

(d) Profit when sales Rs. 1200000

(e) Sales when profit Rs. 40000

Solution:

P/V ratio

$$\text{P/V RATIO} = \frac{\text{Changes in Profit}}{\text{Changes in Sales}} * 100$$

$$= \frac{20000 - 15000}{160000 - 140000} * 100$$

$$= \frac{5000}{20000} * 100$$

P/V RATIO = 25 %

(a) Fixed cost

Fixed cost = Contribution – Profit Contribution = Sales * P/V Ratio

= 140000 * 25%

Contribution = Rs 35000Fixed cost = 35000 - 15000

Fixed cost = Rs 20000

(b) Breakeven point

BEP = FIXED COST = 20000 / 25 %

P/V Ratio

Breakeven point = Rs 80,000

(c) When the sales are Rs.12,00,000

Net profit (if sales) = Sales * P/V Ratio – Fixed Cost

= 1200000 * 25% - 20000

= 300000 – 20000

Net profit from the sales of Rs.12,00,000= Rs 2,80,000

(d) Sales when profit Rs. 40000

$$\text{Sales} = \frac{\text{Fixed cost + Desire profit}}{\text{P/V Ratio}} = \frac{20000 + 40000}{25\ \%}$$

Sales when profit Rs. 40000=Rs. 2,40,000

Illustration 4 :

In 2002 the position of Y Ltd., was as follows:

	Rs.
Sales	1,20,000
Variable Overheads	96,000
Gross Profit	24,000
Fixed Overhead	16,000
Net profit	8,000

Find out:

(c) P/V ratio

(d) B.E.P

(c) Net profit from the sales of Rs.1,30,000

(d) Required sales for a net profit Rs.10,000

Solution:

(a) P/V Ratio

$$P/V\ RATIO = \frac{Contribution}{Sales} * 100$$

$$= \frac{\text{Fixed Cost + Profit}}{Sales} * 100$$

$$= \frac{16000+ 8000}{120000} * 100 \quad \frac{24000}{120000} * 100$$

P/V Ratio = 20 %

(b) BEP

$$\text{BEP} = \frac{\text{FIXED COST}}{\text{P/V Ratio}} = \frac{16000}{20\%} \quad \text{BEP = Rs. 80,000}$$

(c) When the sales are Rs.1,30,000

Net profit (if sales) = Sales * P/V Ratio – Fixed Cost

= 130000 * 20% - 16000

=26000 - 16000

Net profit from the sales of Rs.1,30,000= Rs 10000

$$\text{Sales when profit Rs. 10000 Sales} = \frac{\text{Fixed cost + Desire profit}}{\text{P/V Ratio}}$$

$$= \frac{16000 + 10000}{20\%}$$

Sales when profit Rs. 10000= Rs 130000

12.10. Application of Marginal Costing Techniques

Marginal costing is an extremely valuable technique with the management. The cost- volume-profit relationship has served as a key to locked storehouse of solutions to many situations. It enables the management to tackle many problems which are faced in the practical business. ―All the introduction of marginal cost principles does is to give the management a fresh, and perhaps a refreshing, insight into the progress of their business‖. Now, we explain the application of the techniques of marginal costing in certain important areas.

Marginal Costing helps the management in decision-making in respect of the following areas:

1. Cost control
2. Fixation of Selling Price
3. Closure of a Department or Discontinuing a Product
4. Selection of a Profitable Product Mix
5. Profit Planning
6. Decision to make or buy
7. Decision to accept a bulk order
8. Introduction of a new product
9. Choice of technique
10. Evaluation of performance
11. Maintaining a desired level of profit
12. Level of activity planning
13. Alternative methods of production
14. Introduction of product line

Let Us Sum Up

In this unit, you have learned about the following

- In costing products companies use either absorption costing or marginal costing. All costs fixed and variable are charged to product in absorption costing.
- In marginal costing only variable cost are charged to products, fixed costs are transferred to profit and loss account.
- The Break Point is the point of no profit no loss. A break chart is a shaphical device to show cost volume profit relationship between the contribution and sales margin of safety is the difference between the actual sales and the break-even sales.
- The marginal costing technique furnishing all possible facts relating to a particular issue which is under the consideration of management. It is the most powerful and popular technique is and of marginal decision making.

Check Your Progress-2

1. Capital planning is the interaction
   a) Embraced to investigate how to make accessible extra money to the business.
   b) By which the firm chooses how much cash flow to put resources into business
   c) By which the firm concludes which long-haul ventures to make.
   d) This helps make an ace financial plan for the association.
2. The choice to acknowledge or dismiss a capital planning project relies upon –

   a) An investigation of the incomes produced by the venture
   b) Cost of capital puts resources into business/project.
   c) Both (A) and (B)
   d) Neither (A) nor (B)
3. The Internal Rate of Return (IRR) standard for project acknowledgment, under hypothetically boundless assets, is: Acknowledge all undertakings which have –

   a) IRR equivalent to the expense of capital
   b) IRR more noteworthy than the expense of capital
   c) IRR is not exactly the expense of capital
   d) None of the above mentioned.

4. Which of the accompanying addresses how much time it takes for a capital budgeting undertaking to recuperate its underlying expense?

   a) Maturity period
   b) Payback period
   c) Redemption period
   d) Investment period

5. What is the thought behind project-explicit required paces of return for a firm or division?

   a) Different undertakings ought to have different required paces of return since they are not the same concerning risk.
   b) Each firm ought to have an alternate required pace of return since firms are not the same as for risk and have generally been made by projects that contrast to risk.
   c) A firm's division will constantly have an expected pace of return not quite the same as the company's generally weighted normal expense of capital because the gamble of the division generally varies from that of the firm.
   d) All of the above mentioned

Glossary

Break even point: The breakeven point is the level of production at which the costs of production equal the revenues for a product

Profit volume ratio: Measurement of the rate of change of profit due to change in volume of sales

Margin of safety: Principle of investing in which an investor only purchases securities when their market price is significantly below their intrinsic value

Angle of incidence: The angle between a ray incident on a surface and the line perpendicular to the surface at the point of incidence, called the normal.

Answers to Check Your Progress-1

a-True

b-True

c-True

d-True

e-False

Answers to Check Your Progress-2

1.c

2.c

3.b

4.b

5.a

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam (2020) Financial Statement Analysis, 11th Edition, McGrawHill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India

Block-5: Introduction

This Block -5: **Budgeting and Financial Reporting** has been split into two Units(Unit-13 and Unit-14).

Unit-13 : Budgeting deals with Introduction , Definition of Budget and Budgeting, Budgetary control, Essentials of Budgeting and Budgetary control, Advantages and Limitations of Budgetary control system, Organization for budgetary control system, Classification of Budgets and Zero Base Budgeting.

Unit-14: Financial Reporting explain about Meaning & Definition of Financial Reporting, Objectives of Financial Reporting, Importance of Financial Reporting, Users of financial reports, Concept of Financial Reporting, Qualitative characteristics of information in financial reporting, Role of SEBI, Disclosure requirements of IFRS and Challenges in financial reporting.

In all the units of **Block -5 Budgeting and Financial Reporting**, the Check your progress, Glossary, Answers to check your progress and Suggested Reading has been provided and the Learners are expected to attempt all the Check your progress as part of study.

Unit-13
Budgeting

STRUCTURE

Overview

In this unit the Introduction and the Definition of Budget and Budgeting, Budgetary control, Essentials of Budgeting and Budgetary control, Advantages and Limitations of Budgetary control system, Organization for budgetary control system., Classification of Budgets, Zero Base Budgeting and also the details about Budgeting has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Define budget and budgetary control
- List out advantages and limitations of budgetary control system
- Explain the techniques of preparing various types of budgets.
- Prepare various types of budgets.

13.1. Introduction

Modern business world is full of competition, uncertainty and exposed to different types of risks. This complexity of managerial problems has led to the development of various managerial tools, techniques and procedures useful for the management in managing the business successfully. Budgeting is the most common, useful and widely used standard device of planning and control. The budgetary control has now become an essential tool of the management for controlling costs and maximizing profit.

Costs can be reduced, wastage can be prevented and proper relationship between costs and incomes can be established only when the various factors of production are combined in profitable way. The resources of a business can be effectively utilized by efficient conduct of its operations. This requires careful working out of proper plans in advance, co-ordination and control of activities on the part of management.

A proper planning and control are essential for an efficient management. A good number of tools and devices are available. Of all these, the most important device used is budget. Cost accounting aims not only at cost ascertainment, but also greatly at cost control and cost reduction. Thus the management aims at the proper and maximum utilization of resourcesavailable.

It is possible when there is a pre-planning. Modern management aims that all types of operations should be predetermined in advance, so that the cost can be controlled at every step. The more important point is that the actual programme is compared with the preplanned programme and the variances are analyzed and investigated. All are familiar with the idea of budget, at every walk of life, state, firm, business etc.

13.2. Definition of Budget and Budgeting

A budget is a plan of action expressed in figures. It is a planned estimate of future business conditions such as the income, probable cost and profit. It acts as a business barometer as it is a complete programme of activities of the business for the period covered. It may be stated in financial terms or non-financial terms.

