Master of Business Administration

(Open and Distance Learning Mode)

Semester – I

Business Accounting

Centre for Distance and Online Education (CDOE)

DEVI AHILYA VISHWAVIDYALAYA, INDORE

"A+" Grade Accredited by NAAC

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Edition : 2022 (Restricted Circulation)
Published by : Centre for Distance and Online Education (CDOE), Devi Ahilya Vishwavidyalaya
Printed at : University Press, Devi Ahilya Vishwavidyalaya, Indore – 452001

Business Accounting

Table of Content

UNIT -4 : PREPARATION OF FINAL ACCOUNTS OF SOLE PROPRIETORSHIP

UNIT -5 : INTRODUCTION TO COMPANY FINAL ACCOUNTS

UNIT -6 : FORM AND CONTENTS OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT (AS PER SCHEDULE VI OF THE COMPANIES ACT, 1956)

UNIT -7 : FORM AND CONTENTS OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT (AS PER REVISED SCHEDULE VI OF THE COMPANIES ACT, 1956)

7.1 Objectives

7.2 Introduction

7.3 Salient features of the Schedule VI (Revised)

7.4 Form and Contents of Balance Sheet and Profit and Loss account

7.5 Summary

7.6 Self-Test

UNIT-8 : ANNUAL REPORT AND ITS CONTENTS

8.1 Objectives

8.2 Introduction

8.3 Need for annual reports

8.4 Presentation of Annual report

8.5 Contents of Annual reports

8.6 Summary

8.7 Self-Test

UNIT-9 : TECHNIQUES OF FINANCIAL STATEMENT ANALYSIS

9.0 Objectives

9.1 Introduction

9.2 Meaning and Concept of Financial Statement

9.3 Objectives of Financial Statement Analysis

9.4 Qualitative characteristics of Financial Statement Analysis

9.5 Types of Financial Analysis

9.6 Procedure for Financial Statement Analysis

9.7 Methods of Financial Analysis

9.8 Comparative Statement

9.9 Trend Analysis

9.10 Common Size Statement

9.11 Advantages of Financial Statement Analysis

9.12 Limitations of Financial Statement Analysis

UNIT - 10 : RATIO ANALYSIS

UNIT - 11 : FUND FLOW STATEMENT

UNIT - 12 : CASH FLOW STATEMENT (ACCOUNTING STANDARD)

UNIT-13 : COST ACCOUNTING

UNIT – 20 : FORENSIC ACCOUNTING

UNIT -1 : INTRODUCTION TO ACCOUNTING

Structure

1.1 Objectives

1.2 Introduction

1.3 Meaning of Book Keeping, Accounting and Accountancy

1.4 Accounting Information System

1.5 Users of Accounting Information

1.6 Accounting Concepts and Conventions

1.7 Financial Accounting Vs Management Accounting

1.8 Summary

1.9 Self-Test

1.1 OBJECTIVES

After going through this unit, you should able to;

- Define Accounting and explain its role in making business decisions.
- Understand Accounting Information System.
- Identify the users of accounting information and their informational needs
- Distinguish between financial and management accounting.
- Discuss the various concepts and conventions underlying accounting measurement and explain their significance.

1.2 INTRODUCTION

Accounting is one of the fastest growing professions and is one of the most popular fields of study in colleges, universities and business schools. Accounting offers interesting, challenging and rewarding careers. Business enterprises, governmental agencies, charities and individuals need information to be able to make sound decisions. The accounting system provides relevant and reliable financial information to interested parties. This unit presents an overview of accounting and its role in today's organizations and society.

Accounting is often called the language of business. The function of a language is to facilitate communication among individuals in a society. Accounting is the common language used to communicate financial information from one person to another in the world of industry and commerce. Clearly, individuals who aspire to be professional accountants should be experts in accounting. However, a good knowledge of accounting terms, principles and techniques is also essential for non-accountants, such as investors, managers, employees, and government officials, who have to constantly interact with business organizations.

Accounting provides "information that is useful in making business and economic decisions – for making reasoned choices among alternative uses of scarce resources in the conduct of business and economic activities" It is a principal means of communicating financial information to owners, lenders, managers and others who have an interest in an enterprise. Accounting is not an end in itself. Indeed, accounting is an information development and communication function that supports economic decision making.

1.3 MEANING OF BOOK KEEPING, ACCOUNTING AND ACCOUNTANCY

Accounting as a discipline was introduced to have permanent and systematic record of business transactions. This would help a businessperson to record all relevant business transactions, to ascertain the profit earned during a particular period and finally evaluate the financial position of his/her business. Book keeping, accounting and accountancy are the terms used in the science of financial accounting.

Book keeping is defined as the science and art of recording business transactions in a systematic manner in a certain set of books known as books of accounts. It identifies the transactions and events, measures the identified transactions and events in a common measuring unit, records then in proper books of accounts and finally classifies them in another bookcalled the ledger.

Accounting is termed as language of business which records all events andtransactions that are of monetary value and facilitates communication among individuals in a society.

The American institute of Certified Public Accountants defines accounting as "the art of recording, classifying and summarizing in a significantmanner and in terms of money transactions and events which are, in part atleast, of a financial character, and interpreting the results thereof.

This definition brings out the following as attributes of accounting:

1. Events and transactions of a financial nature are recorded while the events of a non-financial nature cannot be recorded.
2. The record should reflect the importance of the transactions so recorded both individually and collectively, which includes summarization, thereby making it amenable to analysis.

Accountancy refers to a systematic knowledge of accounting. It explains "why to do? and "how to do? of various aspects of accounting. It tells us whyand how to prepare the books of accounts and how to summarize theaccounting information and communicate it to the interested parties.

The users of the financial statements should be able to obtain the messageencompassed in such financial statements, and it is the knowledge ofaccountancy, which enables the user to understand the contents of thefinancial statements.

1.4 ACCOUNTING INFORMATION SYSTEM

An oft-quoted publication of the American Accounting Association states that "essentially, accounting is an information system". A system converts inputs into outputs. The accounting system processes business transactions to provide information to various interested parties. There are external and internal users of the information produced by the accounting system of a firm. External users of accounting information are those who are outside the firm and include investors and lenders. Managing directors, marketing managers, production managers, materials mangers and financial controllers are examples of internal users of accounting information.

The following figure depicts the accounting information system.

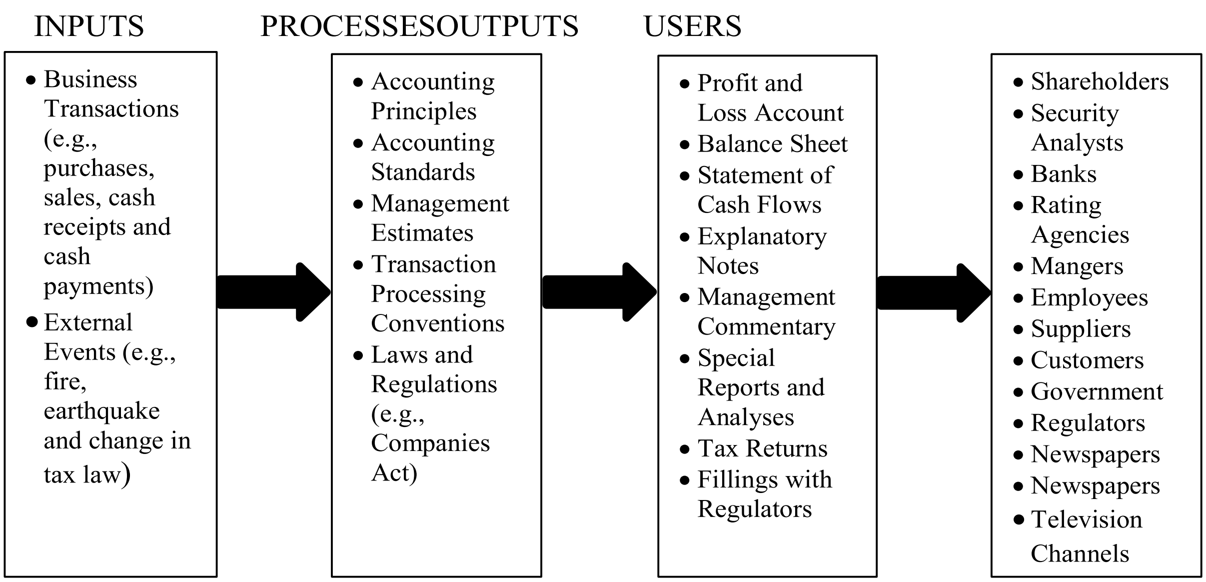


FIGURE 1.2 The Accounting Information System.

1.5 USERS OF ACCOUNTING INFORMATION

Investors and lenders are the most obvious users of accounting information. Their decisions and their user of information have been studied and described to a much greater extent than those of other user groups. Therefore, for reasons that are largely pragmatic, the objectives of financial reports are focused on information for investment and loan decisions. However, financial reports are also extensively used by other individuals and groups who have to rely on them as their major source of financial information. Potential users of accounting information include present and potential investors, lenders, security analysts and advisers, management, employees and trade unions, suppliers and other trade creditors, customers, governments and regulatory agencies and the public.

Exhibit showing users of accounting information and their informational needs

	USERS	INFORMATIONAL NEEDS
Investors	Individual shareholders Mutual funds Insurance companies	Is it time to buy, hold or sell an investment? Can the company pay good dividends regularly? Is the company's performance satisfactory?
Lenders	Banks Debenture holders	Can the borrower pay the loan and interest on time? What should be the security and interest rate for the loan?
Security analysts and advisers	Equity and bond analysts Stockbrokers Credit rating agencies	Same as investors and lenders
Management	Managing directors Finance directors Marketing managers Production mangers Profit centre heads	How does the company's performance compare with that of its competitors? Which projects should the company invest in? Are the company's profit and profitability adequate? Do the financial statements fairly communicate the intrinsic value of the company's share?
Employees and trade unions	Industrial workers Office staff Trade unions Federations of trade unions	How much wages and bonus can the company afford? Will the company continue to be in business? Can the company honour its future obligations for pension, health and other retirement benefits?
Suppliers and other trade creditors	Suppliers of raw materials and components Sub-contractors Utility companies	Is the company a major customer? Will it become one? If the company is a major customer, will the situation continue to be so? Can the company pay for its purchases on time?
Customers	Past, present and prospective customers	Can the company be expected to be a reliable and economical source of supply? Can the company service its products? Can the company honour its warranty obligations?
Government and regulatory agencies	Tax authorities Stock exchanges Securities and Exchange Board of India Competition commission of India Department of company affairs	Does it appear that the company is evading payment of tax? Should an industry be given bounties or be taxed more? Are companies overcharging consumers? Should an industry be given anti-dumping protection? Do companies make proper disclosures of their financial results as legally required?
The public	Local community Political parties Public affairs groups Consumer groups Environmental activists	Do companies exploit local suppliers? Are the products of companies safe and wholesome? Do companies take adequate pollution control measures? Do companies hinder competition in the industry?

1.6 FINANCIAL ACCOUNTING v/s MANAGEMENT ACCOUNTING

Financial accounting and management accounting both appear to be similar in as much as both study the impact of business transactions and events of the enterprise and report and interpret the results thereof. Both provide information for internal as well as external use. But management accounting, although having its roots in financial accounting, differs from the latter in the following respects.

1. Financial accounting deals with the business transactions and events for the enterprise as a whole. Management accounting, in addition to the study of events in relation to the enterprise as a whole takes organisation in its various units and segments and attempts to trace the impact and effect of the business transactions and events through its various divisions and sub divisions. Thus, while the financial statement - profit and loss account, balance sheet and cash flow statements reveal the overall performance and position of the enterprise. Management accounting reports emphasise on the details of operational costs, inventories, products, process and jobs. It traces the effect and impact of the business transactions and events on costs, inventories, processes, jobs and products.

2. Financial accounting is attached more with reporting the results and position of the business to persons and authorities other than management - Government, creditors, investors, owners, etc. At times, financial accounting follows window-dressing tactics in order to project a better than actual image of the enterprise. Management accounting is concerned more with generating information for the use of internal management and hence the information reflects the real or really expected position.

3. Financial accounting is necessarily historical. It records and analyses business events long after they have taken place. Management accounting analyses the events as they take place and also anticipates such events for the future. Thus, it uses data which generally has relevance to the future.

4. Since financial accounting data is historical in nature, it is more precise than the management accounting data, which generally reflects the expected future, and hence could only be estimation. This provides the necessary rapidity to management accounting information.

5. The periodicity in reporting financial accounts is much wider than in case of management accounting. In financial accounting, generally, results are reported on year to year basis. In management accounting, weekly, fortnightly and even monthly reporting is used.

6. Financial accounting has to be governed by the "generally accepted principles". This is so because; it has to cater for the informational needs of the outsiders. It has to stick to the generally accepted methods of presentation of such information. Regarding the contents and form of information, financial accounting has to abide by the legal provisions also. Management accounting has not to worry about such legal and/or conventional constraints and the "generally accepted principles". It is free to formulate its own rules, procedures and forms, because the information it generates is solely for internal consumption. In management accounting fixed assets may be stated at appraisal values, overhead costs may be omitted from inventories or revenues may be recorded before realisation. Generally accepted principles of financial accounting do not permit such accounts. What is important in management accounting is the usefulness of the information for managerial functions rather than its general acceptability. The form and content of management accounting information differs according to the needs and purpose.
7. Financial accounting is a must in case of joint stock companies to meet the statutory provisions of company law and tax laws. Even in case of sole proprietorship and partnership firms financial accounting becomes a necessity for tax purposes. Management accounting, on the other hand, is entirely optional and its forms and contents depend upon the outlook of the management.
8. Financial statements prepared under financial accounting, consists of monetary information only. Management accounting statements in addition to monetary information also consists non-monetary information, viz., quantities of materials consumed, and number of workers, quantities produced and sold and so on.
9. Financial statements are required to be published and audited by statutory auditors. Management accounting statements are for internal use and thus neither published nor audited.

1.7 ACCOUNTING CONCEPTS AND CONVENTIONS

The system of accounting is based on a set of principles, which are called Generally Accepted Accounting Principles (GAAP). These principles enable to certain extent standardization in recording and reporting of information so that the users, once they are aware of the principles, can read and understand financial statements prepared by diverse organizations.

Accounting principles may be defined as those rules of action or conduct which are adopted bythe accountants universally while recording accounting transaction. These principles can be classified into two categories:

1. Accounting concepts.
2. Accounting conventions

Accounting concepts

The accounting concepts include those basic assumption or conditions which the science of accounting is based. ***The following are the important accounting concepts:***

1. Money measurement concept,
2. Business entity concept,
3. Going concern concept,
4. Duality concept,
5. Cost concept,
6. Matching of cost and revenue concept,
7. Realization concept.
8. Accrual concept.

* **Money Measurement Concept:** In financial accounting, an event is recorded, only if it can be expressed in monetary terms. Recording, classification and summarization of business transactions requires a common unit of measurement, which is taken as money. The advantage of doing this is that money provides a common denominator by means of which heterogeneous facts about an entity can be expressed as numbers that can be added and subtracted. If events cannot be quantified in monetary terms then they do not facilitate accounting. Hence, all transactions are recorded through a common denominator - money. Thus, if a certain event, no matter how significant for the health or even existence of the business, cannot be measured in monetary terms, that event is not recorded in accounting. Money is expressed in terms of its value at the time an event is recorded in the accounts. Subsequent changes in the purchasing power of money do not affect this amount. For example, purchase of an inconsequential asset, which is easily measured in rupee terms, is accounted for in the business. However, the retirement or death of the Chairman of a company, even though it has far reaching consequences for the health of the business is not accounted for, since no monetary measurement of the event is possible.

* **Business Entity Concept :** In simple language the business is distinctly different and separate from its owner. A business entity or a company is an artificial company created by law, who has a common seal, which has a perpetual existence and does not die natural death. A business entity can be described as an undertaking under the control of a single management, which may include a sole-proprietor, a partnership firm, a company or a nonprofit making organization. Hence for accounting purpose, the owner and his business should be kept separate. Accounting records are kept from the point of view of the business unit and not the owner. So, if the owner contributes fund to the business, it will be treated as a liability of the business - say the business owes this much to the owner.

* **Going Concern Concept :** A business entity is having a perpetual existence, which does not die a natural death. It is assumed to carry on its operations forever. Seemingly inconsequential, this is a fundamental concept, which has far reaching consequences. This is because it is difficult to envisage any economic activity on the part of a business entity if its liquidation were shortly expected. Going concern concept implies that the resources of the concern would continue to be used for the purposes for which they are meant to be used. For instance, in a manufacturing concern, the land, buildings, machinery etc., are primarily required for carrying out the production and selling of certain products. Going concern concept implies that these land, buildings, machinery etc., would continue to be used for this purpose. In fact, it is because these assets would continue to be with the concern for a long time for producing and selling the end products, that these assets (as would be seen in subsequent paragraphs) are termed 'fixed assets'. If on the other hand, the above assumption were to be invalid, and these assets were to be sold off and not used for manufacturing and selling operations, then these assets could not even be labelled as 'fixed assets', but would be termed 'current assets'. Thus, the very categorization of assets into 'fixed' and 'current', presupposes the Going Concern Concept.

* **Cost Concept :** Cost Concept implies that in accounting, all transactions are generally recorded at cost, and not at market value. For example, if a piece of land is acquired for Rs.1 lakh, it would continue to be shown in the balance sheet at Rs.l lakh, even when the market value of the land rises to say Rs.10 lakhs. Why should this be so? This is because cost concept is in fact closely related to the going concern concept. If the land is acquired for the operations of the business and would continue to be used for its operations and would not be sold shortly, then it is largely immaterial what the land's market value is, since it is not going to be sold anyway. Thus, it is

consistent with going concern concept to keep recording the land at cost, i.e. Rs.l lakh on an ongoing basis. The cost, historical cost, at which the assets are acquired, forms the basis for subsequent accounting. Therefore the valuation does not reflect the current worth of the asset. The cost concept, though sacrificing a certain degree of current relevance, provides for feasibility and objectivity.

* **Dual aspect concept:** This concept is based on the double entry system of book keeping which says for every debit there is a correspondence credit. Therefore the total assets of the firm should have claims from both owners i.e., capital and outsiders i.e., liabilities.

The economic resources of an entity are called assets. The claims of various parties against these are called-equities. There are two types of equities:

1. Liabilities, which arc the claims of creditors (that is every one other than the owners of the business).

2. Owners 'equity, which is the claims of the owners of the business.

Since all of the assts of a business are claimed by someone (either by its owner or by its creditors) and since the total of these claims cannot exceed the amount of assets to be claimed, it follows that

ASSETS = CLAIMS

This is the fundamental accounting equation, which is the formal expression of the dual aspect concept. To reflect the two types of claims, the equation is more commonly expressed as

ASSETS = LIABILITIES + OWNERS' EQUITY

* **Accounting Period Concept :** A business entity is an artificial person having a perpetual existence. It is a going concern. Because of the perpetual nature of a business concern, to measure income generated by the business or loss incurred by the business, the infinite life of the business is broken into small pieces called accounting periods. End of each such period it is ascertained what income the business generated" or what loss the business incurred and what is the financial position of the business. These small periods are known as accounting period. Generally accounting period is one year - January 01 to December 31 as in US and April 01 to March 31 as in India.

* **Matching Concept :** The purpose of the Accounting Period Concept is to ascertain whether the company generated some profit or incurred some loss in an accounting period. In order to ascertain this, the expenses related to this period must be compared

or matched with the revenues generated during this period. Relevant expenses or income of an accounting period implies that these should specifically relate to this period, irrespective of the fact that the cash transaction has taken place or not. Say, for example a company in India sold goods worth Rs.12 lakhs in the month of March 2004.on credit for two months, Hence, though the cash would be realized in the accounting period 2004-05, the revenue would relate to 2003-04 for accounting purposes. Similarly all expenses, though the cash outflow may occur in the next period, but if it is generated in this period, it will be treated as this period's expenses. All these relevant expenses incurred are matched with the relevant income and ascertained whether the business entity generated profit or incurred loss in that accounting period.

* **Realization Concept :** Realization concept deals with the point in time at which revenue may be deemed to be realized or when a sale can be said to have taken place. Normally revenue is said to be realized when efforts rendered are rewarded either in cash (or kind) or in the form of a promise of reward some time in future. Thus, revenue is normally recognized only when goods or services are transferred and a reward or a promise ofreward is forthcoming. If there is no transfer of goods or services, normally no reward may be expected either now or in future and hence no revenue is realized. Thus, normally revenue is recognized at the time of transfer of goods or services when a return consideration is either obtained immediately or there exists a reasonable certainty of receiving a return consideration in future.

* **Accrual concept :** Profit earned or loss suffered for an accounting period is the result of bothcash and credit transactions. It is possible that certain incomes are earned but not received and similarly certain expenses incurred but not yet paidduring an accounting period. But it is relevant to consider them whilecomputing the financial results just because they are related to the specific accounting period.Similarly the expenses that are incurred for the accounting period could be paid after the accounting period. Such accrued expenses are deducted while calculating the profit for the accounting period. This is the accrual concept.

* **Accounting Conventions :** The term convention denotes circumstances or traditions which guide the accountant while preparing the accounting statements. The following are the important accounting conventions:

1. Conservatism
2. Materiality

3. Consistency
4. Full Disclosure

* **Conservatism :** The idea behind the convention of conservatism is that recognition of revenue requires better evidence than recognition of expenses. This principle emphasizes that revenues and profits are to be recognized only when they are reasonably certain and expenses and losses are to be recognized as soon as they are reasonably possible. For example, the Foreign Trade Manager of a garment export firm in Kolkata might have received an order to deliver 10000 dozen silks carves to a client in London at an agreed value of £100000. But unless these items are produced and delivered to the client in London, there is no reasonable certainty about receiving the payment for these 10000 dozen carves. It is only thereafter that he can record the sales amount on those 10000 dozen scarves as due from the client. But, on the other hand, if the Outstanding Collection Department of HDFC Credit Cards comes to know that a customer has gone bankrupt and is likely to default payment, then the department should immediately provide for such loss. Thus a revenue or profit should be accounted only when there is a reasonable surety of recognizing but any anticipated loss or expense should be immediately accounted for.

* **Materiality Concept :** The criterion of 'True and Fair' in the preparation of the financial statements is necessary for arriving at a reasonable conclusion on the financial health of the company. This condition brings us to the relative concept of materiality, which by its very nature can be subject to variations. In other words, only things, which are materially important, should be given more importance in accounting. For example, for a small sized electronic repair and maintenance shop in Hyderabad has an error of Rs. 10000 in posting the expenses, where its total turnover in the year is Rs.200000 and a software company in Hyderabad has an error of the same nature and same amount, the only difference beingturnover of this software company is Rs.10 crores. In the former case, the error pertains to 5% of the total turnover, whereas in the latter, the error pertains to 0.01%. While in the case of the electronic repair and maintenance shop, the error is substantially important as it relates to 5% of the yearly turnover, for the software company, it is highly marginal. In the former case, ifit is not rectified, it will give a faulty profit picture but in the latter case, if already the accounts are finalized, it is not worthwhile to spend such money, time and energy to rectify this error. It could be easily rectified in the early next quarter. While for the shop, this is materially important, for the software company it is not materially important.

* **Consistency :** There are in practice several ways of treating a transaction that may be recorded in the accounts. The consistency concept requires that once an entity has decided on one method, it will treat all subsequent events of the same character in the same fashion unless it has a sound reason to change the method of treatment of that transaction. For example, if a concern is valuing its inventory by a particular method in one year it is expected to value its inventory in the subsequent years also in the same method unless there is a strong reason to change the same. Similarly, if it is charging depreciation by one method it is expected to follow the same method in the subsequent years also. This is to do comparison, intra-firm and inter-firm. Absolute values prove nothing, unless and until compared to figures of say the last year, or a same nature of business. Consistency Concept caters to this requirement of financial accounting.

* **Full Disclosure :** According to this convention, all accounting statements should be honestly prepared and to that end full disclosure of all significant information should be made. All information which is of material interest to proprietors, creditors, and investors should be disclosed in accounting statement. On the other hand, if there is no detailed disclosure in the profit and loss account undisclosed reserves accumulated in the past periods may be used to swell the profits in the year when the company is failing badly and the shareholders may be misled into thinking that company is making profit

1.8 SUMMARY

Business organisations offer goods and services in order to earn a profit. Accounting is the common language used to communicate financial information to the world of industry and commerce. Accounting is an information system that processes business transactions to provide financial reports to interested parties. It is not an end in itself. Accounting develops and communicates information that is useful in making sound decisions concerning use of scarce resources.

Accounting information is used by various individuals and groups. Major users of accounting information include present and potential investors and creditors, analysts, employees, management, governments and regulatory agencies.

There are two branches of accounting namely financial accounting and management accounting. Financial accounting differs from management accounting in the sense that financial accounting is the preparation and communication of financial information mainly for the use by those outside the enterprise, whereas management accounting is the provision of financial and other information for the internal use of management.

Accounting measures business transactions, economic events which affect a business. Accounting measures business transactions, economic events which affect a business. The major accounting concepts and conventions that underlie accounting measurement are discussed in detail above make it possible to summarize in money terms the results of business transactions for a period separately for each business.

1.9 SELF-TEST

1. Define Accounting and explain its role in making business decisions.
2. What is Accounting Information system?
3. Identify the major users of accounting information and what are their informational needs?
4. What is Financial Accounting? How does it differ from Management Accounting?
5. Explain the various accounting concepts and conventions underlying accounting measurement and explain their significance.

UNIT-2 : ACCOUNTING PROCESS AND ACCOUNTING EQUATION

Structure

2.1 OBJECTIVES

After going through this unit, you should able to;

- Describe accounting process
- Recognize accounting equation and commonly used asset, liability and owners' equity accounts.
- Describe double entry system and state the rules for debit and credit.

2.2 ACCOUNTING PROCESS

Accounting is the process of identifying the transactions and events, measuring the transactions and events in terms of money, recording them in a systematic manner in the books of accounts, classifying or grouping them and final y summarizing the transactions in a manner useful to the users of accounting information.

1. **Identifying the transactions and events :** This is the first step of accounting process. It identifies the transaction of financial character that is required to be recorded in the books of accounts. Transaction is transfer of money or goods or services from one person or account to another person or account. Events happen as a result of internal policies or external needs. Events of non financial character cannot be recorded even though such events may have an impact on the operational results of the firm.

2. **Measuring :** This denotes expressing the value of business transactions and events in terms of money (in terms of rupees in India).

3. **Recording :** It deals with recording of identifiable and measurable transactions and events in a systematic manner in the books of original entry that are in accordance with the principles of accountancy.

4. **Classifying :** It deals with periodic grouping of transactions of similar nature that appear in the books of original entry into appropriate heads by posting or transfer entries. For Eg: All purchases of goods made for cash or on credit on different dates are brought to purchase account.

5. **Summarizing :** It deals with summarizing or condensing transactions in a manner useful to the users. This function involves the preparation of financial statements such as income statement, balance sheet, statement of changes in financial position and cash flow statement.

6. **Analyzing :** It deals with the establishment of relationship between the various items or group of items taken from income statement or balance sheet or both. Its purpose is to identify the financial strengths and weaknesses of the enterprise. The above six process in the present day scenario are generally performed using software packages.

7. **Interpreting :** It deals with explaining the significance of those data in a manner that the end users of the financial statement can make a meaningful judgment about the profitability and financial position of the business. The accountants should interpret the statement in a manner useful to the users, so as to enable the user to make reasoned decision out of the alternative course of action. They factors on what has happened, why it happened, and what is likely to happen under specific conditions.

8. **Communicating :** It deals with communicating the analyzed and interpreted data in the form of financial reports/ statements to the users of financial information eg Profit and loss account, Balance Sheet, Cash flow and Funds Flow statement, Auditors report etc should explain various.

2.3 THE ACCOUNTING EQUATION

The accounting equation shows the relationship between the economic resources belonging to a business and the claims against those resources. At any given time, the following relationship holds:

Economic resources = Claims

Another term for economic resources is assets. Claims consist of creditors' claims, or liabilities, and owners' claims or owners' equity. The accounting equation may now be modified as follows:

Assets = Liabilities + Owners' equity

Every business transaction, regardless of size and complexity, can be analyzed in terms of its effect on the accounting equation.

1. **Assets :** Assets are resources controlled by the enterprise as a result of past events from which future economic benefits are expected to flow to the enterprise. Simply stated, assets are what an enterprise owns. Money is an asset because of its command over other assets. Investments and amounts receivable from customers are also assets because they can be converted into money. Some assets such as land, building and plant and machinery have a physical form, whereas others like patents and copyrights

confer legal rights but have no physical form. In sum, an asset is either cash or should be able to generate cash.

2. **Liabilities :** A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits. Simply stated, liabilities are the amounts owed by an enterprise and are settled by giving up cash or other assets. Loans payable, salaries payable estimated warranty obligation, pensions payable, and income tax payable are examples of liabilities. Most liabilities are the result of a binding contract or statutory requirement. Liabilities also arise from equitable or constructive obligations, which are commonly paid in the same way as legally binding contracts.

3. **Equity :** Equity, or owners' equity, is the residual interest in the assets of the enterprise after deducting all its liabilities. Thus, owners' equity is the difference between the enterprise's assets and its liabilities. The equity of a business enterprise is increased though investments of assets by owners and profits from operations and is decreased though distributions of assets to owner from the enterprise and losses from operations.

2.4 THE DOUBLE ENTRY SYSTEM : THE BASIS OF MODERN ACCOUNTING

The system of making two or double entries of equal value in two different accounts in opposite directions is called as "Double entry book keeping". It is a complete system of book keeping. It is followed by big business houses. Under this system, each business transaction is recorded in a minimum of two accounts so that the accounting equation is always in balance. Every transaction is recorded with equal debits and credits. As a result, the total of all the debits must equal the total of all the credits. This principle of duality is valid regardless of the complexity of a transaction or the number of accounts affected.

Debit and Credit Rules:

Under the double entry system, assets are entered on the debit side of the account, and liabilities and owners' equity are entered on the credit side of the account. The following describes the recording procedure in terms of the accounting equation:

The rules for debit and credit for assets, liabilities, and owners' equity may be stated as follows:

1. Increases in assets are debited to asset accounts. Decreases in assets are credited to asset accounts.

2. Increases in liability's and owners' equity are credited to liability and owners' equity accounts. Decreases in liabilities and owners' equity are debited to liability and owners' equity account.

Revenues increase owners' equity, and expenses and dividends decrease owners' equity. Thus, the expanded form of the accounting equation is

Assets = Liabilities + Capital + Revenues – Expenses – Dividends

The equation can be rewritten as follows:

Assets + Expenses + Dividends = Liabilities + Capital + Revenues

The rules for recording increases and decreases in owners' equity can now be extended to revenues, expenses and dividends. Revenues are recorded by credits, and expenses and dividends are recorded by debits. The rules for debit and credit may now be summarized as follows:

Effect	**Assets, Expenses, Dividends**	**Liabilities, Capital, Revenues**
Increase	**Debit**	**Credit**
Decrease	**Credit**	**Debit**

For the purpose of passing journal entries every business transaction has to be identified as to either individual, firm, companies or institution, or assets, properties or goods or expenses or losses and incomes or gains. The accounts, therefore, are classified in to three categories.

1. Personal Accounts
2. Real Accounts,
3. Nominal Accounts

Personal Accounts: They are accounts of persons with whom a concern carries on business. Personal accounts' may be

a. Representative personal accounts i.e. outstanding expenses A/c, income received in advance A/c.

b. Accounts of natural, or physical persons. Example, Ram's. A/c

c. Accounts of artificial or legal persons i.e. account of partnership firms, companies, club association, banking institution, Government institutions etc.

Real accounts: These are accounts of properties or assets or goods owned by a concern. Real or assets account may be

a. Tangible Assets like Goods *a/c.* cash a/c, furniture a/c, vehicles a/c, Land and buildings a/c. Machinery a/c.

b. Intangible Assets like Goodwill a/c patent rights a/c, copy rights a/c. trade marks a/ c.

Nominal accounts: Nominal accounts or fictitious accounts are accounts of the expenses and losses which a concern incurs and incomes and gains, which a concern earns.

a. Revenue or incomes account i e., accounts of revenues, incomes, gains or profits.
b. Expenses account i,e., accounts of expenses or losses.

The fundamental rule of double entry system for debit and credit is that the account that receives the benefit of a transaction should be debited and the account that gives the benefit of the transaction should be credited.

The rules for debit and credit

The Rule of debiting and crediting in respect of all the categories of account stated, above are as follows:

1. **Personal Accounts :**

   Debit the receiverand Credit the giver

2. **Real, Property or- Asset Accounts :**

   Debit what comes inand Credit what goes out

3. **Nominal or Fictitious Accounts :**

   Debit all expenses and Losses and Credit all incomes and gains.

2.5 SUMMARY

Accounting process begins with the analysis and the journalizing of transactions, then posting them into the ledger accounts and preparation of trial balance to check the arithmetical accuracy of the books of accounts. The most important output of accounting process is financial statements i.e. final accounts.For recording transactions, double entry system of book keeping is followed wherein the accounting equation states that at a given time, the sum of assets must equal the sum of liabilities and owners' equity. The equation is 'Assets = Liabilities + Equity'. Each business transaction is recorded in a minimum of two accounts so that the total of all debits must equal to the total of all credits. The procedure for analysing transactions consists of three steps namely (a)examining how a transaction changes assets, liabilities, and owners' equity, (b) apply the rules for debit and credit and (c) make the journal entry.

2.6 SELF TEST

1. State the Accounting equation. Explain the major components of accounting equation.
2. Describe the steps in accounting process.
3. What is double entry system of book-keeping? State the rules of debit and credit for a) assets, b) liabilities and c) owners' equity.
4. What are personal, nominal and real accounts? Give suitable examples for each category.
5. On September 1, 2012, RashmiSinha established Lovely Beauty Salon. The business engaged in the following transactions in the first month:

a. RashmiSinha invested Rs.50, 000 cash in business.

b. Bought equipment for cash Rs.15,000

c. Took a bank loan Rs. 25,000.

d. Bought supplies on credit Rs.3,000

e. Paid rent Rs 12,500

f. Received fee for services provided Rs. 29,000.

Analyze the above transactions in terms of their effects on assets, liabilities and owners' equity.

UNIT-3 : RECORDING, CLASSIFYING AND SUMMARIZING BUSINESS TRANSACTIONS

Structure

3.1 OBJECTIVES

After going through this unit, you should able to;

- Record transactions in the journal.
- Post transactions from the journal to the ledger.
- Prepare a trial balance and recognize its uses and limitations.

3.2 RECORDING, CLASSIFYING AND SUMMARIZING BUSINESS TRANSACTIONS

3.2.1 The Journal

The journal is a chronological record of transactions entered into by a business. The word 'journal' derives from the Latin root, ***dies*** **meaning 'day'.** The journal is called the book of original entry or primary book because this is the accounting record where transactions are first recorded. The journal provides in one place a complete record of all transactions including necessary explanations. Also, if a transaction is directly recorded in the ledger, the effect of the transaction may be erroneously recorded as entering the debit twice or the credit twice or omitting the debit or the credit. The journal entry for a transaction consists of the date of the transaction, the individual accounts and the related amounts to be debited and credited, and a brief explanation of the transaction. The process of recording transactions in the journal is called journalizing.

Form of Journal :

Date	Particulars	LF	Debit	Credit

Illustration No 1 :

Journalize the above transaction.

1. Started business with Rs 2,00,0000 out of which 50,000 deposited into bank.
2. Purchase of goods from Thrilokh and sons worth Rs 40,000
3. Sold goods for cash Rs 20,000
4. Paid telephone bill through bank Rs 500
5. Purchased furniture worth Rs 25,000 for exchange of goods

6. Purchased a computer for personal use for Rs 20,000 paid through bank
7. Purchased goods from Sourabh& company at a invoice of price of Rs 12,000 at a trade discount of 10%
8. Paid office expenditure Rs 200
9. Issued a cheque to Sourabh& company to settlement of his company Rs 10,500

Solution:

Journal Entries

Date	Particulars	L/F	Dr	Cr
1	Cash a/c Dr Bank a/c Dr To Capital a/c [Being business commenced		150000 50000 -	- - 200000
2	Purchases a/c Dr To Thrilokh a/c [Being goods purchased from Thrilokh]		40000 -	- 40000
3	Cash a/c Dr To Sales a/c [Being goods sold for cash]		20000 -	- 20000
4	Telephone bill a/c Dr To Bank a/c [Being telephone bill paid by cheque]		500 -	- 500
5	Furnitures a/c Dr To purchase a/c [Being furniture purchased for goods]		25000 -	- 25000
6	Drawing s a/c Dr To Bank a/c [Being computer purchased for personal use]		20000 -	- 20000
7	Purchase a/c Dr To Sourabh& Co. [Being the goods purchased from sourabh& Co. @ 10% discount]		10800 -	- 10800
8	Office expense a/c Dr To Cash a/c [Being office expense paid]		200 -	- 200
9	Sourabh& Co. a/c Dr To Bank a/c To Discount a/c [Being payment made to sourabh& co. in full settlement of their a/c]		10800 -	- 10500 300

Illustration 2.

Journalize the following transactions:

1. Commenced business with cash Rs 10000
2. Deposited into bank Rs 5000
3. Purchased goods for cash Rs 3000
4. Sold goods for cash Rs 2500
5. Purchased goods from A on credit Rs 4000
6. Sold goods to Mr. B on credit Rs 4500
7. Withdrew from bank Rs 3000
8. Paid Mr. A on a/c Rs 2000
9. Received from B on a/c Rs 2500
10. Took loan from C Rs 5000
11. Gave a loan to Mr. D Rs 4000
12. Paid salaries Rs 1000
13. Received commission Rs 200
14. Cash withdrew from the business for personal use Rs 300
15. Rent due to Mr. E, the land lord Rs 1000.

Solution:

Journal Entries

3.2.2 The Ledger

Ledger is a book which contains various accounts. In other words, Ledger is a set of account; a ledger account may be defined as a summary statement of all the transaction relating to a person, assets, expenses or income which have taken place during period of time and shows their net effect. It is the main book of account. Ledger is also called Principal book as final information pertaining to the financial position of a business emerges only from the accounts.

Form of Ledger

Account

Date	Particulars	JF	Amount	Date	Particulars	JF	Amount

Illustration no 3.

Journalize the following transaction in the books of Sharma brothers and post them into Ledger accounts

2007 April 1 - commenced business with cash Rs 50000 & machinery Rs 10000

2007 April 2 - Deposited cash into bank Rs 20000

2007 April 4 - Purchased goods worth Rs 8000 less 10% trade discount & 2% cash Discount

2007 April 7 - Purchased goods from Roy son's for Rs 5000 less 20% trade Discount & 5% cash discount half of the amount was paid in cash

2007 April 10 - Withdrawn from bank for office use Rs 2000

2007 April 13 - Sold goods to Ashok for Rs 3000 less 5% trade discount

2007 April 16 - Appointed Mr. Manu as a cashier at a salary of Rs 1000 per month and received Rs 2000 from him as security deposit

2007 April 18 - Received Cash from Ashok Rs 2840 in full settlement of his a/c

2007 April 20 –Withdrew from business for personal use Rs 1000

2007 April 22 –Purchased goods for Rs 2000 from Patel and invoiced the same Sahil for Rs 2400.

In the books of Sharma & brothers

Date	Particulars	L/F	Dr	Cr
1-4-07	Cash a/c Dr Machinery a/c Dr To capital a/c [Being business started with cash & machinery]		50000 10000	- - 60000
2-4-07	Bank a/c Dr To cash a/c [Being cash deposited into bank]		20000 -	- 20000
4-4-07	Purchases a/c Dr To Creditors a/c [Being		7200 -	- 7200
4-4-07	Creditors a/c Dr To cash a/c To discount a/c [Being cash paid to suppliers to avail 2% cash discount]		7200 - -	- 7056 144
7-4-07	Purchases a/c Dr To Roy & Son's a/c [Being goods purchased from Roy's son's subject to 20% trade discount]		4000 -	- 4000
7-4-07	Roy's & Son's a/c Dr To discount a/c To cash a/c [Being		2000 - -	- 100 1900
	Purchases a/c Dr To Roy & Son To Discount 5% on 2000 To cash a/c [Being goods purchased from Roy on credit with subject to 20% trade discount & half of the amount paid in cash to avail 5% cash discount]		4000 - - -	- 2000 100 1900
10-4-07	Cash a/c Dr To bank a/c [Being cash withdrawn from bank]		2000 -	- 2000
13-4-07	Ashok a/c Dr To sales a/c [Being goods sold to Ashok on credit subject to 5% trade discount]		2850 -	- 2850
16-4-07	Cash a/c Dr To Manu's security deposit a/c [Being security deposit was received from Manu]		2000 -	- 2000
18-4-07	Cash a/c Dr Discount allowed a/c Dr To Ashok a/c [Being cash received from Ashok in full settlement of his a/c]		2840 10 -	- - 2850

20-4-07	Drawings a/c Dr To cash a/c [Being cash withdrawn for personal use]		1000 -	- 1000
22-4-07	Purchases a/c Dr To Patel's a/c [Being goods purchased from Patel on cedit]		2000 -	- 2000
22-4-07	Sahil a/c Dr To sales a/c [Being goods sold on credit to Sahil]		2400 -	- 2400

Date	Particulars	J/F	Amt	Date	particulars	J/F	Amt
1-4-07	To capital a/c		1000		By bal c/d		1000
			1000				1000
	To bal b/d		100				

Capital A/C

Date	Particular	J/F	Amt	Date	Particular	J/F	Amt
				1-4-07	By cash a/c		50000
	To bal c/d		60000	1-4-07	By machinery a/c		10000
			60000				60000
					By bal b/d		60000

Date	Particular	J/F	Amt	Date	Particular	J/F	Amt
1-4-7	To capital a/c		50000	2-4-07	By bank a/c		20000
10-4-07	To bank a/c		2000	4-4-07	By creditors a/c		7056
16-4-07	To Manu's security deposit		2000	7-4-07	By Roy's a/c		1900
18-4-07	To Ashok a/c		2840	20-4-07	By drawing a/c		1000
				30-4-07	By bal c/d (B/F)		26884
			56840				56840
1-5-07	To bal b/d		26884				

			20000				20000
	To bal b/d		18000				

Creditors A/C

Date	particulars	J/F	Amt	Date	particulars	J/F	Amt
4-4-07	To cash a/c		7056	4-4-07	By purchases		7200
4-4-07	To discount a/c		144				
			7200				7200

Purchases A/C

Date	particulars	J/F	Amt	Date	particulars	J/F	Amt
4-4-07	To creditor a/c		7200		By bal c/d		11300
4-4-07	To Roy & son's a/c		2000				
4-4-07	To discount a/c		100				
22-4-07	To Patel a/c		2000				
			11300				11300
	To Bal b/d		11300				

Discount received a/c

Date	particulars	J/F	Amt	Date	particulars	J/F	Amt
				4-4-07	By creditors a/c		144
	To bal c/d		244	7-4-07	By purchases a/c		100
			244				244
				31-5-07	By bal b/d		244

Roy & Son's A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
	To bal c/d		2000	7-4-07	By purchases a/c		2000
			2000				2000
				31-5-07	By bal b/d		2000

Ashok A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
13-4-07	To sales a/c		2850	18-4-07	By discount allowed		10
					By bal c/d		2840
			2850				2850
31-5-07	To bal b/d		2840				

Sales A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
	To bal c/d		5250	13-4-07	By Ashok a/c		2850
				22-4-07	By sahil a/c		2400
			5250				5250
				31-5-07	By bal b/d		5250

Manu's security deposit A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
	To bal c/d		2000	16-4-07	By cash a/c		2000
			2000				2000
				31-5-07	By bal b/d		2000

Discount allowed A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
18-4-07	To Ashok a/c		10		By bal c/d		10
			10				10
31-5-07	To bal b/d		10				

Drawing A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
20-4-07	To cash a/c		1000		By bal c/d		1000
			1000				1000
31-4-07	To bal b/d		1000				

Patel A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
	To bal c/d		2000	22-4-07	By purchases a/c		2000
			2000				2000
				31-4-07	By bal b/d		2000

Sahil A/C

Date	particulars	J/F	Amt	Date	Particulars	J/F	Amt
22-4-07	To sales a/c		2400		By bal c/d		2400
			2400				2400
31-5-07	To bal b/d		2400				

3.2.3 Trail Balance

A Trial Balance is a summary of all the General Ledger Balances outstanding as on a particular date, the entire debit balances from the ledger are shown on the one side and all the credit balances are shown on the other side. You are aware that a debit balance in a general ledger account indicates an excess of debit side ever the credit side of the ledger. Similarly, a credit balance in a ledger account indicates the excess of credit side over the debit side. Now, if all the debit and credit balances were recorded on the two sides of the Trial Balance, it stands to reason that the two sides should be equal, since in the journal for each item of debit, there was a credit item. Thus in other word Trial balance may be defined as a statement of debit and credit totals or balances extracted from the various accounts in the ledger with a view to test the arithmetical accuracy of the books.

A Trial Balance is prepared for the following objectives:

- It is a check on the accuracy of postings. If the Trial Balance agrees, it can be assumed that both the aspects of all the transactions have been correctly posted in the ledger
- It brings at one place, the balances of all the accounts, which facilitates the preparation of final accounts.

Illustration no. 4

Record the following transactions in the Journal,post them to Ledger accounts and prepare Trial balance:

Jan 1Started business with cash 10000

Jan 2Deposited into bank 90000

Jan 3 Machinery purchased for Rs 5000 from Javahar& give in a cheque for amount

Jan 15 Paid installation charges of machinery Rs 100

Jan 20 purchased timber from Naveen of the last price of Rs 2000 he allowed 10% trade discount.

Jan 23 Furniture costing Rs500 was used in furnishing the office.

Jan 25 sold furniture to Naresh of the last price of Rs 1000 & allowed him 5% trade discount.

Jan 28 Received cheque from Naresh for Rs 930 in full settlement & sent the cheque to bank

Jan 29 Sent to Naveen in full settlement a cheque for Rs 1750 paid wages Rs 350 & Rent 200

Journal Entries

Date	Particulars	L/F	Dr	Cr
Jan 1	Cash a/c Dr To capital a/c [Being business started with cash]		100000 -	- 100000
Jan 2	Bank a/c Dr To cash a/c [Being cash deposited into bank]		90000 -	- 90000
Jan 3	Machinery a/c Dr To bank a/c [Being machinery purchased from javahar& paid by cheque]		5000 -	- 5000
Jan 15	Machinery a/c Dr To cash a/c [Being installation charges were paid]		100 -	- 100
Jan 20	Purchases a/c Dr To Naveen a/c [Being timber purchased from Naveen on credit subject to 10% trade discount]		1800 -	- 1800
Jan 23	Furniture a/c Dr To Purchase a/c [Being furniture used for office purpose]		500 -	- 500
Jan 25	Naresh a/c Dr To sales a/c [Being furniture sold to Naresh on credit with 5% trade discount]		950 -	- 950
Jan 28	Bank a/c Dr Discount allowed a/c To Naresh a/c [Being received from Naresh in full settlement of his a/c]		930 20 -	- - 950
Jan 29	Naveen a/c Dr To bank a/c To discount received a/c [Being paid to Naveen in full settlement of his a/c]		1800 - -	- 1750 50
Jan 31	Wages a/c Dr Rent a/c Dr To cash a/c [Being wages & rent paid]		350 200 -	- - 550

Cash Account

Date	Particulars	J/F	Amt	Date	particulars	J/F	Amt
Jan 1	To capital a/c		100000	Jan 2	By bank a/c		90000
				Jan 15	By machinery a/c		100
				Jan 31	By wages a/c		350
				Jan 31	By Rent a/c		200
				Jan 31	By bal c/d		9350
			100000				100000
Feb 1	To bal b/d		9350				

Capital Account

Date	Particulars	J/F	Amt	Date	particulars	J/F	Amt
Jan 31	To bal c/d		100000	Jan 1	By cash a/c		100000
	To bank		100000				100000
				Feb 2	By bal b/d		100000

Bank Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 1	To cash a/c		90000	Jan 3	By machinery a/c		5000
Jan 28	To Naresh a/c		930	Jan 29	By Naveen a/c		1750
					By balance c/d		84180
			90930				90930
Jan 2	To bal b/d		84180				

Machinery Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 3	To bank a/c		5000				
	To cash a/c		100	Jan 21	By bal c/d		5100
			5100				5100
Feb 2	To bal b/d		5100				

Purchases Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 20	To Naveen		1800	Jan 23	By furniture a/c		500
				Jan 31	By bal c/d		1300
			1800				1800
Feb 1	To bal b/d		1300				

Naveen Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 29	To bank a/c		1750	Jan 20	By purchase		1800
Jan 29	To discount received		50				
			1800				1800

Furniture Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 23	To purchase a/c		500				
				Jan 31	By bal c/d		500
			500				500
Feb 1	To bal b/d		500				

Naresh Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 25	To sales		950	Jan 28	By bank a/c		930
				Jan 28	By discount allowed		20
			950				950

Discount Allowed

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 28	To naresh a/c		20	Jan 31	By bal c/d		20
			20				20
Feb 1	To bal b/d		20				

Discount Received Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 31	To bal c/d		50	Jan 29	By naveen a/c		50
			50				50
				Feb1	By bal b/d		50

Wages Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 31	To cash a/c		350	Jan 31	By bal c/d		350
			350				350
Feb 1	To bal b/d		350				

Rent Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 31	To cash a/c		200	Jan31	By bal c/d		200
			200				200
Feb 1	To bal b/d		200				

Sales Account

Date	Particulars	J/F	Amt	Date	Particulars	J/F	Amt
Jan 31	To bal c/d		950	Jan25	By naresh a/c		950
			950				950
				Feb 1	By bal b/d		950

Trial Balance

Sl. No	Name of the account	L/F	Dr	Cr
1.	Cash		9350	-
2.	Capital		-	100000
3.	Bank		84180	-
4.	Machinery		5100	-
5.	Purchase		1300	-
6.	Furniture		500	-
7.	Discount Allowed		20	-
8.	Discount received		-	50
9.	Wages		350	-
10.	Rent		200	-
11.	Sales		-	950
			101000	101000

3.3 SUMMARY

The journal is a chronological record in which transactions are first recorded. The journal is called the book of original entry or primary book because this is the accounting record where transactions are first recorded. The journal provides in one place a complete record of all transactions including necessary explanations.

Posting is the process of transferring information in the journal to the ledger. Ledger is a set of accounts; a summary statement of all the transactions relating to a person, assets, expenses or income which have taken place during period of time and shows their net effect.

Trial balance is a list of ledger accounts and their balances at a given time, and is used to verify equality of debits and credits in the ledger after which, at the end of the accounting period, final accounts are prepared.

3.4 SELF-TEST

1. Define Journal and Ledger. State the differences between journal and ledger
2. What is a trial balance? What are its objectives?
3. Pass journal entries for the following transactions and post them to ledger accounts.
   a. Suresh started business by cash Rs.5,00,000
   b. Bought goods Rs. 40,000
   c. Bought furniture Rs.50,000
   d. Sold goods for cash Rs. 2,400
   e. Sold goods to Mahendra on credit Rs, 4650
   f. Deposit into bank Rs. 8,000
   g. Paid salary Rs 4,600
   h. Withdraw from bank for personal use Rs. 3,000.
4. Prepare a trial balance using imaginary figures.
5. The following are the ledger account balances as on 31-03-2010. You are required to prepare a Trial Balance for the year ending 31-03-2010

Mr. Bharath's Capital	108090	Stock on 1-4-09	46800
Sales	289600	Sales returns	8600
Purchases	243000	Purchases returns	5800
Carriage & freight	18600	Rent and Taxes	5700
Salaries and wages	9550	Sundry Debtors	24000
Sundry Creditors	14800	Bank Loan @ 6%	20000
Bank interest paid	900	Printing &Advertising	14600
Income from investments	250	Cash at Bank	8200
Discount allowed	7340	Discount received	3690
Investments	5000	Furniture & Fittings	1800
General expenses	3600	Audit Fees	500
Insurance	800	Travelling expenses	2310
Postage and telegram	800	Cash in Hand	380
Bank Deposit @ 5%	30000	Drawings	10000
Bad debts	500	Bank Interest received	500
Reserve for bad debts	250		

UNIT -4 : PREPARATION OF FINAL ACCOUNTS OF SOLE PROPRIETORSHIP

Structure

4.1 OBJECTIVES

After going through this unit, you should able to;

- Understand the format of preparation of final accounts of sole proprietorship.
- Know the treatment of some common adjustments in preparation of final accounts of sole proprietorship.
- Prepare Trading and Profit and loss account of sole proprietorship business.
- Prepare Balance Sheet of sole proprietorship business.

4.2 INTRODUCTION

A form of organization owned and established by a single person is known as **"Sole trading concern". An a/c prepared by a sole trader at the end of accounting period is known as "final accounts of sole trading concern"**.

In order to known the profit or loss earned by a firm, Trading and profit and Loss account is prepared. Balance sheet or position statement will portray the financial condition of the firm on a particular date. These two statements i.e., Trading and Profit and Loss Account and Balance Sheet are prepared to give a final results of the business, that is why both these are collectively called as final accounts. Thus final account includes the preparation of:

- Trading and Profit and Loss Account; and
- Balance sheet

Dr.Format of Profit and Loss Account for the year ending ……… Cr

Particulars	Rs	Particulars	Rs
To opening stock	**XXX**	By sales	**XXX**
To Purchases	**XXX**	Less returns inwards/sales returns	**XXX**
Less Purchase returns/returns outwards	**XXX**	By Closing stock	**XXX**
To Carriage inwards	**XXX**		
To freight and octroi	**XXX**		
To wages	**XXX**		
To Add outstanding wages	**XXX**		
To Less prepaid wages	**XXX**		
To fuel and power	**XXX**		
To Gas, coal, electricity for production	**XXX**		
To Import duty and clearing charges	**XXX**		
To stores consumed	**XXX**		
To factory rent, insurance	**XXX**		
To other direct expenses	**XXX**		
To Royalty paid	**XXX**		
To Profit and Loss A/c (Gross Profit)	**XXX**		

4.3 FORMAT OF TRADING, PROFIT AND LOSS ACCOUNT AND BALANCE SHEET

Dr.Format of Trading Account for the year ending- - - - Cr

Particulars	**Rs**	**Particulars**	**Rs**
To Trading Account (GL)	**XXX**	By Trading account (GP)	**XXX**
To Salaries + Out standing –Prepaid	**XXX**	By Interest earned + Accrued interest	**XXX**
To Rent of the premises	**XXX**	By Commission earned	**XXX**
To Travelling expenses	**XXX**	By Discount earned	**XXX**
To Rates and Taxes	**XXX**	By Rent received	**XXX**
To Printing and stationery	**XXX**	By Bad debts recovered	**XXX**
To Postage and Telegram	**XXX**	By Interest on drawings	**XXX**
To Telephone charges	**XXX**	By Reserve for discount on Creditors	**XXX**
To Insurance	**XXX**	By Dividends received	**XXX**
To Interest paid	**XXX**	By Royalty Received	**XXX**
To Discount al owed	**XXX**	By Capital Account (Net Loss)	**XXX**
To Sundry expenses	**XXX**		
To Advertisement	**XXX**		
To Commission	**XXX**		
To Carriage outwards	**XXX**		
To Bad Debts	**XXX**		
To Reserve for Bad debts	**XXX**		
To Reserve for discount on Debtors	**XXX**		
To Depreciation	**XXX**		
To Legal charges	**XXX**		
To Audit fee	**XXX**		
To Interest on Capital	**XXX**		
To Capital Account (Net Profit)	**XXX**		

FORMAT OF BALANCE SHEET

Balance Sheet as on ……………..

Liabilities and Capital		**Amount**	**Assets**		**Amount**
Opening Capital	**XXX**		Fixed Assets		
Add: Additional capital	**XXX**		Less depreciation	xxx	
Add: Interest on capital	**XXX**		Land & Buildings		
Add: Net Profit	**XXX**		Plant & Machinery		XXX
	XXX		Furniture & Fittings		XXX
Less:Drawings	**(XXX)**		Goodwill		XXX
Less: Interest on Drawings	**(XXX)**		Closing Stock		XXX
Less: Net Loss	**(XXX)**		Bills Receivables		XXX
Closing Capital			Sundry Debtors less RBD		XXX
Sundry Creditors			Prepaid Expenses		XXX
Bills Payable			Outstanding Incomes		XXX
Bank Loan/ Overdraft		XXX		xxx	XXX
Outstanding Expenses		XXX			XXX
Incomes received in		XXX			XXX
advance		XXX			XXX
		XXX			
		XXX			
		XXX			
		XXX			
TOTAL		**XXXX**	**TOTAL**		**XXXX**

4.4 TREATMENT OF COMMON ADJUSTMENTS IN FINAL ACCOUNTS

There would be some business transactions or events that might have occurred after the preparation of trial balance but have to be accounted for before preparing the final accounts. They are either given as adjustments or as additional information with the Trial Balance. We have to consider them before preparing final accounts. Since we follow double entry system of book – keeping, even in the treatment of adjustments, we do follow the same. It means adjustments generally would be effected twice, once in trading account or profit and loss account and once in Balance Sheet. But there are few exceptional adjustments wherein both the effects would be in both Trading account and Profit and Loss Account or both the effects would be on either side of the Balance Sheet only. Some of the commonly given adjustments and their treatment are shown below.

1. Closing Stock:

Stock of goods – raw materials, semi finished goods, finished goods – at the end of the accounting year should be considered for preparing trading account and balance sheet. It is an internal adjustment. It should have two effects. Once, it is shown on the credit side of the Trading Account. Then, it is shown as a current asset on the Asset side of the Balance Sheet.

2. Expenses:

Expenses given in the adjustment can be outstanding expenses or expenses paid in advance.

A. Outstanding expenses means those expenses incurred for the current year but not yet paid. They have to be charged against the income of the current year. Hence, they have to be added to the concerned expenses on the debit side of either trading account or profit and loss account. Again, they should be shown as a liability on the liabilities side of the balance sheet.

B. Expenses paid in advance or prepaid expenses are those expenses not yet occurred for the current year but already paid. They have to be deducted from the concerned expenses on the debit side of trading or profit and loss account and then, it has to be shown as an asset on the asset side of the balance sheet.

3. Incomes:

Incomes given in the adjustment can be either outstanding incomes or incomes received in advance.

A. Outstanding incomes mean those incomes that are earned for the current year but not yet received. They have to be added to the concerned income on the credit side of profit and loss account and then it is shown as an asset on the asset side of the balance sheet.

B. Incomes received in advance means incomes that are not earned for the current year but the income is already received. Hence, they have to be deducted from the concerned income on the credit side of profit and loss account and then, it will appear as a liability on the liabilities side of the balance sheet.

4. Bad Debts

Bad debts are those debts which have become irrecoverable. Bad debts form loss to the business and reduce the amount of debtors. Since bad debts are losses, they are debited to profit and loss account. Again, it is deducted from Debtors on the asset side of the balance sheet.

5. Provision for Doubtful Debts

From the past experience of the business proprietor, what percentage of good debts may become bad in future can be estimated and in the current year an equal amount of profit is set aside. This provision is also known as Reserve for Bad Debts or Provision for Doubtful Debts or Reserve for Doubtful Debts.

Since the provision for bad debts is a charge against current year profit, first, it is debited to profit and loss account and again it is deducted from Debtors on the asset side of the balance sheet.

6. Depreciation on Fixed Assets

Depreciation is a non cash expense that reduces the value of a fixed asset due to wear and tear, passage of time, obsolescence or any for other reasons. It should first be debited to profit and loss account and again, it should be deducted from the concerned fixed asset on the asset side of the balance sheet.

4.5 PREPARATION OF FINAL ACCOUNTS OF SOLE PROPRIETORSHIP-SOME ILLUSTRATIONS

Illustration no. 1

From the following balances extracted from the books of Mr.X.,Prepare trading & profit & loss a/c and balance sheet as on 31/03/04

Trial Balance

Particulars	Dr	Cr
Purchase / Sales	71280	60000
Capital /Drawings	4440	60000
Computer	18000	-
Cash at bank	4380	-
Cash in hand	2836	-
Stock on 1//2001	3000	-
Miscellaneous receipts	-	220
patent	1540	-
Rent	10000	-
Trade mark	2090	-
Discount received		2000
Reserve fund		13000
Workmen compensation fund		2000
B R /B P	6720	10000
Fright inward	920	
Sunder creditor	22000	1800
IDBI share	6000	
Com		720
Computer repair	1156	
Office expense	1200	
Dividend		320
Provision for doubtful debts		432
Interest premium	550	
Entertainment expense	2000	
Wages	1800	
Salaries	16780	
Returns	1000	11000
	1,77,692	**1,7,692**

Adjustments :

- The value of closing stock Rs. 8000.
- Rent Outstanding Rs. 1000.
- Advance salary paid Rs. 1780.
- Dividend accrued but not received Rs. 180.
- Deprecation computer at 5% p.a. write off patents at 10% p.a.

- Create provision for discount on debtors & on creditors at 1% each.
- Interest premium prepaid Rs. 300.

Trading and profit & Lose Account for the year ending 31/3/04

Particulars	**Rs**	**Rs**	**Particulars**	**Rs**	**Rs**
To opening stock		3000	By sales	60000	
To purchases	71280		(-) retunes	1000	59000
(-) purchase returns	11000	60280	By closing stock		8000
To freight inwards		920			
To wages		1800			
To G/P c/d (b/f)		1000			
		67000			**67000**
To salaries	16780		By G/P c/d		1800
(-) advance salary	1780	15000	By miscellanea		
To rent	10000		By discount received	2000	
(+) o/s rent	1000	11000	(+) prevision for discount on CR	180	2180
To computer repairs Expenses		1156	By commission		720
To office expenses		1200	By dividend	320	
To interest premium	550		(+) dividend accrued but not received	180	500
(-) prepaid interest	300	250	By provision for doubtful debt		432
To entertainment		2000			
To provision for discount on debtor		220	By net loss (B/F)		26828
To deprn on computer		900	Transferred to capital a/c		
To deprn on patent written off		154			
		31880			**31880**

Balance Sheet as on 31-3-02

Liabilities	Amt	Amt	Assets	Amt	Amt
Capital	60000		Computer	18000	
(-) net loss	26828		(-) deprecation	900	17100
	33172		Cash at bank		4380
(-) drawings	4440	28732	Cash in hand		2836
Reserves fund		13000	Patent	1540	
workmen Computation		2000	(-) written off	154	1386
B.P.		10000	Trade make		2090
Secured creditor	18000		B.R		6720
(-) provision for discount on creditor	180	17820	s. debtor	22000	
Outstanding rent		1000	(-) provision for discount on debtor	220	21780
			IDBI share	6000	
			(+) dividend accrued but not received	180	6180
			Closing stock		8000
			Advance salary		1780
			Interest premium prepaid		300
		72552			**72552**

Illustration : 2

The following is the trial balance of Sri Chandra kanth as on 31/12/2009.

Particular	Dr	Cr
Drawing & capital	4000	72000
Plant & machinery	20000	
Stock on 1/1/2009	12000	
Purchase & sales	80000	125000
Return inwards	3000	
Furniture	10000	
Debtors and Creditors	35000	10000
Carriage outwards	1000	
Carriage on purchase	3000	
Life ins premium	1000	
Printing & stationary	900	
Rent & taxes	4800	
Purchase returns		2000
Provision for bad debt		1000
Fire insurances	1200	
Cash in hand	5000	
Cash at bank	8000	
B.R/B.P	6000	4000
Bad debt written off	500	
General expenses	1100	
Salaries & wages	7000	
Advertisement	1000	
Income tax	500	
Discount	1000	2000
Goodwill	10000	
	2,16,000	**2,16,000**

Prepare trading & P&L a/c for the year ended 31/12/2009. And balance sheet as on that date after taking into account the following adjustment.

- Closing stock was valued at Rs. 20,000
- Write off further bad debt Rs.400, and maintain provision for bad debt at 5% on debtor.
- Provide deprecation at 10% on plant and machinery and 5% of furniture
- Prepaid fire insurance Rs 300
- Provide interest on capital @ 5% p.a
- Goods costing Rs 800 were distributed on free samples
- Purchases include goods worth Rs 1000, purchased for private purpose.
- Goods to the value of Rs. 4000 have been destroyed by fire and the insurance company admitted a claim of Rs.2700

Trading and P&L Account for the year ended 31/12/2009

Particulars	Rs	Rs	Particulars	Rs	Rs
To opening stock		12000	By sales		
To purchase	80000		(-) return inward		
(-)purchase retunes	2000		By goods destroyed		
	78000		By fire		
(+)carriage on purchase	3000		By closing stock		
	81000				
(-)goods destroyed free sample	800				
	80200				
(-) goods used for private purpose	1000	79200			
To G/P c/d		54800			
		1,46,000			**1,46,000**
To salaries & wages		7000	By G/P b/d		54800
To carriage out wards		1000	By discount		2000
To printing & stationary		900			
To rent & tax		4800			
To general expense		1100			
To fire insurance	1200				

(-) pre paid	300	900			
To bad debt	500				
(+) new bad debt	400				
(+) new RBD	1730				
	2630				
(-) old RBD	1000	2630			
To advertisement	1000				
(+) goods distributed as free sample	800	1800			
To discount		1000			
To interest on capital		3600			
To loss by fire		1300			
To deprecation on P&M		2000			
To dep on furniture		500			
To net profit (B/F) Transfer to capital		29270			
		56800			**56800**

Balance Sheet as on 31/12/2009

Liabilities	Amt	Amt	Assets	Amt	Amt
Capital	72000		Plant & machinery	20000	
(+) interest on capital	3600		(-) depreciation	2000	18000
Net profit	29270		Furniture	10000	
	104870		(-) depreciation	500	9500
(-) drawings	6500	98370	Drs	35000	
Creditor		10000	(-) new bad debt	400	
B.P		4000		34600	
			(-) new R.B.D	1730	
			Cash in hand		5000
			Cash at bank		8000
			B.R		6000
			Good will		10000
			Closing stock		20000
			Prepaid insurance		300
			Amt due from Insurance company		2700
		1,12,370			**1,12,370**

4.5 SUMMARY

For recording transactions, double entry system of book keeping is followed wherein the accounting equation states that at a given time, the sum of assets must equal the sum of liabilities and owners' equity. The equation is 'Assets = Liabilities + Equity'. Each business transaction is recorded in a minimum of two accounts so that the total of all debits must equal to the total of all credits. The procedure for analyzing transactions consists of three steps namely (a) examining how a transaction changes assets, liabilities, and owners' equity, (b) apply the rules for debit and credit and (c) make the journal entry.

The journal is a chronological record in which transactions are first recorded. Posting is the process of transferring information in the journal to the ledger. Trial balance is a list of ledger accounts and their balances at a given time, and is used to verify equality of debits and credits in the ledger after which, at the end of the accounting period, final accounts are prepared. Final accounts, in case of a sole proprietor consists of Trading Account, Profit and Loss Account and a Balance Sheet. Trading, Profit and Loss Account is prepared to show the financial results of a business, profit or loss, during an accounting period; and the Balance Sheet is prepared to show the financial position, position of assets and liabilities, of a business as on a particular date.

4.6 SELF TEST

1. How do you treat outstanding and prepaid expenses while preparing final accounts?
2. The following are the ledger account balances as on 31-03-2010. You are required to prepare Trading and Profit & Loss A/c for the year ending 31-03-2010 and a Balance Sheet as on that date.

Mr. Bharath's Capital	108090	Stock on 1-4-09	46800
Sales	289600	Sales returns	8600
Purchases	243000	Purchases returns	5800
Carriage & freight	18600	Rent and Taxes	5700
Salaries and wages	9550	Sundry Debtors	24000
Sundry Creditors	14800	Bank Loan @ 6%	20000
Bank interest paid	900	Printing &Advertising	14600
Income from investments	250	Cash at Bank	8200
Discount allowed	7340	Discount received	3690
Investments	5000	Furniture & Fittings	1800
General expenses	3600	Audit Fees	500
Insurance	800	Travelling expenses	2310

Postage and telegram	800	Cash in Hand	380
Bank Deposit @ 5%	30000	Drawings	10000
Bad debts	500	Bank Interest received	500
Reserve for bad debts	250		

Additional information:

a. Stock in hand as on 31-03-2006 was Rs. 78,600

b. Depreciate Furniture and Fittings by 10%

c. Salaries outstanding Rs.450 and Carriage outstanding Rs.100

d. Insurance prepaid Rs.200

e. Create reserve for bad debts @ 5% on Debtors

f. Goods worth Rs.2500 were destroyed by fire, but the Insurance Company admitted the claim for Rs.1800 only.

3. From the following Trial Balance prepare Trading and Profit and Loss Account and Balance Sheet for the year ended 31st March 2008

	Debit	Credit
Capital	—	5,00,000
Drawings	1,00,000	—
Purchases	7,40,000	—
Sales	—	11,28,000
Opening Stock	1,80,000	—
Returns	25,000	15,000
Wages	60,000	—
Salaries	55,000	—
Rent and Insurance	14,000	—
General expenses	46,000	—
Debtors and Creditors	2,00,000	1,70,000
Bills Receivable and Payable	80,000	1,50,000
Bad Debts	12,000	—
Discount allowed	3,200	—
Plant and Machinery	3,00,000	—
Furniture	50,000	—
Cash	97,800	—
	19,63,000	**19,63,000**

Adjustments:

a. Outstanding Salaries Rs.5,000.

b. Insurance prepaid Rs.2,000

c. Provision for doubtful debts to be maintained at 5%

d. 10% depreciation to be provided on plant and machinery.

e. Closing stock was valued at Rs.1,60,000

UNIT -5 : INTRODUCTION TO COMPANY FINAL ACCOUNTS

Structure

5.1 OBJECTIVES

After going through this unit, you should able to;

- Define Company and discuss its distinctive characteristics
- Explain the statutory provisions regarding preparation of final accounts of joint stock companies.

5.2 INTRODUCTION

A company represents the third stage in the evolution of forms of business organisations-the first two being sole proprietorship and partnership firms. As distinct from these two, a company enjoys a separate legal status. The ownership here is divorced from management. The shareholders contribute towards the finances of the company but all of them do not and cannot participate in the management of the company. The company is managed by a Board of Directors elected by the shareholders. Thus, in the company form of business organisation, a shareholder simply acts as a rentier of capital. Companies in our country are governed by the provisions of the Companies Act, 1956 which has been amended several times.

5.3 MEANINGAND DEFINITION OFACOMPANY

In common parlance, company means, an association of persons formed for the economic gain of its members. However, in law, any association of persons for any common object can be registered as company. The object need not be the economic gain of its members, e.g., a company can be formed for purposes such as charity, research, advancement of knowledge, etc.,

In the words of Justice Lindley, "A company is an association of many persons who contribute money or money's worth to a common stock and employs it for a common purpose. The common stock so contributed is denoted in money and is the capital of the company. The persons who contribute it or to whom it belongs, are members." Late Chief Justice Marshall of USA has defined a company as "a person, artificial, invisible, intangible and existing only in the eyes of lthe law. Being a mere creature of law, it possesses only those properties which the charter of its creation confers upon it, either expressly or as incidental to its very existence."

The Companies Act defines a company as **"a company formed and registered under this Act or an existing company."** An existing company means a company formed and registered under any of the former Companies Act. A company thus exists, only in the contemplation of law. It has no physical existence. Right to act as a natural being is grated to it by law. Law creates it and law alone can dissolve it.

5.4 ESSENTIAL CHARACTERISTICS OF A COMPANY

The following are the essential characteristics of a company:

a. Voluntary Association: A company is a voluntary association of persons, i.e., it can neither compel a person to become its member not to give up its membership. It is personal choice of people and their objective to make profits which leads them to become members of a company.

b. Independent legal entity: A company is legal entity quite distinct and separate from its members. It can hold and deal with any type of property-of which it is lthe owner-in any way it likes; can enter into contracts, open a bank account its own name, sue and be sued by its members as well as outsiders. On account of this independent corporate existence, the creditors of a company are creditors of the company alone and their remedy lies against the company and its property only and not against any of its members. Law recognises the existence of the company as quite distinct, irrespective of the motives, intentions, scheme of conduct of the individual shareholders.

c. Perpetual existence: A company has perpetual succession. The mode of incorporation and dissolution of a company and the right of the members to transfer shares freely, guarantees the continuity of the existence of the Company quite independent of the life of the members. The existence of a company can be terminated only by law. Thus, members may come and go, but the company can go on for ever.

d. Common seal: A company being an artificial entity, acts through other natural persons, who are called directors. They act as agents to the company but not to its members. All the acts of the company are authorised by its common seal. The common seal is the official signature of the company. A document not being the common seal of the company will not be binding on the company.

e. Limited Liability: The liability of the members of a company is generally limited to the extent of the unpaid value of the shares held by them. In case of a guarantee company, the members are liable to contribute a specified agreed sum to the assets of the company in the event of the company being wound up if its assets fall short of its liabilities.

f. Transferability of Shares: The shares of a joint stock company are freely transferable. However, in the case of private companies they are transferable subject to the restrictions put by the company's articles.

5.5 PREPARATION AND PRESENTATION OF FINAL ACCOUNTS

Final accounts of a company consist of the following two statements:

1. Balance Sheet as at the end of the accounting period disclosing the financial position of the company; and
2. Profit and Loss Account for that period disclosing the results of the operations of the company.

A company is under legal obligation to keep proper books of account and to prepare its final accounts every year in the prescribed manner. While preparing its final accounts, each and every company must conform to certain legal requirements as contained in the Companies Act, 1956. As such, it would be proper to consider first those legal provisions.

Section 210 of the Companies Act, 1956 governs the preparation and presentation of final accounts of a company. It provides that –

1. At every general meeting of a company held in pursuance of Section 166, the Board of directors of the company shall lay before the company –

    a. a balance sheet at the end of the period specified in sub-section (3); and

    b. a profit and loss account for that period.

2. It the case of a company not carrying on business for profit, an income and expenditure account shall be laid before the company at its annual general meeting instead of a profit and loss account and all references to "profit and loss account", **"profit" and "loss"** in this section and elsewhere in this Act, shall be construed in relation to such a company, as reference respectively to the **"income and expenditure account",** the excess of **"income over expenditure" and "the excess of expenditure over income"**.

3. **The profit and loss account shall relate –**

a. In the case of the first annual general meeting of the company, to the period beginning with incorporation of the company and ending with a day which shall not precede that day of the meeting by more than nine months, and

b. In the case of any subsequent annual general meeting of the company, to the period beginning with the day immediately after the period for which the account was last submitted and ending with a day which shall not precede the day of the meeting by more than six months, or in cases where an extension of time has been granted for holding the meeting under the second proviso to Sub-section (l) of Section 166, by more than six months and the extension so granted.