It is defined as ―a financial and or quantitative statement, prepared and approved prior to a defined period of time, of the policy to be pursued during that period of time for the purpose of attaining a given objective‖

Budgeting refers to the mechanism of preparing budgets according to J. Batty, ―The entire process of preparing the budgets is known as budgeting‖ Formation of business budgets involves a careful study of the conditions of the business the objectives of the management and the capacity of the business concern for attain these objectives.

13.3 Budgetary Control

Budgetary control is a system of management and accounting control. It means the control of operations with the aid of budgets. It is one of the important tools of control. The Institute of Cost and Management Accounts, England, defines budgetary control as –the establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objectives of that policy or to provide a basis for its revision.

Steps involved in the budgetary control: Budgetary control involves the following steps.

1. Preparation of budgets for each function and section of the organization.
2. Recording of actual performance.
3. Continuous comparison of actual performance with the budgets and the ascertainment of deviations.
4. Prompt investigations into differences.
5. Prompt remedial action when required.
6. Revision of budgets in the light of changed circumstances.

Objectives of Budgetary control

The important objectives of budgetary control can be summarized as follows.

(i) To plan the policy of a business for the coming period for achievement of the firm is objectives and its translation into monetary and quantitative terms.

(ii) To determine the responsibility of each department and executive so that they are made accountable for definite and precise results.

(iii) To coordinate the activities of a business so that each is a part of an integral total.

(iv) To provide for continuous comparison of actual and budgeted performance in terms of results achieved and costs incurred so that cause for any inefficiency is immediately detected and removed.

(v) To control and direct each function so that best possible results may be obtained.

(vi) To provide for the revision of budgets for future in the light of experience gained.

13.4. Essentials of Effective Budgeting and Budgetary Control

The main essentials for an effective and successful system of budgetary control can be given as follows:

1. ***Support of Top Management:*** In order to make the budgeting system successful, it is necessary that it must have the whole hearted support of every person involved in the organizational set up. In this regard, the initiative must come from the top management.

2. ***Definite and Reasonable Targets or Goals:*** For the successful operations of the budgetary control system, the targets fixed in the budgets should be definite, realistic and attainable. This feeling should come from the various executives who have been assigned the responsibility of various budget centers.

3. ***Well-defined Organization:*** In order to ensure maximum benefits from budgeting system, well defined budget centers should be created within the organization so that the responsibility of each executive in the organization may be clearly laid down.

4. ***Well-defined Policy**:* The budgets are prepared to establish the responsibilities of executives to the requirements of a particular policy. As such the policy of the business to be followed during budget period should be clearly defined.

5. ***Active Participation by Executives:*** The various executives who are made responsible for different budget centers, should be actively involved in the preparation of the budget.

6. ***Efficient Budget Education:*** The various executives responsible for putting into effect the budgetary proposals, should take active interest in the operation of the budgeting system. It is possible if these executives are constantly educated about the objectives, potentials and techniques of budgeting.

7. ***Adequate Accounting System:*** Budgeting is closely related to accounting since compilation of budget is done on the basis of historical data provided by the Accounting Department. These dataform the basis for making estimates. As such the accounting

system should be designed to the requirements of responsibility accounting.

8. ***Cost of the Budgeting System:*** The cost of operation of the budgeting system should be within the financial capacity of the business and should not exceed, in any case, the total benefits accruing from it to the organization.
9. ***Efficient Reporting:*** It is necessary that prompt reports on the comparison of actual performance with the budgeted figures should be made available to the management for ensuring timely action on the points of inefficiency.
10. ***Flexibility:*** The budget programme of the business concern should not be too rigid. It should be flexible and should provide for possible contingencies.
11. ***Integration with Standard Costing System*:** If the business concern decides to introduce standard costing system, it should be completely integrated with budgetary control system in respect of compilation of budget and analysis of variances.

Check Your Progress-1

True/False

a. Modern business world is full of competition, uncertainty and exposed to different types of risks.
b. Well-defined Policy is one of the main essentials for an effective and successful system of budgetary control.
c. Budgetary control is not a system of management and accounting control.
d. Budgetary control offers many advantages.
e. Budget acts as a tool for measuring the managerial performance.

13.5. Advantages and Limitations of Budgeting control

Advantages of Budgetary Control

Budgetary control offers many advantages. It has become an essential tool of the management for controlling cost and maximizing profit. It uncovers un-economies in operations, weaknesses in the organization structure and minimizes wasteful, spending. It acts as a friend, philosopher and guide to the management. Its important advantages are as follows:

Efficiency and economy in the conduct of business:

Budgetary control brings efficiency and economy in the working of the business. Wastages and losses of all types are avoided. As Sickle says –The budget in an impersonal policeman that maintains ordered effort and brings about efficiency in results‖.

Establishes responsibility:

Budgetary control establishes divisional and departmental responsibility. It thus prevents alibis and –buck passing‖ when the budgeted results are not achieved.

Ensures Co-ordination:

It co-ordinates the various divisions of a business, namely, the production, marketing financial and administrative divisions. It forces executives to think, and think as a group. Thus it ensures team work.

Safety single for the management:

It acts as a safety signal for the management. It shows when to proceed cautiously and when manufacturing expansion can be safely undertaken. It acts as a magic eye to the management who can always watch over the performance of the business.

Ensures effective utilization of factors of production:

It ensures effective utilization of men, materials, machines and money because production is planned according to the availability of these items.

Setting up standard costing system:

Budgetary control creates conditions for setting up a system of standard costing.

Cost consciousness:

It helps in promoting a feeling of cost consciousness and in restricting expenditure to the minimum.

Acts as a measure of efficiency:

Budget acts as a tool for measuring the managerial performance. The budget targets are compared with actual ones, variations are singled out and responsibility fixed. It is therefore, an instruments of control. It helps in measuring the efficiencyof all departments.

Favour from credit agencies:

Budgets confirm the existence of plans and bring light their profitability.

Financial institutions are willing to lend on easy terms for the concerns having a budgetary programme.

Prompt and profitable decisions by management:

By furnishing periodical adequate accounting data, budgetary control assists the management in taking prompt and profitable decisions.

Limitations of Budgetary Control

The Budgetary control system is not a perfect tool. It has its own limitations. They are as follows:

Opposition against the very spirit of budgeting:

There will be always active and passive resistance to budgetary control as it points out at the efficiency or inefficiency of individuals.

Budgeting and changing economy:

The preparation of a budget under inflationary pressure and changing Government policies is really difficult. Thus the accurate position of the business cannot be estimated.

Time factor:

Accuracy in budgeting comes through experience. Management must not expect too much during the development period.

Not a substitute for management:

Budget is only a management tool. It is not a substitute for management. It cannot replace management in decision-making.

Co-operation required:

The success of budgetary control depends upon willing co- operation and team work. Budget officer must get co-operation from all departmental managers.

Heavy expenditure:

Budgeting involves heavy expenditure which small concerns cannot afford.

13.6. Organization for Budgetary control system

The following steps should be taken in a sound system of budgetary control:

Preparation of an organization chart:

Before successful installation of budgetary control, it is necessary that the concern should prepare a definite plan of organization. Authority and responsibility of each executive should be clearly defined.

***Establishment of Budget centres*:**

A budget centre is a section of the organization of an undertaking for the purpose of the budgetary control. Budget centers should be established for cost control and all budgets should be related to cost centres. Budget contres will disclose the sections of the organization where planned performance is not achieved.

Establishment of Budget Committee:

A budget committee should be established with functional heads as members. A top executive should be appointed known as budget controller or budget officer. The functional managers will prepare the budgets and submit to the committee for approval. The budget committee make necessary adjustments in the budgets, coordinate all thebudgets can finally approve the budgets.

Introduction of adequate Accounting records:

The accounting system should be able to record and analyse the information required. A chart of accounts corresponding with the budget centre should be maintained.

Preparation of Budget manual:

The budget manufacturing is a written document or booklet which specifies the objective of the budgeting organization and procedures. It guides executives in preparing various budgets. It is the reasonability of the budget officer to prepare and maintainthis manufacture.

Fixation of Budget period:

Budget period means the period for which a budget is prepared and employed. The budget period will depend upon.

a. the nature of the business, and

b. the costing techniques to be applied.

For example, in case of continuous or mass production industries, it is necessary to compare continuously the actual with budgets and therefore, the budget period should be a short one. But in case of heavy engineering works, a longer period willbe suitable.

Determination of Key Factor:

Key factor means the factor the extent of whose influence must first be assessed in order to ensure that functional budgets are reasonably capable of fulfillment‖.Key factor is also known as ‒Principal budget‖ or

‑limiting‖ or ‑governing factor‖. It is necessary to locate the factor before the preparation of budgets because it influences all other budgets. The key factor will differ from concern to concern. In some concerns the key factor might be sales, while in others it might be production, materials, labour, machinery or capital.

The budget relating to key facto should be prepared first and the other budgets should be based upon it. A coordinated plan should then be finally approved. Most often shortage of sales is the key factor in industry. This limiting factor can be overcome by taking sales promotion stepssuch as increasing sales staff and advertising.

13.7. Classification of Budgets

The budgets are classified according to their nature. The following are the types ofbudgets which are commonly used.

A. Classification According to Time:

(i) Short period Budget: These budgets are usually for a period of one year.

(ii) Long period Budget: These budgets are for a longer period say 5 to 10 years.

(iii) Current Budget: These budgets are for a very short period, say, a month or a quarter andare related to current conditions.

***B.* Classification According to Function:**

A functional budget is a budget which relates to any of the functions of an organization.

The following are the commonly used functional budgets.

1. ***Sales Budget:*** A sales budget is an estimate of expected sales during the budget period. It may be stated in terms of money or quantity or both. It contains information relating to sales, month-wise, product wise and area wise. Sales budgets should be carefully prepared as the preparation of other budgets is dependent on it.

   1. Past sales figures
   2. Salesmen‘s estimates
   3. Plant capacity
   4. Availability of raw materials
   5. Seasonal fluctuations
   6. Availability of finance

7. Competition

8. Orders on hand

9.Other factors like political conditions, government policies etc.

2. ***Production Budget:*** The preparation of production budget is dependent on the sales budget. Production budget is an estimate of quantity of goods that must be produced during the budget period. It may be stated in terms of money or quantity (weights, units etc.) or both. Production may be calculated as follows:

   Units to produced = Budgeted Sales + Desired closing stock – Opening stock

3. ***Materials Budget***: Materials may be direct or indirect. The materials budget deals with only the direct materials. Indirect materials are included in the factory overhead budget. Materials budget can be classified into two categories – Materials Requirement Budget and Materials Purchase Budget. Materials Requirement Budget is an estimate of total quantities of material required for production during the budget period. The Material purchase Budget is an estimate of quantities of raw materials to be purchased for production during the budget period.

4. ***Direct Labour Budget:*** This indicates detailed requirements of direct labour and its cost to achieve the production target. This budget is classified into two categories namely, labour requirement and labour recruitment budget. The labour requirement budget gives information regarding the different classes of labour required for each department, their rates of pay and the hours to be spent. The labour recruitment budget states the additional direct workers to be recruited.

5. ***Factory Overhead Budget:*** Factory overheads include indirect material, indirect labour and indirect expenses. Factor overhead budget indicates the factory overheads to be incurred in the budget period. The expenses included in the budget are classified into fixed, variable and semi- variable expenses. Fixed expenses are estimated on the basis of past records. Variable expenses are estimated on the basis of budgeted output.

6. ***Administrative Expenses Budget***: The budget is an estimate of administrative expenses to be incurred in the budget period. E.g. rent, salaries, insurance etc.

7. ***Selling and Distribution Overhead Budget:*** The budget gives an estimate of selling and distribution expenses to be incurred in

the budget period. For example, Salesmen‘s salary, commission, advertisement, transportation costs etc. It is prepared by the sales executive. It is closely linked with sales budget.

8. ***Capital Expenditure Budget:*** This budget shows the estimated expenditure on fixed assets during the budget period. Separate budgets may be prepared for each item of assets, if necessary. For example, building budget, plant and machinery budget etc. This budget is prepared for a longer period say 5 years or 10 years.

9. ***Cash Budget:*** This budget gives an estimate of receipts and payments of cash during the budget period. It is prepared by the chief accountant. It shows the cash available and needed from time to meet the capital requirements of the organization. This budget is prepared in two parts – one showing an estimate of receipts and the other showing an estimate of payments.

10. Cash budget can be prepared by any of the following methods:
    (a) Receipts and Payments method
    (b) The Adjusted Profit and Loss Account method
    (c) The Balance Sheet method.

12. ***Master Budget:*** Finally, master budget is prepared incorporating all functional budgets. It is defined as, the summary budget incorporating the functional budgets which is finally approved, adopted and employed‖, the budget may take the form of budgeted profit and loss account and balance sheet. It contains sales, production cost, cash position, debtor, fixed assets, bills payable etc. It also shows the gross and net profits and the important accounting ratios. It has to be approved by the board of directors before it is put into operation.

C. **Classification According to Flexibility:**

1. ***Fixed Budget:*** Fixed budget is also called static budget. It may be defined as, a budget designed to remain unchanged irrespective of the level of activity actually attained‖. This budget is most suited for fixed expenses, which have no relation to the volume of output. It is ineffective for cost control purposes. It is useless for comparison with actual performance when the level of activity changes.

2. ***Flexible Budget:*** Flexible budget is also called variable budget. It may be defined as, a budget designed to change in

accordance with the level of activity actually attained‖. It shows estimated costs and profit at different levels of output. It facilitates comparison of actual performance with the budget at any level of output. To prepare flexible budget, all costs should be classified into fixed, variable and semi-variable. It is more elastic, useful and practical. It is used for the purpose of control.

13.8. Zero base budgeting

To streamline the allocation, to curb this tendency of equalizing the expenditure with budgeted figures and to control the costs, a new technique called Zero Base Budgeting‖ or Zero Base budgeting‖ emerged. Under this technique, no special budget is prepared but the approach is changed.

The use of Zero-Base Budgeting (ZBB) as a managerial tool has become increasingly popular since the early 1970's. It first came into being when Ex-President Jimmy Carter of the United States of America introduced it as a means of controlling state expenditure. The underlying idea of ZBB is that there is no given base figure for a budget. A fresh budgeted figure is to be determined keeping the circumstances and requirements. This basic concept of ZBB is simple: budgeting starts from scratch or zero. That is, every activity in an organization must be examined and justified, any alternatives must be considered and the results evaluated. It is a method whereby all activities are re-evaluated each time when a budget is formulated:

It implies that:

1. Every budget starts with a zero base.
2. No previous figure is to be taken as a base figure for adjustments.
3. Each activity is to be examined afresh.
4. Every budget allocation is to be justified in the light of anticipated circumstances.
5. Alternatives are to be given due consideration.

Benefits

1. Effective cost control can be exercised.
2. Careful planning is facilitated.
3. Management by objectives becomes a reality.
4. Uneconomical activities are identified.
5. Inefficiencies are controlled.

6. Scarce resources are allocated and used beneficially.
7. Each activity is thoroughly examined and justified.

Model Questions

Production Budget:

Prepare a production budget for three months ending March 31, for a factory producing four products, on the basis of the following information

Type of Product	Estimated Stock onJanuary 1, 2008 Units	Estimated Sales during January–March 2008 Units	Desired closing Stock March 31, 2008 Units
M	2,000	10,000	5,000
N	3,000	15,000	4,000
O	4,000	13,000	3,000
P	5,000	12,000	2,000

Solution:

Production Budget for 3 months ending 31.3.2008

Particulars	**M (Units)**	**N (Units)**	**O (Units)**	**P (Units)**
Estimated Sales	10,000	15,000	13,000	12,000
Add: Desired closing stock	5,000	4,000	3,000	2,000
	15,000	19,000	16,000	14,000
Less: Opening stockEstimated production	2,000	3,000	4,000	5,000
	13,000	16,000	12,000	9,000

Illustration: 2Sales Budget:

X & Co. Ltd. produces two products, and there are two sales division, East and West.Budgeted sales for the year ended 31st December 2008 were as follows:

Division	**Products**	**Units**	**Price perunitRs.**
East	AB	25,000 15,000	10 5
West	AB	24,000 30,000	10 5

Actual sales for the said period were:

Product	East	West
AB	28,000 units @ Rs. 10each 18,000 units @ Rs. 5each	25,000 units @ Rs. 10each 33,000 units @ Rs. 5each

On the basis of assessments of the salesmen the following are the observations of sales divisionfor the year ending 31st December, 2009.

East Zone A Budgeted increase of 40% on 2008 budget. B Budgeted increase of 10% on 2008 budget.

West Zone A Budgeted increase of 12% on 2008 budget. B Budgeted increase of 15% on 2008 budget.

Solution:

X & Co. Ltd

Sales Budget for the year 2009

Division	Product	Budget for 2009			Budget for 2008			Actual Sales for 2008		
		Quantity	Price Rs.	Value Rs.	Quantity	Price Rs.	Value Rs.	Quantity	Price Rs.	Value Rs.
East	AB	38,125 18,375	10 5	3,81,250 91,875	25,000 15,000	10 5	2,50,000 75,000	28,000 18,000	10 5	2,80,000 90,000
	Total(A)	56,500		4,73,125	40,000		3,25,000	46,000		3,70,000
West	AB	26,880 34,500	10 5	2,68,800 1,72,500	24,000 30.000	10 5	2,40,000 1,50,000	25,000 33,000	10 5	2,50,000 1,65,000
	Total(B)	61,380		4,41,300	54,000		3,90,000	58,000		4,15,000
	Total A Total B	65,005 52,875		6,50,050 2,64,375	49,000 45,000		4,90,000 2,25,000	53,000 51,000		5,30,000 2,55,000
Total (A+B)		1,17,880		9,14,425	94,000		7,15,000	1,04,000		7,85,000

Working:

BUDGET FOR 2009

East	A	25,000 + (40% Increase) 10,000 + 3,125	= 38,125 units
	B	15,000 + (10% Increase) 1,500 + 1,875	= 18,375 units
West	A	24,000 + (12% Increase) 2,880	= 26,880 units
	B	30,000 + (15% Increase) 4,500	= 34,500 units

Note: Additional sales of 5,000 units in East division is distributed for A and B in the proportionof 25,000 : 15,000 (budgeted quantity for 2008).