4. The period to which the account aforesaid relates is referred to in this Act as a **"financial year"** and it may be less or more than a calendar year, but it shall not exceed fifteen months provided that it may extend to eighteen months where special permission has been granted in that behalf by the Registrar.

5.6 SUMMARY

The companies Act requires that the final accounts must exhibit a true and fair view of the profit earned or loss suffered and true and fair view of financial position of the company during the period for which the final accounts are prepared. On the whole the final accounts should give the significance factors that are contributed to current financial position.

5.7 SELF TEST

- Define Company. Explain its essential characteristics
- Briefly explain the statutory requirements with respect to preparation of final accounts of Joint Stock companies.

UNIT -6 : FORM AND CONTENTS OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT (AS PER SCHEDULE VI OF THE COMPANIES ACT, 1956)

Structure

6.1 Objectives

6.2 Requirements of companies act, 1956 with respect to form and contents of balance sheet and profit and loss account

6.3 Balance sheet as per Schedule VI of the Companies Act, 1956 (Both Horizontal and Vertical Forms)

6.4 Profit and Loss account (Both in conventional form and in the form of a statement)

6.5 Profit and Loss Appropriation Account

6.6 Summary

6.7 Self-Test

6.1 OBJECTIVES

After going through this unit, you should able to;

- Familiarize with the form of balance sheet in Horizontal Form and Vertical form.
- Understand the requirements as to the preparation of profit and loss account.
- Understand the requirements as to the preparation of profit and loss appropriation account.
- Recognize the importance and modes of making different adjustments in the final account.

6.2 REQUIREMENTS OF COMPANIES ACT, 1956 WITH RESPECT TO FORM AND CONTENTS OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT

Section 211 of the Companies Act, 1956 prescribes the form and contents of balance sheet and profit and loss account of a company which provides that-

1. Every balance sheet a company shall give a true and fair view of the state of affairs of the company as at the end of the financial year and shall, subject to the provisions of this section, be in the form set out in Part l of Schedule Vl or as near thereto as circumstances admit or such other form as may be permitted by the Central Government either generally or in any particular case; and in preparing the balance sheet, due regard shall be had, as far as may be, to the general instruction for preparation of balance sheet under the heading "Notes" at the end of that part:

Provided that nothing contained in this sub-section shall apply to any insurance or banking company or any company engaged in the generation or supply of electricity or to any other class of company for which a form of balance sheet has been specified in or under the Act governing such class of company.

2. Every profit and loss account of a company shall give a true and fair view of the profit or loss of the company for the financial year and shall, subject as aforesaid, comply with the requirements or Part ll of Schedule Vl, so far as they are applicable thereto:

Provided that nothing in this sub-section shall apply to any insurance or banking company or any company engaged in the generation of supply of electricity or to any other class of company for which a form of profit and loss account has been specified in or under the Act governing such class of company.

3. The Central Government may, by notification in the Official Gazette, exempt any class of companies from compliance with any of the requirements in Schedule Vl, if in its opinion, it is necessary to grant the exemption in the public interest.

Any such exemption may be granted either unconditionally or subject to such conditions as may be specified in the notification.

Every profit and loss account and balance sheet of company shall comply with the accounting standards. Where the profit and loss account and balance sheet of the company do not comply with the accounting standards, such companies shall disclose in its profit and loss account and balance sheet, the following: (a) deviation from the accounting standards; (b) the reasons for such deviation, and (c) the financial effect, if any, arising due to such deviation.

4. The Central Government may, on the application or with the consent of the Board of Directors of the company, by order, modify in relation to the company any of the requirements of this Act as to the matters to be stated in the company's balance sheet or profit and loss account for the purpose of adapting them to the circumstances of the company.

5. The balance sheet and the profit and loss account of a company shall not be treated as not disclosing a true and fair view of the state of affairs of the company, merely by reason of the fact that they do not disclose:

1. In the case of an insurance company, any matters which are not required to be disclosed by the Insurance Act, 1938;

2. In the case of banking company, matters which are not required to be disclosed by Banking Companies Act, 1949;

3. In the case of a company engaged in the generation or supply of electricity, any matters which are not required to be disclosed by both the Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1948;

4. In the case of a company governed by any other special Act for the time being enforce, in any matters which are not required to be disclosed by that special Act; or

5. In the case of any company, any matters which are not required to be disclosed by virtue of the provisions contained in Schedule Vl or by virtue of a notification issued under Sub-section (3) or an order issued under Sub-section (4).

6. For the purposes of this section, except where the context otherwise requires, any reference to a balance sheet or profit and loss account shall include any notes thereon

or documents annexed thereto giving information required by this Act, and allowed by this Act to be given in the form of such notes or documents.

7. If any such person as is referred to in Sub-section (6) of Section 209 fails to take all reasonable steps to secure compliance by the company, as regards any accounts laid before the company in general meeting, with the provisions of this section and with the other requirements of this Act as to the matters to be stated in the accounts, he shall, respect of each offence, be punishable with imprisonment for a term which may extend to one thousand rupees, or with both:

Provided that in any proceedings against a person in respect of an offence under this section, it shall be a defence to prove that a competent and reliable person was charged with the duty of seeing that provisions of this section and the other requirements aforesaid were complied with, and was in a position to discharge that duty:

Provided further that no person shall be sentenced to imprisonment for any such office unless it was committed willfully.

8. If any person, not being a person referred to in Sub-section (6) of Section 209, having been charged by the managing director or manager or Board of directors as the case may be, with the duty of seeing that the provisions of this section and the other requirements aforesaid are complied with, makes default in doing so, he shall in respect of each offence be punishable with imprisonment for a term which may extend to six months or with fine which may extend to ten thousand rupees, with both:

Provided that no person shall be sentenced to imprisonment for any such offence unless it was committed willfully.

Since every balance sheet of a company shall in the form set out in Part l of Schedule VI and every profit and loss account of a company shall comply with the requirements of Part II of Schedule VI, or as near thereto as circumstances admit it is important to study Schedule VI very carefully. A detailed discussion is made on Schedule VI as follows:

6.3 BALANCE SHEET AS PER SCHEDULE VI OF THE COMPANIES ACT, 1956 (Both Horizontal and Vertical Forms)

Schedule Vl to the Companies Act, 1956, consists of the following parts:

Part l – Part l of Schedule Vl prescribes two alternative forms of balance sheet, i.e., horizontal form and vertical form.

It also indicates the information relating to different assets and liabilities which should be disclosed, therein. Besides there are general instructions at the end of the form which must be followed in preparing the balance sheet.

Part ll – Part ll of Schedule Vl deals with the requirements as to profit and loss account. Unlike balance sheet, no form for profit and loss account has been prescribed, As such, a company may adopt any suitable form to meet its own requirements.

Part lll – Part lll of Schedule Vl contains the interpretation of certain terms.

Part lV – Part lV of Schedule Vl contains balance sheet abstract and general business profile. **SCHEDULE Vl**

(See Section 211)

PART1

FORM OF BALANCE SHEET

The balance sheet of a company shall be either in horizontal form or vertical form:

A. Horizontal Form

Balance Sheet of………………………..(Here enter the name of the company)

as at…………………………………………………(Here enter the date as at which the balance sheet is made out).

Figs. For The Pre. Year Rs.	LIABILITIES	Figs. for the curr. Year Rs.	Figs. For the prev. year Rs.	ASSETS	Figs. for the curr. Year Rs.
(1)	(2)	(3)	(4)	(5)	(6)
	Share Capital: Authorized… Shares of Rs….. each. *Issued:* *Subscribed*: *Less*: Calls unpaid: (i) By directors. (ii) By others. *Add*: forfeited shares: *Reserves and Surplus:* 1. Capital Reserves. 2. Capital Redemption Reserve. 3. Securities Premium Account. 4. Other reserves. *Less*: Debit balance in profit and Loss account (if any) 5. Surplus, i.e., balance in profit And loss account 6. Proposed additions to Reserves. 7. Sinking Funds. *Secured Loans:* 1. Debentures 2. Loans and Advance from Bank. 3. Loans and Advances from Subsidiaries. 4. Other Loans and Advances. *Unsecured Loans:* 1. Fixed Deposits. 2. Loans and Advances from Subsidiaries. 3. Short-term Loans and Advances: (a) From banks. (b) From others. 4. Other Loans and Advances:			*Fixed Assets:* (a) Goodwill, (b) Land, (c) Buildings, (d) Leaseholds, (e) Railway sidings, (f) Plant and machinery, (g) Furniture and fittings, (h) Development of property, (i) Patents, trade marks and designs, (j) Livestock, (k) Vehicles, etc. *Investments:* 1. Invest5ments in Government or Trust securities. 2. Investments in shares, debentures or bonds. 3. Immovable properties. 4. Investments in the capital of partnership firms. 5. Balance of unutilized monies raised by issue. *Current Assets, Loans and Advances*: (A) Current Assets 1. Interest accrued on investments. 2. Stores and spare parts. 3. Loose tools. 4. Stock-in-trade. 5. Work-in-progress. 6. Sundry debtors: *Less*: provision *(B) Loans and Advances:* (8) Advances and Loans (9) Bills of Exchange. (10) Advances recoverable (11) Balance with Customers,	

Current liabilities and Provisions: *A. Current Liabilities* 1. Acceptances. 2. Sundry creditors 3. Subsidiary companies. 4. Advance payments and unexpired Discounts 5. Investor Education and Protection Funds 6. Other liabilities 7. Interest accrued but not due on Loans *B. Provisions:* 8. Provision for taxation 9. Proposed dividends. 10. For contingencies. 11. For provident fund scheme. 12. For insurance, pension and Similar staff benefits schemes. 13. Other provisions.			*Miscellaneous Expenditure:* (1) Preliminary expenses (2) Expenses including commission or brokerage on underwriting or subscription of shares or debentures. (3) Discount allowed on the issue of shares or debentures. (4) Interest paid out of capital during construction (also stating the rate of interest). (5) Development expenditure not adjusted. (6) Other sums (specifying nature). *Profit and Loss Account:*

B – Vertical Form

Name of the Company ....

Balance Sheet as at ....

	Schedule No.	Figures as at the end of current financial year	Figures as at the end of previous financial year

I. Sources of Funds			
(1) Share holders' funds:			
(a) Capital	…	…	…
(b) Reserves and surplus	…	…	…
(2) Loan funds:			
(a) secured loans	…	…	…
(b)Unsecured loans	…	…	…
Total	…	…	…
II. Application of Funds			
(1)Fixed assets:			
(a) Gross block	…	…	…
(b) Less depreciation	…	…	…
(c) Net block	…	…	…
(d) Capital work in progress	…	…	…
(2)Investments			
(3)Current assets, loans and advances:			
(a) Inventories	…	…	…
(b) Sundry debtors	…	…	…
(c) Cash and bank balances	…	…	…
(d) Other current assets	…	…	…
(e) Loans and advances	…	…	…
Less: Current liabilities and Provisions:			
(a) Liabilities	…	…	…
(b) Provisions	…	…	…
Net current assets	…	…	…
(4)(a) Miscellaneous expenditure to the extent not written off or adjusted	…	…	…
(b)Profit and loss account	…	…	…

6.4 PROFIT AND LOSS ACCOUNT
(Both in conventional form and in the form of a statement)

Although, the Companies Act, 1956 does not recognize Trading account or Profit and Loss Appropriation Account as such, it is desirable to make out the Profit and Loss Account in three sections namely: (i) Trading Account, (ii) Profit and Loss Account, and (iii) Profit and loss Appropriation Account for the obvious reason that, in such a manner, it is possible to know separately the gross profit or loss, the net profit or loss and the disposition of the net profit, if any.

If it is desired by a company, no separate section for Trading Account need be shown. But the Profit and l=Loss Account must be split into two sections at least, namely: (i) Profit and Loss Account, and (ii) Profit and Loss Appropriation Account in order to distinguish the items changeable against profits from the items of appropriation of profits:

1. The Profit and Loss Account, proper, should include all appropriations for dividends, transfer to and from reserves and income and show the figure of Profits or Loss for the year, and

2. The second part of the account should include all appropriations for dividends, transfer to and from reserves and income and expenditure, if material, relating to previous years.

When the Profit and Loss Account is spilt up in two parts, i.e.,(i) Profit and Loss Account, proper, and (ii) Profit and Loss Appropriation Account, a line of demarcation is drawn in between the two parts to separate the items chargeable against profits from the items of appropriation or disposition of profits. The items which are shown in the Profit and Loss Account proper are referred to as items appearing "Above the line" and the items which are shown in the appropriation section of the Profit and Loss Account are referred to as items appearing **"Below the line".**

The corresponding amounts of incomes and expenses for the immediately preceding financial year should be stated in the Profit and Loss Account except in the case of the first Profit and Loss Account after incorporation. The Profit and Loss Account should be made out in such a manner that it discloses a "true and fair" view of the profit earned or loss incurred by the company during the financial year. This implies that the items which are related to the previous years or the items of exceptional nature should be stated separately.

The Profit and Loss Account can be prepared either (a) in the conventional form of a ledger account, or (b) in the form of a statement.

……COMPANY LTD.

Profit and Loss Account for the year ended……….

	Rs.		Rs.
To stock (opening)		By sales	
To purchases		By Stock (closing)	
To wages			
To coal and coke			
To carriage inward			
To gross profit c/d			
To General and administration Salaries		By Gross profit b/d	
To Sales salaries		By Interest and dividend earned	
To Advertising		By Income from rent	
To Travel and entertainment		By Gain on sale of Investment	
To Rates and taxes			
To Insurance			
To Freight and delivery			
To Depreciation			
To interest paid			
To Provision for taxes			
To Net profit c/d			

Statement Form

Particulars	**Amount**	**Amount**	**Amount**
Sales		XXX	
Cash	XXX		
Credit	XXX		
Less: Returns		(XXX)	
Net Sales			XXX
Less: Cost of Goods sold			(XXX)
Gross Profit			XXX
Less: Operating expenses		XXX	
General & Administrative expenses		XXX	
Selling expenses		XXX	
Net operating profits			XXX
Add: Non-operating Incomes		XXX	
Less: Non-operating expenses		(XXX)	
Net Profit before Interest and Tax			XXX
Less: Interest on debentures		(XXX)	
Less: Provision for taxation		(XXX)	
Net profit after tax			XXX

1. As per clause 3(vii) of Part ll, the amounts reserved for:
   a. repayment of share capital; and
   b. repayment of loans.
2. As per clause3(viii) of Part ll:
   a. the aggregate, if material, of any amounts set aside or proposed to be set aside top reserves, but not including provisions made to meet any specific liability, contingency or commitment known to exist at the date as at which the balance sheet is made up; and
   b. the aggregate, if material, of any amounts withdrawn from such reserves.
3. As per clause 3(ix)(b) of Part ll, the aggregate, if material, of the amounts withdrawn from the provisions made for meeting specified liabilities, contingencies or commitments as no longer required.
4. As per clause 3(xix) of Part ll, the aggregate amount of the dividends paid and proposed and stating whether such amounts are subject to deduction of income-tax or not.

Thus, the amount of profits transferred to various reserves, amount withdrawn from such reserves, excess provisions made over the actual requirements or vice versa and distribution of profits by way of dividend to the shareholders are to be disclosed in the Profit and Loss Appropriation Account. In addition, it is appropriate that excess of provision or shortfall in them made last year as also prior period items be shown below the line. The profit and Loss Appropriation Account may have the items shown below.

Profit and Loss Appropriation Account

	Rs.		Rs.
To stock (opening) To purchases To wages To coal and coke To carriage inward To gross profit c/d		By sales By Stock (closing)	
To General and administration Salaries To Sales salaries To Advertising To Travel and entertainment To Rates and taxes To Insurance To Freight and delivery To Depreciation To interest paid To Provision for taxes To Net profit c/d		By Gross profit b/d By Interest and dividend earned By Income from rent By Gain on sale of Investment	

Statement Form

Particulars	Amount	Amount	Amount
Sales		XXX	
Cash	XXX		
Credit	XXX		
Less: Returns		(XXX)	
Net Sales			XXX
Less: Cost of Goods sold			(XXX)
Gross Profit			XXX
Less: Operating expenses		XXX	
General & Administrative expenses		XXX	
Selling expenses		XXX	
Net operating profits			XXX
Add: Non-operating Incomes		XXX	
Less: Non-operating expenses		(XXX)	
Net Profit before Interest and Tax			XXX
Less: Interest on debentures		(XXX)	
Less: Provision for taxation		(XXX)	
Net profit after tax			XXX

Excess of actual liability over the provisions made, if any Prior Period Expenses Transfer of profits to Reserves, if any Dividends paid, if any, i.e., interim dividend Dividend proposed, if any, i.e., final dividend Tax on distributed profit (i.e., tax on dividend – proposed, declared or paid) Bonus to shareholders (issue of bonus shares out of profits) Surplus profits, if any, to be carried Forward to the next year.	Last year’s surplus profit remaining undistributed and carried forward, if any Current year’s net profits transferred from the profit and loss account proper Prior period Incomes Excess provisions made, if any, over actual liability, which are no longer required Withdrawal from Reserves, if any

It is important to note here that appropriation can be made only out of profits of the company and do not out of losses incurred buy the company; but the loss as disclosed by the profit and loss account may be further affected by such items as balance b/d excess provision, prior period items, etc. Hence, even in the case of loss, a Profit and Loss Appropriation Account may be prepared

If there is any surplus left in the Profit and Loss Appropriation Account as undistributed, the same has to be carried forward to the next year and must be shown on the liabilities side of the Balance sheet under the head, "Reserves and Surplus". On the other hand, if the company incurs losses, the Profit and Loss account proper will show a debit balance which has to be carried forward to the next year and must be shown on the assets side of the Balance sheet under the head, "Profit and Loss Account". If, however, there are any un-committed reserves of the company, the same has to be deducted from such reserves.

Illustration 1

The following balances appeared in the books of the Moon-Light Co, Ltd. as on 31st March, 2008:

(Rs. in 000's)

	Dr.	Cr.
	Rs.	Rs.
Issued, Subscribed and paid-up Capital:		
60,00,000 Equity Shares of Rs. 100 each		6,00,000
General Reserve		2,50,000
Unclaimed Dividend		6,526
Trade Creditors		36,858
Buildings at cost	1,50,000	
Purchases	5,00,903	
Sales	10,83,947	
Manufacturing Expenses	3,59,000	
Establishment Charges	26,814	
General Charges	31,078	
Machinery at Cost	2,00,000	
Motor Vehicle at Cost	30,000	

Furniture at Cost	5,000	
Opening Stock	1,72,058	
Book Debts	2,23,380	
Investments	2,88,950	
Depreciation Reserve .		71,000
Advance Payment of Income-tax	50,000	
Cash Balance	72,240	
Directors' Fees	1,800	
Interest on Investment		8,544
Profit and Loss Account		
1st April. 2007		16,848
Staff Provident Fund		37,500
	21,11,223	21,11,223

From these balances and the following information, prepare the Company's Balance Sheet as on 31st March, 2008 and its Profit and Loss Account for the year ended on that date:

a. The stocks on 31st March, 2008 were valued at Rs. 1,48,680 thousand,

b. Provided Rs. 10,000 thousand for depreciation on fixed assets, Rs. 1,800 thousand for Managing Director's remuneration and Rs. 6,200 thousand for the company's contribution to the Staff Provident Fund.

c. Interest accrued on investment amounted to Rs. 2,750 thousand.

d. A provision of Rs- 50.000 thousand for taxes in respect of the profit for 2007-08 considered necessary.

e. The directors propose a final dividend @ 8% after transfer to General Reserve Rs. 30,000 thousand.

f. A claim of Rs. 2,500 thousand for workmen's compensation is being disputed by the company.

g. The market value of investments as on 31.3.2008 amounts to Rs- 3,02,500 thousand.

Solution:

Profit and Loss Account of the Moonlight Co. Ltd.

for the Year Ended 31st March, 2008

(Rs. in 000's)

Dr.				**Cr.**
	Rs.		**Rs.**	
To Opening Stock	1,72,058	By Sales		10,83,947
To Purchases	5,00,903	By Closing Stock	1,48,680	
To Manufacturing	By Interest on			
Expenses	3,59,000	Investments	8,544	
To Establishment Charges	26,814	Add: Accrued		
To General Charges	31,078	Interest	2.750	11,294
To Directors' Fees	1,800			
To Depreciation on Fixed Assets	10.000			
To Managing Director's Remuneration	1,800			
To Contribution to Staff Prowdent Fund	6,200			
To Provision for Taxation	50,000			
To Profit for the year c/d	84.268			
	12.43.921			12,43,921
To General Reserve		By Balance as per last year		16,848
(transfer)	30,000	By Profit for the year b/d		84,268
To Proposed Dividend	48,000			
To Tax on Distributed Profit*	7,200			
To Balance c/d	15,916			
	1,01,116			1.01.116

* Tax on Distributed Profit has been calculated @15% on the proposed dividend.

Balance Sheet of the Moonlight Co. Ltd. as 31st March, 2008
(Horizontal Form)

Liabilities		*Assets*			
		Rs.			Rs.
Share Capital:			Fixed Assets:	1,50.000	
Building at cost					
Authorised Capital					
Issued, Subscribed and					
Paid-up Capital			Machinery at cost	2,00,000	
60,00,000 Equity Shares of			Motor vehicle at cost	30,000	
Rs. 100 each		6,00,000	Furniture at cost	5,000	
Reserves and Surplus:				3,85,000	
General Reserve	2,50,000		**Less :**		
Added during			Depreciation upto date		
the year	30.000	2,80,000	(71,000 + 10,000)	81,000	3,04,000
Profit and Loss Account		15,916	Investment (market		
Secured Loan			value Rs. 3,02,500)		2,88,950
Unsecured Loan			*Current Assets,*		
			Loans and advances:		
Current Liabilities and					
Provisions:			A. Current Assets		2,88,950
A. Current Liabilities:			Interest Accrued on		
Trade Creditors		36,858	Investments		2,750
Unclaimed Dividend		6,526	Stock in trade		
Managing Director's			(at cost or market		
Remuneration		1,800	value whichever is less)		1,48,680
B. Provision;			Books Debts		2,23,380
Provision for Taxation		50,000	Cash in hand		72,240
Proposed dividend		48,000			
Tax on Distributed Profit		7,200	B. Loans and Advances;		
Staff Provident			Advance Payment of Tax		50,000
Fund	37,500		Miscellaneous Expenditure		-
Added during					
the year	6.200	43,700			
		10.90.000			10.90.000

Note: There is a contingent liability for Rs. 2,500 in respect of a claim for workmen's compensation which is disputed by the company.

Vertical Form *

Balance Sheet of the Moonlight Co. Ltd. as at 31st March, 2008

(Rs. in 000s)

	Schedule No.	Figure as at the end of current financial year		
I. Sources of Funds				
1. Shareholders' funds:				
(a) Capital	…..	6,00,000		
(b) Reserves and Surplus	…..	2,95,916		8,95,916
2. Loan Funds:				
(a) Secured Loans	…..		___	___
(b) Unsecured Loans	…..		___	___
				8,95,916
II. Application of Funds				
1. Fixed assets:				
(a) Gross blocks	…..	3,85,000		
(b) Less depreciation	…..	81,000		
(c) Net blocks	…..			3,04,000
(d) Capital work-in-progress	…..			
2. Investments	…..		2,88,950	
3 Current Assets, Loans and Advances				
(a) Inventories	…..	1,48,680		
(b) Sundry Debtors	…..	2,23,380		
(c) Cash and bank balances	…..	72,240		
(d) Other current assets	…..	___		
(e) Loans and advances	…..	52,750	4,97,050	
Less: Current Liabilities and Provisions				
(a) Liabilities	…..	45,184		
(b) Provisions	…..	1,48,900	1,94,084	
Net current assets				3,02,966
4.(a) Miscellaneous expenditure (to the extent not written of or adjusted)	…..		___	
(b) Profit and loss account	…..		___	
Total				8,95,916

Note: There is a contingent liability for Rs- 2,500 in respect of a claim for workmen's compensation which is disputed by the company.

Illustration 2

Mutual Engineers Ltd, have authorised capital of Rs. 50 lakhs, divided into 5,00,000 equity shares of Rs. 10 each. Their books show the following balances as on 31.3.2007:

	Rs.		Rs.
Stock 1.4.2007	6,65,000	Bank current account	20,000
Discount and rebates	30,000	Cash in hand	8,000
Carriage inwards	57,500	Debenture interest	
Patterns	3,65,000	(for 72 year to 30.9.2007)	20,000
Rates, taxes and insurance	55,000	Interest banks (Dr.) .	91,000
Furniture and fixtures	1,50,000	Preliminary expenses	10,000
Materials purchased	12,32,500	Calls-in-arrears	10,000
Wages	13,05,000	Equity share capital	
Coal and coke	63,000	(2,00,000 share of	
Freehold land	12,50,000	Rs. 10 each)	20,00,000
Plant and machinery .	7,50,000	8% Debentures	5,00,000
Engineering tools	1,50,000	Bank overdraft	7,57,000
Goodwill ,	3,75,000	Sundry creditors (for goods)	2,40,500
Sundry debtors	2,66,000	Sales	36,17,000
Bills receivable	1,34,500	Rents (Cr.)	30,000
Advertisement	15,000	Transfer fees	6,500
Commission and brokerage	67,500	Profit and Loss A/c (Cr,)	67,000
Business expenses	56,000		
Repairs	46,500		
Bad debts	25,500		

The stock (valued at cost or market value whichever is lower) as on 31.3.2008 was Rs. 7,08,000. Outstanding liability for wages Rs. 25,000 and business expenses Rs 25,000.

Dividend declared @ 8% on paid-up capital.

To charge depreciation; Plant and Machinery @ 15% Engineering Tools @ 20%, Patterns @ 10% and furniture and fixture @ 10%. Provide 2% on debtors as doubtful debts after writing off Rs. 21,500 as bad debts. Write off preliminary expenses Rs. 5,000 and create Debenture Redemption Reserve Rs. 50,000. Provide Rs. 1,30,000 for income-tax.

Prepare Profit and Loss Account for the year ended 31.3.2008 and Balance Sheet, as on that date, in accordance with the Companies Act, 1956, giving as much information as necessary. Ignore previous year's figures

Solution:

Profit and Loss Account of Mutual Engineers Ltd.
for the year ended 31st March, 2008

Dr.				Cr
		Rs.		**Rs**
To Opening Stock		6,65,000	By Sales	36,17.000
To Materials purchased		12,32.500	By Closing Stock	7,08,000
To Carriage inwards		57,500	By Rent	30,000
To Wages		13,30,000	By Transfer Fees	6,500
To Coal and Coke		63,000		
To Discount and Rebates		30,000		
To Rates, Taxes and Insurance		55,000		
To Advertisements		15,000		
To Commission and Brokerage		67,500		
To Business expenses		81,000		
To Repairs		46,500		
To Bad Debts		47,000		
To Debenture Interest		40,000		
To Interest-Banks		91,000		
To Preliminary Expenses		5,000		
To Depreciation on				
Plant and				
Machinery	1,12,500			
Engineering				
Tools	30,000			
Patterns	37,500			
Furniture and				
Fixtures	15,000	1,95,000		
To Provision for Doubtful				
Debts		4,890		
To Provision for Income-tax		1,30,000		
To Profit for the year c/d		2,05,610		
		43,61,500		43,61,500
To Debenture Redemption			By Balance as per	
Reserve-transfer		50,000	last year	67,000
To Proposed Dividend 1		59,200	By Profit for the	
To Tax on Distributed Profit		23,880	year b/d	2,05,610
@ 15%				
To Balance c/d		39,530		
		2.72,610		2,72,610

Horizontal Form*

Balance Sheet of Mutual Engineers Ltd. as at 31st March, 2008

Liabilities	***Amount***	***Assets***		***Amount***
	Rs			***Rs***
Share Capital :		*Fixed Assets :*		
Authorised Capital		Goodwill		3,65,000
5,00,000 Equity Shares		Freehold Land at cost		12,50,000
of Rs. 10 each Reserve	50,00,00	Plant		
Issued and Subscribed		& Machinery **	7,50,000	
Capital		Less; Depreciation	1,12,500	6,37,500
2,00,000 Equity Shares		Furniture and		
of Rs. 10 each, fully		Fixtures**	1,50,000	
called up-	20,00,000	*Less :* Depreciation	37,500	3,37,500
Debenture Redemption		Engingeering		
Reserve	50,000	Tools**	1.50,000	
Profit and Loss Account	39,530	*Less :* Depreciation	30,000	1,20,000
Secured Loan:				
8% Debentures (repayable		*Investments:*		
after 10 years)	5,00,000	Current Assets, Loans		
Interest due and payable	20,000	and Advances:		
Bank overdraft***	7,57,000	A. Current Assets:		
Unsecured Loans	-	Stock-in-trade		
Current Liabilities and		(Valued at cost or		
Provisions:		market value which-		
A. Current Liabilities:		ever is lower)		7,08,000
Sundry Creditors		Sundry Debtors 2,	44,500	
(for goods)	2,40,500	Less: Provision		
Outstanding Wages	25,000	for Doubtful Debts	4,890	2,39,610
Outstanding Expenses	25,000	Cash in hand		8,000
B. Provisions:		Bank Balance in Current A/c		20,000
Provision for income-tax	1,30,000	B. Loans and Advances:		
Proposed Dividend	1,59,200	Bills Receivable		1,34,500
Tax on Distributed Profit	23,880	*Miscellaneous expenditure:*		
		Preliminary Expenses		5,000
	39,60,110			39,60,110

Note: As the rate of dividend is 8%, transfer to statutory reserve as per Section 205(2A) is not essential.

ertical Form*

Balance Sheet of Mutual Engineers Ltd. as at 31st March, 2008

	Schedule No.	Figure as at the end of current financial year		
		Rs.	Rs..	Rs.
I. Sources of Funds				
1. Shareholders' funds:				
(a) Capital	1	19.90.000		
(b) Reserves and Surplus	2	89.530	20,79,530	
2. Loan funds:				
(a) Secured loans	3	12,77,000		
(b) Unsecured loans		_	12.77.000	33.56.530
II. Application of Funds				
1. Fixed assets:				
(a) Gross blocks	4	30,40.000		
(b) Less Depreciation		1.95.000		
(c) Net blocks			28,45,000	
(d) Capital work-in-progress			—	28,45,000
2. Investments				
3 Current Assets, Loans and Advances:				
(a) Inventories valued at cost or market value whichever is lower		7,08,000		
(b) Sundry debtors		2,39,610		
(c) Cash and bank balances		28,000		
(d) Other current assets		—		
(e) Loans and advances		1,34,500	11,10,110	
Less: Current Liabilities and Provisions:				
(a) Liabilities	5	2,90,500		
(b) Provisions		3.13.080	6,03.580	
Net current assets		5,06,530		
4. (a) Miscellaneous expenditure (to the extent not written of or adjusted)				
Preliminary expenses			5,000	
(b) Profit and loss account				—
Total				33.56.530

Schedules

1. Shareholders'Funds:

Capital	Rs.
Authorised 5,00,000 equity shares ofRs 10 each	50,00,000
Subscribed and paid-up	
2,00,000 equity shares of Rs. 10 each	20,00,000
Less; Calls in arrears	10,000
Amount as per Balance Sheet	19,90,000

2. Reserves and Surplus

Debenture Redemption Reserve
Surplus as per Profit and Loss A/c
Amount as per Balance Sheet

3. Loan Funds:

Secured loans	5,00,000
8% Debentures	20,000
Interest accrued and due	7,57,000
Bank overdraft	12,77,000
Amount as per Balance Sheet	

4. Fixed Assets

Particulars	Value given	Depreciation charged	Written down value on 31.3.2008
Goodwill	3,65,000	___	3,65,000
Land	12,50,000	___	12,50,000
Plant and Machinery	7,50,000	1,12,500	6,37,500
Furniture and Fixtures	1,50,000	15,000	1,35,000
Patterns	3,75,000	37,500	3,37,500
Engineering tools	30,40,000	1,95,000	28,45,000
30.40.000 1.95.000			

5. Current Liabilities and Provisions

Current Liabilities		
Sundry Creditors	2,40,500	
Outstanding wages	25,000	
Outstanding business expenses	25,000	2,90,500
Provisions		
Proposed Dividend	1,59,200	
Tax on Distributed Profit	23,880	
Taxation	1,30,000	3,13,080
	6,03,580	

6.6 SUMMARY

Final accounts of a company consist of balance sheet as at the end of the accounting period and profit and loss account for that period. Sec. 211 of Companies Act 1956 prescribes the form and contents of balance sheet and profit and loss account of a company. Balance Sheet of a company shall be prepared in the form set out in Part-I and Profit and loss account of the company shall comply with the requirements of Part-II of Schedule VI of Companies Act 1956. The profit and loss appropriation account shows the disposal of net profits as disclosed by profit and loss account proper.

6.7 SELF TEST

- How do you present the balance sheet in the vertical form?
- Why is profit and loss appropriation account prepared?
- The authorized capital of Good Luck company Ltd is Rs 3,00,000 consisting of 1500 6% Pref shares of Rs 100 each and 15,000 of equity shares of Rs 10 each.

  Following are the balances as on 31-3-2009

Debit Balances

Investment in shares	25,000
Purchases	2,65,545
Packing charges	9,000
Delivery charges	17,700
Stock on 1-4-2008	72,600
Wages	15,000
Salaries	9000
Directors fees	2000
Rate and taxes	7750
Carriage	4100
Dividend for 2008	6000
Preference dividend for half year to 30-6-2008	13000
Machinery	12500
Discount on issue of debentures	1000
Preliminary expenses	500
Bills receivable	20750
Interest on Bank loan	2900
Debenture interest for half year to 30-9-2008	1875
Sundry debtors	25050
Buildings	175000
Furniture (cost Rs 25000)	17500
Technical know –how at cost	75000
Cash	2075

Credit Balances

Sundry creditors	43925
Pref share capital	100000
Equity share capital	100000
5% Mortgage debentures	75000
Dividend and interest	22420
Profit & loss A/c	14250
Sales	340250
Bank Loan	75000

Prepare profit and loss Account for the year ended 31-3-2009 and the balances as on that date in vertical form taking into account the following:

1. Closing stock Rs 71,250
2. Wages include Rs 1000 incurred for installation of machinery.
1. Purchases include goods worth Rs 2500 distributed freely among customers.
2. Depreciate furniture at 10% on original cost.
3. Write of half of the discount in issue of debentures.
4. Provide for the remaining half years preference dividend.
5. Technical know-how is to be written down over 15 years
6. Provide for taxation Rs 15000

- The following is the Trial Balance of Wonderful Company Ltd. As at 31st March, 2009. Prepare Profit and Loss Account and the Balance Sheet in both horizontal and vertical form:

Adjustments:

Charge depreciation on Buildings at 2%, on Machinery at 10% and Furniture at 10%; Make a reserve of 5% on debtors for bad debts. Carry forward the unexpired amount: Insurance Rs.120; Provide for outstanding Wages Rs. 32,000; Salaries Rs.500; Rent and Rates Rs.200; The value of stock as on 31st March, 2009 Rs. 30,000

Trial Balance

Particulars	Dr.	Cr.
	Rs.	Rs.
Authorised Capital(50,000 shares of Rs. 10 each Rs. 5,00,000)		
Subscribed Capital (10,000 shares of Rs. 10 each)		
Calls in arrears		1,00,000
Land	6,400	
Building	10,000	
Machinery	25,000	
Furniture	15,000	
Carriage	3,200	
Wages	2,300	
Salaries	21,400	
Bad debts reserve	4,600	
Sales		1,400
Sales return		80,000
Bank Charges	1,700	
Coal, Gas and Water	100	
Rent and Rates	700	
Purchases	800	
Purchase returns	50,000	
Bills Receivable		3,400
General Expenses	1,200	
Debtors	1,900	
Creditors	42,800	
Stock		13,200
Insurance	25,000	
Cash at Bank	400	
Cash in hand	13,000	
Securities premium	2,500	
General Reserve		6,000
		24,000
Total	**2,28,000**	**2,28,000**

- The following trial balance has been extracted from the books of Neptune ltd as on 31st march 2009.the authorized capital of the company consists of 10,000 equity shares of rs.10 each & 300 5% preference shares of rs.100 each.

Particulars	**RS.**	**RS.**
Equity share capital		100000
Preference share capital (200 shares)		20,000
Purchases & sales	110670	160800
Stock in trade (1st April 2008)	29145	
Preference dividend to 30th sept, 2008	500	
Provisions for bad debts		600
Investments incomes		1000
Wages	16,328	
Motor car expenses	5,895	
Vehicles (cost-RS.18000)	9,240	
Debtors & creditors	28,370	22,650
Rates & insurances	1,217	
Freehold land (at cost)	85,000	
Bad debts	770	
Profits & loss a/c, 1st April, 2008		6,954
Directors remuneration	3000	
Investments	5800	
Salaries	7890	
Balance at scheduled banks	8179	
Total	**3,12,004**	**3,12,004**

You are given the following further information:

1. Stock in trade on 31st march 2009 RS.32, 630.
2. The provision for bad debts to be increased up to RS.750.
3. A dividend of 10% on equity capital is recommended.
4. Depreciation on vehicles is to be provided at 20% on cost.
5. Prepaid insurance is RS.78.
6. Outstanding wages RS.200.
7. RS.3000 is to be transferred to general reserve.
8. An office block was constructed during the year by the company's own workmen, the cost of their labour being RS. 420, which is included in wages.

You are required to prepare final accounts of the company in the vertical form for the year ended 31st march, 2009.

UNIT -7 : FORM AND CONTENTS OF BALANCE SHEET AND PROFIT AND LOSS ACCOUNT (AS PER REVISED SCHEDULE VI OF THE COMPANIES ACT, 1956)

Structure

7.1 OBJECTIVES

After going through this unit, you should able to;

- Understand the salient features of revised Schedule VI of the Companies Act, 1956 with respect to preparation of final accounts of Companies.
- Familiarize with the form of Balance Sheet and Profit and Loss Account as per revised Schedule VI of the Companies Act, 1956
- Recognize the importance and modes of making different adjustments in the final account.

7.2 INTRODUCTION

Schedule VI to the Companies Act, 1956 deals with the form of Balance Sheet and Profit and Loss Account and classified disclosure to be made therein and it applies uniformly to all the companies registered under the Companies Act, 1956, for the preparation of financial statements of an accounting year. The original schedule VI, with minor amendments from time to time, has been in force for more than fifty years. To keep pace with the changes in the economic philosophy leading to privatization and globalization and consequent desired changes/reforms in the corporate financial reporting practices, the Ministry of Corporate Affairs, Government of India, has revised the above mentioned schedule and through its notification No. F. No. 2/6/2008-C.L-V has notified that the text of the Revised Schedule VI to the Companies Act, 1956 shall come into force for the Balance Sheet and Profit and Loss Account to be prepared for the financial year commencing on or after 1/4/2011.

7.3 SALIENT FEATURES OF THE REVISED SCHEDULE VI

- A vertical format for presentation of balance sheet with classification of Balance Sheet items into current and non-current categories.
- A vertical format of Statement of Profit and Loss with classification of expenses based on nature.
- Deletion of part IV of the original schedule requiring presentation of balance sheet abstract and general business profile.
- The revised schedule VI has eliminated the concept of „Schedulesand such information is now to be furnished in terms of „Notes to Accounts.
- While preparing the Balance-Sheet. „Cash and Cash Equivalents will be shown under Current Assets, and include the following:

a. Balances with banks

b. Cheques, drafts on hand;

c. Cash on hand;

d. others

Earmarked balances with banks (For examples, for unpaid dividend) shall be separately stated.

Balances with banks held as margin money or security against the borrowings, guarantees, other commitments shall be disclosed separately.

Revised Schedule VI does not contain any specific disclosure for items included in Old Schedule VI under the head, “Miscellaneous Expenditure”. As per AS-16 borrowing cost and discount or

premium relating to borrowing could be amortized over loan period. Further, share issue expenses, discount on shares, discount/ premium on borrowing, etc. are excluded from As-26. These items be amortized over period of benefit i.e., normally 3-5 years. The draft guidance note issued by ICAI suggests that unamortized portion of such expenses be shown under the head “Other Current/Non-current Assets” depending on whether the amount will be amortized in the next 12 months or thereafter.

- Now the Dr. Balance of Statement of Profit & Loss A/c will be disclosed under the head, Reserves & Surplus as the negative figure.

- No change in the format of cash flow statement as per revised schedule and therefore its preparation continue to be as per AS-3 on cash flow statement.

7.4 FORM AND CONTENTS OF BALANCE SHEET AND PROFIT AND LOSSACCOUNTAS PER SCHEDULE VI (REVISED) OF THE COMPANIES ACT, 1956

The vertical format of financial statements as per SCHEDULE VI (REVISED) and the major structural changes in the classification and disclosure of information in the financial statements are discussed below in detail.

Proforma of Balance Sheet

Name of the Company ………………………………………..

Balance Sheet as at……………………………………..

(‘ in ………..

Particulars	Note No.	Figures as at the end of current reporting period	Figures as at the end of previous reporting period
I EQUITY AND LIABILITIES			
(1) Shareholders' Funds			
(a) Share capital			
(b) Reserves and surplus			
(c) Money received against share warrants			
(2) Share application money pending allotment			
(3) Non – current liabilities			
(a) Long term borrowings			
(b) Deferred tax liabilities (net)			
(c) Other long term liabilities			
(d) Long term provisions			
(4) Current liabilities			
(a) Short term borrowings			
(b) Trade payables			
(c) Other current liabilities			
(d) Short term provisions			
Total			

II ASSETS			
(1) Non-Current Assets			
(a) Fixed assets			
(i) Tangible assets			
(ii) Intangible assets			
(iii) Capital work in progress			
(iv) Intangible assets under development			
(b) Non-current investments			
(c) Deferred tax assets (net)			
(d) Long term loans and advances			
(e) Other non-current assets			
(2) Current Assets			
(a) Current investments			
(b) Inventories			
(c) Trade receivables			
(d) Cash and cash equivalents			
(e) Short term loans and advances			
(f) Other current assets			
Total			

I. **Items appearing under the head EQUITY AND LIABILITIES**

(1) Shareholders' Funds :

(a) Share capital:- Under the head „Share Capital?, some of the important items to be shown are as under:

1. Number and amount of shares authorised.
2. Number of shares issued, subscribed and fully paid up and subscribed but not fully paid up.
3. Par value per share.
4. A reconciliation of the number of shares outstanding at the beginning and at the end of the reporting period.
5. Shares in the company held by each share holder holding more than 5% shares specifying the number of shares held.
6. Aggregate number and class of shares allotted or fully paid up for consideration other than cash.
7. Aggregate number and class of shares allotted as fully paid up by way of bonus shares.
8. Calls unpaid showing aggregate value of calls unpaid by directors and officers.
9. Share forfeited amount.

(b) Reserves and Surplus:- Under this head the following items are shown;

1. Capital Reserve
2. Securities Premium (Reserve)
3. Capital Redemption Reserve.
4. Debenture Redemption Reserve
5. Revaluation Reserve
6. Share Options Outstanding Account
7. Other reserves (a) General Reserve (b) Tax Reserve (c) Subsidy Reserve (d)Amalgamation Reserve
8. Surplus i.e., balance in Statement of Profit and Loss.

In case the final balance of the Statement of profit and loss shows a debit balance the same should be shown as deduction from the totals of reserves.

(c) Money received against share warrants:

A share warrant is a financial instrument which gives the holder the right to acquire equity shares. A disclosure of the money received against share warrants is to be made since shares are yet to be allotted against the share warrants. These are not shown as part of share capital but to be shown as a separate line items.

(2) Share application money pending allotment: If company has issued sharesbut date of allotment falls after the balance sheet date, such application money pending allotment will be shown in the following manner:

(i) Share application money not exceeding the issued capital and to extent not refundable is to be disclosed under this line-item.

(ii) Share application money to the extent refundable or where minimum subscription is not met, such amount shall be shown separately under the other current liabilities.

(3) Noncurrent liabilities: A non-current Liability is a liability which is notclassified as current-liability. A liability is classified as current when it satisfies any one of the following conditions:

It is expected to be settled in the company's normal operating cycle. Operating cycle means the time between the acquisition of assets for processing and their realization in cash or cash equivalents.

(i) identified, it is assumed to have a duration of 12 months.

(ii) It is held for the purpose of being traded.

(iii) It is due to be settled within 12 months after the reporting date.

(iv) The company does not have an unconditional right to offer settlement of the liability for at least 12 months after the reporting date

Hence, the liabilities which are not classified as current shall be classified as non – current.

(a) Long Terms borrowings (Debentures, Long Term Loans etc.)

(b) Deferred Tax Liabilities (Net).

(c) Other Long Term Liabilities (Trade payables on account of purchase of Fixed Assets and interest accrued there on, Provisional Fund contribution)

(d) Long Term provisions: All provisions for which the related claims are expected to be settled beyond 12 months after the reporting date are classified as non-current provisions. (Provision for employee benefits, Provision for Warranties).

(4) Current Liabilities : -

(a) Short term borrowings (Loans repayable on demand from banks and other parties, Deposits, Loans and advances from related parties)

(b) Trade Payables: A trade payable refers to the amount due on account of goods purchased or services received in the normal course of business.

(c) Other Current Liabilities (Unpaid dividends, Interest accrued and due/ not due on borrowings, income received in advance, Calls in advance and interest thereon.)

(d) Short Term Provisions: All Provisions for which the related claim is expected to be settled within 12 months after the reporting period are classified as short term provisions & shown under the head „Current Liabilities?(Provision for doubtful debts, Provision for tax, Proposed dividend.)

II Items appearing on Assets side of Balance Sheet. There are mainlytwo types of assets.

(i) Current Assets and

(ii) Non-current Assets

Current Asset defined:

1. An asset shall be classified as current when it satisfies any of the following criteria:

(a) It is expected to be realized in, or is intended for sale or consumption in the company?s normal **operating cycle; (**An operating cycle is the time between the acquisition of assets for processing and their realization in cash and cash equivalents. Where the normal operating cycle cannot be identified, it is assumed to have a duration of 12 months.

(b) It is held primarily for the purpose of being traded;

(c) It is expected to be realised within twelve months after the reporting date; or

(d) It is cash or cash equivalents unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting date.

All other assets shall be classified as non-current

(a) Fixed Assets

(i) Tangible Assets: Tangible assets are assets which can be physically seen and touched. (Land, Building, Plant and Equipment, Furniture & Fixture, Vehicles, Office Equipments, Others)

(ii) Intangible Assets: Intangible assets are assets which are not tangible classified as given below: (Goodwill, Brands/ trademarks, Computer Software, Mastheads and Publishing Titles, Mining Right, Copyrights and patents and other intellectual property rights, Recipes, formulae, models, designs, Licenses and franchise, Others.)

(iii) Capital Work in Progress.

(iv) Intangible Assets under Development – like patents, intellectual property rights, etc. which are being developed by the company

(b) Non-Current Investments – Investments which are not held for purpose of resale (Investment property, Equity Instrument, Preference shares, Government Securities, Debentures, Mutual Funds etc).

(c) Deferred Tax Assets (Net) –

(d) Long-term Loans and Advances – Capital Advances, Security Deposits, etc.

2. Current Assets

(a) Current Investments – Investment which are held to be converted into cash within a short period i.e., within 12 months (Investments in Equity Instrument, Preference shares, Government Securities, Debentures, Mutual Funds etc.)

(b) Inventories: Inventories include the following:

(i) Raw material

(ii) Work-in-progress

(iii) Finished goods

(iv) Goods acquired for trading

(v) Stores and spares

(vi) Loose tools.

(c) Trade Receivable: Trade receivables refer to the amount due on account of goods held or services rendered in the normal course of business.

(d) Cash and Cash Equivalents – As discussed in the sailent features of revised Schedule in General Instructions.

(e) Short-term Loans and Advances

(f) Other Current Assets (Prepaid expenses, and advance taxes)

3. Contingent Liabilities and Capital Commitments

(a) Contingent Liabilities- Those liabilities which may or may not arise because they are dependent on a happening in future. It is not recorded in the books of accounts but is disclosed in the Notes to Accounts for the information of the users. (Claims against the company not acknowledged as debts, Guarantees, Other money for which the company is contingently liable.)

(b) Capital Commitments – Financial commitments due to activities agreed by the company to be undertaken by it in future. (Uncalled Liability)

Illustration 5:

From the following information extracted from the books of XY Ltd., prepare a Balance Sheet of the company as at 31st March, 2012 as per Schedule VI (Revised) of the Companies Act. 1956:

Long term borrowings	500
Trade payables	30
Share capital	400
Reserve and surplus	90
Fixed assets (tangible)	800
Inventories	20
Trade receivables	80
Cash and cash equivalents	120

Solution:

XY Ltd.
Balance Sheet as at 31st March, 2012

Particulars	Note No.	2011 - 2012	2010-2011
I EQUITY AND LIABILITIES			
(1) Shareholders' Funds			
(a) Share capital		400	
(b) Reserves and surplus		90	
(c) Money received against share warrants		-	
(2) Share application money pending allotment			
(3) Non – current liabilities		500	
(a) Long term borrowings		-	
(b) Deferred tax liabilities (net)		-	
(c) Other long term liabilities		-	
(d) Long term provisions		-	
(4) Current liabilities			
(a) Short term borrowings		-	
(b) Trade payables		30	
(c) Other current liabilities		-	
(d) Short term provisions		-	
Total		1020	

II ASSETS			
1. Non-Current Assets			
a) Fixed assets		800	
i. Tangible assets		-	
ii. Intangible assets		-	
iii. Capital work in progress		-	
iv. Intangible assets under develop ment		-	
b) Non-current investments			
c) Deferred tax assets (net)			
d) Long term loans and advances			
e) Other non-current assets			
2. Current Assets			
a) Current investments		-	
b) Inventories		20	
c) Trade receivables		20	
d) Cash and cash equivalents		80	
e) Short term loans and		120	
f) advances		-	
g) Other current assets		-	
Total		1020	

Illustration 6:

Prepare Balance Sheet of AB Ltd. as at 31st March, 2012 from the details given below : -

	(` in „000)
Reserves and surplus	200
Application money pending allotment	40
Other long term liabilities	100
Trade payables	75
Long term borrowings	120
Other current liabilities	50
Short term provisions	20
Long term provisions	30
Share capital	500
Cash & cash equivalents	200
Other current assets	200
Inventories	50
Trade receivables	120
Intangible fixed assets	110
Capital work-in-progress	115
Intangible assets under development	20
Tangible fixed assets	320

Solution:

AB Ltd.

Balance Sheet as at 31st March, 2012

Particulars	Note No.	2011-12	2010-11
EQUITY AND LIABILITIES			
(1) Shareholders' Funds			
(a) Share capital		500	
(b) Reserves and surplus		200	
(c) Money received against share Warrants		-	
(2) Share application money pending Allotment		40	
(3) Non – current liabilities			
(a) Long term borrowings		120	
(b) Deferred tax liabilities (net)		-	
(c) Other long term liabilities		100	
(d) Long term provisions		30	
(4) **Current liabilities**			
(a) Short term borrowings		-	
(b) Trade payables		75	
(c) Other current liabilities		50	
(d) Short term provisions		20	
Total		**1135**	
II ASSETS			
(1) Non-Current Assets			
(a) Fixed assets			
i. Tangible assets		320 110 115 20	

(1) Non-Current Assets			
(a) Fixed assets			
i. Tangible assets		320	
ii. Intangible assets		110	
iii. Capital work in progress		115	
iv. Intangible assets under Development		20	
(b) Non-current investments		-	
(c) Deferred tax assets (net)		-	
(d) Long term loans and Advances		-	
(e) Other non-current assets		-	
(2) Current Assets			
(a) Current investments		-	
(b) Inventories		50	
(c) Trade receivables		120	
(d) Cash and cash equivalents		200	
(e) Short term loans and Advances		-	
(f) Other current assets		200	
Total		**1135**	

3.5 SUMMARY

Revised Scheduled VI has been framed as per the existing non-converged Indian accounting standards and has nothing to do with the converged Indian accounting standards. It is applicable for the financial year commencing on or after 1st April, 2011. Revised Schedule VI is also applicable to consolidated financial statements. Information hitherto disclosed as schedules and notes to accounts now clubbed as notes to accounts. The revised schedule prescribes a vertical form of presentation of balance sheet. Thus a company will not have the option to use horizontal format for presentation of financial statements.The primary focus of the revision has been to bring the disclosures in financial statements at par, or at least very close, to the international corporate reporting practices.

7.6 SELF TEST

1. List the major heads under which the „Equity and Liabilities? are presented in theBalance Sheet of a Company as per Schedule VI (Revised) Part I to the Companies Act 1956.
2. List the major heads under which the assets are presented in the Balance Sheet of a company as per schedule VI (Revised) part I of the Companies Act 1956.
3. List the different items which are presented under the major head. „Non-current Assets?as per revised Schedule VI Part I of the Companies Act 1956.
4. List the items which are presented under the major head „Current Assets? as perRevised Schedule VI Part I of the Companies Act 1956.

UNIT-8 : ANNUAL REPORT AND ITS CONTENTS

Structure

8.1 OBJECTIVES

After going through this unit, you should able to;

- Understand annual reports and the need for annual reports
- Outline the presentation of annual reports
- Explain the contents of annual reports

8.2 INTRODUCTION

An annual report is a comprehensive report on a company's activities throughout the preceding year. Annual reports are intended to give shareholders and other interested people information about the company's activities and financial performance. Most jurisdictions require companies to prepare and disclose annual reports, and many require the annual report to be filed at the company's registry. Companies listed on a stock exchange are also required to report at more frequent intervals depending upon the rules of the stock exchange involved.

8.3 NEED FOR ANNUAL REPORTS

1 Every company has its obligation towards shareholders, government, financial institutions, creditors, employees etc., and society at large.

2 The ultimate control and destiny of the company should be in the hands of its shareholders who have contributed money towards the share capital of the company.

3 It is desirable that the shareholders should come together periodically to review the working of the company.

4 It is the responsibility and obligation on the part of the board of directors to give a true picture of the state of affairs of the company and its future.

5 The board of directors is obligated to give good corporate governance.

6 In view of the above there are statutory provisions made under the Companies Act, 1956 whereby the company is obligated under the various provisions to provide information to the stake holders of the company and thus the need to furnish of the annual report to all the concerned is statutorily warranted.

8.4 PRESENTATION OF ANNUAL REPORT

The annual report of the company is presented before the shareholders in its annual general meeting of the shareholders.

Notice of the Annual general meeting: Date, Place and Time and Notice period

Every company pursuant to sec 166 of the Companies Act, 1956 shall in each calendar year hold a general meeting as its annual general meeting. Not more than 15 months shall elapse between the date of one general meeting and that of the next meeting. However extension of 3 months can be obtained with a prior permission from the Registrar of companies. The first annual general body meeting shall be held within a period of not more than 18 months from the date of its incorporation.

In terms of sec 166, 171 & 172 of the Companies Act a proper notice shall be served on all the shareholders of the company specifying the time, date and place of holding the general meeting. The meeting shall be held during the business hours on a day which is not a public holiday and it shall be held either at the registered office of the company or at some other place within the city, town, or village in which is the registered office of the company is situated.

The Notice should be in writing and must be given 21 days before the date of the meeting.

Contents of Notice:

The notice shall contain the particulars of the business to be considered at the annual general meeting.

The businesses that are transacted in the annual general meeting is of two kinds (Sec 173)

1. General business or ordinary business
2. Special Business

The following are regarded as general business in any annual general meeting.

1. Consideration of audited Profit & Loss account and Balance Sheet,
2. Consideration of the Directors Report.
3. Consideration of Auditors Report
4. Declaration of Dividend

5. Appointment of directors in the place of retiring director.
6. Appointment of Auditors and fixing of the remuneration of the Auditors.

Any other business at an annual general body meeting and at all businesses at extraordinary general meetings is regarded as special business.

If any special business is to be transacted in an annual meeting explanatory statement setting out all the material facts concerning each such items of business shall be annexed along with the notice of the meeting.

8.5 CONTENTS OF ANNUAL REPORTS

In terms of the above, the annual report of a company includes Directors Report, Report on Corporate Governance and Compliance Certificate, Auditors Report, and Audited Profit & Loss account and Balance Sheet,

1. Directors Report:

In terms of the provisions of the Companies Act the director's report should show the following particulars.

1. The state of the company's affairs.
2. The amount if any which it recommends should be paid by way of dividend.
3. The amount if any which is proposes to carry to any reserves.
4. Material changes and commitments effecting the financial position of the company which have occurred between the end of the financial year to which the balance sheet relates and to the date of the report. (Events occurring after the balance sheet date)
5. Conservation of energy, technology absorption, foreign exchange earnings and outgo. (This is in terms of the companies (Discloser of Particulars in Report of the Board of Directors) Rules 1988)

Under this actual energy consumed energy conservation measures adopted, R & D efforts for technology absorption, absorption and innovation, foreign exchange earnings and outgo shall be reported.

6. Particulars of certain employees shall be included in the Board of Directors report pursuant to Sec 217(2A).

Under this a statement should be given showing the name every employee of the company who has been in receipt of remuneration of not less than Rs. 24 Lakhs. If the employee is employed for part of the financial year the details shall also be furnished in respect of such employee whose aggregate remuneration where it is not less than Rs. 2 Lakhs.

7. Director's responsibility statements.

In terms of sec 217 (2AA) the directors report shall include responsibility statement indicating

- That in the preparation of the annual accounts, the applicable accounting standards has been followed along with proper explanation relating to material departure.
- That the directors have selected such accounting policies applied them consistently so as to give true and fair view of state of affairs of the company and the profit or loss of the company for the period.
- That the directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the company.
- That the directors had prepared the annual accounts on going concern basis.

8. Other Particulars

The Directors Report shall give the fullest information and explanation on every reservation, qualification and adverse remark contained in the auditors report.

9. Composition of Audit Committee

In terms of Sec 299A every public company having paid up capital of not less than Rs.5 Crores shall constitute a committee of the board known as "Audit Committee" which shall consist of not less than 3 directors. The company in its annual report shall disclose the composition of the Audit Committee.

10. Compliance report by the Company Secretary in practice shall be attached to the board of director's report in case of companies having paid up share capital of Rs. 10 Lakh or more. It is to be noted such compliance certificate shall be filed with ROC.

2. Report on Corporate Governance and Compliance Certificate.

In case of companies which are listed with recognized stock exchange in India there shall be a separate section on corporate governance in the annual report along with a detailed compliance report on the corporate governance consisting of

1. Structure and composition of board
2. Board procedures
3. Composition and proceedings of the audit committee
4. Composition and proceedings of remuneration committee
5. Composition and proceedings of share holders and investors grievance committee.
6. Compositions and proceedings of Banking operations committee.
7. In relation to transparency details regarding
    i. Related party transactions
    ii. Executive compensation,
    iii. Shareholders rights, Proxy voting, Transfer of shares etc.,
    iv. Compliance with the requirements of stock exchanges, SEBI and other statutory authorities.
    v. Whistle blower policy etc.,

3. A certificate known as corporate governance certificate duly certify by the managing director and other directors for having complied with the corporate governance in terms of the provisions of the listing agreements with the stock exchanges shall be furnished.
4. Auditors' certificate on compliance with the conditions of corporate governance under the provisions of listing agreements shall also be furnished.

3. Auditors Report

Every annual report placed before the general body shall be attached with the report of the Auditors. The audit report shall also be accompanied by the various information as required under section 227(4A) of the Companies Act. The Auditors are required to form an opinion whether the financial statements presented are in conformity with the provisions of the Companies Act and whether the Profit and Loss account, the Balance Sheet and the Cash Flow Statement give a true and fair view in conformity with the Generally Accepted Accounting Principles in India.

It is important to note that auditor's reports on financial statements are neither evaluations nor any other similar determination used to evaluate entities in order to make a decision. The report is only an opinion on whether the information presented is correct and free from material misstatements, whereas all other determinations are left for the user to decide.

Unqualified Opinion

An opinion is said to be unqualified when the Auditor concludes that the Financial Statements give a true and fair view in accordance with the financial reporting framework used for the preparation and presentation of the Financial Statements. An Auditor gives a Clean opinion or Unqualified Opinion when he does not have any significant reservation in respect of matters contained in the Financial Statements. The most frequent type of report is referred to as the Unqualified Opinion. This type of report is issued by an auditor when the financial statements presented are free of material misstatements and are represented fairly in accordance with the Generally Accepted Accounting Principles (GAAP), which in other words means that the company's financial condition, position, and operations are fairly presented in the financial statements. It is the best type of report an auditee may receive from an external auditor.

An Unqualified Opinion indicates the following -

1. The Financial Statements have been prepared using the Generally Accepted Accounting Principles which have been consistently applied;
2. The Financial Statements comply with relevant statutory requirements and regulations;
3. There is adequate disclosure of all material matters relevant to the proper presentation of the financial information subject to statutory requirements, where applicable;
4. Any changes in the accounting principles or in the method of their application and the effects thereof have been properly determined and disclosed in the Financial Statements.

The report consists of a title and header, a main body, the auditor's signature and address, and the report's issuance date. US auditing standards require that the title includes "independent" to convey to the user that the report was unbiased in all respects. Traditionally, the main body of the unqualified report consists of three main paragraphs, each with distinct standard wording and individual purpose; however certain auditors have since modified the arrangement of the main body (but not the wording) in order to differentiate themselves from other audit firms.

The first paragraph (commonly referred to as the **introductory paragraph**) states the audit work performed and identifies the responsibilities of the auditor and the auditee in relation to the financial statements. The second paragraph (commonly referred to as the **scope paragraph**) details the scope of audit work, provides a general description of the nature of the work, examples of procedures performed, and any limitations the audit faced based on the nature of the work. This paragraph also states that the audit was performed in accordance with the country's prevailing generally accepted auditing standards and regulations. The third paragraph (commonly referred to as the **opinion paragraph**) simply states the auditor's opinion on the financial statements and whether they are in accordance with generally accepted accounting principles.

4. Audited Profit and Loss Account and Balance Sheet

Every annual report placed by the Board of Directors before the share holders in the annual general meeting shall furnish the audited Profit and Loss account and audited Balance Sheet.

1. The balance sheet of a company shall give a true and fair view of the state of affairs of the company as at the end of the financial year and shall be in the form set out in Part I of schedule VI of the Companies Act. (Section 211(1))

2. Every profit and loss accounts of the company a true and fair view of the profit or loss of the company for the financial year and shall comply with the requirements of Part II of Schedule VI of the Companies Act. (Section 211(2))

3. The above shall not apply to any insurance company or banking company or company engaged in the supply of electricity or any other class of company for which the form of Balance Sheet and Profit and Loss account has been specified under the Act governing such class of company.

Any deviations to the provisions of Sec 211(1) & (2) can be made only with the concurrence of the Central Government, in circumstances where the Board of Directors opinion that the changes are required in the interest of Business of the Company.

4. The Balance Sheet and Profit and Loss account shall also be attached with the Cash Flow Statement prepared as per the Accounting Standards prescribed.

5. The Balance Sheet of holding company having subsidiary companies the following documents in respect of each of such subsidiary company shall also be attached with the Balance Sheet.

a. A copy of the Balance Sheet of the subsidiary company

b. A copy of the its Profit and Loss account

c. A copy of the Report of its Board of Directors

d. A copy of Report of its Auditors

e. Statement of holding companies interest in the subsidiary

The company is obligated to file the annual accounts with the Registrar of Companies within 30 days from the date on which the Balance Sheet and Profit and Loss account were so laid before the Annual General Meeting.

Significant Accounting Policies and Notes on accounts

The audited Profit and Loss account and Balance Sheet so laid before the Annual General Meeting shall furnish the details regarding Significant Accounting Policies and Notes to the accounts.

The Significant Accounting Policies shall give various information in relation to

1. Accounting convention - Applicability of Accounting Standards as notified under the Companies Act.
2. Revenue Recognition
3. Accounting for Fixed Assets
4. Accounting for Borrowing Costs
5. Accounting for Depreciation
6. Accounting for Investments
7. Accounting for Inventories
8. Treatment of Capital Subsidy
9. Employee Stock option scheme
10. Information relating to employees benefit like gratuity, superannuation, PF, leave encashment etc.,
11. Foreign Exchange Transactions
12. Details of Earning Per Share

The notes on accounts shall give information relating to

1. Contingent Liability
2. Capital Commitments
3. Loans
4. Deferred Tax
5. Details of Directors Remuneration
6. Details of Payment to Auditors
7. Segment Reporting
8. Capacity of Production – Installed and actual
9. Quantitative details of finished goods, raw material consumption
10. Value of imports calculated on CIF basis
11. Expenditure in Foreign Currency etc.,

All the above particulars shall be furnished as annexure to the Balance Sheet and Profit and Loss account.

8.6 SUMMARY

Every company has to present an annual report before the shareholders in its annual general meeting. The annual report should contain the notice of the annual general meeting; date, place, time and notice period; director's report; report on corporate governance and compliance certificate and auditor's report.

8.7 SELF TEST

- Define annual report. Explain the need for annual reports
- How an annual report be presented before shareholders? Explain.
- Discuss the important contents of annual reports.

UNIT-9 : TECHNIQUES OF FINANCIAL STATEMENT ANALYSIS

Structure

9.0 Objectives

9.1 Introduction

9.2 Meaning and Concept of Financial Statement

9.3 Objectives of Financial Statement Analysis

9.4 Qualitative characteristics of Financial Statement Analysis

9.5 Types of Financial Analysis

9.6 Procedure for Financial Statement Analysis

9.7 Methods of Financial Analysis

9.8 Comparative Statement

9.9 Trend Analysis

9.10 Common Size Statement

9.11 Advantages of Financial Statement Analysis

9.12 Limitations of Financial Statement Analysis

9.13 Let Us Sum Up

9.14 Terminal Questions

9.15 Reference

9.0 OBJECTIVES

After going through this unit, you should be able to

- Explain the concept of Financial Statement Analysis
- Identify the different methods used for the analysis and interpretation of Financial Statement
- Highlight the procedures of Financial Statement Analysis
- Explain the different types of Financial Statement Analysis.

9.1 INTRODUCTION

Financial statement analysis can be referred as a process of understanding the risk and profitability of a company by analyzing reported financial info, especially annual and quarterly reports. Putting another way, financial statement analysis is a study about accounting ratios among various items included in the balance sheet. These ratios include asset utilization ratios, profitability ratios, leverage ratios, liquidity ratios, and valuation ratios. Moreover, financial statement analysis is a quantifying method for determining the past, current, and prospective performance of a company. Financial statement analysis is concerned with analyzing the balance sheet and the income statement of a business to interpret the business and financial ratios of a business for financial representations, business evaluation, in addition to financial forecasting. On the basis of the information provided in the financial statements, management makes a review of the progress of the company and decides the future course of action. The annual reports constitute one of the major vehicles of corporate financial reporting to shareholders. It is, therefore, essential that these reports are elaborate, standardization in terms of accounting treatment and provides details for analysis and understanding of corporate performance by the shareholders. In India, the Institute of Chartered Accountants of India has for long been spearheading the process of standardization in accounting treatment and enhancing disclosure requirements to shareholders. All companies are now required to state whether their accounts are prepared with applicable accounting standards and give particulars of any material departures from those standards and the reason therefore. The trend in India, may be observed from the greater disclosure norms set at every stage and personal accountability of both directors and auditors, with the introduction of corporate governance concept.

9.2 MEANING AND CONCEPT OF FINANCIAL STATEMENT ANALYSIS

Financial Statements are the results of the accounting process which begins with recording of transactions. The accounting process involves recording, classifying and summarizing business transactions in a systematic way. The term 'Financial Analysis' is also known as analysis and interpretation of statements. It refers to the process of determining the financial strengths and weaknesses of a firm by establishing strategic relationship between the items of the balance sheet, profit & loss account and other operative data. The purpose of financial analysis is to diagnose the information contained in financial statements so as to judge the profitability and financial soundness of the firm. Financial statement analysis is an attempt to determine the significance and meaning of the financial statements data so that forecast may be made of the future earnings, ability to pay interest and debt on maturities (both current and long term) and probability of sound dividend policy.

Financial statements are a collection of reports about an organization's financial results and condition.

They are useful for the following reasons:

a) To determine the ability of a business to generate cash, and the sources and uses of that cash.

b) To determine whether a business has the capability to pay back its debts.

c) To track financial results on a trend line to spot any looming profitability issues.

d) To derive financial ratios from the statements that can indicate the condition of the business.

e) To investigate the details of certain business transactions, as outlined in the disclosures that accompany the statements.

The standard contents of a set of financial statements are:

a) **Balance Sheet:** It shows the entity's assets, liabilities, and stockholders' equity as of the report date.

b) **Income Statement:** It shows the results of the entity's operations and financial activities for the reporting period.

c) **Cash flow Statement:** It shows changes in the entity's cash flows during the reporting period.

d) Supplementary notes: It includes explanations of various activities, additional detail on some accounts, and other items as mandated by GAAP or IFRS.

9.3 OBJECTIVES OF FINANCIAL STATEMENT ANALYSIS

Financial Statement Analysis is a very important and effective tool to the management of an enterprise. The intent of financial statements is to provide information useful in economic decision making. In particular, the data should be useful in making investment and credit decisions. It should provide a reliable indication of a company's financial position, operating results, and changes in financial position. Also, statement components and categories should aid in decisions. It may provide information in addition to that specified by authoritative requirements and regulatory groups.

The objectives of a Financial Statement Analysis are as follows:

1. To assess the real meaning and significance of financial data as disclosed in the Financial Statements.
2. To assess the liquidity and short-term solvency position of the enterprise.
3. To assess the long-term solvency position of the enterprise.
4. To assess the present and future profitability of the enterprise.
5. To evaluate the operational efficiency of the enterprise.
6. To evaluate the managerial efficiency of the enterprise.
7. To assess the growth potentiality of the enterprise.
8. To evaluate the different activities of the concern.
9. To assess the financial stability of the enterprise.

9.4 QUALITATIVE CHARACTERISTICS OF FINANCIAL STATEMENT ANALYSIS

Qualitative characteristics are the attributes that make the information provided in the financial statement useful to users. The following are all qualitative characteristics of financial statements:

♦ **Understandability :** The information must be readily understandable to users of the financial statements. This means that information must be clearly presented, with additional information supplied in the supporting footnotes as needed to assist in clarification.

♦ **Relevance :** The information must be relevant to the needs of the users, which is the case when the information influences the economic decisions of users. This may involve reporting particularly relevant information, or information whose omission or misstatement could influence the economic decisions of users.

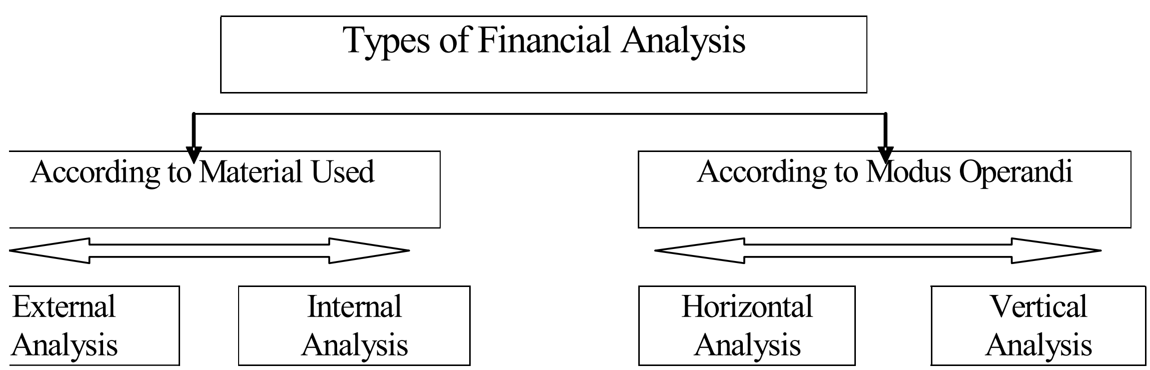
♦ **Reliability :** The information must be free of material error and bias, and not misleading. Thus, the information should faithfully represent transactions and other events, reflect the underlying substance of events, and prudently represent estimates and uncertainties through proper disclosure.

♦ **Comparability :** The information must be comparable to the financial information presented for other accounting periods, so that users can identify trends in the performance and financial position of the reporting entity.

9.5 TYPES OF FINANCIAL ANALYSIS

Financial analysis is the process of evaluating businesses, projects, budgets and other finance-related entities to determine their suitability for investment. Typically, financial analysis is used to analyze whether an entity is stable, solvent, liquid, or profitable enough to be invested in. When looking at a specific company, the financial analyst will often focus on the income statement, balance sheet, and cash flow statement. In addition, one key area of financial analysis involves extrapolating the company's past performance into an estimate of the company's future performance.

The following chart will give a snap short view of financial analysis.



(a) According to Material Used

According to material used, financial analysis can be of two types:

(1) External Analysis: This analysis is done by outsiders who do not have any access to the detailed internal accounting records of the business firm. These outsiders include investors, creditors, government agencies, credit agencies, and the general public. For financial analysis, these external parties depend almost entirely on the published financial statements.

(2) Internal Analysis: The analysis conducted by persons who have access to the internal accounting records of a business firm is known as internal analysis. Such an analysis can be performed by executives and employees of the organization as well as the government agencies which have statutory powers vested in them.

(b) According to Modus Operandi

According to the method of operation followed in the analysis, financial analysis can also be classified into two namely:

(1) Horizontal Analysis: Horizontal analysis refers to the comparison of financial data of a company for several years. The figures for this type of analysis are presented horizontally over a number of columns. The figures of the various years are compared with the standard or base year. A base year is a year chosen as the beginning point. This type of analysis is also called 'dynamic analysis' as it is based on the data from year to year rather than on data of any one year.

(2) Vertical Analysis: Vertical analysis refers to the study of relationship of the various items in the financial statements of one accounting period. In this type of analysis, the figures from the financial statement of a year are compared with a base selected from the same year's statement. It is also known as 'static analysis'.