Illustration: 3Cash Budget:

Summarized below are the Income and Expenditure forecasts of X Ltd. for the months of Marchof August, 2008.

Month	Sales (all credit)Rs.	Purchases (all credit) Rs.	Wages	Manufacturing Expenses Rs.	Office Expenses Rs.	Selling Expenses Rs.
March	60,000	36,000	9,000	4,000	2,000	4,000
April	62,000	38,000	8,000	3,000	1,500	5,000
May	64,000	33,000	10,000	4,500	2,500	4,500
June	58,000	35,000	8,500	3,500	2,000	3,500
July	56,000	39,000	9,500	4,000	1,000	4,500
August	60,000	34,000	8,000	3,000	1,500	4,500

You are given the following further information:

a) Plant costing Rs. 16,000/- is due for delivery in July payable 10% on delivery and thebalance after three months.

b) Advance Tax of Rs. 8,000/- is payable in March and June each.

c) Period of credit allowed (i) by suppliers 2 months and (ii) to customers 1 month.

d) Lag in payment of manufacturing expenses ½ month.

e) Lag in payment of all other expenses 1 month.

You are required to prepare a cash budget for three months starting on 1st May, 2008 when therewas a cash balance of Rs. 8,000/-.

Solution: X Ltd Cash Budget for the three months ending 31 July 2008.

Particulars	**May Rs.**	**JuneRs.**	**July Rs.**
Receipts:			
Opening Balance	8,000	15,750	12,750
Debtors	62,000	64,000	58,000
Total	70,000	79,750	70,750
Payments:			
Creditors	36,000	38,000	33,000
Wages	8,000	10,000	8,500

Manufacturing Expenses	3,750	4,000	3,750
Office Expenses	1,500	2,500	2,000
Selling Expenses	5,000	4,500	3,500
Advance Tax	-	8,000	-
Delivery of Plant (10% Payment on delivery)	-	-	1,600
Total	54,250	67,000	52,350
Closing Balance	15,750	12,750	18,400

Illustration: 4

Flexible Budget

The expenses for budgeted production of 10,000 units in a factory are furnished below:

Per Unit	Rs.
Material	70
Labour	25
Variable Overheads	20
Fixed Overheads (Rs. 1,00,000)	10
Variable Expenses (Direct)	5
Selling Expenses (10% Fixed)	13
Distribution Expenses (20% Fixed)	7
Administration Expenses	5
Total Cost per unit	155

Prepare a budget for production of:

(a) 8,000 units

Prepare a budget for production of:

(a) 8,000 units

(b) 6,000 units

(c) indicate cost per unit at both the levels.

Assume that administration expenses are fixed for all levels of production.

Solution:

Flexible Budget

	10,000 Units		8,000 Units		6,000 Units	
	Perunit Rs.	Total Amount Rs.	Per Unit Rs.	Total Amount Rs.	Per Unit Rs.	Total Amount Rs.
Production Expenses:						
Materials	70.00	7,00,000	70.00	5,60,000	70.00	4,20,000
Labour	25.00	2,50,000	25.00	2,00,000	25.00	1,50,000
Overheads	20.00	2,00,000	20.00	1,60,000	20.00	1,20,000
Direct variable expenses	5.00	50,000	5.00	40,000	5.00	30,000
Fixed Overheads: (Rs. 1,00,000)	10.00	1,00,000	12.50	1,00,000	16.667	1,00,000
Selling Expenses:	1.30	13,000	1.625	13,000	2.167	13,000
Fixed	11.70	1,17,000	11.700	93,600	11.700	70,200
Variable						
Distribution Expenses:	1.40	14,000	1.750	14,000	2.334	14,000
Fixed	5.60	56,000	5.600	44,800	5.600	33,600
Variable	5.00	50,000	6.250	50,000	8.333	50,000
Administration Expenses						
Total Cost	155.00	15,50,000	159.425	12,75,400	166.801	10,00,800

Working:

Fixed expenses remain fixed irrespective of the level of output. Selling expenses Rs. 13/-. Variableexpenses per unit is constant

Fixed 10% i.e. $13X \dfrac{10}{100}$ = Rs. 1.30/-

For 10000 units = 10000 x 1.30 = Rs. 13000/-.

Variable 90% i.e. $13X \dfrac{90}{100}$ = Rs. 11.70/-

Illustration: 5

Mater Budget

A Glass Manufacturing Company requires you to calculate and present the budget for the nextyear from the following information:

Sales:

Toughened Glass Rs. 3,00,000/-

Bent Toughened Glass Rs. 5,00,000/-. Direct Material Cost 60% of sales Direct wages 20 workers @ Rs. 150/- per month

Factory Overheads:

Indirect labour:

Works manager Rs. 500/- per month Foremen Rs. 400/- per month

Stores and spares machinery	2 ½ % on sales Depreciation on Rs. 12,600/- Light and Power Rs. 5,000/-
Other sundries	10% on direct wagesdistribution Rs. 14,000/- per year
Repairs and maintenance	Rs. 8,000/-

Solution:

Master budget for the period ending

		Rs.	Rs.
Sales (as per sales budget) Thoughened glass Bent Thoughened glass			3,00,000 5,00,000
			8,00,000
Less: Cost of production (as per production cost budget) Direct Materials Direct wages		4,80,000 36,000	
Prime Cost		5,16,000	
Factory Overheads:Variable: Stores and spares(2 ½ % on sales)	20,000		
Light and power Repairs and maintenanceFixed: Works manager‘s salaryForeman‘s salary Depreciation Sundries	5,000 8,000 6,000 4,800 12,600 3,600	33,000 27,000	
Works cost			5,76,000
Gross profit Less: Administration, selling and distribution overheads			2,24,000 14,000
Net Profit			2,10,000

Illustration: 6

Control Ratios

A factory produces 2 units of a commodity in one standard hour. Actual production during a particular year is 17,000 units and the budgeted production for the year is fixed at 20,000 units. Actual hours operated are 8,000. Calculate the efficiency and activity ratios.

Solution:

2 units are produced in one standard hour

For actual production of 17,000 units, standard hours will be

$$\frac{17,000}{2} = 8,500$$

For budgeted production of 20,000 units, budgeted hours will be

$$\frac{20,000}{2} = 10,000$$

$$\text{Efficiency Ratio} = \frac{\text{Standard hours for actual production}}{\text{Actual hours worked}} \text{ X } 100$$

$$= \frac{8,500}{8,000} \text{ X } 100 = 106.25\%$$

$$\text{Activity Ratio} = \frac{\text{Standard hours for actual production}}{\text{Budgeted hours}} \text{ X } 100$$

$$= \frac{8,500}{10,000} \text{ X } 100 = 85\%$$

Let Us Sum Up

In this unit, you have learned about the following:

- Budgeting is an essential phase of managing the activities of any type of organization.
- A budget is detailed plan that shows how resources should be acquired and used during aspecific period.
- The master budget is a set of interrelated budgets, which in turn, are classified as eitheroperating or financial budgets.
- The operating budget is a detailed description of the revenues and costs required for theprofit goals of the firm.

- The financial budget shows the cash flows and financial position required to achievethese goals.
- The real advantage of budgetary control well materialize when budget preparation isfollowed by feedback system.
- Reporting through well designed performance report is an internal part of budgetarycontrol.

Check Your Progress-2

1. ___________Fixed expenses decrease per unit with the increases in production and increases per unit with the decrease in production.

   a) Fixed expenses
   b) Variable expenses
   c) Both a and b
   d) None of the above

2. Marginal costs is taken as equal to

   a) Prime Cost plus all variable overheads
   b) Prime Cost minus all variable overheads
   c) Variable overheads
   d) None of the above

3. If total cost of 100 units is Rs. 5000/- and those of 101 units is Rs. 5030/- then increase of Rs. 30/- in total cost is

   a) Marginal cost
   b) Prime cost
   c) All variable overheads
   d) None of the above

4. Marginal cost is computed as

   a) Prime cost + All Variable overheads
   b) Direct material + Direct labor + Direct Expenses + All variable overheads
   c) Total costs – All fixed overheads
   d) All of the above

5. Marginal costing is also known as

   a) Direct costing
   b) Variable costing
   c) Both a and b
   d) None of the above

Glossary

Budget: Estimation of revenue and expenses over a specified future period of time and is usually compiled and re-evaluated on a periodic basis.