9.6 PROCEDURE FOR FINANCIAL STATEMENT ANALYSIS

Following are the procedure for financial statement analysis framework:

1. Establish objectives of financial analysis by defining the purpose and context of financial statements analysis
2. Collect data necessary for financial analysis from different sources
3. Process the data gathered in the second phase which may range from simple sorting and adjustments to preparing common-size financial statements and graphical representation of ratios and trends

4. Conduct analysis on processed data and interpret the results
5. Develop recommendations in the light of inferences drawn from analysis conducted and report/communicate them to relevant personnel. This phase is the most critical of all from different perspectives. As it involves many responsibilities on part of the analysts that he is required to fulfill regarding the recommendations and communication of those recommendations.
6. Follow up (Review), if necessary, the information gathered, conclusions reached on the basis of analysis and recommendations made on periodic basis by repeating the all above 5 steps to check whether conclusions reached and recommendations given earlier need any revisions or not on the basis of updated information.

9.7 METHODS OF FINANCIAL STATEMENT ANALYSIS

A number of methods or devices are used to study the relationship between different statements. ***The following methods of analysis are generally used:***

(1) Comparative statements
(2) Trend analysis
(3) Common size statements
(4) Funds flow analysis
(5) Cash flow analysis
(6) Ratio analysis
(7) Cost-Volume-Profit analysis

9.8 COMPARATIVE STATEMENTS

The comparative financial statements show the financial position of a firm at different periods of time. The elements of financial position are shown in a comparative form so as to give an idea of the financial position at two or more periods. Any statement prepared in a comparative form will be covered in comparative statements. Generally, two financial statements are prepared in a comparative form for financial analysis purposes.

The two comparative statements are:

(a) **Comparative Income Statement:** The comparative income statement gives an idea of the progress of business over a period of time. The changes in absolute data in money values and percentages can be determined to analyze the probability of the business.

(b) **Comparative Balance Sheet:** The comparative balance sheet analysis is the study of the trend of the same items, group of items and computed items in two or more balance sheets of the same business enterprise on different dates. The changes in periodic balance sheet items reflect the conduct of a business. The changes can be observed by a comparison of the balance sheet at the end of a period and these changes can help in forming an opinion about the progress of an enterprise.

Advantages- The comparative financial statement are useful for analysis of the following:

a) Comparative statements indicate trends in sales, cost of production, profits etc. and help the analyst to evaluate the performance of the company.

b) Comparative statements can also be used to compare the performance of the firm with the average performance of the industry or inter-firm comparison. This helps in identification of the weaknesses of the firm and remedial measures can be taken accordingly.

Weaknesses- ***The comparative financial statements suffer from the following weaknesses:***

a) Inter-firm comparison can be misleading if the firms are not identical size and age and when they follow different accounting procedures with regard to depreciation, inventory valuation etc.

b) Inter-period comparison may be misleading, if the period has witnessed changes in accounting policies, inflation, recession etc.

1.9 TREND ANALYSIS

Trend analysis is very helpful in making a comparative study of the financial statements of several years. Under this technique, information for a number of years is taken up and one year, usually the first year is taken as the base year. Each item of the base year is taken as 100 and on that basis; the percentages for other years are calculated. Trend analysis is one of the tools for the analysis of the company's monetary statements for the investment purposes. Investors use this analysis tool a lot in order to determine the financial position of the business. In a trend analysis, the financial statements of the company are compared with each other for the several years after converting them in the percentage. In the trend analysis, the sales of each year from the 2008 to 2011 will be converted into percentage form in order to compare them with each other.

Trend analysis has a great advantage that it can also be used to predict the future events. This is possible by forecasting the future cash flow based on the data available of the past. With the help of trend analysis, you can predict the future and track the variances to add performance.

However, in management accountancy, the calculation of trends is based on the data of the past. This is favorable in deducing the current situation of the company and the increase in the financial position of the company and growth over the past years. Apart from investments and financial data of the company, the trend analysis is also a useful tool that can be used effectively for the projections. This allows the company to conduct market research and draw trends to forecast the demand of different products. This helps in the marketing purposes, and company can deduce results to select the right marketing approach to address the issues. Trend analysis can pretty much apply to all the techniques, which requires forecasting therefore, that it is a very useful tool in business.

Trend analysis can be performed in different ways in finance. For example, in technical analysis the direction of prices of a particular company's public stock is calculated through the study of past market data, primarily price, and volume. Fundamental analysis, on the other hand, relies not on sentiment measures (like technical analysis) but on financial statement analysis, often in the form of ratio analysis. Creditors and company managers also use ratio analysis as a form of trend analysis. For example, they may examine trends in liquidity or profitability over time.

Trend analysis using financial ratios can be complicated by the fact that companies and accounting can change over time. For example, a company may change its business model so that it begins to operate in a new industry or it may change the end of its financial year or the way it accounts for inventories. When examining historical trends in ratios, analysts will often make adjustments to the ratios for these reasons, perhaps performing some ratio analysis in which they segment out business segments that are not consistent over time or they separate recurring from non-recurring items.

Limitations- The analysis through trend ratios is subject to the following limitations:

- The trend ratios are incomparable, if there is inconsistency in accounting policies and practices.
- The price level changes are represented in trend ratios.
- The trend ratios must be studied along with absolute data for correct analysis.

- While analyzing the trend ratios, non-financial data should also be considered, otherwise conclusions would be misleading.

9.10 COMMON SIZE STATEMENT

In the common size statements, balance sheet and income statements 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 percent statement because every individual item is stated as a percentage of the total 100.

The two common-size statements are:

(a) **Common Size Income Statement:** It can be shown as percentages of sales to show the relation of each item to sales. A significance relationship can be established between the 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 the sales and other item in income statement and this relationship is helpful in evaluating operational activities and operational efficiency of a concern.

(b) **Common-Size Balance Sheet:** A statement in which the balance sheet items are expressed as a ratio of each asset to total assets and the ratio of each liability to total liabilities is called common-size balance sheet.

9.11 ADVANTAGES OF FINANCIAL STATEMENT ANALYSIS

The different advantages of financial statement analysis are listed below:

- The most important benefit if financial statement analysis is that it provides an idea to the investors about deciding on investing their funds in a particular company.
- Another advantage of financial statement analysis is that regulatory authorities like IASB can ensure the company following the required accounting standards.
- Financial statement analysis is helpful to the government agencies in analyzing the taxation owed to the firm.

- Above all, the company is able to analyze its own performance over a specific time period.

9.12 LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

In spite of financial statement analysis being a highly useful tool, it also features some limitations, including comparability of financial data and the need to look beyond ratios. Although comparisons between two companies can provide valuable clues about a company's financial health, alas, the differences between companies' accounting methods make it, sometimes, difficult to compare the data of the two.

Besides, many a times, sufficient data are on hand in the form of foot notes to the financial statements so as to restate data to a comparable basis. Or else, the analyst should remember the lack of data comparability before reaching any clear-cut conclusion. However, even with this limitation, comparisons between the key ratios of two companies along with industry averages often propose avenues for further investigation.

9.13 LET US SUM UP

To summarize, financial statement analysis is concerned with analyzing the balance sheet and the income statement of a business to interpret the business and financial ratios of a business for financial representations, business evaluation, in addition to financial forecasting.

9.14 TERMINAL QUESTIONS

1. What is financial statement analysis? Explain the different methods of financial analysis.
2. What are the objectives and qualitative characteristics of financial statement analysis?
3. What do you mean by comparative financial statements? Explain the advantages and limitations of comparative financial statements.
4. Enumerate the procedures for preparing financial statement analysis.

5. Explain in detail two types of comparative financial statements.

6. What are the advantages and limitations of financial statement analysis?

9.15 REFERENCE

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UNIT - 10 : RATIO ANALYSIS

Structure :

10.0 OBJECTIVES

After studying this unit, you should be able:

- To understand the concept of ratio analysis
- To highlight the benefits of ratio analysis
- To analyze the classification of ratios
- To compute profitability, liquidity, solvency and capital market ratios
- To identify the limitations of ratio analysis.

10.1 INTRODUCTION

Ratio-analysis is a concept or technique which is as old as accounting concept. Financial analysis is a scientific tool. It has assumed important role as a tool for appraising the real worth of an enterprise, its performance during a period of time and its pit falls. Financial analysis is a vital apparatus for the interpretation of financial statements. It also helps to find out any cross-sectional and time series linkages between various ratios. Unlike in the past when security was considered to be sufficient consideration for banks and financial institutions to grant loans and advances, nowadays the entire lending is need-based and the emphasis is on the financial viability of a proposal and not only on security alone. Further all business decision contains an element of risk. The risk is more in the case of decisions relating to credits. Ratio analysis and other quantitative techniques facilitate assessment of this risk. Ratio-analysis means the process of computing, determining and presenting the relationship of related items and groups of items of the financial statements. They provide in a summarized and concise form of fairly good idea about the financial position of a unit. They are important tools for financial analysis. Financial ratios are the most common and widespread tools used to analyze a business' financial standing. Ratios are easy to understand and simple to compute. They can also be used to compare different companies in different industries. Since a ratio is simply a mathematically comparison based on proportions, big and small companies can be use ratios to compare their financial information. In a sense, financial ratios don't take into consideration the size of a company or the industry. Ratios are just a raw computation of financial position and performance.

10.2 MEANING AND DEFINITION OF RATIO ANALYSIS

Ratio analysis is used to evaluate relationships among financial statement items. The ratios are used to identify trends over time for one company or to compare two or more companies at one point in time. Financial statement ratio analysis focuses on three key aspects of a business: liquidity, profitability, and solvency.

According to J. Batty "The term accounting ratio is used to describe significant relationships which exist between figures shown in a balance sheet, in a profit and loss account, in a budgetary control system or in any other part of the accounting organization".

According to Accountant's Handbook by Wixon, Kell and Bedford, "A ratio is an expression of the quantitative relationship between two numbers".

According to Myers, "Ratio analysis of financial statements is a study of relationship among various financial factors in a business as disclosed by a single set of statements and a study of trend of these factors as shown in a series of statements."

10.3 OBJECTIVES OF RATIO ANALYSIS

With the help of ratio analysis financial executives can measure whether the firm is at present financially healthy or not. The following are some of the important objectives of ratio analysis.

(a) To serve as an aid in Financial Forecasting

Ratio analysis is very helpful in financial forecasting. Ratios relating to the fast sales, profits and financial position are the base for the future trends.

(b) To serves as an Aid in Comparison

With the help of ratio analysis ideal ratios can be composed and they can be used for comparison of a particular firm's progress and performance.

(c) To serve an Aid in Cost Control

Ratios are very useful for measuring the performance of any organization and it is very useful in cost control.

(d) To Communicate

Different financial ratios communicate the strengths and financial standing of the firm to both internal and external parties.

(e) Other objectives

Financial ratios are very helpful in the diagnosis of the financial health of a firm. They highlight the liquidity, solvency, profitability and capital gearing etc. of the firm. Thus, ratio analysis serves as a useful tool for analyzing the financial performance of any firm.

10.4 BENEFITS OF RATIO ANALYSIS

The ratio analysis is one of the most powerful tools available in the hands of the management to take sound financial decisions. It is used as a device to analyze and interpret the financial health of an enterprise. The managerial uses of ratio analysis are the following:

a) Helpful in Decision Making

All our financial statements are made for providing information. But this information is not helpful for decision making because financial statements provide only raw information. When we calculate different ratios in ratio analysis, at that time, we get useful information. We can explain it with simple example. Suppose, we calculate our interest coverage ratio which is 10times but our competitor company's interest coverage ratio is 15 times. It means capacity of the profit of our competitor company is more than us. By seeing this, we can take decisions for increasing our profitability.

b) Helpful in Financial Forecasting and Planning

Every year we calculate lots of accounting ratios. When we make trend of all these ratios, we can get useful information for our future forecasting and planning. We can make two plans. One is effective use of money which we are getting from our debtors more fastly and second we can also check the behavior of our debtors by comparing this with sales trend. Like this, there are lots of ratios which are also useful for better planning.

c) Helpful in Communication

Ratio analysis is more important from communication point of view. Suppose, we have to appoint new sales agents for our company. At that time, we can communicate them by using our company's sales and profit related ratios. There is no need of hi-tech for understanding the meaning of any specific ratio. For example, our gross profit in 2010 is 26.6% and in 2011, it is 28.55%. By just telling this ratio, we can understand whether our company is growing or falling.

d) Helpful in Co-ordination

No company has all the strength points. Company's financial result shows some strength points and some weak points. Ratio analysis can create co-ordination between strength points and weak points.

e) Helps in Control

Ratio analysis can also use for controlling our business. We can easily create the standard of each financial item of our balance sheet and profit and loss account. On this basis, we can also calculate standard ratios. By comparing standard ratios with actual accounting ratios, we can find variance. This variance may be favorable and unfavorable. On this basis, we can control our business from financial point of view.

f) Helpful for Shareholder's decisions

For example, if a shareholder wants to invest in any company's shares. Before buying any company's shares, He will be interested to know company's long term solvency. So, He has to calculate long term solvency ratios. In which, He has to calculate fixed assets to net worth ratio, fixed assets to long term debt ratio. On this basis, he can know the level of fixed assets and its main resource. After checking his money's security, he will be interested to know his return on this investment. ROI, EPS and DPS are most useful ratios which he can calculate for knowing this.

g) Helpful for Creditors' decisions

Creditors are those persons who provide goods on credit to company or provides short period loan to company. All the creditors are interested to know whether company will repay their debt or not. For this, they calculate current ratio and quick liquid ratio and average payment period. On this basis, they take decisions.

h) Helpful for employees' decisions

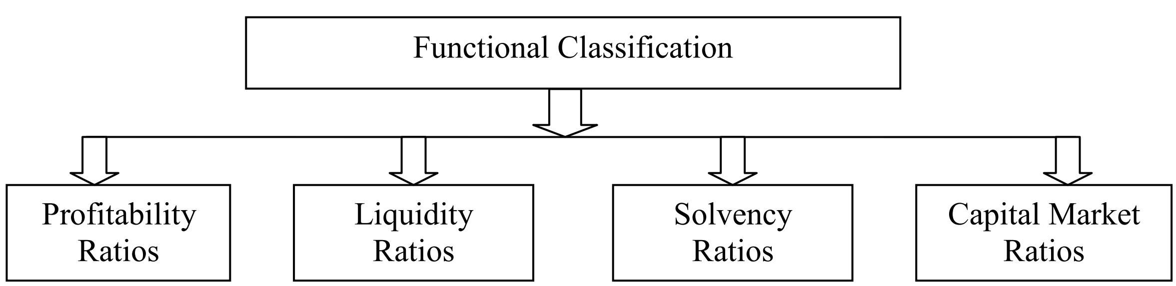
Every employee wants to increase his salary. He also wants to get more and more incentives from company. For this, he takes help from company's profitability ratios. Profitability ratios will be helpful for employees to pressure on the company for increasing their salary.

i) Helpful for Govt. decisions

Different companies analyze their accounting ratios and publish on the net and print newspapers. Govt. collects all these information. On this basis, Govt. makes policies. If ratios will wrong, Govt. policies will become wrong. For example, Govt. collects income data of all companies in different industries for calculation the national income.

10.5 CLASSIFICATION OF RATIOS

Ratios can be classified on the basis of their functions. The functional classification of ratios is as follows:



10.6 PROFITABILITY RATIOS

Profitability ratios measure a company's ability to generate earnings relative to sales, assets and equity. These ratios assess the ability of a company to generate earnings, profits and cash flows relative to relative to some metric, often the amount of money invested. They highlight how effectively the profitability of a company is being managed.

Common profitability ratios used in analyzing a company's performance include gross profit margin (GPM), operating margin (OM), return on assets (ROA), return on equity (ROE), return on sales (ROS), and return on investment (ROI). Let's take a look at these in some detail.

(a) Gross Margin

Gross margin tells you about the profitability of your goods and services. It tells you how much it costs you to produce the product. It is calculated by dividing your gross profit (GP) by your net sales (NS) and multiplying the quotient by 100:

Gross Margin = Gross Profit/Net Sales x 100

OR

GM = GP/NS x 100

Example: Imagine that you run a company that sold 50,000,000 in running shoes last year and had a gross profit of 7,000,000. What was your company's gross margin for the year?

GM = GP/NS x 100

GM = 7,000,000/50,000,000 x 100

GM = .14 x 100

GM = 14%

(b) Operating Margin

Operating margin takes into account the costs of producing the product or services that are unrelated to the direct production of the product or services, such as overhead and administrative expenses. It is calculated by dividing your operating profit (OP) by your net sales (NS) and multiplying the quotient by 100:

Operating Margin = Operating Profit/Net Sales x 100

OR

OM = OP/NS x 100

Example: Let's say you make and sell computers. Last year you generated net sales of 12,000,000 and your operating income was 100,000,000. What was your operating margin?

OM = OI/NS x 100

OM = 12,000,000/100,000,000 x100

OM = 0.12 x 100

OM = 12%

(c) Return on Assets

This metric measures how effectively the company produces income from its assets. You calculate it by dividing net income (NI) for the current year by the value of all the company's assets (A) and multiplying the quotient by 100:

Return on Assets = Net Income/Assets x 100

OR

ROA = NI/A x 100

Example: Imagine that you are the president of a large company that manufactures steel. Last year you company had net income of 25,000,000, and the total value of its assets such as plant, equipment, and machinery totaled 135,000,000. What was your return on assets last year?

ROA = 25,000,000/135,000,000 x 100

ROA = 0.185 x 100

ROA = 18.5%

(d) Return on Equity

Return on equity measures how much a company makes for each dollar that investors put into it. You calculate it by taking the net income earned (NI) by the amount of money invested by shareholders (SI) and multiplying the quotient by 100:

Return on Equity = Net Income/Shareholder Investment x 100

OR

ROE = NI/SI x 100

Example: Imagine that your social media company just went public last year resulting in a total investment of $100,000,000. Your company's net income for the year the year was $10,000,000. What is the return on equity?

ROE = NI/SI x100

ROE = $10,000,000/100,000,000 x 100

ROE = 0.10 x 100

ROE = 10%

(e) Return on Sales

This ratio tells you what percentage of income you generated from sales is available to retain as earnings for future investment or for dividends to be distributed to your shareholders. You can calculate it by dividing the net income (NI) by sales (S) and multiplying the quotient by 100:

Return on Sales = Net Income/Sales x 100

For example:

$$\text{Return on Sales} = \frac{\text{Net Income} \times 100}{\text{Sales}}$$

$$\text{Return on Sales} = \frac{112000 \times 100}{100000}$$

Return on Sales = 11.2%

(a) Return on investment (ROI)

It is a measure of the profit earned from each investment. Like the "return" (or profit) that you earn on your portfolio or bank account, it's calculated as a percentage. In simple terms, the ROI formula is:

$$\frac{(\text{Return} - \text{Investment})}{\text{Investment}}$$

For example:

$$\textbf{Return on investment} = \frac{20000}{100000}$$

Return on investment = 20%

Illustration

Summarized Income statement and Balance sheet of Genius cables ltd. for the year ended 31st March 2014 are as under:

Income statement for the year ended 31st March, 2014

Sales		8000000
Less: Cost of goods sold		6400000
Gross profit margin		1600000
Less: Depreciation	150000	
Selling and administration expenses	250000	400000
Profit before interest and tax		1200000
Less: Internet		300000
Profit before tax		900000
Less: Tax @ 40%		360000
Net Profit		**540000**

The balance of Genius cables Ltd. as at 31st March, 2014 is given below:

Liabilities	Rs.	Assets	Rs.
Share capital	5000000	Fixed Assets	6300000
Retained earnings	1800000	Inventory	900000
Debentures	800000	Debtors	500000
Creditors	280000	Marketable securities	210000
Bills payable	120000	Cash	90000
	8000000		**8000000**

You are required to calculate (a) Gross profit margin, (b) Net profit margin, (c) Cash profit ratio, (d) Return on total assets and (e) Return on shareholders net worth.

Solution:

(a) Gross Profit Margin

$$\text{Gross Profit Margin} = \frac{\text{Sales} - \text{Cost of goods sold} *100}{\text{Sales}}$$

$$\text{Gross Profit Margin} = \frac{8000000 - 6400000 \ *100}{8000000}$$

Gross Profit Margin = 20%

(b) Net Profit Margin

$$\text{Net Profit Margin} = \frac{\text{Net Profit before Interest and Tax} *100}{\text{Sales}}$$

$$\text{Net Profit Margin} = \frac{1200000 \ *100}{8000000}$$

Net Profit Margin = 15%

(c) Cash Profit Ratio

$$\text{Cash Profit Ratio} = \frac{\text{Net profit} + \text{Depreciation} *100}{\text{Sales}}$$

$$\text{Cash Profit Ratio} = \frac{1200000 + 150000 \ *100}{8000000}$$

Cash Profit Ratio = 16.9%

(d) Return on Total Assets

$$\text{Return on Total Assets} = \frac{\text{Net profit after tax} *100}{\text{Total assets}}$$

$$\text{Return on Total Assets} = \frac{540000 \ *100}{8000000}$$

Return on Total Assets = **6.75%**

(e) Return on shareholders net worth

$$\text{Return on shareholders net worth} = \frac{\text{Net profit after tax} *100}{\text{Share holders net worth (Share capital + Retained earnings)}}$$

$$\text{Return on shareholders net worth} = \frac{540000 \ *100}{6800000 \ (5000000 + 1800000)}$$

Return on shareholders net worth = 7.9%

10.7 LIQUIDITY RATIOS

Liquidity ratios are used to determine a company's ability to meet its short-term debt obligations. Investors often take a close look at liquidity ratios when performing fundamental analysis on a firm. Since a company that is consistently having trouble meeting its short-term debt is at a higher risk of bankruptcy, liquidity ratios are a good measure of whether a company will be able to comfortably continue as a going concern.

To measure the liquidity of a firm, the following ratios can be calculated.

(a) Current Ratio

Current ratio may be defined as the relationship between current assets and current liabilities. This ratio is also known as working capital ratio.

$$\textbf{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

For example:

ABC Ltd summarized the total current assets and total current liabilities of Rs.100000 and Rs.40000 respectively. What is the current ratio of the firm?

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

$$\text{Current Ratio} = \frac{\text{Rs.100000}}{\text{Rs.40000}}$$

$$\textbf{Current Ratio} = \textbf{2.5:1}$$

(b) Liquid/Acid/Quick Ratio

The term liquidity refers to the ability of a firm to pay its short term obligations as and when they become due. Quick ratio is a more rigorous test of liquidity than the current ratio. Quick ratio is a more rigorous test of liquidity than the current ratio. Quick assets can be converted into cash within a short period without loss of value.

$$\textbf{Liquidity Ratio} = \frac{\text{Liquid assets (Current assets – Stock)}}{\text{Current liabilities}}$$

For example:

XYZ Ltd specified the total current assets and total current liabilities of Rs.100000 and Rs.40000 respectively and the value of the stock is Rs.10000. What is the liquidity ratio of the firm?

$$\textbf{Liquidity Ratio} = \frac{\text{Liquid assets (Current assets – Stock)}}{\text{Current liabilities}}$$

$$\textbf{Liquidity Ratio} = \frac{90000\ (100000 - 10000)}{\text{Current liabilities}}$$

$$\textbf{Liquidity Ratio} = 2.25:1$$

(C) Absolute Liquid Ratio

Absolute liquid assets include cash, bank and marketable securities or temporary investments.

$$\textbf{Absolute Liquid Ratio} = \frac{\text{Cash + Bank + Marketable securities}}{\text{Current liabilities}}$$

For example:

Calculate Absolute Liquid Ratio from the given details-

Cash = 18000

Bank = 142000

Marketable securities = 180000

Bills payable = 27000

Creditors = 50000

Outstanding expenses = 15000

Tax payable = 75000

Solution

$$\textbf{Absolute Liquid Ratio} = \frac{\text{Cash + Bank + Marketable securities}}{\text{Current liabilities}}$$

$$\textbf{Absolute Liquid Ratio} = \frac{18000 + 142000 + 180000}{27000 + 50000 + 15000 + 75000}$$

$$\textbf{Absolute Liquid Ratio} = \frac{340000}{167000}$$

Absolute Liquid Ratio = 2.04:1

Illustration

The balance of Venus Ltd. as at 31st March, 2014 is given below:

Liabilities	Rs.	Assets	Rs.
Share capital	1000000	Goodwill	600000
Reserves	300000	Fixed Assets	1260000
Profit & Loss A/c	250000	Investments (Short-term)	100000
Secured Loans	800000	Stock	360000
Credits	250000	Debtors	240000
Bank over draft	150000	Advances	50000
Provision for taxation	50000	Cash in hand	90000
		Cash at bank	100000
	2800000		**2800000**

You are required to calculate (a) Current ratio, (b) Liquid ratio and (c) Absolute liquid ratio.

Working notes:

Particulars	Current assets	Liquid assets	Absolute liquid assets
Stock	360000	-	-
Debtors	240000	240000	-
Advances	50000	50000	-
Cash in hand	90000	90000	90000
Cash at bank	100000	100000	100000
Investments (Short-term)	100000	100000	100000
Total	940000	580000	290000

Current Liabilities = Creditors + Bank overdraft + Provision for taxation

= 250000 + 150000 + 50000

= Rs. 450000

Solution:

(a) Current ratio :

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

$$\text{Current Ratio} = \frac{940000}{450000}$$

Current Ratio = 2.09:1

(b) Liquid ratio :

$$\text{Liquidity Ratio} = \frac{\text{Liquid assets}}{\text{Current liabilities}}$$

$$\text{Liquidity Ratio} = \frac{580000}{450000}$$

Liquidity Ratio = 1.93:1

(C) Absolute liquid ratio:

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

$$\text{Absolute Liquid Ratio} = \frac{590000}{450000}$$

Absolute Liquid Ratio = 0.64:1

The company's absolute liquid ratio is 0.64:1 and an ideal ratio is 0.5:1. It means that more than 50% of current assets are highly liquid. Hence, the company's liquidity position can be able to meet uncertainties in payment obligations of short-term liabilities.

10.8 SOLVENCY RATIOS

Solvency ratios are designed to help you measure the degree of financial risk that your business faces by considering debt to equity, debt to assets, the treatment of fixed charges and other costs, and interest expense. Solvency ratio is one of the various ratios used to measure the ability of a company to meet its long term debts. Moreover, the solvency ratio quantifies the size of a company's after tax income, not counting non-cash depreciation expenses, as contrasted to the total debt obligations of the firm. Also, it provides an assessment of the likelihood of a company to continue congregating its debt obligations.

(a) Debt Equity Ratio

The debt to equity ratio is a financial, liquidity ratio that compares a company's total debt to total equity. The debt to equity ratio shows the percentage of company financing that comes from creditors and investors. A higher debt to equity ratio indicates that more creditor financing (bank loans) is used than investor financing (shareholders).

$$\text{Debt Equity Ratio} = \frac{\text{Total liabilities}}{\text{Total equity}}$$

Example:

Assume a company has Rs.100,000 of bank lines of credit and a Rs.500,000 mortgage on its property. The shareholders of the company have invested Rs.1.2 million. Here is how you calculate the debt to equity ratio.

$$\text{Debt Equity Ratio} = \frac{\text{Total liabilities}}{\text{Total equity}}$$

$$\text{Debt Equity Ratio} = \frac{100000+500000}{1200000}$$

Debt Equity Ratio = 0.5

(b) Equity Ratio

The equity ratio is an investment leverage or solvency ratio that measures the amount of assets that are financed by owners' investments by comparing the total equity in the company to the total assets.

$$\textbf{Equity Ratio} = \frac{\text{Total equity}}{\text{Total assets}}$$

Example:

Tim's Tech Company is a new startup with a number of different investors. Tim is looking for additional financing to help grow the company, so he talks to his business partners about financing options. Tim's total assets are reported at Rs.150,000 and his total liabilities are Rs.50,000. Based on the accounting equation, we can assume the total equity is Rs.100,000. Here is Tim's equity ratio.

$$\text{Equity Ratio} = \frac{\text{Total equity}}{\text{Total assets}}$$

$$\text{Equity Ratio} = \frac{100000}{150000}$$

Equity Ratio = 0.67

(a) Debt ratio

Debt ratio is a solvency ratio that measures a firm's total liabilities as a percentage of its total assets. In a sense, the debt ratio shows a company's ability to pay off its liabilities with its assets. In other words, this shows how many assets the company must sell in order to pay off all of its liabilities.

This ratio measures the financial leverage of a company. Companies with higher levels of liabilities compared with assets are considered highly leveraged and more risky for lenders. This helps investors and creditors analysis the overall debt burden on the company as well as the firm's ability to pay off the debt in future, uncertain economic times.

Example:

Dave's Guitar Shop is thinking about building an addition onto the back of its existing building for more storage. Dave consults with his banker about applying for a new loan. The bank asks for Dave's balance to examine his overall debt levels.

The banker discovers that Dave has total assets of Rs.100,000 and total liabilities of Rs.25,000. Dave's debt ratio would be calculated like this:

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

$$\text{Debt ratio} = \frac{25000}{100000}$$

$$\textbf{Debt ratio} = \textbf{0.25}$$

10.9 CAPITAL MARKET RATIOS

Capital markets are places where companies which need long-term ?nance can meet investors who have finance to offer. This finance may be equity finance, involving the issue of new ordinary shares, or debt finance, in which case companies can choose from a wide range of loans and debt securities. Capital markets are also places where investors buy and sell company and government securities. Capital markets are markets for trading long-term ?nancial securities. The most important ones for companies are ordinary shares, long-term debt securities such as debentures, unsecured loan stock and convertible bonds, and, to a much lesser extent, preference shares.

Market ratios measure investor response to owning a company's stock and also the cost of issuing stock. It includes Price earning ratio, Earnings per share, market price to book value ratio, dividend yield and dividend payout ratio. Capital market analysis ratios indicate a company's ability to win to the confidence of the stock market. Capital Market is a market for debt (bond market) and equity securities (stock market) where companies and governments raise long term funds for their various requirements. Capital Market Analysis Ratios deal with the equity securities portion of the capital market. These ratios indicate the relationship between the elements of company's financial statements and the market price of the shares of the company.

Features of Capital market ratios:

- An appreciation of the range of internal and external sources of finance available to a company, and of the factors influencing the relative proportions of internal and external finance used;
- An understanding of the significance of the capital markets to a company;
- A firm understanding of the importance of the efficient market hypothesis to corporate finance and an ability to explain the difference between the various forms of market efficiency;
- An appreciation of the empirical research that has been undertaken to establish the extent to which capital markets may be considered to be efficient in practice;
- The ability to calculate key ratios from corporate financial statements and an understanding of their significance in corporate finance;
- An appreciation of the difficulties encountered in calculating and interpreting financial ratios;
- An appreciation of the concepts of economic profit and economic value added and their relationship with shareholder wealth.

(a) Dividend Payout Ratio: This is the ratio of dividend per share (DPS) to Earnings per share (EPS). It indicates what percentage of total earnings is paid to shareholders. It is computed as:

$$\textbf{Dividend Payout Ratio} = \frac{\text{Dividend per share}}{\text{Earnings per share}}$$

OR

$$\textbf{Dividend Payout Ratio} = \frac{\text{Dividends}}{\text{Net Income}}$$

The percentage of the earnings that is not paid out (1 - Dividend pay-out) is retained for the firms future needs. There is no guideline as to what percentage of earnings should be declared as dividend and it varies according to firm's fund requirements to support its operations. If the firm is in need of funds, then it may cut the dividends in relation to earnings and on the other hand if the firm finds that it lacks opportunities to use the profits generated, it might increase the dividends. Firms that experience high growth rates tend to have a low pay-out ratio as compared to the ones that have low growth expectations. High pay-out ratio means that the firm will have less profit to plough back into the business for future growth. But in both the cases, consistency of dividend payment is important to the shareholders.

Example:

If a company has earnings per share of Rs.3 and pays out Rs.2 in dividends, its dividend pay-out ratio would be 67%.

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend per share}}{\text{Earnings per share}}$$

$$\text{Dividend Payout Ratio} = \frac{\text{Rs. 2}}{\text{Rs. 3}}$$

Dividend Payout Ratio = 67%

(b) ***Dividend Yield Ratio:*** Companies generally pay out dividends to share holders out of their earnings. These dividends are generally expressed as a per-share amount. Dividend yield is a ratio to indicate the percentage dividends paid by a firm relative to the market price of its share. It is similar to return on investment on a stock. It is computed by dividing the annual dividends per share by the market price of the share.

$$\textbf{Dividend Yield Ratio} = \frac{\text{Annual Dividend per share}}{\text{Current market price per share}}$$

This measure can be used by the investors to compare the relative attractiveness of dividend paying stocks. Higher the dividend yield, higher would be the return and cash flows associated with that stock investment. Investors looking for steady or regular flow of income may consider this ratio to select their investments. This ratio gives current return on one's investment. This is mainly of interest to the investors who are desirous of getting income in the form of dividends. No dividend yield exists for firm which does not declare dividends.

It must however be noted that high dividend yield stocks do not indicate that the investment is sound. In some cases, it may indicate that the company does not have other investment opportunities to plough back its earnings and may indicate limited growth potential for the stock/company.

Example:

If a company pays an annual dividend of Rs.2 and has its share price quoting at Rs.40, the dividend yield comes to 5%. It means that if you buy the stock currently, you will realize a dividend yield of 5%.

$$\text{Dividend Yield Ratio} = \frac{\text{Annual Dividend per share}}{\text{Current market price per share}}$$

$$\text{Dividend Yield Ratio} = \frac{\text{Rs. 2}}{\text{Rs.40}}$$

Dividend Yield Ratio = 5%

(c) ***Market to Book Ratio:*** It is a financial ratio that compares the market price of the share and its book value. The market price is the current stock price of the company as quoted in the market. The book value can be computed from the balance sheet by deducting the total liabilities from the total assets and dividing the result by the number of outstanding shares. Alternatively, the company's market capitalization can be divided by the company's book value to arrive at the Market to Book ratio. The book value is always computed on the basis of the company's historical cost or value as per books/ accounts. It is computed as:

$$\textbf{Market to Book Ratio} = \frac{\text{Market value of the company}}{\text{Book value of the company}}$$

OR

$$\textbf{Market to Book Ratio} = \frac{\text{Market price of the stock}}{\text{Book value of the stock}}$$

The ratio is used to measure the worth of the company as per the market as compared to the amount of money initially invested. The ratio is used by investors to assess whether a particular stock or company is undervalued or overvalued. A ratio of less than 1 generally indicates that the company is undervalued and good investments buy. Lower the market to book ratio, the better the value for an investor.

Example:

If a company's stock price is quoting at Rs.20 and it has a book value per share of Rs.25, its market to book ratio would be:

$$\textbf{Market to Book Ratio} = \frac{\text{Market value of the company}}{\text{Book value of the company}}$$

$$\textbf{Market to Book Ratio} = \frac{\text{Rs. 20}}{\text{Rs.25}}$$

$$\textbf{Market to Book Ratio} = 0.80$$

(d) ***Price earnings ratio:*** Price-Earnings Ratio (also known as the P/E multiple) is calculated by taking the market price of the stock and dividing it by earnings per share. It is calculated as:

$$\textbf{Price-Earnings Ratio} = \frac{\text{Market price of the stock}}{\text{Earnings per share}}$$

This ratio indicates the relationship between the market price of the stock and its earnings by revealing how the earnings affect the market price of the firm's stock. It is the most popular financial ratio in the stock market for secondary market investors.

The price earnings ratio indicates the expectation of equity investors about the earnings of the firm. It is used for valuation of the firm and its stock. The earnings of the firm and the market price of the stock being related indicate the investor the price they are paying for each unit of the income available to them. Higher the P/E ratio, the expensive it is to own the stock. Companies with high growth rates and potential generally have a higher P/E ratio as compared to companies with lower earnings growth. By comparing the P/E ratios of two companies, one can assess the relative valuation of the company. Other things remaining equal, a company with lower P/E ratio is preferred over the one with a higher P/E ratio. One of the drawbacks of the P/E ratio is that it based on the net profit as reported in the profit and loss account. If the companies have inflated profits by any means, the ratio may be misleading.

Example:

Assume that the stock price of a company is Rs.36 and the company reported net earnings of Rs.600,000 during the period. It has 100,000 shares outstanding at the end of the period.

The earnings per share of the company would be Rs6 (Rs600, 000 / 100,000 shares) and the P/E ratio would be:

$$\textbf{Price-Earnings Ratio} = \frac{\text{Market price of the stock}}{\text{Earnings per share}}$$

$$\textbf{Price-Earnings Ratio} = \frac{\text{Rs.36}}{\text{Rs.6}}$$

Price-Earnings Ratio = 6.0

Illustration:

A company is capitalized as follows:

7% Preference shares Re.1 each	600000
Ordinary shares Re.1 each	1600000
	2200000

The following information is relevant as to its financial year just ended:

Profit after taxation at 50%	542000
Capital commitments	240000
Market price of ordinary shares	Rs.4
Ordinary dividend paid	20%
Depreciation	Rs.120000

You are required to state the following showing the necessary workings (a) Dividend yield on ordinary shares, (b) Earnings yield and (c) Price earnings ratio.

Solution: -

(a) Dividend yield on ordinary shares

$$\text{Dividend Yield Ratio} = \frac{\text{Annual Dividend per share} * 100}{\text{Current market price per share}}$$

$$\text{Dividend Yield Ratio} = \frac{0.20 * 100}{4}$$

Dividend Yield Ratio = 5%

(b) Earnings yield:

$$\text{Earnings yield} = \frac{\text{Profit after tax} - \text{Preference dividend} * 100}{\text{Ordinary share capital}}$$

$$\text{Earnings yield} = \frac{542000 - 42000 \;\; *100*1/4}{1600000}$$

Earnings yield = 7.8

(c) P/E ratio:

$$\text{Price-Earnings Ratio} = \frac{\text{Market price of the stock}}{\text{Earnings per share}}$$

$$\text{Earnings per share} = \frac{\text{Profit after tax – Preference dividend *100}}{\text{No. of ordinary share capital}}$$

$$\text{Earnings per share} = \frac{542000 - 42000 \ {*}100}{1600000}$$

$$\text{Earnings per share} = 0.3125$$

$$\text{Price-Earnings Ratio} = \frac{\text{Rs.4}}{0.3125}$$

Price-Earnings Ratio = 12.8

10.10 LIMITATIONS OF RATIO ANALYSIS

Despite usefulness, financial ratio analysis has some disadvantages. Some key demerits of financial ratio analysis are:

1. Different companies operate in different industries each having different environmental conditions such as regulation, market structure, etc. Such factors are so significant that a comparison of two companies from different industries might be misleading.
2. Financial accounting information is affected by estimates and assumptions. Accounting standards allow different accounting policies, which impairs comparability and hence ratio analysis is less useful in such situations.
3. Ratio analysis explains relationships between past information while users are more concerned about current and future information.

10.11 DU- PONT ANALYSIS

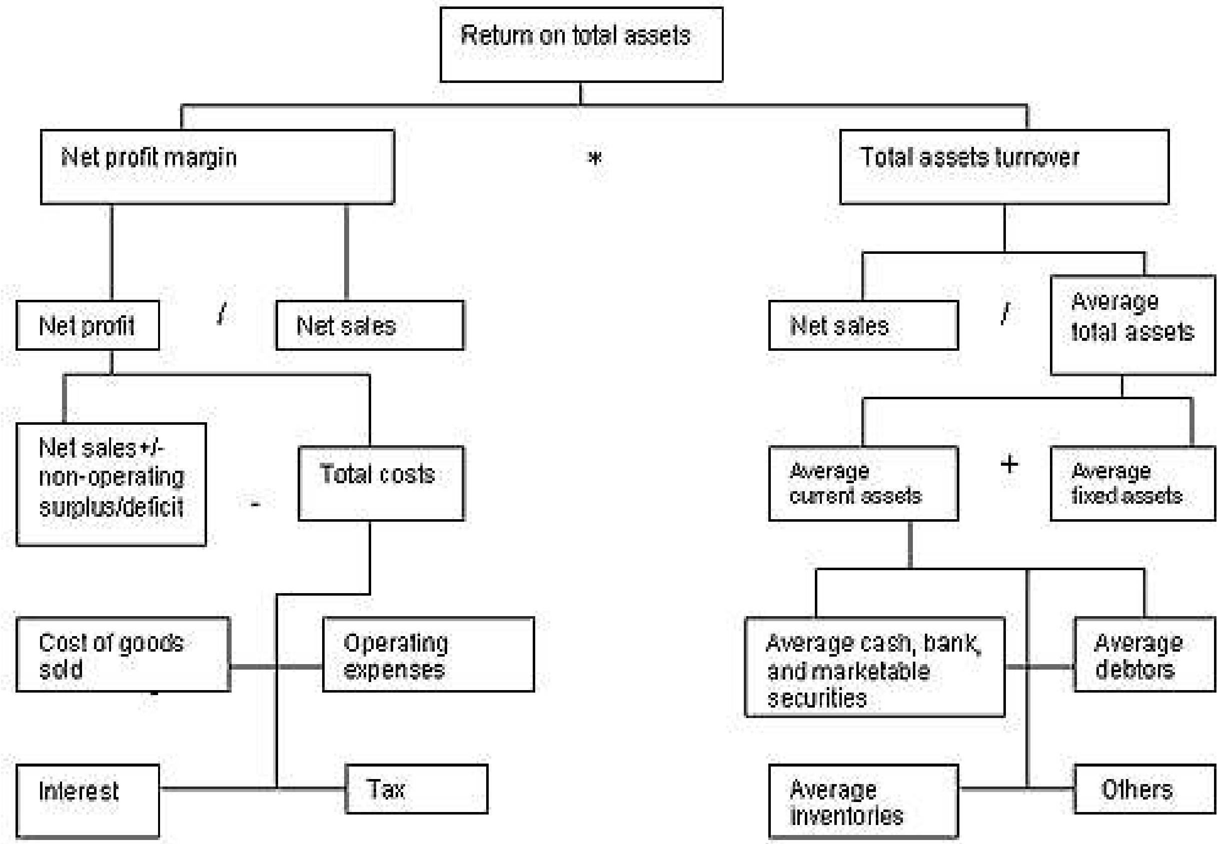
A method of performance measurement that was started by the DuPont Corporation in the 1920s. With this method, assets are measured at their gross book value rather than at net book value in order to produce a higher return on equity (ROE). It is also known as "DuPont identity".

DuPont analysis tells us that ROE is affected by three things:

- Operating efficiency, which is measured by profit margin
- Asset use efficiency, which is measured by total asset turnover
- Financial leverage, which is measured by the equity multiplier

ROE = Profit Margin (Profit/Sales) * Total Asset Turnover (Sales/Assets) * Equity Multiplier (Assets/Equity).

DuPont analysis chart



10.12 LET US SUM UP

Effective planning and financial management are the keys to running a financially successful small business. Ratio analysis is critical for helping you understand financial statements, for identifying trends over time and for measuring the overall financial state of your business. In addition, lenders and potential investors often rely on ratio analysis when making lending and investing decisions.

10.13 KEY WORDS

Cash management

Financial stability, efficiency and profitability

Liquidity management

10.14 CASE STUDIES

(1) The balance sheet of ABCD Ltd. shows the following figures:

a) Share capital Rs 152,000

b) Cash in hand and at Bank Rs 30,000

c) Fixed Assets Rs 113,000

d) Creditors Rs 20,000

e) 5% Debentures Rs 24,000

f) Bill Payables Rs 4,000

g) Debtors Rs 18,000

h) Stock Rs 52,000

i) General reserve Rs 8,000

j) Profit and Loss A/c Rs 5,000

Calculate (i) current ratio and (ii) liquid ratio.

Solution :

(i) Current ratio =

Current Asset

Current Liabilities

Where Current assets = Cash in hand and at bank + Debtors + Stock

= Rs 30,000 + Rs 18,000 + Rs 52,000

= Rs 1,00,000

Current liabilities = Creditors + Bill Payable

= Rs 20,000 + Rs 4,000

= **24,000**

Rs 100000

Rs 24,000

= **4.26 : 1**

(ii) Quick ratio = Quick Assets

Current liabilites

where Quick assets = current Assets – Stock

= Rs 1,00,000 – Rs 52,000

= **Rs 48,000**

Quick ratio =

Rs 48,000

Rs 24,000

= **2 : 1**

(2) Find out (a) debtors turnover and (b) average collection period from the following information for one year ended 31st March 2006.

a) Annual credit sales 500000

b) Debtors in the beginning 80000

c) Debtors at the end 100000

d) Debt to be taken for the year 360 days

Solution : -

$$\textbf{Average debtors} = \frac{\text{Opening debtors} + \text{Closing debtors}}{2}$$

$$\textbf{Average debtors} = \frac{80000 + 100000}{2}$$

$$= \textbf{Rs 90000}$$

(b) $\textbf{Average collection period} = \frac{\text{No of working days}}{\text{Debtors turnover}}$

$$= \frac{360}{5.56}$$

$$= \textbf{64.7 days}$$

$$= \textbf{65 days (approximately)}$$

3. From the following compute current ratio and quick ratio :

Fixed Assets 100000

Stock 30000

Debtors 20,000

Cash 40,000

Prepaid expenses 10,000

Creditors 30,000

Reserves 10,000

1. **Balance Sheet of Mr X and Mr. Y as on 31st December 2013 is**

Liabilities	Rs.	Assets	Rs.
Equity share capital	100000	Cash in hand	20000
7% debentures	100000	Cash at Bank	20,000
Bank overdraft	40,000	Bill receivables	100000
Creditors	60000	Investment	10000
Profit and Loss A/c	20000	Debtors	50000
General reserve	30000	Stock	150000
	350000		**350000**

Sales during the year 2013 were Rs 490000. Calculate stock turnover ratio.

5. Given: Current ratio 2: 5

Liquidity ratio 1: 5

Working capital Rs.60000

Calculate

(a) Current liabilities

(b) Current assets

(c) Liquid assets

(d) Stock

6. XYZ Ltd. supplies you following information regarding the year ending 31st, December 2013.

Cash Rs 80000

Credit sales Rs 200000

Return inward Rs 10000

Opening stock Rs 25000

Closing stock Rs 30000

Gross profit ratio is 25%. **Find out stock turnover ratio.**

10.15 REFERENCE

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UNIT - 11 : FUND FLOW STATEMENT

Structure

11.0 OBJECTIVES

After studying this unit, you should be able to

- Make out the meaning and concept of fund.
- Grasp the significance of flow of fund.
- Draw the distinction between current assets and current liabilities.
- Adopt the suitable technique of Funds Flow Statement and thereby to solve the problems.
- Familiarize with significant and limitations of Fund Flow Statement.
- Workout the problems of Funds Flow Statements and make projection for future requirement.

11.1 INTRODUCTION

Fund flow is usually measured on a monthly or quarterly basis. The performance of an asset or fund is not taken into account, only share redemptions (outflows) and share purchases (inflows). Net inflows create excess cash for managers to invest, which theoretically creates demand for securities such as stocks and bonds. Investors and market analysts watch fund flows to gauge investor sentiment within specific asset classes, sectors, or for the market as a whole. For instance, if net fund flows for bonds funds during a given month is negative by a large amount, this would signal broad-based pessimism over the fixed-income markets. Fund flow statement also referred to as statement of "source and application of funds" provides insight into the movement of funds and helps to understand the changes in the structure of assets, liabilities and equity capital. The information required for the preparation of funds flow statement is drawn from the basic financial statements such as the Balance Sheet and Profit and loss account. "Funds Flow Statement" can be prepared on total resource basis, working capital basis and cash basis. The most commonly accepted form of fund flow is the one prepared on working capital basis.

11.2 MEANING OF FUNDS AND CONCEPT OF FUND FLOW STATEMENT

A fund refers to all the financial resources of a firm, such as cash in hand, bank balance, accounts receivable. Any change in these resources is reflected in the firm's financial position. Fund Flow Statement also referred to as the statement of "Source and Application of Funds" provides insight into the movement of funds and helps to understand the changes in the structure of assets, liabilities and equity capital.

The term “Fund” refers to Cash, to Cash Equivalents or to Working Capital and all financial resources which are used in business. These total resources of a concern are in the form of men, materials, money, plant and equipments and others.

In a broader meaning the word “Fund” refers to Working Capital. The Working Capital indicates the difference between current assets and current liabilities. The term working capital may be:

(a) Gross Working Capital and

(b) Net Working Capital. 174 A Textbook of Financial Cost and Management Accounting

“Gross Working Capital” represents total of all Current Assets.

“Net Working Capital” refers to excess of Current Assets over Current Liabilities.

The term “Flow of Funds” refers to changes or movement of funds or changes in working capital in the normal course of business transactions. The changes in working capital may be in the form of inflow of working capital or outflow of working capital. In other words, any increase or decrease in working capital when the transactions take place is called as “Flow of Funds.” If the components of working capital results in increase of the fund, it is known as Inflow of Fund or Sources of Fund. Similarly, if the components of working capital effects in decreasing the financial position it is treated as Outflow of Fund.

For example, if the fund rose by way of issue of shares will be taken as a source of fund or inflow of fund. This transaction results in increase of the financial position. Like this, the fund used for the purchase of machinery will be taken as application or use of fund or outflow of fund. Because it stands to reduce the fund position.

11.3 STATEMENT OF CHANGES IN FINANCIAL POSITION

It is a statement prepared on the basis of all financial resources, i.e., assets, liabilities and capital. This statement is attempt to measure changes in both current and non-current accounts. The changes in financial position may occur in deal with following transactions:

(a) Involves between current assets and non-current assets (fixed assets or permanent assets).

(b) Involves between current liabilities and non-current assets.

(c) Involves between current assets and non-current liabilities (long-term liabilities and capital).

(d) Involves between current liabilities and non-current liabilities.

11.4 COMPONENTS OF FUND FLOW

In order to analyze the sources and application of funds, it is essential to know the meaning and components of flow of funds given below:

(1) Current Assets

(2) Non-Current Assets (Fixed or Permanent Assets)

(3) Current Liabilities

(4) Non-Current Liabilities (Capital & Long-Term Liabilities)

(5) Provision for Tax

(1) Current Assets: The term "Current Assets" refer to the assets of a business of a transitory nature which are intended for resale or conversion into different form during the course of business operations. For example, raw materials are purchased and the amount unused at the end of the trading period forms part of the current as stock on hand. Materials· in process at the end of the trading period and the labour incurred in processing them also form part of current assets.

(2) Non-Current Assets (Permanent Assets): Non-Current Assets also refer to as Permanent Assets or Fixed Assets. This class of asset includes those of tangible and intangible nature having a specific value and which are not consumed during the course of business and trade but provide the means for producing saleable goods or providing services. Land and Building, Plant and Machinery, Goodwill and Patents etc. are the few examples of Non-Current assets.

(3) Current Liabilities: The term Current Liabilities refer to amount owing by the business which are currently due for payment. They consist of amount owing to creditors, bank loans due for repayment, proposed dividend and proposed tax for payment and expenses accrued due.

(4) Non-Current Liabilities: The term Non-Current Liabilities refer to Capital and Long-Term Debts. It is also called as Permanent Liabilities. Any amount owing by the business which are payable over a longer period time, i.e., after a year are referred as Non-Current Liabilities. Debenture, long-term loans and loans on mortgage etc., are the few examples of non-current liabilities.

(5) Provision for Taxation: Provision for taxation may be treated as a current liability or an appropriation of profit. When it is made during the year it is not used for adjusting the net profit, it is advisable to treat the same as current liability. Any amount of tax paid during the year is to be treated as application of funds or non-current liability. Because it is used for adjusting the net profit made during the year.

11.5 BENEFITS OF FUND FLOW STATEMENT

Fund Flow Statements are prepared for financial analysis in order to meet the needs of people serving the following purposes:

(1) It highlights the different sources and applications or uses of funds between the two accounting period.

(2) It brings into light about financial strength and weakness of a concern.

(3) It acts as an effective tool to measure the causes of changes in working capital.

(4) It helps the management to take corrective actions while deviations between two balance sheets figure.

(5) It is an instrument used by the investors for effective decisions at the time of their investment proposals.

(6) It also presents detailed information about profitability, operational efficiency and financial affairs of a concern.

(7) It serves as a guide to the management to formulate its dividend policy, retention policy and investment policy etc.

(8) It helps to evaluate the financial consequences of business transactions involved in operational finance and investment.

(9) It gives the detailed explanation about movement of funds from different sources or uses of funds during a particular accounting period.

11.6 PREPARATION OF FUND FLOW STATEMENT

Fund flow analysis involves the following important three statements such as :

I. Fund from Operations

II. Statement of Changes in Working Capital

III. Fund Flow Statement.

I. FUND FROM OPERATIONS

Fund from Operation is to be determined on the basis of Profit and Loss Account. The operating profit revealed by Profit and Loss Account represents the excess of sales revenue over cost of goods sold. In the true sense, it does not reflect the exact flow of funds caused by business operations. Because the revenue earned and expenses incurred are not in conformity with the flow of funds. For example, depreciation charges on fixed assets, write up of fixed assets or factious assets, any appropriations etc. do not cause actual flow of funds. Because they have already been charged to such profits. Hence, fund from operation is prepared to find out exact inflow or outflow of funds from the regular operations on the basis of items which have readjusted to the current profit or loss. The balancing amount of adjusted profit and loss account is described as fund from operations.

II. STATEMENT OF CHANGES IN WORKING CAPITAL

It is also termed as Statement of Changes in Working Capital. Before preparation of fund flow statement, it is essential to prepare first the schedule of changes in working capital and fund from operations. Statement of changes in working capital is prepared on the basis of items in current assets and current liabilities of between two balance sheets. This statement helps to measure the movement or changes of working capital during a particular period. The term working capital refers to excess of current assets over Fund current liabilities. The working capital may be "Increase in working capital" or "Decrease in working capital." An increase in the amount of an item of current assets in the current year as compared to the previous year represents to an increase in working capital. Similarly, a decrease in the amount of an item of current assets in the current year as compared to the previous year would represent decrease in working capital. In the same way over all changes in working capital is calculated and presented in the schedule of changes in working capital. The final result of Net Decrease in Working Capital refers to Source of Funds or Inflow of Funds. Like this, Net Increase in Working Capital represents Application of Fund or Uses of Funds.

III. FUND FLOW STATEMENT

In the analysis and interpretation of financial statements fund flow statement is one of the important techniques. The statement of changes in working capital is prepared with the help of current assets and current liabilities. Similarly, fund from operation is prepared on the basis of profit and loss account to find out the exact movement of funds in different operations. After preparing schedule of changes in working capital and fund from operations, at the last stage a comprehensive fund flow statement can be prepared on the basis of component of non-current assets, non-current liabilities of balance sheet and relevant information. In other words, this statement is prepared with the help of the changes in non-current assets and non-current liabilities of balance sheet.

Components of Sources and Application of Funds

The following are the components of different sources and applications of funds:

(1) Fresh Issue of Equity Share Capital.

(2) Fresh Issue of Preference Share Capital.

(3) Issue of Debentures and Bonds.

(4) Long-Term Loans rose from bank, financial institutions and public.

(5) Long-Term Loans on Mortgage.

(6) Sale of Fixed Assets.

(7) Sale of Long-Term Investments.

(8) Non-Trading Incomes.

(9) Fund from Operations.

(10) Net Decrease in Working Capital (as per schedule of changes in working capital).

Components of Applications of Funds

Generated funds from various sources may be utilized in the following ways for meeting the future productive programmes of the business:

(1) Redemption of shares and debentures.

(2) Repayment of loans rose from bank, financial institutions and public.

(3) Purchase of Fixed Assets.

(4) Purchase of Long-Term Investments.

(5) Non-Trading Expenditure.

Payment of Tax;

Payment of Dividend.

(6) Fund Lost in Operations.

(7) Net Increase in Working Capital (as per schedule of changing in working capital).

Specimen Form of Fund Flow Statement

The following are the two usual formats for preparation of Sources and Application of Fund is presented below:

(1) Statement Form.

(2) Account Form.

11.7 ADVANTAGES OF FUND FLOW STATEMENT

Advantages of fund flow are as follows:

* Management of various companies are able to review their cash budget with the aid of fund flow statements
* Helps in the evaluation of alternative finance and investments plan
* Investors are able to measure as to how the company has utilized the funds supplied by them and its financial strengths with the aid of funds statements.
* It serves as an effective tool to the management of economic analysis
* It explains the relationship between the changes in the working capital and net profits.
* Help in the planning process of a company
* It is an effective tool in the allocation of resources
* Helps provide explicit answers to the questions regarding liquid and solvency position of the company, distribution of dividend and whether the working capital is effectively used or not.
* Helps the management of companies to forecast in advance the requirements of additional capital and plan its capital issue accordingly.
* Helps in determining how the profits of a company have been invested: whether invested in fixed assets or in inventories or ploughed back.

11.8 ILLUSTRATION

(1) Calculate funds from operations with the help of the following profit and loss account:

Profit and Loss Account

Particulars	Rs.	Particulars	Rs.
To Expenses paid and outstanding	150000	By Gross Profit	235000
To Depreciation	35000	By Gain of sale of land	30000
To Loss on sale of Machine	2000		
To Discount	100		
To Goodwill	10000		
To Net profit	57900		
	255000		**255000**

Net Profit (as given)		57900
Add: Non-operating item which have been debited to P & L A/c		
Depreciation	35000	
Loss on sale of machine	2000	
Goodwill	10000	47000
Less: Non-operating items which have been credited to P & L A/c		104900
Gain on sale of land		30000
Funds from operation		74900

(2) Prepare a statement showing changes in working capital from the following given below:

Particulars	2012	2013
Assets:		
Cash	60000	94000
Debtors	240000	230000
Stock	160000	180000
Land	100000	132000
	560000	**636000**
Capital and Liabilities:		
Share Capital	400000	500000
Creditors	140000	90000
Retained earnings	20000	46000
	560000	**636000**

Solution :

Particulars	2012	2013	Increase	Decrease
Assets:				
Cash	60000	94000	34000	-
Debtors	240000	230000	-	-
Stock	160000	180000	20000	
	460000	**504000**	**-**	**-**
Capital and Liabilities:				
Creditors	140000	90000	50000	-
Working Capital (CA-CL)	**320000**	**414000**	-	-
Net increase in working capital	94000	-	-	94000
	414000	**414000**	**104000**	**104000**

(3) Following are the summarized balance sheet of 'X' Ltd. as on 31st December, 2012 and 2013. You are required to prepare a funds flow statement for the year ended 31st December 2013.

Liabilities	2012	2013	Assets	2012	2013
Share capital	100000	125000	Goodwill	-	2500
General Reserve	25000	30000	Buildings	100000	95000
Profit and Loss account	15250	15300	Plant	75000	84500
Bank Loan (Long-term)	35000	67600	Stock	50000	37000
Creditors	75000	-	Debtors	40000	32100
Provision for tax	15000	17500	Bank	-	4000
			Cash	250	300
	265250	**255400**		**265250**	**255400**

Additional Information:

a) Dividend of Rs. 11500 was paid.

b) Depreciation written off on plant Rs.7000 and on buildings Rs.5000.

c) Provision for tax was made during the year Rs.16500.

Solution:

Schedule of changes in working capital:

Particulars	2012	2013	Increase	Decrease
Assets:				
Cash	250	300	50	-
Debtors	-	4000	4000	7900
Stock	40000	32100	-	13000
Bank	50000	37000	-	-
	90250	**73400**		
Capital and Liabilities:				
Creditors	75000	-	75000	-
Working Capital (CA-CL)	15250	73400	-	-
Net increase in working capital	58150	-	-	58150
	73400	**73400**	**79050**	**79050**

Funds Flow Statement:

Sources	Rs.	Application	Rs.
Funds from operation	45050	Purchase of plant	16500
Issue of shares	25000	Income tax paid	14000
Bank loan	32600	Dividend paid	11500
		Goodwill paid	2500
		Net Increase in working capital	58150
	102650		**102650**

Share capital A/c

Particulars	Rs.	Particulars	Rs.
To Balance c/d	125000	By Balance B/d	100000
		By Profit and Loss A/c	25000
	125000		125000

General Reserve A/c

Particulars	Rs.	Particulars	Rs.
To Balance c/d	30000	By Balance B/d	25000
		By Profit and Loss A/c	5000
	30000		30000

Provision for taxation A/c

Particulars	Rs.	Particulars	Rs.
To Balance c/d	14000	By Balance B/d	15000
To Income tax A/c	17500	By Profit and Loss A/c	16500
	31500		31500

Bank Loan A/c

Particulars	Rs.	Particulars	Rs.
To Balance c/d	67600	By Balance B/d	35000
		By Profit and Loss A/c	32600
	67600		67600

Land and Building A/c

Particulars	Rs.	Particulars	Rs.
To Balance c/d	100000	By Balance B/d	5000
		By Profit and Loss A/c	95000

Plant A/c

Particulars	Rs.	Particulars	Rs.
To Balance c/d	75000	By Balance B/d	7000
To Bank A/c	16500	By Profit and Loss A/c	84500
	91500		91500

Goodwill A/c

Particulars	Rs.	Particulars	Rs.
To Bank A/c	2500	By Balance B/d	2500
	2500		2500

Fund from Operations

Net Profit (as given)		**15300**
Add: Non-operating item which have been debited to P & L A/c		
General Reserve	5000	
Provision for tax	16500	
Dividends paid	11500	
Depreciation: On buildings	5000	
On plant	7000	45000
		60300
Less: Balance of Profit and Loss		15250
Funds from operations		**45050**

(4) Following are the Balance Sheets of BROYHILL Industries Ltd, as on 31.12.2005 and 31.12.2006

Balance Sheet of M/s BROYHILL Industries Ltd,

Liabilities	**As on 31st December**		**Assets**	**As on 31st December**	
	2005	**2006**		**2005**	**2006**
Share capital	12,00,000	16,00,000	Goodwill (at Cost)	6,00,000	5,50,000
Debentures	4,00,000	6,00,000	Plant and	8,00,000	14,90,000
Reserve	3,00,000	3,50,000	Machinery (Cost)	2,00,000	2,00,000
Profit & Loss a/c	2,50,000	5,00,000	Furniture	6,00,000	10,00,000
Creditors	4,50,000	3,80,000	Buildings	2,20,000	-
Bank Loan	8,00,000	13,00,000	Investments	3,50,000	4,70,000
Fixed Deposits	2,00,000	-	Land	3,38,000	3,72,000
Provision for			Debtors	6,00,000	8,00,000
Depreciation	12,000	6,000	Stock	40,000	80,000
	40,000	48,000	Bank	14,000	12,000
on Buildings			Preliminary		
on Plant &	60,000	70,000	expenses		
Machinery	50,000	1,20,000			
Provision for:					
Bad & Doubtful Debts					
Taxation					
	37,62,000	49,74,000		37,62,000	49,74,000

You are required to analyze the Funds Flow and the Changes in working Capital in as much detail as possible, using the following additional details available.

1. A part of the machinery costing Rs. 1,40,000 (Accumulated depreciation Rs. 12,000) was sold for Rs. 1,20,000.
2. Buildings costing Rs. 1,00,000 (Accumulated depreciation 10,000) was sold for Rs. 1,10,000.
3. Land costing Rs. 1,50,000 was sold for Rs. 1,70,000. Profit of Rs. 20,000 transferred to reserve.
4. All the Investments are sold at a profit of Rs. 24,000 and the sale proceeds are utilized for clearing the fixed deposits and purchasing new furniture.
5. Dividends of Rs. 1,00,000 were paid during the year.
6. Provision for taxation in 2006 Rs. 1,10,000.
7. During 2006 Assets of another company were purchased for a consideration of Rs. 1,00,000, payable in shares. These assets included buildings worth Rs. 50,000 and stock worth Rs. 50,000.

11.9 LIMITATIONS OF FUND FLOW STATEMENT

Fund Flow Statement has suffered with the following limitations:

(1) It is prepared on the basis of information related to historical in nature. It ignores to project future operations.

(2) This statement does not focus on transactions involved in non-fund items.

(3) It also ignores when transactions involved between current accounts or non-current accounts.

(4) It does not provide any additional information to the management because financial statements are simply rearranged and presented.

11.10 ANSWER TO CHECK YOUR PROGRESS

1. What is mean by Fund Flow Statement?
2. Explain the Changes of Financial Position.
3. Briefly explain the Flow of Funds and No Flow of Funds. Illustrate with numerical examples.
4. What are the components of Flow of Fund?
5. What do you understand by Fund Flow Statement? How is it prepared?
6. Explain the importance of Fund Flow Statement.

7. Explain the limitations of Fund Flow Statement.
8. Explain the procedure for preparation of Fund Flow Statement.
9. What do you understand by Fund from Operations?
10. What is meant by Schedule of Changes in Working Capital How is it prepared?

11.11 GLOSSARY

Funds	–	Working Capital
Funds Flow	–	Increase or decrease in funds
Working capital	–	Current assets – Current liabilities
Sources of Funds	–	Increase of Funds/Receipts
Application of Funds	–	Uses of payment

3.12 REFERENCE

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UNIT - 12 : CASH FLOW STATEMENT (ACCOUNTING STANDARD)

Structure

12.0 OBJECTIVES

After studying this unit, you are able to

- Give the meaning of cash and cash flow
- Explain the sources and uses of cash flow
- Difference between Funds Flow Statement and Cash Flow Statement
- Prepare a Cash Flow Statement
- Make out the significance and limitations of Cash Flow Statement
- Workout the problems of Cash Flow Statement.

12.1 INTRODUCTION

One of the quarterly financial reports any publicly traded company is required to disclose to the SEC and the public. The document provides aggregate data regarding all cash inflows a company receives from both its ongoing operations and external investment sources, as well as all cash outflows that pay for business activities and investments during a given quarter. Because public companies tend to use accrual accounting, the income statements they release each quarter may not necessarily reflect changes in their cash positions. For example, if a company lands a major contract, this contract would be recognized as revenue (and therefore income), but the company may not yet actually receive the cash from the contract until a later date. While the company may be earning a profit in the eyes of accountants (and paying income taxes on it), the company may, during the quarter, actually end up with less cash than when it started the quarter. Even profitable companies can fail to adequately manage their cash flow, which is why the cash flow statement is important: it helps investors see if a company is having trouble with cash. The approach to the Statement of Cash Flows is simple: Report the activities that add to resources of the company and those that subtract from the company's resources. Then, separate cash flow transactions into three buckets: operations, investments, and acquisition or retirement of debt (financing). In order to understand why the Statement of Cash Flows is important, we need to define the term "working capital" as the difference between current assets and current liabilities. Businesses operate on a cycle designed to generate more working capital in order to grow. For example, cash is used to purchase inventory, inventory is sold at a profit, and thus generates more working capital that could be used for more inventory.

12.2 MEANING OF CASH FLOW STATEMENT

A cash-flow statement differs from an income statement in reflecting actual cash on hand rather than money owed (accounts receivable). Its purpose is to throw light on management's use of its available financial resources and to help in evaluating a company's liquidity.

The accounting data is presented usually in three main sections:

a) Operating activities (sales of goods or services),

b) Investing-activities (sale or purchase of an asset, for example), and

c) Financing-activities (borrowings, or sale of common stock, for example).

Cash flow statements assess the amount, timing, and predictability of cash-inflows and cash-outflows, and are used as the basis for budgeting and business-planning. Together, these sections show the overall (net) change in the firm's cash-flow for the period the statement is prepared. Lenders and potential investors closely examine the cash flow resulting from the operating activities. This section represents after-tax net income plus depreciation and amortization and, therefore, the ability of the firm to service its debt and pay dividends. With balance sheet and income statement (profit and loss account), cash flow statement constitutes the critical set of financial information required to manage a business.

12.3 IMPORTANCE OF CASH FLOW STATEMENT

The cash flow statement provides information regarding inflows and outflows of cash of a firm for a period of one year. Therefore cash flow statement is important on the following grounds.

1. Cash flow statement helps to identify the sources from where cash inflows have arisen within a particular period and also shows the various activities where in the cash was utilized.

2. Cash flow statement is significant to management for proper cash planning and maintaining a proper matching between cash inflows and outflows.

3. Cash flow statement shows efficiency of a firm in generating cash inflows from its regular operations.

4. Cash flow statement reports the amount of cash used during the period in various long-term investing activities, such as purchase of fixed assets.

5. Cash flow statement reports the amount of cash received during the period through various financing activities, such as issue of shares, debentures and raising long-term loan.
6. Cash flow statement helps for appraisal of various capital investment programmes to determine their profitability and viability.

12.4 CONCEPT AND OBJECTIVES OF CASH FLOW STATEMENT

Every big and small firm performs cash transactions. Cash transaction refers to cash inflows and outflows. Cash inflows and outflows help to review success, failure of a firm and its ability to meet maturing debts. Such review and evaluation are possible if the statement of cash flow is prepared. Accounting standard Board (ASB) at international level in 1996 suggested every firm to publish the statement of cash flow along with the final accounts. Since then the statement of cash flow is getting more recognition than funds flow statement.

The statement that shows cash inflows and outflows of a firm for a specified period is called the cash flow statement. Cash flow statement demonstrates where the cash has come during the period and what the firm has done with the available cash. Therefore, cash flow statement shows a picture of cash movement occurred in and out from a firm during a year in a summarized form. Cash flow statement gives a picture of sources and applications of cash of a firm for a year. The cash flow statement is not a cash book because it demonstrates inflows and outflows of cash and near to cash items. Cash and near to cash cover entire items of current assets and current liabilities. The cash flow statement reports increase and decrease in cash by listing in meaningful categories in terms of operating, investing and financing activities.

Objectives of Cash Flow Statement : -

1. To provide information about the cash inflows and cash outflows from operating, financing and investing activities of the firm.
2. To show the impact of the operating, financing and investing activities on cash resources.
3. To tell how much cash came in during the period, how much cash went out and what the net cash flow was during the period.
4. To explain the causes for changes in cash balance.
5. To identify the financial needs and help in forecasting future cash flows.

12.5 ADVANTAGES AND DISADVANTAGES OF CASH FLOW STATEMENT

Cash flow statement is a statement which shows how the operations of the company affects the cash position of the company during a financial year and therefore companies usually make both cash and funds flow statement. Given below are some of the advantages and disadvantages of cash flow statement –

Advantages : -

1. It shows the actual cash position available with the company between the two balance sheet dates which funds flow and profit and loss account are unable to show and therefore it is important to make a cash flow report if you want to know about the liquidity position of the company.
2. It helps the company in making accurate projections regarding the future liquidity position of the company and hence arrange for any shortfall in money by making arrangements in advance and if there is excess than it can help the company in earning extra return out if idle funds.
3. It acts like a filter and is used by many analyst and investors to judge whether company has prepared the financial statements properly or not because if there is any discrepancy in the cash position as shown by balance sheet with cash flow statement than it means that statements are incorrect.

Disadvantages : -

1. Since it shows only cash position, it is not possible to arrive at actual profit and loss of the company by just looking at this statement alone.
2. In isolation this is of no use and it requires other financial statements like balance sheet, profit and loss etc…, and therefore limiting its use.

12.6 DIFFERENCE BETWEEN FUND FLOW STATEMENT AND CASH FLOW STATEMENT

Fund Flow Statement and Cash Flow Statement are the two useful tools of financial analysis and interpretations of financial statements. But at the same time both the statements differ from each other in the following manner:

1) Fund Flow Statement helps to measure the causes of changes in working capital whereas cash flow statement focuses on the causes for the movement of cash during a particular period.

2) Fund flow statement is prepared on the basis of Fund or all financial resources while cash flow statement is based on cash basis of accounting.

3) Cash Flow Statement guides to the management for short-term financial planning while Fund flow analysis helps to the management for intermediate and long-term financial planning.

4) Statement of changes in Working capital is required for the preparation of Fund flow statement while for cash flow Statement no such statement is required.

12.7 PREPARATION OF CASH FLOW STATEMENT

Cash Flow Statement is prepared like Fund Flow Statement. Preparation of this statement is based on the movement of cash, may be an actual inflow of cash or outflow of cash, Profit and Loss Account and other relevant information. While preparing a cash flow statement, it starts with an opening balance of cash in hand and cash at bank, all the sources of cash are added to an opening balance minus applications of cash is reconciled with the closing balance of cash. The balance represents cash and bank balances at the end of accounting period.

12.8 SOURCES AND APPLICATION OF CASH

Sources of Cash (Inflow of Cash)

The following are the main sources of cash such as:

1) Cash From Operations or Trading Profit.

2) Sale of Fixed Assets for Cash.

3) Sale of Investments for Cash.

4) Raising Long-Term Loans from banks and Financial Institutions.

5) Issue of Shares and Debentures for Cash.

Application of Cash (Outflow of Cash)

Application of cash can be involved in the following forms:

1) Cash Lost in Operations or Trading Losses.

2) Redemption of Shares and Debentures by Cash.

3) Purchase of Fixed Assets.

4) Repayment of Long Term Loans.

Computation of Cash Flow Statement

A Comprehensive Cash Flow Statement is ascertained in two stages:

1) Cash From Operations i.e., internal sources of cash calculated by preparing combined statements of adjusted profit and loss account.

2) External Sources and Applications of cash, i.e. Flow of Cash involves in non-current items ascertained by the Statement of Sources and Applications of Cash.

12.9 ILLUSTRATION

With the help of the above discussion, Let us work out some illustration which gives you confidence.

Problem No.1 : -

From the following information as contained in the Income Statement and the balance Sheet of Strong Ltd., you are required to prepare a cash flow statement using

a) Direct method and

b) Indirect method.