Budgetary Control: Process of determining various actual results with budgeted figures for the enterprise for the future period and standards set then comparing the budgeted figures with the actual performance for calculating variances, if any

Fixed Budget: Financial plan that is not modified for variations in actual activity

Flexible Budget: Adjusts to changes in actual revenue levels

Zero Base Budget: Method of budgeting in which all expenses must be justified for each new period

Master Budget: The process of zero-based budgeting starts from a "zero base," and every function within an organization is analyzed for its needs and costs.

Answers to Check Your Progress-1

a-True

b-True

c-False

d-True

e-True

Answers to Check Your Progress

1.a

2.a

3.a

4.a

5.c

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGrawHill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

Unit-14

Financial Reporting

Structure

Overview

In this unit the Meaning and Definition of Financial Reporting, Objectives of Financial Reporting, Importance of Financial Reporting, Users of financial reports, Concept of Financial Reporting, Qualitative characteristics of information in financial reporting, Role of SEBI, Disclosure requirements of IFRS, Challenges in financial reporting and also the details about Financial Reporting has been clearly explained.

Objectives

After completion of this unit, you will be able to:

- Track, analyze and report your business income.
- Examine resource usage, cash flow, business performance and the financial health of the business.
- Provide key information that shows financial performance over time.

- Understand how much money have, where the money is coming from, and where the money needs to go.

14. 1 .Meaning & Definition of Financial Reporting

Financial Reporting involves the disclosure of financial information to the various stakeholders about the financial performance and financial position of the organization over a specified period of time. These stakeholders include – investors, creditors, public, debt providers, governments & government agencies. In case of listed companies the frequency of financial reporting is quarterly & annual.

Financial Reporting is usually considered an end product of Accounting. The typical components of financial reporting are:

The financial statements – Balance Sheet, Profit & loss account, Cash flow statement & Statement of changes in stock holder‘s equity.

The Government and the Institute of Chartered Accounts of India (ICAI) have issued various accounting standards & guidance notes which are applied for the purpose of financial reporting. This ensures uniformity across various diversified industries when they prepare & present their financial statements. Now let‘s discuss about the objectives & purposes of financial reporting.

According to International Accounting Standard Board (IASB), the objective of financial reporting is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions.

14.2. Objectives of Financial Reporting

- Providing information to the management of an organization which is used for thepurpose of planning, analysis, benchmarking and decision making.
- Providing information to investors, promoters, debt provider and creditors which is used to enable them to male rational and prudent decisions regarding investment, credit etc.
- Providing information to shareholders & public at large in case of listed companies aboutvarious aspects of an organization.
- Providing information about the economic resources of an organization, claims to those resources (liabilities & owner‘s equity) and how these resources and claims have undergone change over a period of time.

- Providing information as to how an organization is procuring & using various resources.
- Providing information to various stakeholders regarding performance management of an organization as to how diligently & ethically they are discharging their fiduciary duties & responsibilities.
- Providing information to the statutory auditors which in turn facilitates audit.
- Enhancing social welfare by looking into the interest of employees, trade union &Government.

14.3. Importance of Financial Reporting

The importance of financial reporting cannot be over emphasized. It is required by each and every stakeholder for multiple reasons & purposes. The following points highlights why financial reporting framework is important.

In help and organization to comply with various statues and regulatory requirements. The organizations are required to file financial statements to ROC, Government Agencies. In case of listed companies, quarterly as well as annual results are required to be filed to stock exchanges and published.

It facilitates statutory audit. The Statutory auditors are required to audit the financial statements of an organization to express their opinion.

Financial Reports forms the backbone for financial planning, analysis, benchmarking and decision making. These are used for above purposes by various stakeholders.

Financial reporting helps organizations to raise capital both domestic as well as overseas.

On the basis of financials, the public in large can analyze the performance of the organization as well as of its management.

For the purpose of bidding, labor contract, government supplies etc., organizations are required to furnish their financial reports & statements.

14.4. Users of financial reports

Financial reporting is an integral process across almost all industries. Businesses and corporations depend on analysis and review of financial documents to make decisions and gain financial backing. Financial institutions also rely on financial documentation to monitor compliance, issue credit and assess profitability and performance. Consider several groups and professionals who use financial reports:

Investors, shareholders and creditors: Investors and shareholders have ownership of company stock and review financial reports to assess how companies generate profit. Creditors also use data from financial reports to understand how well companies pay off debts and invest credit to generate business growth.

Executive managers**:** Executive directors and teams use financial reporting systems to review performance and revise documentation. Financial reporting also supports executive decision- making, which companies use to establish goals and departmental objectives.

Regulatory institutions: Regulatory entities also gather and review business data from financial reports. Government entities, including the IRS and the Securities Exchange Commission (SEC) monitor the compliance of financial reporting activities for tax and revenue documentation.

Industry consumers: Financial reporting is also important to educate consumers about company activities and create transparency in the market. Open communication about earnings, investment activities and charitable donations helps inform customers and can drive additional sales.

Unions and employees: Union organizations that represent employees monitor financial reporting to ensure members receive fair wages and treatment in the workplace. Financial statements are also beneficial to employees who can review reports to gain insight into the financial stability and long-term profitability of their companies.

Check Your Progress-1

True/False

a. The importance of financial reporting can be over emphasized.
b. Financial Reporting is usually considered an end product of Accounting.
c. The characteristic of faithful representation implies that financial information faithfully represents the phenomena it purports to represent.
d. Regulatory entities also gather and review business data from financial reports.
e. Financial reporting helps organizations to raise capital both domestic as well as overseas.

14.5. Concept of Financial Reporting

Financial reporting may be defined as communication of published financial statements and related information from a business enterprise to third parties (external users) including shareholders, creditors, customers, governmental authorities and the public. It is the reporting of accounting information of an entity (individual, firm, company, government enterprise) to a user or group of users.

Company financial reporting is a total communication system involving the company as issuer (preparer); the investors and creditors as primary users, other external users; the accounting profession as measurers and auditors; and the company law regulatory or administrative authorities.

14.6. Qualitative characteristics of information in financial reporting

Relevance

The characteristic of relevance implies that the information should have predictive and confirmatory value for users in making and evaluating economic decisions. The relevance of information is affected by its nature and materiality. Information is material if omitting it or misstating it could influence decision making. A financial report should include all information which is material to a particular entity.

Faithful representation

The characteristic of faithful representation implies that financial information faithfully represents the phenomena it purports to represent. This depiction implies that the financial information is complete, neutral and free from error.

Enhancing qualitative characteristics:

Comparability

The characteristic of comparability implies that users of financial statements must be ableto compare aspects of an entity at one time and over time, and between entities at one time and over time. Therefore, the measurement and display of transactions and events should be carried out in a consistent manner throughout an entity, or fully explained if they are measured or displayed differently.

Verifiability

The characteristic of verifiability provides assurance that the information faithfullyrepresents what it purports to be representing.

Timeliness

The characteristic of timeliness means that the accounting information is available to allstakeholders in time for decision-making purposes.

Understandability

The characteristic of understandability implies that preparers of information have classified, characterised and presented the information clearly and concisely. The financial reports are prepared with the assumption that its users have a reasonable knowledge‘ of the business and its economic activities.

16.7. Role of SEBI

SEBI has been pro-actively involved in the process of convergence of Indian Accounting Standards with IFRS. As a step towards encouraging convergence with IFRS, listed entities having subsidiaries have been allowed an option to submit consolidated accounts as per IFRS.

SEBI has set up a group under the chairmanship of Shri Y.H. Malegam with representation from RBI, ICAI, accounting and auditing firms, and industry to discuss and submit comments on the exposure drafts issued by the IASB in an objective and streamlined manner.

Since formation in February 2010, the group has had four meetings and has provided comments to IASB on the following exposure drafts:

a. Management Commentary (proposed new IFRS)
b. Financial Instruments: Amortised Cost and Impairment (IFRS9)
c. Conceptual Framework for Financial Reporting
d. Fair Value Option for Financial Liabilities (proposed new IFRS replacing IAS 39)

16.8. Disclosure requirements of IFRS

IFRS requires certain disclosures to be presented by category of instrument based on the IAS 39 measurement categories. Certain other disclosures are required by class of financial instrument. For those disclosures an entity must group its financial instruments into classes of similar instruments as appropriate to the nature of the information presented. [IFRS 7.6]

The two main categories of disclosures required by IFRS 7 are:

Information about the significance of financial instruments.