Income of statement and reconciliation of earnings for the year ended 31st March 2013

Net sales		4032000
Less: Cost of sales	3168000	
Depreciation	96000	
Salaries and wages	384000	
Operating expenses	128000	
Provision for taxation	140800	3916800
Net operating profit		**115200**
Non-recurring income:		19200
Profit on sale of equipment		134400
Profit for the year		242880
Retained earnings (balance in profit & loss b/f)		377280
Dividend declared and paid during the year		115200
Profit and Loss Account balance		**262080**

Solution:

Statement showing cash receipts from customers

Sales	4032000
Add: Debtors at the beginning	268800
	4300800
Less: Debtors at the end	297600
Cash receipts from customers	**4003200**

Statement Showing Cash Payments to Suppliers and Employees

Cost of goods sold		3168000
Add: Operating expenses		128000
Salaries and wages		384000
		3680000
Add: Creditors at the beginning	384000	
Outstanding expenses at the end	38400	
Stock at the end	153600	
Advances at the end	14400	590400
		4270400
Less: Creditors at the end	374400	
Outstanding expenses at the end	76800	
Stock at the beginning	422400	
Advances at the beginning	12480	886080
Cash paid to Suppliers and Employees		**3384320**

Income Tax Payable A/c

Particulars	Amount	Particulars	Amount
To Income tax A/c (bal. fig tax paid)	138880	By Balance b/d	19200
To Balance c/d	21120	By Profit and loss A/c	140800
	160000		**160000**

Accumulated Depreciation A/c

Particulars	Amount	Particulars	Amount
To Buildings and Equipment A/c (Dep. on equipment sold)	76800	By Balance b/d	192000
		By Profit and loss A/c	96000
To Balance c/d	211200		
	288000		**288000**

Building and Equipment A/c

Particulars	Amount	Particulars	Amount
To Balance b/d	576000	By Accumulated Depreciation A/c (Dep. On equipment sold)	76800
To Bank A/c (Purchase of equip.)	460800		
To Profit and Loss A/c (Profit on sale of equipment)	19200	By Bank A/c (Sale of equipment)	57600
		By Balance c/d	921600
	1056000		**1056000**

Cash Flow Statement of M/s Strong Ltd. for the year ended 2013 (Direct Method)

Cash flows from Operating activities:	
Cash receipts from customers	4003200
Cash paid to suppliers and employees	(3384320)
Cash generated from operations	618880
Income-tax paid	(138880)
Net cash inflow from operating activities	**480000**
Cash flows from Investing activities:	
Purchase of land	(76800)
Purchase of building and equipment	(460800)
Sale of equipment	57600
Net cash inflow from Investing activities	**480000**
Cash flows from Financing activities:	
Issue of share capital	134400
Dividend Paid	(115200)

Net cash inflow from Financing activities	**19200**
Net increase in cash and cash equivalents during the period	19200
Cash and Cash equivalents at the beginning	96000
Cash and Cash equivalents at the end	**115200**

Cash Flow Statement of M/s Strong Ltd. for the year ended 2013 (Indirect Method)

Cash flows from Operating activities:	
Net Profit before taxation and extraordinary items	256000
Depreciation	96000
Operating profit before working capital changes	**352000**
Increase in debtors	(28800)
Decrease in stock	268800
Increase in advance	(1920)
Decrease in creditors	(9600)
Increase in outstanding expenses	38400
Cash generated from operations	**618880**
Income tax paid	480000
Net cash inflow from operating activities	**480000**
Cash flows from Investing activities:	
Purchase of land	(76800)
Purchase of building and equipment	(460800)
Sale of equipment	57600
Net cash inflow from Investing activities	**480000**
Cash flows from Financing activities:	
Issue of share capital	134400
Dividend Paid	(115200)
Net cash inflow from Financing activities	**19200**
Net increase in cash and cash equivalents during the period	19200
Cash and Cash equivalents at the beginning	96000
Cash and Cash equivalents at the end	**115200**

Problem No. 2

Dev Products Ltd. presents to you the following Balance Sheets and Profit and Loss Account:

Particulars	**2013**	**2014**
Liabilities:		
Equity hare capital	2500000	2500000
Profit and Loss account	2075000	2365000
14% Debentures	1500000	1250000
Sundry creditors	256250	304250
Expenses outstanding	54500	68500
Provision for bad debts	20000	22500
	6405750	**6510250**
Assets:		
Fixed assets	6000000	6500000
Less: Provision for depreciation	2000000	2450000
	4000000	**4050000**
Investments	625000	250000
Stock	1033250	1267750
Sundry debtors	400000	450000
Cash at bank	335500	483000
Preliminary expenses	12000	9000
	6405750	**6510250**

Profit and Loss account for the year ended 2014

Particulars	Amount	Particulars	Amount
To opening stock	1033250	By sales	9100500
To purchases	4884500	By closing stock	1267750
To Gross profit	4450500		
	10368250		**10368250**
To operating expenses	1958750	By gross profit	4450500
To provision for bad debts	2500	By law suit compensation	125000
To provision for depreciation	450000	By interest on investments	65000
To preliminary expenses	30000	By profit on sale of	18750
written off	192500	investments	
To interest on debentures	821000		
To income-tax paid	1231500		
To net profit			
	4659250		**4659250**

Cash Flow Statement for the year ended 2014 (Indirect method)

Particulars	Amount
Cash flows from Operating activities:	
Net Profit before taxation and extraordinary items	1927500
Adjustment for:	
Depreciation	450000
Provision for bad debts	2500
Preliminary expenses written off	3000
Profit on sale of investments	(18750)
Interest on investments	(65000)
Interest on debentures	192500
Operating profit before working capital changes	**2491750**
Adjustment for:	
Increase in stock	(234500)
Increase in sundry debtors	(50000)
Increase in sundry creditors	48000
Increase in outstanding expenses	14000
Cash generated from operations	2269250
	(821000)
Income tax paid	1448250
Add: Compensation received in law suit	125000
Net cash inflow from Operating activities	**1573250**
Cash flows from Investing activities:	
Fixed assets purchased	(500000)
Sale proceeds of Investments	393750
Interest on investments	65000
Net cash inflow from Investing activities	**(41250)**
Cash flows from Financing activities:	
Redemption of debentures	(250000)
Debenture interest paid	(192500)
Dividend paid	(941000)
Net cash inflow from Financing activities	**(1384000)**

Net increase in cash and cash equivalents during the period	148000
Cash and Cash equivalents at the beginning	33500
Cash and Cash equivalents at the end	**483500**

Problem No. 3

The Balance sheet of Mandeep Technologies Ltd. For the year ended 2012 and 2013

Particulars	2013	2012
Liabilities:		
Equity share capital	600000	450000
8% Preference share capital	150000	225000
Capital reserve	30000	-
General Reserve	75000	60000
Profit and Loss account	72000	45000
Proposed dividend	75000	63000
Sundry creditors	70500	37500
Bills payable	24000	30000
Liability for expenses	54000	45000
Provision for taxation	75000	60000
	1225500	**1015500**
Assets:		
Goodwill	120000	150000
Land and building	255000	300000
Plant and machinery	300000	120000
Investments	45000	30000
Sundry debtors	255000	210000
Stock	163500	115500
Bills receivable	45000	30000
Cash in hand	15000	22500
Cash at Bank	12000	15000
Preliminary expenses	15000	22500
	1225500	**1015500**

The additional information is as under:

a) An interim dividend of ₹ 30000 has been paid in 2012-13.

b) Investments are trade investments ₹ 4500 by way of dividends are received which included ₹ 1500 from pre-acquisition profit which has been credited to Investment Account.

c) A machinery was sold for ₹ 15000. The written down value of the machine was ₹ 18000. Depreciation of ₹ 15000 is charged on plant and machinery in 2012-13.

d) A piece of land has been sold during the year and profit on sale has been credited to Capital Reserve Account. Depreciation charged on buildings during the year amounted to ₹ 7500. No additions existed under this head during the current year.

You are required to prepare a cash flow statement for the year 2014 in accordance with AS-3.

Land and Building A/c

Particulars	Amount	Particulars	Amount
To balance b/d To capital reserve A/c	300000 30000	By depreciation A/c By bank A/c (bal. fig) By balance b/d	7500 67500 255000
	330000		**330000**

Plant and Machinery A/c

Particulars	Amount	Particulars	Amount
To balance b/d To Bank A/c (purchases)	120000 213000	By bank A/c (sales) By depreciation By profit and loss A/c (loss) By balance b/d	15000 15000 3000 30000
	333000		**333000**

Investment A/c

Particulars	Amount	Particulars	Amount
To balance b/d To Bank A/c (purchases)	30000 16500	By Dividend A/c By balance b/d	1500 45000
	46500		**46500**

Cash flow statement for the year ended 2014

Cash flows from Operating activities:	
Net Profit before taxation and extraordinary items	162000
Adjustment for Depreciation	
Building	7500
Plant and Machinery	15000
Preliminary expenses written off	7500
Loss on sale of plant	3000
Goodwill written off	30000
Dividend received	(3000)
Operating profit before working capital changes	**222000**
Increase in debtors	(45000)
Increase in stock	(48000)
Increase in bills receivable	(15000)
Decrease in bills payable	(6000)
Increase in sundry creditors	33000
Increase in liability for expenses	9000
Net cash inflow from operating activities	**150000**
Cash flows from Investing activities:	
Sale of proceeds of land	67500
Sale of proceeds of machine	15000
Purchase of plant	(213000)
Purchase of investment	(16500)
Dividend received	4500
Net cash inflow from Investing activities	**(142500)**
Cash flows from Financing activities:	
Issue of share capital	150000
Redemption of preference shares	(75000)
Interim dividend paid	(30000)
Dividend paid of last year	(63000)
Net cash inflow from Financing activities	**(18000)**
Net increase in cash and cash equivalents during the period	(10500)
Cash and Cash equivalents at the beginning	37500
Cash and Cash equivalents at the end	**27000**

12.10 LIMITATIONS OF CASH FLOW STATEMENT

In spite of the immense usefulness of the Cash Flow Statement, it has its own limitations. They are as follows:

a) Cash Flow Statement shows only the inflows and outflows of cash, and thus, it does not take into consideration the non-cash transactions of the enterprise that had taken place during the same period.

b) As it considers only the inflows and outflows of cash, the Net Cash Flow of a certain period does not necessarily mean the Net Profit of the business, as Net Profit is ascertained considering both cash as well as non-cash transactions. Thus, there may be a huge difference between the Net Cash Flow and the Net Profit for the same period.

c) As it discloses the Net Cash Flow and not the Net Profit for a certain period, it is not a substitute of the profit and loss account (Profit & Loss A/c) or Income statement.

12.11 SUMMARY

In this unit we have discussed about cash flow statement. Cash flows refer to the actual movement of cash into and out of an organization. In order to ensure that cash flows are adequate to meet the current liabilities such as tax payment, wages, amounts due to trade creditors, it is essential to prepare a statement of changes in the financial position of a firm. Cash flow statement is most useful in the preparation of dividend and retention policies.

12.12 SELF ASSESSMENT QUESTIONS

1. What is meant by Cash Flow Statement?
2. Explain briefly the uses of Cash Flow Statement?
3. What are the limitations of Cash Flow Statement?
4. Explain the procedure for preparing a Cash flow Statement.
5. What are the components of Sources and Applications of Cash?
6. From the following Profit and Loss account, you are required to compute Cash Flow Statement.

The following were the balance sheets of the Raju & Kumar for the year 2013 and 2014.

Liabilities	2012	2014	Assets	2013	2014
Creditors	40000	44000	Cash	10000	7000
Mrs. Kumar's Loan	25000	-	Debtors	30000	50000
SBI loan	40000	50000	Stock	35000	25000
Capital	125000	153000	Machinery	80000	55000
			Land	40000	50000
			Building	35000	60000
	230000	**247000**		**230000**	**247000**

Additional Information:

During the year a machine costing 10000 (accumulated depreciation 3000) was sold for ₹ 5000. The provision for depreciation against machinery as on 2012 was ₹ 25000 and on 2013 was 40000. Net profit for the year ending 2014 amounted to ₹ 45000.

7. From the following particulars, prepare a cash flow statement.

Balance Sheet

Liabilities	2013	2014	Assets	2013	2014
Share capital	300000	350000	Fixed Assets	510000	620000
8% Debentures	100000	200000	Discount on debentures	10000	5000
Reserves & Surplus	80000	100000	Debtors	40000	75000
Creditors	70000	50000	Stock	30000	100000
Bills Payable	50000	60000	Bank	10000	-
Bank O.D.	-	40000			
	600000	**800000**		**600000**	**800000**

Additional Information:

a) Provision for depreciation as 2012 150000 and on 2013 190000 respectively.

b) A machine costing 70000 (depreciation written off 30000) was sold for 25000.

c) Dividend paid was 30000.

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UNIT-13 : COST ACCOUNTING

Structure

13.0 OBJECTIVES

After studying this unit, you should be able to:

- Understand the meaning of cost;
- Distinguish between cost, costing and cost accounting;
- Know the various cost elements; and
- Prepare a cost sheet.

13.1 INTRODUCTION

In this competitive business world, it is very important to fix appropriate price for the product / service[1] to protect the diverse interest of both the manufacturers / service providers as well as customers. Competitive and affordable pricing requires determination of correct cost and control over cost. The need for cost ascertainment and cost control is directly related with the intensity of competition. Now a days almost all electronic gadgets, electrical products, furniture, toys and many more items are being produced and exported from China. Chinese manufactures are becoming cost leaders. Repute brands in electrical and electronics are manufactured in China through so called contract manufacturing system. The benefits accruing to Chinese manufacturers are essentially due to seven factors: **economies of scale in manufacturing**, tariff differentials, lower cost of capital investment, **higher labour productivity, lower transaction, power and transportation costs**.

13.2 COST, COSTING AND COST ACCOUNTING

Let us understand the concept of cost, costing and cost accounting:

Cost

Measurement in monetary terms of the amount of resources used for the purpose of production of goods or rendering services

— Terminology of ICWA, India

Cost is the amount of expenditure (actual or notional) incurred on or to attributable to a specified thing or activity

— Terminology Institute of Cost And Management Accountants, London

Cost represents the resources that have been or must be sacrificed to attain a particular object

— Gordon Shilling Law

Cost is the value of resources required / used for goods to be produced / produced or services to be rendered / rendered. These resources are broadly classified as material, labour, and other expenses (known as overheads). The resources may be tangible or intangible, but measurable in terms of money. Let us have look some resources required to produce a given product / service.

Product/service	Material	Labour	Other expenses
Furniture	Wood/plywood, steel, beadings, decolam, adhesive, nails, wood polish / paint, packing material (if any)	Services of designer, carpenter, helper	Rent / depreciation of the workshop, depreciation of equipments (saw, hammer etc.), supervision expenses, electricity
Invitation card / brochure	Card sheet, envelope, ink/chemical, packing material (if any)	Services of computer operator (DTP), printing machine operator, helper	Rent / depreciation of the workshop, depreciation of machinery, supervision expenses, electricity
Saloon	Shaving cream, razor blades, Lotion, Hair Die etc.	Services of Barber	Rent /Depreciation of the building, depreciation of the furniture & fixtures, electricity, upkeep and maintenance

Costing

"the techniques and processes of ascertaining costs"

— Terminology of CIMA, London

It is simply the process of ascertaining costs. These techniques include - principles and rules of ascertaining cost of products. The method of the analysis of expenses and the processes by which such an analysis should be related to different products or services differ from industry to industry. These techniques are also dynamic and they change with time due to change in production system.

Cost Accounting

The process of accounting for costs from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost centers and cost units. In its widest usage, it embraces the preparation of statistical

data, the application of cost control methods and the ascertainment of profitability of activities carried out or planned.

— Terminology of CIMA, London

13.3 OBJECTIVES OF COST ACCOUNTING

Cost accounting comprises systematic recording of expenses and analysis to ascertain the cost of each product manufactured or service rendered. Cost of each product or service is required to know where to reduce the cost, how to fix the price, maximize profits etc.

The main objectives of cost accounting are as under:

1. Analysis and classification of all expenses incurred in producing goods or services.
2. Ascertainment of the cost of production of every unit, job, operation, process, department or service
3. Determination of the standard cost to compare with the actual cost.
4. Finding inefficiencies and the extent of various forms of waste, whether of materials, time, expenses or in the use of machinery, equipment and tools.
5. Analysis of the causes of unsatisfactory results to indicate remedial measures.
6. To provide data of departments or individual products for preparing profit and loss accounts and balance sheet
7. Providing detailed information for knowing the exact reasons for profit or loss revealed in total in the profit and loss accounts.
8. To find sources of economies in production having regard to methods, types of equipment, design, output and layout.
9. To provide actual cost data for comparing with estimates; to use it for future estimates or quotations; and to aid management in pricing policy.
10. Providing information to aid short term decisions, such as quoting the price for special orders or during a slump, make or buy decision, assigning priorities to various products, etc.

13.4 SOME TERMS

It is necessary to understand the basic terms.

Cost unit

"A unit of quantity of product, service or time in relation to which costs may be ascertained or expressed.

— Terminology of CIMA, London,

Cost unit is normally a sales unit, such as kg, litre, meter, square feet, etc. Let us look into the following examples for better understanding.

Product/Service	Cost Unit
Automobile	Numbers of parts
Brick works	1000 bricks
Cement	Tonne
Chemicals	Litre/ gallon/ kilogram/ ton
Steel / Sugar	Tonne
Passenger Transport	Passenger-kilometre (Per passenger per kilometre)
Goods transport	Tonne- kilometre (Per tonne per kilometre)
Hotel	Per guest per day
Hospital	Per patient per bed / room
Cinema	Per person per show
Restaurant	Per meal
Furniture	Per unit or per job

Cost centre

"A location, person or item of equipment (or group of these) for which costs may be ascertained and used for the purpose of cost control".

— Terminology of CIMA, London

Cost centre is the sub-unit of an organisation, for which separate cost collection is to be made. It could be any department in the factory, such as Production Department, Stores Department, Repairs and Maintenance Department. It is one of the convenient unit into which the whole factory organization has been appropriately divided for costing purposes. A cost unit may consist of a department or a sub-department or item of equipment or, machinery or a person or a group of persons. For example, although an assembly department may be supervised by one foreman, it may contain several assembly lines. Some times each assembly line is regarded as a separate cost centre with its own assistant foreman.

13.5 COST ELEMENTS

Broadly there are three elements of cost, viz. Material, Labour and Expenses. They are further divided into direct and indirect. Exhibit 1.1 shows the various elements of cost.

Material

Lot of materials are consumed in the process of production. Some materials form part of the product and other materials are consumed in the process of production and do not form the part of product. Materials can be direct and indirect.

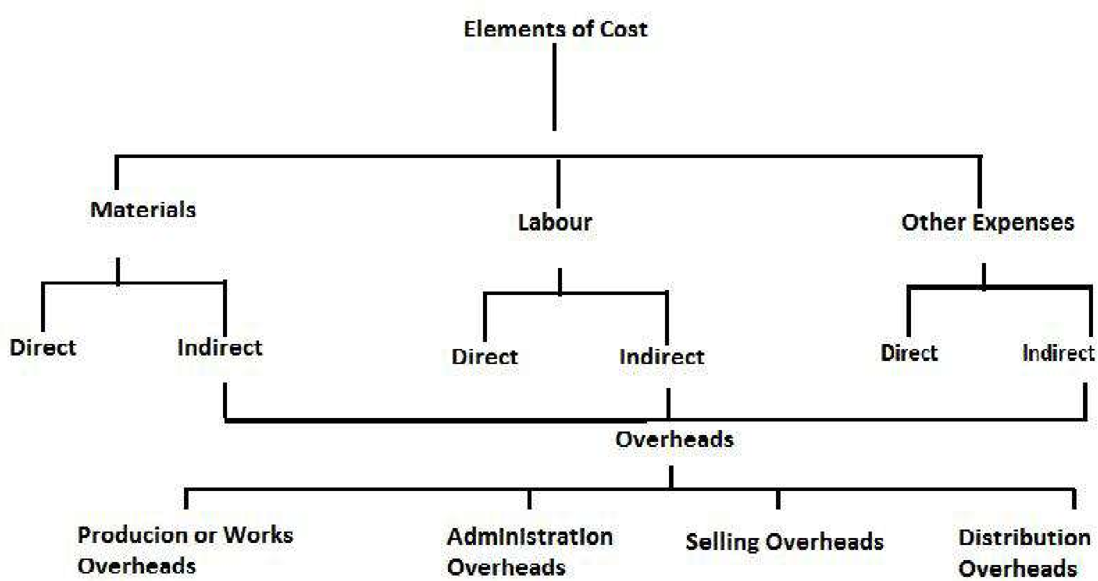

Exhibit 1.1 – Elements of Cost

Direct Material: Direct material is the substance from which a product is made. It may be in a raw state-raw material, such as timber in furniture, thread in cloth and leather in shoe, etc. It may also be in manufactured state-components, such as battery for car, speaker for radio, tin of paint, etc. The cost of direct material is directly and completely assigned to the specific physical unit and charged to the prime cost. The following materials form the part of direct material:

- Materials which are specifically purchased; acquired or produced for a particular job, order or process.
- Primary packing material (e.g. carton, wrapping, cardboard, etc.)
- Materials passing from one process to another as inputs.

Indirect Material*:* All materials, which cannot be conveniently assigned to specific physical units, are termed as 'indirect material'. Such commodities do not form part of the finished products. Consumable stores, lubrication oil, stationery and spare parts for the machinery are termed as indirect materials. Under certain circumstances a material may be the part of product but it may not be possible to conveniently assign it to a specific cost unit. Say for example, thread in dress is a part of the dress, but the value is very negligible. A thread costing Rs. 4 may be sufficient for 8 to 10 shirts. It may be considered as indirect material.

Labour

Human efforts used for conversion of raw material into finished product or doing various jobs in the business are known as labour. Wages paid to the labourers is called labour cost. It may be direct and indirect.

Direct Labour: Direct labour is the labour employed in altering the condition, composition or construction of the product. The wages paid to skilled and unskilled workers for manual work or mechanical work for operating machinery, which can be specifically allocated to a particular unit of production, is known as direct wages and it is known as direct labour cost. Examples of direct labour are – shop floor workers, tailors, carpenters etc. Direct labour cost is specifically and conveniently traceable to the specific products.

Indirect Labour: Labour employed to perform work incidental to production of goods or those engaged for office work, selling and distribution activities are known as indirect labour. All the labour employed for assisting, supervising, monitoring the direct labour is indirect labour. The wages paid to such workers are known as indirect wages or indirect labour cost. Example: Salary paid to the driver of the delivery van used for distribution of the product.

Expenses

All expenditure other than material and labour incurred for manufacturing a product or rendering service is termed as expenses. Expenses may be direct or indirect.

Direct Expenses: Expenses which are specifically incurred and can be directly and fully allocated to a particular product, job or service are termed as direct expenses. Examples of such expense are: hire charges of special machinery hired for the job, carriage inward, royalty, cost of special and specific drawings, etc. These are also known as chargeable expenses.

Indirect Expenses: All expenses excluding indirect material and indirect labour, which cannot be directly and fully attributed to a particular product, job or service, are termed as indirect expense'. Some examples of such expenses are: repairs to machinery, insurance, lighting and rent of the building.

13.6 COST CLASSIFICATION

Costs can be classified or grouped by their common characteristics. Classification of costs is very important for linking costs by cost center and cost unit. Important approaches of classification cost are dealt in this section:

1. **By the nature or cost elements**: In this classification, cost is categorized by the nature or by element. The cost elements as dealt in the previous section are: materials, labour and expenses.
2. **By the organisational functions**: Classification of the costs by various functions of an organization (i.e., production, administration, selling and distribution) is more relevant for cost ascertainment and cost control. Costs are classified as under:

a. Manufacturing or works cost;

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3. **By the degree of traceability of costs to the cost units:** According to this classification, costs are divided direct costs and indirect costs.

a. Direct Costs: Those costs which are incurred for a particular product and can be traced or identified with a particular cost centre or cost unit are direct costs. For example direct materials, direct labour and direct expenses. These are the costs which can be directly, and wholly allocated or charged to a specific cost center or cost unit. All direct cost other than direct material and direct labour are termed as direct expenses. Direct expenses are also termed as chargeable expenses. Some examples of the direct expenses are hire of specific machinery for specific task, cost of special designs, moulds or patterns, feed paid to architect, surveyors and other consultants, cost of patents and royalties. The total cost of cloth in a given shirt can traced easily and can be termed as direct cost, to be specific direct material.

b. **Indirect costs:** The expenses which cannot be directly, easily, and wholly allocated to specific cost center or cost units are indirect costss. All indirect costs other than indirect material and indirect labour are termed as indirect expenses. For example: rent of a building, electricity charges, salary of administrative staff etc.

4. By the changes in level of activity or volume: This classification is based on the behaviour of the cost due to change in the level of activity or volume of production. They are fixed, variable and semi-variable.

a. **Fixed Costs** are the costs which remain fix in total irrespective of quantity of output. The change in quantity of output has no influence on the fixed cost. These costs are also known as periodic costs, as they are paid for specific period. Say, for example rent of the workshop per annum will remain fix, whatever is the production. Even if there is no production, rent is to be paid. The other examples are insurance on machinery, fixed annual maintenance cost of the machine, depreciation of the building, administrative staff salaries, etc. Fixed cost remain fix in total and per unit it varies based on volume.

b. **Variable Costs** are the costs which vary in direct proportion to the volume of output. These costs change in total but remain constant per unit as production activity changes. Variable costs include direct material costs, direct labour costs and direct expenses. Say for example, steel and wood requirement for each unit of a classroom desk remains same. The steel and wood required for first desk is equal to second desk and so on.

c. **Semi-variable Costs** are those which are partly fixed and partly variable. For example; depreciation, for second shift working may be only 50% of the single shift working. Semi variable costs changes with comparatively small changes in output but not proportionately.

5. By Controllability: Costs which can be influenced by the action of a specified member of an organisation is **controllable cost** and the cost which cannot be influenced by the action of a specified member of an undertaking is **non-controllable cost**.

6. By time: On the basis of time of computation of cost, costs can be classified as **Historical cost** and **Predetermined Costs**. The actual costs which are ascertained and recorded after it has been incurred is called historical cost. Predetermined costs are also known as estimated costs as they are computed in advance of production based on past cost data. Predetermined costs are also known as standard costs. Standard costs are used to prepare budgets and forms base for comparing with actual costs.

13.7 COST SHEET

Cost sheet is a statement, which shows various components of the total cost. Total cost consists of prime cost, factory cost, selling and distribution cost. Cost is to be calculated for each product or service of an organisation. Further, cost is to be computed per unit basis. Cost sheet can be prepared on historical basis as well as estimation basis.

Historical Cost Sheet: Historical Cost sheet is prepared on the basis of actual cost incurred to produce a product or render a service. Historical cost is computed after goods are produced or services are rendered.

Estimated Cost Sheet: Estimated cost sheet is prepared on the basis of estimated cost to produce a product or render a service. It is the estimation of value of resources required to produce a given product. Estimated cost is useful for giving quotations, to determine the tender price of a job or a contract. For example, a carpenter gives estimation of furniture before the commencement of work likewise an electrician gives estimation.

Uses of Cost Sheet

Cost sheet is very much useful for the following purposes:

1. Cost ascertainment: The main objective of the cost sheet is to ascertain the cost. Cost sheet helps to ascertain the cost of goods produced. It also helps to ascertain the actual cost or estimated cost of a Job.

2. Fixation of selling price: Cost is the base in fixing selling price of a product or service.

3. Helps in cost control: For controlling the cost of a product, it is necessary for every manufacturer to prepare a cost sheet. Estimated cost sheet helps in controlling the material cost, labour cost and overheads cost at every point of production.

4. Aids in managerial decisions: It helps in important management decisions such as: make or buy a component, what prices of goods are to be quoted in the tender, addition and /or deletion of a product, whether to retain or replace an existing machine etc.

Format for cost sheet

There is no standard format for cost sheet. It may change from industry to industry and within the industry from time to time. A typical format of a Cost Sheet is given as under:

Cost Sheet

Particulars		Amount
A. Materials Consumed :		
Purchases of raw material	xxxx	
Add: Expenses associated with Purchases	xxxx	
Add : Opening Stock of Raw material	xxxx	
Less : Closing Stock of Raw Material	(xxxx)	
Direct Material consumed		xxxx
B. Direct Wages		xxxx
C. Direct Expenses		xxxx
D. Prime Cost (A + B + C)		**xxxx**
E. **Factory / Works Overheads**		
Add : Opening Stock of Work-in-Progress	xxxx	
Less : Closing Stock of Work-in-Progress	(xxxx)	xxxx
F. Works / Factory Cost (D + E)		**xxxx**
G. Office and administration overheads		xxxx
H. Total Cost of Production (F + G)		**xxxx**
Add : Opening Stock of finished Goods		xxxx
Cost of Goods available for sale		xxxx
Less : Closing Stock of finished Goods		xxxx
I. Cost of production of goods Sold or cost of good sold		**xxxx**
J. **Selling & Distribution Overheads**		xxxx
K. Total Cost (I + J) = Cost of Sales		**xxxx**
L. Profit		xxxx
M. Sales (K + L)		**xxxx**

Exhibit 1.1 – Elements of Cost

Direct Material: Direct material is the substance from which a product is made. It may be in a raw state-raw material, such as timber in furniture, thread in cloth and leather in shoe, etc. It may also be in manufactured state-components, such as battery for car, speaker for radio, tin of paint, etc. The cost of direct material is directly and completely assigned to the specific physical unit and charged to the prime cost. The following materials form the part of direct material:

- Materials which are specifically purchased; acquired or produced for a particular job, order or process.
- Primary packing material (e.g. carton, wrapping, cardboard, etc.)
- Materials passing from one process to another as inputs.

Indirect Material: All materials, which cannot be conveniently assigned to specific physical units, are termed as 'indirect material'. Such commodities do not form part of the finished products. Consumable stores, lubrication oil, stationery and spare parts for the machinery are termed as indirect materials. Under certain circumstances a material may be the part of product but it may not be possible to conveniently assign it to a specific cost unit. Say for example, thread in dress is a part of the dress, but the value is very negligible. A thread costing Rs. 4 may be sufficient for 8 to 10 shirts. It may be considered as indirect material.

Labour

Human efforts used for conversion of raw material into finished product or doing various jobs in the business are known as labour. Wages paid to the labourers is called labour cost. It may be direct and indirect.

Direct Labour: Direct labour is the labour employed in altering the condition, composition or construction of the product. The wages paid to skilled and unskilled workers for manual work or mechanical work for operating machinery, which can be specifically allocated to a particular unit of production, is known as direct wages and it is known as direct labour cost. Examples of direct labour are – shop floor workers, tailors, carpenters etc. Direct labour cost is specifically and conveniently traceable to the specific products.

Indirect Labour: Labour employed to perform work incidental to production of goods or those engaged for office work, selling and distribution activities are known as indirect labour. All the labour employed for assisting, supervising, monitoring the direct labour is indirect labour. The wages paid to such workers are known as indirect wages or indirect labour cost. Example: Salary paid to the driver of the delivery van used for distribution of the product.

Expenses

All expenditure other than material and labour incurred for manufacturing a product or rendering service is termed as expenses. Expenses may be direct or indirect.

Direct Expenses: Expenses which are specifically incurred and can be directly and fully allocated to a particular product, job or service are termed as direct expenses. Examples of such expense are: hire charges of special machinery hired for the job, carriage inward, royalty, cost of special and specific drawings, etc. These are also known as chargeable expenses.

Indirect Expenses: All expenses excluding indirect material and indirect labour, which cannot be directly and fully attributed to a particular product, job or service, are termed as indirect expense'. Some examples of such expenses are: repairs to machinery, insurance, lighting and rent of the building.

13.6 COST CLASSIFICATION

Costs can be classified or grouped by their common characteristics. Classification of costs is very important for linking costs by cost center and cost unit. Important approaches of classification cost are dealt in this section:

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Cost Sheet

Particulars	Amount	
A. Materials Consumed :		
Purchases of raw material	xxxx	
Add: Expenses associated with Purchases	xxxx	
Add : Opening Stock of Raw material	xxxx	
Less : Closing Stock of Raw Material	(xxxx)	
Direct Material consumed		xxxx
B. Direct Wages		xxxx
C. Direct Expenses		xxxx
D. Prime Cost (A + B + C)		**xxxx**
E. **Factory / Works Overheads**		
Add : Opening Stock of Work-in-Progress	xxxx	
Less : Closing Stock of Work-in-Progress	(xxxx)	xxxx
F. Works / Factory Cost (D + E)		**xxxx**
G. Office and administration overheads		xxxx
H. Total Cost of Production (F + G)		**xxxx**
Add : Opening Stock of finished Goods		xxxx
Cost of Goods available for sale		xxxx
Less : Closing Stock of finished Goods		xxxx
I. Cost of production of goods Sold or cost of good sold		**xxxx**
J. **Selling & Distribution Overheads**		xxxx
K. Total Cost (I + J) = Cost of Sales		**xxxx**
L. Profit		xxxx
M. Sales (K + L)		**xxxx**

Components of Cost Sheet

The components of total cost are shown in the cost sheet. Let us try to understand these components of total cost and adjustments to be made in the cost sheet:

Prime cost (D): Prime cost comprises of direct material, direct labour and direct expenses. It is also known as basic, first, flat or direct cost of a product.

Prime Cost = Direct material + Direct Wages + Direct expenses

Here, direct material means cost of raw material used or required for production. For examples cloth in shirt, wood in furniture, leather in shoes etc. Primary packing material is also part of direct material. Normally material is bought in bulk and issued to production in lots. Cost of materials consumed during a specific period can be found as under:

Material Consumed = Material purchased + Opening stock of material – Closing stock of material.

Factory cost (F) : It includes prime cost and works or factory overheads. Factory overheads consist of cost of indirect material, indirect wages, and indirect expenses incurred in the factory. Factory cost is also known as works cost, production or manufacturing cost.

Factory Cost = Prime cost + Factory overheads

Adjustment for stock of work-in-progress: Normally some units may remain incomplete in the production process at the end of an accounting period, say a quarter or a year. These incomplete units are known as work-in-progress. At the time of computing factory cost, it is necessary to make adjustment of opening and closing stock of work in progress to arrive at the net Factory cost/works cost.

Total Cost (H): Administrative overheads are added to factory or works cost, to find the total cost of production. Total cost of production is calculated as under:

Total Cost of production = Factory cost + Office and administration overheads

Cost of goods sold (I) : Production activity may not synchronise with sales. All the goods produced in a particular period may not be sold in the same period. There may be a stock of finished goods at the opening and at the end of a period. The adjustment for opening and closing stock is to be made as under:

Cost of goods sold = Total cost of production + Opening stock of Finished goods – Closing stock of finished goods

Cost of Sales (K) : Cost of ales consists of total cost of production and selling & distribution overheads, This cost is also termed as cost of Sales and found as under:

Total Cost = Cost of Goods sold + Selling and distribution overheads

Sales (M) : If the profit margin is added to the total cost, sales value is arrived at. Excess of sales over total cost is termed as profit. When total cost exceeds sales, it is termed as Loss.

Sales = Total Cost $\pm$ Profit

1.8 ILLUSTRATIONS

Illustration 1

Calculate factory cost from the following information:

		Rs.	
Material consumed		24,000	
Productive wages		8,000	
Direct Expenses		2,000	
Consumable stores		800	
Oil grease/Lubricating		200	
Salary of a factory manager		2,400	
Unproductive wages		400	
Factory rent		800	
Repair and Depreciation on Machine		240	

Solution:

Statement showing Factory Cost

Particulars	Amount (Rs.)
Direct Material: Material Consumed	24,000
Direct Labour: Productive wages	8,000
Direct Expenses	2,000
Prime cost	**34,000**
Indirect Material:	
Consumable stores	800
Oil grease/lubricants	200
Indirect Labour:	
Unproductive wages	400
Salary of a factory Manager	2,400
Indirect Expenses:	
Factory rent	800
Repair and Depreciation on Machine	240
Factory cost	**38,840**

Illustration 2

From the following information find the works cost.

	Rs.
Direct material	1,20,000
Direct Labour	33,000
Direct Expenses	7,500
Factory overheads	18,000
Work-in-progress: Opening stock	19,500
Closing stock	10,500

Solution:

Statement Showing Factory cost

Particulars	Amount (Rs.)
Direct Material: Material Consumed	1,20,000
Direct Labour: Productive wages	33,000
Direct Expenses	7,500
Prime cost	1,60,500
Factory overheads	18,000
	1,78,500
Add: Opening stock of work-in-progress	20,500
	1,98,000
Less: Closing stock of work-in-progress	10,500
Works or Factory cost	1,87,500

Illustration 3

From the following information, prepare a cost sheet for the period ended on 31st March 2014.