Information about the nature and extent of risks arising from financial instruments

Information about the significance of financial instruments

Statement of financial position

Disclose the significance of financial instruments for an entity's financial position and performance. [IFRS 7.7] This includes disclosures for each of the following categories: [IFRS 7.8]

- Financial assets measured at fair value through profit and loss, showing separately thoseheld for trading and those designated at initial recognition.
- Held-to-maturity investments.
- loans and receivables.
- available-for-sale assets.
- financial liabilities at fair value through profit and loss, showing separately those held for trading and those designated at initial recognition.
- financial liabilities measured at amortised cost

Other balance sheet-related disclosures:

Special disclosures about financial assets and financial liabilities designated to be measured at fair value through profit and loss, including disclosures about credit risk and market risk, changes in fair values attributable to these risks and the methods of measurement.[IFRS 7.9-11] reclassifications of financial instruments from one category to another (e.g. from fair value to amortised cost or vice versa) [IFRS 7.12-12A] information about financial assets pledged as collateral and about financial or non-financial assets held as collateral [IFRS 7.14-15] reconciliation of the allowance account for credit losses (bad debts) by class of financial assets[IFRS 7.16] information about compound financial instruments with multiple embedded derivatives [IFRS 7.17] breaches of terms of loan agreements [IFRS 7.18-19]

Statement of comprehensive income

- Items of income, expense, gains, and losses, with separate disclosure of gains and lossesfrom: [IFRS 7.20(a)]

- financial assets measured at fair value through profit and loss, showing separately thoseheld for trading and those designated at initial recognition.
- held-to-maturity investments. loans and receivables.
- available-for-sale assets.
- financial liabilities measured at fair value through profit and loss, showing separately those held for trading and those designated at initial recognition.
- financial liabilities measured at amortised cost.
- *Other income statement-related disclosures:*
- Total interest income and total interest expense for those financial instruments that arenot measured at fair value through profit and loss [IFRS 7.20(b)]
- fee income and expense [IFRS 7.20(c)]
- amount of impairment losses by class of financial assets [IFRS 7.20(e)]
- interest income on impaired financial assets [IFRS 7.20(d)]

Other disclosures

- Accounting policies for financial instruments [IFRS 7.21]
- Information about hedge accounting, including: [IFRS 7.22].
- description of each hedge, hedging instrument, and fair values of those instruments, and nature of risks being hedged .
- for cash flow hedges, the periods in which the cash flows are expected to occur, when they are expected to enter into the determination of profit or loss, and a description of anyforecast transaction for which hedge accounting had previously been used but which is nolonger expected to occur.
- if a gain or loss on a hedging instrument in a cash flow hedge has been recognised in other comprehensive income, an entity should disclose the following: [IAS 7.23] .
- the amount that was so recognised in other comprehensive income during the period.
- the amount that was removed from equity and included in profit or loss for the period .
- the amount that was removed from equity during the period and

included in the initial measurement of the acquisition cost or other carrying amount of a non-financial asset or non- financial liability in a hedged highly probable forecast transaction.

- For fair value hedges, information about the fair value changes of the hedging instrumentand the hedged item [IFRS 7.24(a)].
- Hedge ineffectiveness recognised in profit and loss (separately for cash flow hedges and hedges of a net investment in a foreign operation) [IFRS 7.24(b-c)]
- Uncertainty arising from the interest rate benchmark reform [IFRS 7.24H]
- Information about the fair values of each class of financial asset and financial liability, along with: [IFRS 7.25-30]
    - comparable carrying amounts .
    - description of how fair value was determined
    - the level of inputs used in determining fair value.
    - reconciliations of movements between levels of fair value measurement hierarchy additional disclosures for financial instruments whose fair value is determined using level 3 inputs including impacts on profit and loss, other comprehensive income and sensitivity analysis.
    - information if fair value cannot be reliably measured

The fair value hierarchy introduces 3 levels of inputs based on the lowest level of inputsignificant to the overall fair value (IFRS 7.27A-27B):

Level 1 – quoted prices for similar instruments

Level 2 – directly observable market inputs other than Level 1 inputs
Level 3 – inputs not based on observable market data

Note that disclosure of fair values is not required when the carrying amount is a reasonable approximation of fair value, such as short-term trade receivables and payables, or for instruments whose fair value cannot be measured reliably. [IFRS 7.29(a)]

Nature and extent of exposure to risks arising from financial instruments

Qualitative disclosures [IFRS 7.33]

The qualitative disclosures describe:

- risk exposures for each type of financial instrument.

- management's objectives, policies, and processes for managing those risks.
- changes from the prior period

Quantitative disclosures

The quantitative disclosures provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel. These disclosures include: [IFRS 7.34]

- Summary quantitative data about exposure to each risk at the reporting date.
- Disclosures about credit risk, liquidity risk, and market risk and how these risksare managed as further described below.
- Concentrations of risk

Credit risk

  - Credit risk is the risk that one party to a financial instrument will cause a loss for the other party by failing to pay for its obligation. [IFRS 7. Appendix A]
  - Disclosures about credit risk include: [IFRS 7.36-38]

- maximum amount of exposure (before deducting the value of collateral), description of collateral, information about credit quality of financial assets that are neither past due nor impaired, and information about credit quality of financial assets whose terms have been renegotiated [IFRS 7.36].

Liquidity risk

- Financial assets that are past due or impaired, analytical disclosures are required [IFRS 7.37].
- information about collateral or other credit enhancements obtained or called [IFRS 7.38]
    - Liquidity risk is the risk that an entity will have difficulties in paying its financialliabilities. [IFRS 7. Appendix A]
    - Disclosures about liquidity risk include: [IFRS 7.39]
- a maturity analysis of financial liabilities .
- description of approach to risk management

Market risk [IFRS 7.40-42]

- Market risk is the risk that the fair value or cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk reflects interest rate risk, currency risk and other price risks. [IFRS 7. Appendix A]
- Disclosures about market risk include:

- a sensitivity analysis of each type of market risk to which the entity is exposed
- additional information if the sensitivity analysis is not representative of the entity's risk exposure (for example because exposures during the year were different to exposures at year-end).
- IFRS 7 provides that if an entity prepares a sensitivity analysis such as value- at-risk for management purposes that reflects interdependencies of more than one component of market risk (for instance, interest risk and foreign currency risk combined), it may disclose that analysis instead of a separate sensitivity analysis for each type of market risk

14.9. Challenges in financial reporting

A lack of financial performance information

There is often one recurring challenge, which is core banking system agnostic; getting meaningful intelligence from the data held within the core banking system. By intelligence I mean the ability to monitor trends in individual product lines, to measure product profitability, toconstruct a branch balance sheet and income statement so that you can measure the performance of the branch vs. target. We all know that the data is sitting there in the core banking system, so why on earth can‘t we just get it out and put it into a set of management reports every day and at month end?.

Key man dependency

Someone knows how to do it. Someone has developed a process that gets data from the system, into another database, which feeds a spreadsheet. Then something magical happens to it before it makes an appearance in your inbox. But what did they do? What happens if they leave?

Dependency on a single person can be extremely problematic. If this person leaves your company or is absent for even one day during a crucial time, it can be seriously disruptive.

Accuracy and timely arrival of monthly management reports

The management reports could be way out of date before management get their hands on them to begin analysing. The finance team are required to close out the month end and make manual adjustments before publishing answers that could be right but if you're not 100% confident then this is a real financial control issue.

Difficulty in getting users to adopt and interact

Creating performance information such as a branch balance sheet and income statement and the ability to calculate branch efficiency ratios along with branch profitability ratios would enable analysis of performance and would help determine what the branch managers and accountofficers can do to improve their branch performance. They need to be able to measure their performance as part of an ongoing process but this can be difficult to achieve if everyone involved in the process is not using the same software.

A lack of control over daily financial reports

If the finance department could be analysing financial reports on a daily basis then they could reduce the number of surprises and investigations at month end, shaving a significant amount of time from the month end close process, thus producing monthly management reports on day one or two of the new month rather than days ten to fifteen.

Let Us Sum Up

In this unit, you have learned about the following:

- Financial reporting is very important from various stakeholder‘s point of view. At times for large organizations, it becomes very complex but the benefits are far more than such complexities.
- Financial reporting contains reliable and relevant information which are used by multiple stakeholders for various purposes.
- A sound and robust financial reporting system across industries promotes good competition and also facilitates capital inflows. This, in turn, helps in economic development.
- Financial analysis determines a company's health and stability, providing an understanding of how the company conducts its business. Financial reporting is to track, analyse and report your business income.

- Financial reporting refers to standard practices to give stakeholders an accurate depiction of a company's finances, including their revenues, expenses, profits, capital, and cash flow, as formal records that provide in-depth insights into financial information

Check Your Progress-2

1. Capacity ratio * Efficiency ratio = ___________.
   a. Active ration
   b. Active ratio
   c. Capacity ratio
   d. None of the above
2. The scare factors is also known as
   a. Key factor
   b. Abnormal factor
   c. Linking factor
   d. None of the above
3. A budgeting process which demands each manager to justify his entire budget in detail from beginning is.
   a. Functional budget
   b. Master budget
   c. Zero base budgeting
   d. None of the above
4. In fixed budgets ______ are classified according to their nature.
   a. Costs
   b. Revenue
   c. Expenditure
   d. None of the above
5. While preparing sales budget, which of the following factors are considered?
   a. Non-operational factors
   b. Environmental factors
   c. Both a and b
   d. None of the above

Glossary

Financial Reporting: Financial results of an organization that are released its stakeholders andthe public

SEBI: Leading regulator securities markets in India, analogous to the Securities and Exchange Commission

Investors: Any person or other entity (such as a firm or mutual fund) who commits capital with the expectation of receiving financial returns.

IFRS: Set of accounting rules for the financial statements of public companies that are intended to make them consistent, transparent, and easily comparable around the world.

Amortised cost: Accumulated portion of the recorded cost of a fixed asset that has been charged to expense through either depreciation or amortization.

Answers to Check Your Progress-1

a-False

b-True

c-False

d-True

e-True

Answers to Check Your Progress

1.b

2.a

3.c

4.b

5.b

Suggested Reading

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGrawHill education(India) pvt limited
4. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.

REFERENCES

BOOKS:

1. Chandrasekar (2018) Financial Statements Analysis, Vikas Publications.
2. Charles H.Gibson, Financial Statement Analysis 13th Edition, Cengage India publication.
3. Dean Kaplan (2012) Introduction to Financial Statement Analysis, Kaplan group publication.
4. Dr. Anil Kumar Dhagat (2011) Financial Management, Dreamtech Press publication.
5. K. R. Subramanyam(2020) Financial Statement Analysis, 11th Edition, McGrawHill education(India) pvt limited
6. Khan (2018) Financial Management 8th Edition, Mc Graw Hill India.
7. Khan, M. and Jain, P., 2011. Financial management. 1st ed. New Delhi: Tata McGraw-Hill.
8. M. Y. Khan & P. K. Jain (2004) Management Accounting, Tata McGraw Hill Publishing Company, Ltd., 10th edition.
9. Maheshwari S.K. & Maheshwari Sharad K. (2017), A Textbook of Accounting for Management, 4th Edition ,Vikas Publications.
10. Narasimhan (2016) Financial Statement and Analysis 1st Edition, Cengage India publication.
11. Narasimhan (2017) Management Accounting 1st Edition, Cengage India publication.
12. Pandey (2021) Financial Management, 12th edition , Pearson publications.
13. Paresh Shah (2007) Basic Financial Accounting for Management, Oxford Publications, 3rd edition.
14. R. Narayanaswamy (2014)Financial accounting – A Managerial Perspective, Prentice HallIndia Ltd., New Delhi 5th edition.
15. R. S. N. Pillai & Bagavathi (2002) Management Accounting, Chand & Co. Ltd., NewDelhi, 6THedition .
16. T. S. Reddy & Y. Hari Prasad Reddy (2004) – Financial and Management Accounting,Margham publications, TH edition.

JOURNALS

1. Adongo, K.O. and Jagongo, A. (2013): Budgetary control as a measure of financial performance of state corporations in Kenya‖, International Journal of Accounting and Taxation, Vol. 1 No. 1, pp. 38-57.
2. Albu, N. and Albu, C.N. (2012): Factors associated with the adoption and use of management accounting techniques in developing countries: the case of Romania‖, Journalof International Financial Management and Accounting, Vol. 23 No. 3, pp. 245-276.
3. Aren, A.O. and Sibindi, A.B. (2014): Cash flow management practices: an empirical study of small businesses operating in the South African retail sector‖, Risk Governance and Control: Financial Markets and Institutions, Vol. 4 No. 2, pp. 87-100.
4. Arkan, T. (2016): The importance of financial ratios in predicting stock price trends: A casestudy in emerging markets. Finanse, Rynki Finansowe, Ubezpieczenia, (79), 13-26.
5. Badem, A.C. (2016): The origin of term budget for business enterprises: the development of business budgeting from beginning to the 1940s, Journal of Suleyman Demirel University Institute of Social Sciences Year, Vol. 2 No. 24, pp. 1-28.
6. Bitar, M., Pukthuanthong, K., & Walker, T. (2018): The effect of capital ratios on the risk, efficiency and profitability of banks: Evidence from OECD countries. Journal of International Financial Markets, Institutions and Money, 53, 227-262.
7. Chandra, G. and Paperman, J.B. (1976): Direct Costing Vs. Absorption Costing: A Historical Review‖ The Accounting Historians Journal, 3(1/4), p. 1-9.
8. Dunk, A.S. (2011):Product innovation, budgetary control, and the financial performance of firms, The British Accounting Review, Vol. 43, pp. 103-111.
9. Enow, S.T. and Kamala, P. (2016): Cash management practices of small, medium and micro enterprises in the Cape Metropolis, South Africa‖, Investment Management and Financial Innovations, Vol. 13 No. 1, pp. 230-236.
10. Frow, N., Marginson, D. and Ogden, S. (2010): Continuous‘ budgeting: reconciling budget flexibility with budgetary control, Accounting, Organisations and Society, Vol. 35No. 4, pp. 444- 461.

11. Khamees, B. A., Al-Fayoumi, N., & Al-Thuneibat, A. A. (2010): Capital budgeting practices in the Jordanian industrial corporations. International Journal of Commerce and Management, 20(1), 49- 63. http://dx.doi.org/10.1108/10569211011025952.

12. Khan, M. M., & SAFIUDDIN, D. (2016): Liquidity and Profitability Performance Analysis of Selected Telecoms Companies. International Journal of Research in Regional Studies, Law, Social Sciences, Journalism and Management Practices (AIJRRLSJM), 1(8),365- 376.

13. Lazaridis, I. T. (2004): Capital budgeting practices: A survey in the firms in Cyprus. Journalof Small Business Management, 42(4), 427-433.

14. Lopez, O.L. and Hiebl, M.R.W. (2015) :Management accounting in small and medium-sized enterprises: current knowledge and avenues for further research‖, Journal of Management Accounting Research, Vol. 27 No. 1, pp. 81-119.

15. Markovics, K. S. (2016). Capital budgeting methods used in some European countries and in the United States. Universal Journal of Management, 4(6), 348-360.

16. Onduso, E.O. (2013), ―The effect of budgets on financial performance of manufacturing companies in Nairobi county‖, New Business Journal, Vol. 7, pp. 46-74.

17. Rashid, C. A. (2018). Efficiency of Financial Ratios Analysis for Evaluating Companies Liquidity. International Journal of Social Sciences & Educational Studies, 4(4), 110.

WEB LINKS:

- https://corporatefinanceinstitute.com/reLINKS/knowledge/finance/analysis-of-financial- statements/
- https://www.aafmindia.co.in/financial-statement-analysis-tools-limitation-uses-process
- https://www.accountingtools.com/articles/2017/5/14/financial-statement-analysis
- https://www.accountingtools.com/articles/master-budget
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- https://www.netsuite.com/portal/resource/articles/financial-management/cash-flow-analysis.shtml
- https://www.civilserviceindia.com/subject/Management/notes/fund-flow-analysis.html
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- https://www.tutorialspoint.com/accounting_basics/cost_accounting_marginal_costing.htm
- https://www.cliffsnotes.com/study-guides/accounting/accounting-principles-ii/financial-statement-analysis/trend-analysis
- https://www.wallstreetmojo.com/comparative-balance-sheet/
- https://byjus.com/commerce/common-size-statements/

Annexure-Case Studies

1. Prepare trading and profit and loss account from the information given below:

Debit	Rs	Credit	Rs.
Opening stock	3,600	Rent (Factory)	400
Purchases	18,260	Rent (office)	500
Wages	3,620	Sales returns	700
Closing stock	4,420	Purchase returns	900
Sales	32,000	General expenses	900
Carriage on purchases	500	Discount to customers	360
Carriage on sales	400	Interest from Bank	200

2. Prepare trading account, profit and loss account and Balance sheet from the information given below:

Credit balances Capital	Rs. 72,000	Debit balances Debtors	Rs. 7,770
Creditors	17,440	salaries	8,000
Bills payable	5,054	Discount	2,000
Sales	1,56,364	postage	546
Loan	24,000	Bad debts	574
		interest	2,590
		Insurance	834
		Machinery	20,000
		Opening stock(1.1.95)	19,890
		purchases	1,24,184
		Wages	8,600
		Buildings	47,560
		furniture	32,310

Closing stock as on 31.12.95 Rs.28,600

3. Prepare trading and profit and loss account from the information given below:

Debit	Rs	Credit	Rs.
Opening stock	3,600	Rent (Factory)	400
Purchases	18,260	Rent (office)	500
Wages	3,620	Sales returns	700
Closing stock	4,420	Purchase returns	900
Sales	32,000	General expenses	900
Carriage on purchases	500	Discount to customers	360
Carriage on sales	400	Interest from Bank	200

4.From the following information supplied by Mr. Roshan Lal, prepare a Balance Sheet of Mr. Roshan Lal as on 31st March, 2012.

	Amount (Rs)
Capital	50,000
Furniture	15,000
Debtors	25,000
Creditors	30,000
Plant and Machinery	58,000
Investments	5,000
Cash in hand	1,000
Cash at Bank	1,000
Stock at the end	10,000
Bank Overdraft	8,000
Bank Loan	20,000
Net Profit	10,000
Drawings	3,000

5. Prepare Profit & loss account and Balance sheet from the following trail balance

Particulars	Debit (Rs.)	Credit (Rs.)
Sales		4,20,000
Purchases	1,05,000	
Printing charges	2,500	
Wages	77,500	
Salaries	12,500	
Opening stock	2,25,000	
Carriage inwards	8,800	
General expenses	26,250	
Trade marks	5,000	
Rates and taxes	2,500	
Capital		1,74,800
Discount received		1,250
Loan		1,75,000
Buildings	2,00,000	
Furniture	25,000	
Machinery	50,000	
Cash	1,000	
Bank	30,000	
	7,71,050	7,71,050

Adjustments:

a. The Closing stock was valued at Rs. 3,20,000/-

6. Trading and P&L Account

Particulars	Amount	Particulars	Amount
Opening Stock	75,000	By Sales	5,00,000
Purchases	3,10,000	By Closing Stock	1,00,000
Freight	15,000		
Gross Profit c/d	2,00,000		
	6,00,000		6,00,000
To Administrative expenses	85,000	By Gross Profit b/d	2,00,000
		By interest on investments	5,000
To Selling & Distribution expenses	40,000		
To Financial expenses	6,000		
To Other Non-operating expenses	3,000		
To Net Profit	71,000		
	2,05,000		2,05,000

You are required to calculate

(i) Gross Profit Ratio

(ii) Net operating profit Ratio

(iii) Operating Ratio

(iv) Administrative expenses Ratio

(v) Selling and Distribution expenses ratio

7. Calculate:

(i) Calculate (a) Gross Profit ratio (b) Net profit ratio			
Sales	Rs. 1,60,000		
Cost of good sold	Rs. 1,08,000		
Net profit	Rs. 28,000		
(ii) Find out inventory turnover ratio (or) Stock turnover ratio			
Sales	Rs. 2,00,000		
Opening stock	Rs. 25,000		
Closing stock	Rs. 30,000		
Gross profit	Rs. 67,500		
(iii) From the following information, calculate (a) Current liabilities (b) Inventory			
Current ratio	2.5		
Acid test ratio	1.7		
Current assets	Rs. 250000		

8.Prepare a balance sheet from the given ratios

Total assets / Net worth	3.5
Sales / Fixed assets	6
Sales / Current assets	8
Sales / Inventory	15
Sales / Debtors	18
Current ratio	2.5
Annual sales	Rs. 2500000

9.Use the following information and prepare balance sheet

Sales / Total assets	3
Sales / Fixed assets	5
Sales / Current assets	7.5
Sales / Inventories	20
Sales / Debtors	15
Current ratio	2
Total assets / Networth	2.5
Debt / Equity	1
Sales	Rs. 3600000

10.Calculate Trend percentages for IOC from the financial statements extracts using base year as 2012. (Rs. In crore)

Particulars	2012	2013	2014	2015	2016
Turnover	3,73,943	4,14,919	4,57,571	4,50,756	3,99,601
Profit before tax	3,754	5,648	9,926	7,995	15,840
Profit after tax	3,955	5,005	7,019	5,273	10,399
Dividend	1,214	1,505	2,112	1,602	3,399
Net Fixed assets	59,847	60,633	62,949	66,251	90,895
Investments	18,678	18,671	23,594	23,899	23,975
Share capital	2,428	2,428	2,428	2,428	2,428
Reserves	55,449	58,696	63,564	65,542	71,521
Borrowings	75,447	80,894	86,263	55,248	52,469

11.Calculate Funds from Operations from the following Profit and Loss A/c of XYZ Ltd

Particulars	Amount Rs.	Particulars	Amount Rs.
To Expenses Paid To Depreciation To Loss on sale of Machine To Discount To Goodwill To Net Profit	300000 70000 4000 200 20000 115800	By Gross Profit BY Gain on Sale of Land	450000 60000
Total	**510000**	**Total**	**510000**

12. Compile a schedule of Changes in Working Capital from the following details of ABC Ltd.

Particulars	31.3.2016	31.3.2017
8% Debentures	40000	40000
Outstanding Rent	8000	12000
Cash in Hand	4000	8000
Cash at Bank	12000	15000
Accounts Payable	20000	26000
Machinery	25000	16000
Accounts Receivable	30000	34000
Prepaid Commission	4000	--
Inventories	22000	27000
Share Premium	15000	15000
Equity Capital	50000	50000

Liabilities	2008	2009	Assets	2008	2009
Share capital	100000	100000	Goodwill	12000	12000
General reserve	14000	18000	Building	40000	36000
P&I A/c	16000	13000	Plant	37000	36000
Sundry creditors	8000	5400	Bills receivable	2000	3200
Bills payable	1200	800	Debtors	18000	19000
Provision for Taxation	16000	18000	cash at bank	6600	15200
Provision for doubtful debts	400	800	Investment	10000	11000
			Stock	30000	23600
	155600	156000		155600	156000

13.From the following balance sheet you are required to prepare Fund flow statement

Liabilities	31st December		Assets	31st December	
	2014 Rs.	2015 Rs.		2014 Rs.	2015 Rs.
Share Capital	3,00,000	4,00,000	Machinery	50,000	60,000
Creditors	1,00,000	70,000	Furniture	10,000	15,000
P & L a/c	15,000	30,000	Stock in trade	85,000	1,05,000
			Debtors	1,60,000	1,50,000
			Cash	1,10,000	1,70,000
	4,15,000	5,00,000		4,15,000	5,00,000

14. From the following data of Wonder soft Ltd, you are required to calculate the Cash from Operations. Funds from operations for the year 2017 Rs.84000. Current assets and Current liabilities as on 1.1.2017 and 31.12.2017 were as follows:

Particulars	1.1.2017	31.12.2017
Trade Creditors	182000	194000
Trade Debtors	275000	315000
Bills Receivables	40000	35000
Bills Payables	27000	31000
Inventories	185000	170000
Trade Investments	40000	70000
Outstanding Expenses	20000	25000
Prepaid Expenses	5000	8000

Model End Semester Examination Question Paper

Master of Business Administration (MBA)

Course Code: **DCMBA-14**

Course Title: **Financial Reporting Statement and Analysis**

Max. Marks: 70 Time: 3 hours

PART – A (10x2 =20 Marks)

Answer any TEN questions out of TWELVE questions

[All questions carry equal marks]

(1). Differentiate GAAP and IFRS.
(2). What is meant by Financial Statement Analysis?
(3). What is 'funds from operations'?
(4). What are the accounting conventions?
(5). Write a note on trend analysis?
(6). Write a short notes on working capital.
(7). Define the concept Marginal Costing?
(8). Calculate Break Even Point:
Sales Rs.6, 00,000/-
Fixed Expenses Rs. 1, 50,000/-
Variable Cost Rs. 4, 00,000/-
(9). Explain the role of SEBI in IFRS
(10).Write a short note on Flexible budget
(11). Discuss the mechanics of capital budgeting techniques
(12). What is mean by Budgeting?

PART – B (5X8=40 Marks)

Answer any FIVE questions out of SEVEN questions

[All questions carry equal marks]

(13). Describe Management accounting and explains its features?
(14). You are given the following information.

Particulars	**Rs.**
Cash	18,000
Debtors	1,42,000
Closing Stock	1,80,000
Bills Payable	27,000
Creditors	50,000
Outstanding expenses	15,000
Tax Payable	75,000

Calculate (a). Current Ratio
(b). Liquidity Ratio

(15). From the following balance sheets, prepare a statement of changes in working capital.

Liabilities	**2010**	**2011**	**Assets**	**2010**	**2011**
Share Capital	2,00,000	2,10,000	Land	1,00,000	1,20,000
P & L a/c	28,000	49,000	Investments	28,000	48,000
Bank Loan	---	10,000	Stock	58,000	54,000
Creditors	39,000	30,000	Debtors	53,000	59,000
			Cash at bank	28,000	18,000
	2,67,000	2,99,000		2,67,000	2,99,000

(16). Describe the steps involved in the capital budgeting process

(17). Determine the Average Rate of Return from the following data

Cost of Machine	Rs 1,00,000
Net Profit for first year Second year Third year Fourth year Fifth Year	Rs 13,000 Rs 15,000 Rs 11,000 Rs 19,000 Rs 17,000

(18). Describe the Challenges in financial reporting?

(19). Prepare the production budget of X Ltd., from the following information

Products	Sales as per Sales budget (in Units)	Estimated Stock (in Units)	
		1.7.2017	31.6.2017
A	4,88,000	10,000	12,000
B	3,75,000	20,000	45,000
C	6,00,000	50,000	25,000

PART - C (1x10=10 Marks)

CASE STUDY

(20). Prepare Profit & loss account and Balance sheet from the following trail balance

Particulars	Debit (Rs.)	Credit (Rs.)
Sales		4,20,000
Purchases	1,05,000	
Printing charges	2,500	
Wages	77,500	
Salaries	12,500	
Opening stock	2,25,000	
Carriage inwards	8,800	
General expenses	26,250	
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Capital		1,74,800
Discount received		1,250
Loan		1,75,000
Buildings	2,00,000	
Furniture	25,000	
Machinery	50,000	
Cash	1,000	
Bank	30,000	
	7,71,050	7,71,050

Adjustments:

The Closing stock was valued at Rs. 3,20,000/-

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