Opening stock of raw material	Rs. 25,000
Purchases of raw material	Rs. 2,72,000
Closing stock of raw material	Rs. 17,000
Direct wages	Rs. 1,08,000
Direct expenses	Rs. 24,000
Factory overheads	100% of direct wages
Office and administrative overheads	20% of works cost
Selling and distribution overheads	Rs. 52,000
Cost of opening stock of finished goods	Rs. 24,000
Cost of Closing stock of finished goods	Rs. 30,000
Profit on cost	20%

Solution:

Cost Sheet

Particulars		Amount (Rs.)
Direct Material consumed		
Opening stock of raw material	25,000	
Add: Purchases	2,72,000	
	2,97,000	
Less: Closing stock of raw material	17,000	2,80,000
Direct wages		1,08,000
Direct expenses		24,000
Prime cost		**4,12,000**
Factory overheads: 100% of direct wages (1,08,000 × 100/100)		1,08,000
Works cost		**5,20,000**
Office and administrative overheads		
20% of works cost, (5,20,000 × 20/100)		1,04,000
Total cost of production		**6,24, 000**
Add : opening stock of finished goods		24,000
Cost of Goods available for sale		6,48,000
Less : Closing stock of finished goods		30,000
Cost of goods sold		**6,18,000**
Selling and distribution overheads		52,000
Total Cost		**6,70,000**
Profit (20% on Cost i.e. 6,70,000 × 20/100)		1,34,000
Sales		**8,04,000**

Illustration 4

Prepare a statement of cost and profit form the following data

	Rs.
Direct materials	4,00,000
Direct wages	1,20,000
Wages f a foreman	10,000
Electric power	2,000
Lighting – factory	6,000
Lighting – office	2,000
Store keeper's wages	4,000
Oil and water	2,000
Rent – Factory	20,000
Rent – Office	10,000
Repairs - Factory	14,000
Repairs - Office building.	2,000
Transfer to reserves	4,000
Dividend	8,000
Depreciation	
Factory plant	2,000
Office premises	5,000
Consumable stores	10,000
Manger's salary	20,000
Directors' fees	5,000
Office stationery	2,000
Telephone charges	500
Postage and telegrams	1,000
Salesmen's salaries	5,000
Travelling expenses	2,000
Advertising	5,000
Warehousing charges	2,000
Sales	7,58,000
Carriage outward	1,500
Income tax	20,000

Solution:

Statement of Cost and Profit

Particulars	Rs.	Rs.
Direct Materials		4,00,000
Direct Wages		1,20,000
Prime Cost		**5,20,000**
Factory overheads		
Wages of foreman	10,000	
Electric power	2,000	
Storekeeper's wages	4,000	
Oil and water	2,000	
Factory rent	20,000	
Repairs – factory	14,000	
Factory lighting	6,000	
Depreciation of factory plant	2,000	
Consumable stores	10,000	**70,000**
Factory cost		**5,90,000**
Administrative Overheads		
Office rent	10,000	
Repairs – office premises	2,000	
Office lighting	2,000	
Depreciation – office premises	5,000	
Manger's salary	20,000	
Director's fees	5,000	
Office stationery	2,000	
Telephone charges	500	
Postage and telegrams	1,000	**47,500**
Cost of production		**6,37,500**
Selling and Distribution overheads		
Carriage outward	1,500	
Salesmen's salaries	5,000	
Travelling expenses	2,000	
Advertising	5,000	
Warehouse charges	2,000	**15,500**
Cost of Sales		**6,53,000**
Profit (balancing figure)		**1,05,000**
Sales (Given)		**7,58,000**

Illustration 5: The following are the expenses of a company for manufacturing 1,000 units for the year 2013

Direct Materials	
Stock on 01.01.2013	Rs. 60,000
Stock on 31.12.2013	Rs. 1,20,000
Purchases	Rs. 5,80,000
Direct wages	Rs. 3,00,000
Direct Expenses	Rs. 20,000
Factory Overheads (60% variable)	Rs. 1,40,000
Administrative Overheads (Fixed)	Rs. 60,000
Selling overheads (70% Fixed)	Rs. 96,000

Prepare a statement of estimated cost for the year 2014 and find cost per unit using the following information.

a) The estimated output is 3000 units

b) Direct wages are expected to decrease by 10%

c) Fixed factory overheads would go up by Rs. 19,600

d) Administrative overheads will rise by 20%

e) Fixed selling overheads will rise by 25%

Solution:

Statement of cost for the year 2013

Units Produced and Sold : 1,000

Particulars	**(Rs.)**	**Total cost (Rs.)**	**Cost per unit (Rs.)**
Direct Materials :			
Opening stock of Raw Materials	60,000		
Add: Purchase of raw Material	5,80,000		
	6,40,000		
Less: Closing Stock of Raw materials	1,20,000		
Materials consumed		5,20,000	520.00
Direct Wages		3,00,000	300.00
Direct Expenses		20,000	20.00
Prime cost		**8,40,000**	**840.00**
Factory Overheads:			
Fixed (40% of 1,40,000)		56,000	56.00
Variable (60% of 1,40,000)		84,000	84.00
Factory cost		**9,80,000**	**980.00**
Administrative overheads (Fixed)		60,000	60.00
Cost of production		**10,40,000**	**1040.00**
Selling overheads:			
Fixed (70% of 96,000)		67,200	67.20
Variable (30% of 96,000)		28,800	28.80
Cost of Sales		**11,36,000**	**1136.00**

Estimated Cost for the Year 2014

Estimated Units: 3,000

Particulars	(Rs .)	Total cost (Rs.)	Cost per unit (Rs.)
Direct materials		15,60,000	520,00
Direct Wages			
Per unit in 2013	300.00		
Less: Decrease at 10%	30.00	8,10,000	270.00
Direct expenses		60,000	20.00
Prime cost		**24,30,000**	**810.00**
Factory overheads			
Fixed in 2013	56,000		
Add: Increase (given)	19,600	75,600	25.20
Variable		2,52,000	84.00
Factory cost		**27,57,600**	**919.20**
Administration overheads:			
Fixed in 2013	60,000		
Add: increase at 20%	12,000	72,000	24.00
Cost of production		**28,29,600**	**943.20**
Selling overheads:			
Fixed in 2013	67,200		
Add: Increase at 25%	16,800	84,000	28.00
Variable		86,400	28.80
Cost of sales		**30,00,000**	**1,000.00**

13.9 EXERCISES

Exercise 1

Calculate factory cost from the following information:

	Rs.
Material consumed	72,000
Productive wages	24,000
Direct Expenses	6,000
Consumable stores	2,400
Oil grease/Lubricating	600
Salary of a factory manager	7,200
Unproductive wages	1,200
Factory rent	2,400
Repair and Depreciation on Machine	720

(Answer: Prime cost – 1,02,000, Factory cost – 1,16,520)

Exercise 2

From the following information, prepare a cost sheet for period ended on 31st March 2014.

	Rs.
Opening stock of raw material	11250
Purchases of raw material	122400
Closing stock of raw material	7650
Direct wages	48600
Direct expenses	10800
Factory overheads (100% of direct wages)	
Office and administrative overheads (20% of works cost)	
Selling and distribution overheads	23400
Cost of opening stock of finished goods	10800
Cost of Closing stock of finished goods	13500
Profit on cost 20%	

(Answer: Prime cost - 185400; Works cost - 234000; Total cost of production - 280800; Cost of goods sold -278100; Total Cost - ; Profit – 60300)

Exercise 3: Prepare a statement of cost and profit from the following particulars:

	Rs.		Rs.
Direct Materials	2,00,000	Consumable stores	5,000
Direct Wages	60,000	Manager's Salary	10,000
Wages of Foreman	5,000	Directors' fees	2,500
Electric power	1,000	Office Stationery	1,000
Lighting: Factory	3,000	Telephone Charges	250
Office	1,000	Postage and Telegrams	2500
Storekeeper's wages	2,000	Salesmen's salary	2200
Oil and water	1,000	Travelling expenses	1,000
Rent: Factory	10,000	Advertising	2,500
Office	5,000	Warehouse charges	500
Repairs and Renewals:		Sales	3,79,000
Factory plant	7,000	Carriage outward	750
Transfer to Reserves	2,000	Dividend	4,000
Discount on shares written off	1,000		
Depreciation: Factory Plant	1,000		
Office Premises	2,500		

(Answer: Prime Cost – 2,60,000; Factory Cost – 2,90,000; Cost of Production – 3,18,750; Cost of Sales – 3,26,500; Profit – 52,500 and Sales – 3,79,000)

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UNIT-14 : COST ACCOUNTING SYSTEMS : JOB COSTING, PROCESS COSTING, CONTRL COSTING AND SERVICE COSTING (THEORY ONLY)

Structure

14.0 OBJECTIVES

After studying this unit you should be able to:

- Understand the various methods of costing;
- Suggest the methods of costing based on the nature of operations for a given firm; and
- Compute the cost based on the applicable method of costing.

14.1 INTRODUCTION

There are several varieties of products and services. Day by day new products and services are being innovated. Products and services may be standardised or customised. Time and resources requirement differs from product to product and service to service. Different products and services require different operations. Therefore, cost ascertainment differs based on the nature of the business and the types of its products. Different methods of cost ascertainment are applied in practice and they are known as methods of costing. The various methods of costing being practices are as under:

- ♦ **Job Costing:** Job costing is applied for the customised products and services. In this system the cost of each job is ascertained separately. Job costing is suitable in all cases where work is undertaken as per the specifications of the customers. For example printing jobs, tailoring, customised software, furniture, etc.
- ♦ **Batch Costing:** Some products are produced in batches. Batch represents a lot of standardised products. Each batch here is treated as a separate unit of cost. Job costing is applicable in pharmaceutical industry, beverages, etc.
- ♦ **Contract Costing:** Certain works are undertaken on contract basis. Each contract is considered as cost unit. The method of costing applied for finding the cost of contract is known as contract costing. It is suitable for the firms engaged in the work of construction of dams, roads, buildings etc.
- ♦ **Single or Output Costing:** It is applied for the industry in which a standard products are being produced in single process.
- ♦ **Process Costing:** It is a method of costing used to ascertain the cost of the products, which passe through various processes. For example, steel, cement, textile, etc.

- **Service Costing:** It is applied in service industry. The cost of providing a service is known as operating cost and the method of ascertainment the cost of such services is known as service costing or operating costing. For example, transport service, cinema houses, hotels. etc.

14.2 JOB COSTING

Now a days lot of customised products and services are being produced to meet the specific requirements of customers. Customisation is an important competitive tool to cater the changing tastes and preferences of customers. The firms producing customised products use Job Costing method to find the cost of each job. Under job costing each customer's order is considered as independent job. We can quote lot of examples for such products and services, such as customised software, customised machinery, sofa set, cot, house, tailor made dress, interior decoration, printing invitation cards, brochures, catering services, and the like. The method of costing applied for such jobs is known as job costing. Here each job is a cost unit.

Job cost consists of cost of material, labour and other expenses incurred on a particular job. Job costing comprises series of transactions that accumulate the cost of materials, labour, and overhead of a given job. Job costing is an important method for tracing specific costs to individual jobs and examining them to see if thosts can be reduced in later jobs. Let us have a look on the ICMA Terminology of Job costing:

"job costing is that form of specific order costing which applies where work is undertaken to customer's specific requirements and each order is of comparatively of short duration."

— ICMA, London

Features of Job Costing

1. Each job has its own characteristics, depending on the special order placed by the customer.
2. Each job is treated as a cost unit.
3. A separate job cost sheet is prepared out for each job.
4. A separate work in progress ledger is maintained for each job.
5. The duration of the job is normally a short period.
6. Profit or loss is determined for each job independently of others

Procedure for Job Costing System

The Procedure for job order costing system may be summarized as follows:

1. Receiving an enquiry from the customer about the product and its quality, design, quantity etc.
2. Giving an estimation of the price of the job after taking into account the cost of material, labour direct expenses and overheads required for the job.
3. Negotiation and finalising the order.
4. A production order is made by the planning department.
5. The costs are collected and recorded for each job and a Job Cost Sheet is maintained for that purpose.
6. On completion of job, a completion report is sent to costing department.

Illustration 1 (Job Costing)

From the following particulars calculate the cost of Job No. Retail L - 625 and price for the job to get a profit of 25% on the selling price.

Material	Rs. 15,000
Wage details:	
• Department X	60 hrs @ Rs. 30 per hour
• Department Y	50 hrs @ Rs. 40 per hour
• Department Z	30 hrs @ Rs. 50 per hour
The variable Overheads are as follows:	
• Department X	Rs. 50,000 for 5,000 hours
• Department Y	Rs. 40,000 for 2,000 hours
• Department Z	Rs. 20,000 for 500 hours
The total fixed expenses amounted to Rs. 2,00,000 for 10,000 working hours.	

Find the cost of Job No. Retail L - 625 and price for the job to give a profit of 25% on selling price

Solution:

Job Cost Sheet No. Retail L – 625

	Rs.	Rs.
Direct Material		15,000
Wages		
• Department X	60x30=1800	
• Department Y	50x40=2000	
• Department Z	30x50=1500	5,300
Prime Cost		20,300
Variable Overheads		
• Department X	60 x 10 = 600	
• Department Y	50 x 20= 1,000	
• Department Z	30 x 40= 1,200	2,800
Fixed OH	140 x 20 = 2800	2,800
Total Cost		25,900
Add: Profit 25% on selling price i.e., 1/3 of cost	25900 x1/3	8,634
Price of the Job		34,533

Exercise 1 (Job Costing)

Find the price of the Job No. WH 2345 from the following information :

a. Materials - Rs. 8,500

b. Wages - 50 hours @ Rs. 16 per hour

c. Variable OH incurred for all jobs is Rs. 40,000 for 8,000 labour hours.

d. Profit margin is 20 % of the cost price.

14.3 PROCESS COSTING

Process costing is the method of costing applied in the industries in which products are produced in stages. Under this method, cost of a product is ascertained at each process or stage of manufacturing. Process costing is applied in textile industry, cement industry, steel industry, etc. The processes involved in textile industry are: Ginning, Spinning, Viewing, Dyeing. Likewise different processes are involved in different undertakings.

Process Costing is that form of operation costing which applies where standardized goods are produced

— ICMA Terminology

This method involves ascertainment of the cost at each stage of manufacturing. Separate account is maintained at each process of production on which expenditure is incurred. At the end of each process the cost per unit is determined by dividing the total cost by the number of units produced at each stage.

Characteristics of Process Costing

1. Production is continuous. At any point of time, production takes place in each process.
2. Products pass through two or more distinct processes of production. Products pass from one process to another process.
3. Products produced are standardized and homogeneous.
4. Products are not distinguishable in processing stage.
5. The finished product of one process becomes the raw material of the subsequent process. Entire or part of output of one process may fed to the subsequent process.
6. Cost of material, labour and overheads are collected for each process and charged accordingly.

Procedure for Process Costing

Process account prepared for each process. The format of process account is given. The steps involved in of preparation the process account is given below the format of Process Account.

Process Account

	Units	Rs.			Units	Rs.	
		Per unit	Total			Per unit	Total
To Direct materials To Direct Wages To Direct Expenses To Indirect expenses To Other Expenses (if any)				By Loss in weight (Normal Loss) By sale of Scrap By Next Process Account (Transfer)			

1. Each process is separately identified. Separate process account is prepared for each process.
2. Total cost, quantity produced and cost per unit is found for every process.

3. All the expenses incurred for a process are debited in the respective process account.
4. Wastage, sale of scrap, by-products etc are reordered on the credit side of the process account.
5. The difference between debit and credit side shows the cost of production and output of that particular process which is transferred to the next process.
6. The cost per unit in every process is calculated by dividing the net cost by the output.
7. The output of last process is transferred to the Finished Stock Account.
8. Incomplete units at the end of the each period in every process is converted in terms of completed units.

Distinction between Process Costing and Job Costing

#	Process Costing	Job Costing
1.	Production is continuous	Production takes place on receiving customers' orders
2.	Production is for stock i.e., make to stock	Production is not for stock also known as make to order
3.	Homogeneous products are produced	Each job is different from the other.
4.	Cost of one process transferred to its subsequent processes	Cost of one job is not transferred to another job.
5.	Work in progress always exists	Work in progress may or may not exist

Illustration 2 (Process Costing)

Product 'P' requires three distinct processes and after the third process the product is transferred to finished stock. Prepare various process accounts from the following information.

	Total	Process 1	Process 2	Process 3
Direct Materials	10,000	8,000	1,200	800
Direct Labour	8000	3,000	3,200	1,800
Direct Expenses	1,600	1,000	600	
Production overheads	12,000			

Production overheads to be allocated to different processes on the basis of 150% of direct wages. Production during the period was 200 units.

Solution:

Process I A/c

Dr. Cr.

	Units	Rs.		Units	Rs.
To Direct materials To Direct Wages To Direct Expenses To Production overheads (150% of direct wages)	200	8,000 3,000 1,000 4,500	By Process III Account(Transfer) (Cost per unit 16500/200 = 82.50)	200	16,500
	200	16,500		200	16,500

Process II A/c

Dr. Cr.

	Units	Rs.		Units	Rs.
To Process I To Direct materials To Direct Wages To Direct Expenses To Production overheads (150% of direct wages)	200	16,500 1,200 3,200 600 4,800	By Process II Account(Transfer) (Cost per unit 26,300/200 = 131.5)	200	26,300
	200	26,300		200	26,300

Process III A/c

Dr. Cr.

	Units	Rs.		Units	Rs.
To Process II To Direct materials To Direct Wages To Direct Expenses To Production overheads (150% of direct wages)	200	26,300 800 1,800 -- 2700	By Finished stock A/c (Output Transferred) (Cost per unit 31,600/200 = 158)		31,600
	200	31,600		200	31,600

14.4 CONTRACT COSTING

Contract costing is a special form of job costing. It is the most appropriate method to be adopted in industries such as building and construction work, civil engineering, mechanical fabrication and ship building. It is a form of specific order costing which applies where the work is undertaken as per customer's requirements and each order of long duration as compared to job costing. It is also known as terminal costing.

A form of specific order costing in which costs are attributed to individual contracts.

— CIMA terminology

Basic Features

1. Each contract is considered as cost unit.
2. Work is executed at customers site, for example building is constructed on customer's site.
3. Part of the work may be done through sub contract for example building contractor gets the electrical job done through electrical contractor.
4. Most of the expenses incurred upon the contracts are direct.

Types of Contracts

Generally there are three types of contracts:

1. Fixed price contracts: Under these contracts both parties agree to a fixed contract price.
2. Fixed price contract with Escalation clause
3. Cost plus contract: Under this contract no fixed price could be settled for a contract.

Special Terms in Contract Account

It is very important to understand the basic terms in contract account.

1. Contract Account: A contract account is a nominal account. It is prepared to find out the cost of contract and to know profit or loss of the contract. A contractor may undertake a number of contracts at a time. For each contract a separate contract account is prepared. In the contract account all direct cost such as material, labour and other direct expenses incurred during an accounting period are debited and the indirect expenses are apportioned on an equitable basis. The differences between the two sides are known as notional profit or notional loss.

2. Work in Progress: It is the unfinished contract at the end of the accounting period and it includes amount of work certified and amount of work uncertified. Work in progress is an asset and it is shown in the balance sheet by deducting advance received from the contractee.

3. Work certified: The sales value of work completed as certified by the architect is known as 'work certified'.

4. Work Uncertified: It means work which has been carried out by the contractor but has not been certified by the architect.

5. Escalation clause: This clause provides the contractor to increase price of the contract due to increase in the prices of raw material or labour or in the utilization of any other factors of production. Here, the contractor has to satisfy the customer that excessive utilization is not the result of decreased efficiency.

Specimen Form of a Contract Account

The following is the specimen of a contract account.

Contract A/c

Dr.			Cr.
To materials	XXX	By work in progress:	
To Labour	XXX	Work certified XXX	
To Plant	XXX	Work uncertified XXX	XXX
To Overheads	XXX	By material returned	XXX
To cost of sub contracts	XXX	By Plant XXX	
To Notional Profit c/d	XXX	Less: Depreciation XX	XXX
	XXX		XXX
To Profit and Loss A/C	XXX	By Material Lying at site	XXX
To WIP (B/F)	XXX		
	XXX	By Notional profit B/d	XXX

Each contract is considered as a separate unit of cost and is allotted a distinguishing number. A separate account is kept for each individual contract; usually a great part of the work is carried out at the contract site itself, so the whole of the expenditure can be charged direct to the contract. However the over head relating to office, central stores require apportionment among the various contracts on some arbitrary basis such as percentage of wages, materials or prime cost.

Profit on Incomplete Contracts

Most of the contracts will be of long duration. Many a times contracts will be in progress at the end of the accounting period. It is very important to take into account a portion of the profit to the accounting year, even if the contract is not completed. So it is felt desirable to take into account a reasonable proportion of the estimated profit on uncompleted contracts subject to the following principles:

In the case of a small contract extending over the financial period, profit or loss on the same may be ascertained by crediting it with the contract price due by the contractee. This procedure cannot be adopted in the case of contracts extending beyond the accounting period, and taking a long time for completion. If there is any profit upon the incomplete contract, it cannot be taken as actual profit. The profit upon the incomplete contract is called notional profit.

For the purpose of determining the amount of profit to be transferred to profit and loss account and making provision for future contingencies, the following guidelines may be kept in mind.

1. **When the work has not reasonably advanced (¼ th or less than ¼ th) :** No profit should be taken to the credit of P&L account in the case of contracts which have just commenced and a small portion of the work is complete.

2. **Where the work completed is more than ¼ th but less than ½ of contract price:** In this case 1/3rd of the notional profit as reduced by the percentage of cash received may be credited to profit and loss account. The usual formula is:

$$\textbf{Profit} = \text{Notional profit} \times 1/3 \times \frac{\text{Cash received}}{\text{Work certified}}$$

The balance of notional profit shall be kept as reserve till the completion

3. **If the contract completed is more than ½:** Here 2/3rd of the notional profit can be taken to profit and loss account.

$$\textbf{Profit} = \text{Notional profit} \times 2/3 \times \frac{\text{Cash Received}}{\text{Work certified}}$$

4. If the contract is nearing completion

$$\textbf{Profit} = \text{Estimated profit} \times \frac{\text{Work Certified}}{\text{Contract Price}}$$

Illustration 3 (Contract Costing)

The following was the expenditure on a contract of Rs. 9,00,000 commenced in June 2014.

Materials	Rs.1,80,000
Wages	Rs.2,55,000
Plant	Rs. 50,000
Business Charges	Rs. 10,000

Cash received up to 31 March 2014 amounted to Rs.3,60,000 being 80% of work certified ; the value materials on hand at 31-03-2014 was Rs. 15,000. Plant is to be depreciated at 10%. Prepare the contract account for the year ending March 31, 2014 showing the profit to be credited to the Profit and Loss account.

Solution:

Contract Account

	Rs.		**Rs.**
To Materials	1,80,000	Plant in hand 50,000	45,000
To Wages	2,55,000	Less: Depreciation 5,000	
To Plant	50,000	By Materials in hand	15,000
To Business Charges	10,000	**By** Work –in-Progress A/c	
To Notional Profit	15,000	(3,60,000 X100/80)	4,50,000
	5,10,000		**5,10,000**
To Profit & Loss Account			
(15,000 x 2/3 x 80/100)	8,000	By Notional Profit b/d	15,000
Work-In-Progress A/c			
(Reserve)	7,000		
	15,000		**15,000**

14.5 SERVICE COSTING

Service costing is a method of costing used for determining the cost per unit of service rendered. This method of costing is applied in service industry. For example transport service, hospitality, cinema houses, etc. The following examples give clear picture of service costing.

- Transport services such as Road Transport, Railway, Shipping Services, Airways etc.
- Supply services such as Gas, Electricity, Water supply etc.
- Welfare Services such as Hospitals, Restaurants, Libraries etc.
- Municipal services such as Street lighting, Road Maintenance etc.

Let us understand the service costing from the perspective transport service.

Transport Costing

Transport costing is also known as operating costing and it is applicable for transport service. Transport service consists of Air, Water, Rail and Road. Transport service includes passenger transport service and goods transport. Further, transport service is classified into standardised services and customised services. Standardised transport services are operated by transport undertakings, such as rail transport, state road transport etc. customised transport consists of hiring of tax, bus, truck etc. Transport undertaking serve to the community at large. The cost unit of a service organization is a composite unit, say for example for passenger kilometre, per trip, per kilometre, per tonne, per kilometre etc. The important factors to be considered are the number of passengers, tonnage carried, distance covered etc.

Classification of Costs

Costs of operating a transport undertaking can be broadly classified under the following three categories.

1. **Standing or fixed charges**: These charges are incurred irrespective of the kilometres run. Total cost remains fixed. For example, insurance, motor vehicle tax, license fee, rent, salary of operating manager etc.
2. **Maintenance charges**: It includes semi variable expenses. For example tyres, tubes, repairs, painting etc.
3. **Operating and running charges**: These charges vary more or less in proportion to kilometres run. All the variable charges of running vehicles are included in this group. These costs include fuel, oil, grease etc., wages of driver, attendant, etc.

All expenses can be divided into two – fixed cost and variable costs. Here, both maintenance charges and running charges are considered as variable charges. A typical operating cost sheet is given for understanding.

Cost Unit

The cost unit in transport costing may be single cost unit or composite cost unit. Single cost unit means only one unit of cost is considered for costs incurred. For examples, per kilometer, per tonne, per passenger, etc. Composite cost unit means combination of more than one cost unit. For example passenger kilometer, tonne kilometer.

Calculation of passenger kilometres for the given period

No. of vehicles x No. of trips x Distance x No. of Days x capacity x capacity utilized	**xxx**
Less: Passenger or tonne kilometres lost for repairs & maintenance	**xxx**
$\frac{\text{Total passenger/ Ton kilometres}}{\text{No. of vehicles}}$ x No. of vehicles laid off	
Effective passenger ton kilometres	**xxx**

Calculation of kilometres for the given period

No. of vehicles x No. of trips x Distance x No. of Days	xxx
Less: kilometres lost for repairs & maintenance	
$\frac{\text{Total kilometres}}{\text{No. of vehicles}}$ x No. of vehicles laid off for repairs & maintenance	xxx
Effective kilometres	xxx

Operating Cost Sheet

Particulars	**Total Cost (Rs.)**	**Cost per unit (Rs.)**
A. Fixed or standing charges: Garage rent License fee Insurance Motor vehicle tax Interest on capital Supervision Office establishment Administrative Overheads Salary of foreman , manager etc.		
B. Maintenance charges: Repairs and renewals Tyres and tubes Paintings Overhauling Cleaning Gas and electric charges Spare parts and accessories		
C. Operating charges: Fuel, Engine oil, Lubricating oils Lubricating oil, grease Wages of operators Depreciation Salaries of running staff Water		
Total		

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UNIT-15 : MARGINAL COSTING AND USE OF BREAK EVEN ANALYSIS IN DECISION MAKING

Structure

15.0 OBJECTIVES

After studying this unit you should be able to:

- Understand the concept of marginal cost;
- Distinguish between total costing and marginal costing;
- Find the Break-even-point; Margin of Safety;
- Understand the application of Marginal Cost in Managerial Decisions.

15.1 INTRODUCTION

Cost comprises of two components fixed cost and variable cost. Total cost comprises of fixed cost and variable cost. Variable cost changes in proportion to the number of units produced. Fixed cost is a periodic cost and remain fix, irrespective of the number of units produced. Marginal cost is the change in total cost due to change in output by one unit. Many a times marginal cost is equal to variable cost. Marginal cost aids in decisions related to level of activity, product mix, temporary shutdown etc. If there is a temporary stoppage in production, fixed costs are incurred and entire fixed cost so incurred is loss for the enterprise. It means the maximum loss is equal to fixed cost, on temporary shutdown of an entity. Sometimes production may be stopped temporarily for various reasons, such as want of material, lack of demand, too much decline in the market price, etc. When revenue (sales) is less than the marginal cost the production may be stopped. It means production can take place as long as the revenue is greater than marginal cost or at least equal to marginal cost. There are many other decisions which are made based on marginal cost. The excess revenue over marginal cost is known as contribution (i.e., Sales – Marginal Cost). If the contribution is greater than fixed cost, it is profit otherwise it is loss. The production level at which contribution is equal to fixed cost is known as break even point. At that point there is no profit or loss, contribution is just enough to recover fixed cost. Several management decisions are based on marginal cost principles.

15.2 MARGINAL COST AND MARGINAL COSTING

Marginal cost

The amount of any given volume of output by which aggregate cost are changed, if the volume of output is increased or decreased by one unit.

— The institute of cost and works accountants of India

Marginal cost is the change in aggregate cost due to change in output by one (1) unit. Let us try to understand the concept of marginal cost with an example. A garment factory is incurring a fixed cost and variable cost in stitching of shirts. Its cost data and selling price are as under:

a. Fixed cost: Rs. 50,000 comprising rent of the factory, depreciation of sewing machines, and administrative expenses.

b. Variable cost: Rs. 300 per shirt comprising cost of cloth, other material, and tailor's stitching charges (i.e., direct material and direct labour).

c. Selling price per shirt : Rs. 500

Let us understand the concept of marginal cost form the above information:

Particulars	**Total Cost (Rs.) for:**		
	300 shirts	**301 shirts (1 additional shirt)**	**299 shirts (1 shirt less)**
Fixed cost	50,000	50,000	50,000
Variable cost Rs. 300 per shirt	90,000	90,300	89,700
Total Cost	**1,40,000**	**1,40,300**	**1,39,700**
Marginal cost (Change in total cost due to change in output by 1 unit)		**300**	**300**

Note: Here, marginal cost is equal to variable cost.

Marginal Costing

Marginal costing is a technique of cost accounting useful in decision-making. It is not a method of cost determination but It is helps the management in pricing and product mix decisions. The focus here in on finding marginal cost by segregating fixed cost and variable cost. The profitability at various levels of output can be found easily under marginal costing.

Marginal costing is the ascertainment, by differentiating between fixed cost and variable cost, of marginal costs and of the effect on profit of the changes in volume or type of output.

— **Institute of Cost & Management Accountant (ICMA), London**

Characteristics of Marginal Costing

1. Total costs are classified into categories : fixed costs and variable costs.

2. Fixed costs are periodic costs, they are not considered as a part of the cost of production. Only variable costs are treated as the cost of production.

3. Work-in-progress and finished goods are valued at variable cost.
4. Difference between contribution and fixed cost is net profit or loss.
5. Analysis of cost – volume – profit helps to reveal the profitability at various levels of output.

Assumptions

The following are the assumptions of Marginal costing.

1. All the costs can be segregated into fixed costs and variable costs
2. Selling price and variable cost per unit will remain the same.
3. Total fixed costs remain constant.
4. Volume is the only factor which influences the costs.
5. There is a linear relationship between variable cost and revenue.

Determination of Profit under Marginal Costing

The following is the procedure for finding profit under marginal costing:

Particulars		Total (Rs.)	Per Unit (Rs.)
Sales		xxx	xxx
Less : Variable Costs			
1. Direct Materials	xxx		
2. Direct wages	xxx		
3. Direct expenses	xxx		
4. Variable overheads	xxx	xxx	xxx
Contribution		xxx	xxx
Less: fixed cost		xxx	xxx
Profit/loss		xxx	xxx

15.3 CONTRIBUTION

Contribution is the excess of sales over total variable costs. Contribution is also known as gross margin. It enables to meet fixed costs and contributes to profit. Contribution can be found as under:

Contribution = Sales – Variable cost

Contribution = Fixed cost $\pm$ Profit / Loss

Contribution = Sales x P/V ratio

15.4 PROFIT-VOLUME RATIO (P/V Ratio)

Profit volume ratio is the ratio of contribution to revenue (sales). It is also known as contribution ratio. It expresses the relationship of contribution to sales. Profit - volume ratio may be expressed in percent. A higher ratio indicates a greater profitability and a lower ratio indicates lesser profitability. It is very useful to the management in taking certain decisions.

The following are the formulae for computing P/V ratio.

$$\text{P/V Ratio} = \frac{\text{Contribution}}{\text{Sales}}$$

$$\text{P/V Ratio} = \frac{\text{Contribution Per Unit}}{\text{Selling price per unit}}$$

$$\text{P/V Ratio} = \frac{\text{Sales} - \text{Variable Cost}}{\text{Sales}}$$

$$\text{P/V Ratio} = \frac{\text{Change in Profit/loss}}{\text{Change Sales}}$$

$$\text{P/V Ratio} = \frac{\text{Change in contribution}}{\text{Change Sales}}$$

$$\text{P/V Ratio} = \frac{\text{Fixed cost} \pm \text{Profit /Loss}}{\text{Sales}}$$

15.5 BREAK EVEN POINT (BEP)

Break-even-point is a level of output at which the total costs are equal to total revenue (sales). It is a volume of sales at which there is neither profit nor loss. Hence, it is also called as no profit no loss point. Firm will be in profit when the revenue (sales) is greater than Break-Even-Point. Firm incurs loss if revenue is below the BEP. BEP is computed with the following formula.

BEP (in Units) =	$\dfrac{\text{Fixed Cost}}{\text{Contribution Per Unit}}$
BEP (in Rs) =	$\dfrac{\text{Fixed Cost}}{\text{P/V Ratio}}$
BEP (in Rs) =	BEP Units x Selling Price per unit

Let us understand the concept of contribution and Break-even-point from the garment factory example given at the beginning of the unit:

Particulars	Total Cost (Rs.) for:		
	200 shirts	**250 shirts**	**300 shirts**
Sales – (Rs. 500 per shirt) (A)	1,00,000	1,25,000	1,50,000
Variable cost - Rs. 300 per shirt (B)	60,000	75,000	90,000
Contribution	40,000	50,000	60,000
Less: Fixed cost	50,000	50,000	50,000
Profit or Loss	- 10,000	Nil	+ 10,000
Inference	Loss	Break even point	Profit

The firm is not making any profit or loss at 250 units, hence this is termed as Break-even- point or break even sales. At 250 units, total revenue is equal to total cost (Sales Rs. 1,25,000 = V C Rs. 75,000 + FC Rs. 50,000). Here, Contribution of Rs. 50,000 which is sufficient to recover fixed cost of Rs. 50,000. In other words, contribution is equal to fixed cost. Below the BEP, firm incurs loss and above BEP firm earns profit. Hence, firm has to operate at above BEP level.

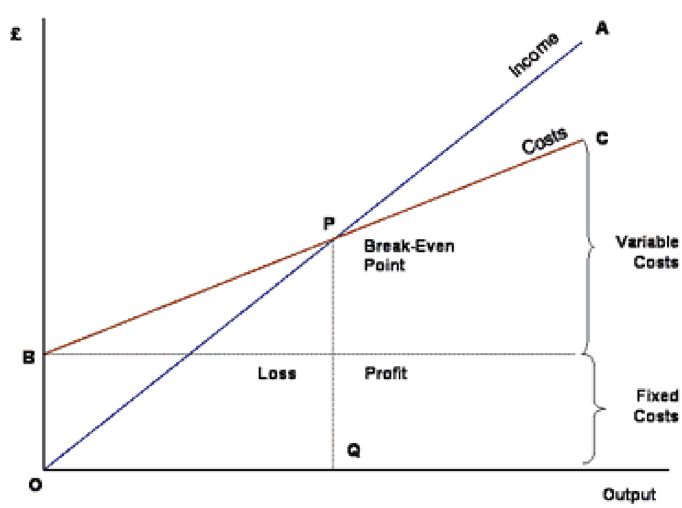

Figure 1.1 – Break-Even-Point

15.6 MARGIN OF SAFETY

Margin of safety is the excess of actual sales over break-even-sales. In other words, sales over and above the Break-Even-Point is known as Margin of Safety. A Large Margin of Safety is the sign of soundness of the business and if the Margin of Safety is small, it is sign of weak position of the business. Even a small reduction in sales will adversely affect the profit position of the concern.

Margin of safety can be expressed in absolute sales amount or in terms of percent to sales. The following formulae are used to compute Margi of Safety.

1. Margin of safety (Amount) = Actual sales – Sales at BEP
2. Margin of safety (Units) = Actual sales (in Units) – Sales at BEP
3. Margin of safety (Amount) = Profit ÷ P/V ratio
4. Margin of safety (Units) = Profit ÷ Contribution Per Unit

15.7 APPLICATION OF MARGINAL COST IN MANAGERIAL DECISIONS

The information provided by the total cost method is not enough for resolving management problems and other decisions. Marginal cost is very much useful in providing assistance to the management in taking several decisions, especially in dealing with the problems requiring short term decisions where fixed cost is not very much important. The following are important areas where managerial problems are simplified by use of the marginal cost data:

1) Fixation of selling price.
2) Key or limiting factor.
3) Make or buy decisions
4) Selection of a suitable product mix.
5) Effect of change in price
6) Maintaining a desired level of profit.
7) Alternative method of production.
8) Diversification of products.
9) Closing down or suspending activities

Let us understand the usage of marginal cost data in the above situations

1) Fixation of Selling Prices: In this competitive business environment prices are being controlled by market conditions. It is very important to fix competitive price for the survival, than by decisions of management. Yet fixation of selling prices is one of the most important functions of management. Marginal costing will be very much useful under the following circumstances:

- In accepting additional orders for utilizing idle capacity.
- In times of competition.
- In times of trade depression.
- In exporting and exploring new markets.
- Key or limiting factor of production

Accepting additional orders for utilizing idle capacity: When an undertaking is operating below the installed capacity, it can accept special order at a price which is above the marginal cost, may be less than the normal price. Here the firm need not to incur to incur the additional fixed cost.

Illustration for Acceptance or Rejection of a Foreign Offer

A company manufactures and sells directly to customers 1,000 jars of 'Glow Snow' per month at Rs.12.50 per jar. The normal production capacity is 2,000 jars per month. An analysis of cost for 1,000 jars show is as under:

	Rs.
Direct materials	1,000
Direct labour	2,475
Power	140
Misc. supplies	430
Jars	600
Fixed expenses of manufacturing, selling and administration	7,955
Total	12,600

The company has received offer for the export under a different brand name for 1,000 jars per month at Rs. 7.50 per jar. Advise the firm in this context assuming that the fixed costs will not change.

Solution:

	Present position		Position after export order	
	Rs.	**Rs.**	**Rs.**	**Rs.**
Sales price		12,500	(12,500+7500)	20,000
Less: **Variable Cost**				
Direct material	1,000		2,000	
Direct labour	2,475		4,950	
Power	140		280	
Misc. supplies	430		860	
Jars	600	4,645	1200	9,290
Contribution		7,855		10,710
Less: **Fixed cost**		7,955		7,955
Profit (loss)		**(100)**		**2,755**

From the above analysis it is clear that the offer for export should be accepted as it converts the loss of Rs. 100 into a net profit of Rs. 2,755.

2) Key or Limiting Factor: A factor that puts a limit on production, sales and profit of a business is known as key or limiting factor. Usually the limiting factor is sales i.e., limited demand for a product or service. A business entity may not be able to sell as much as it can produce. For some products and services there may be huge demand but production may not take place to meet the demand. The limit on production may be due to limited supply of a given material, labour, plant capacity, or capital. Here, the firm has decide the quantity of each product or service to maximize its profit. Normally, when there is no limiting factor, the choice of the product will be on the basis of the highest P/V ratio. But when there are scarce or limited resources, selection of the product will be on the basis of contribution per unit of scarce factor of production.

Illustration for Key or Limiting Factor

The following particulars are extracted from the records of a company.

	Per unit	
	Product A	**Product B**
Sales price (Rs.)	100	110
Consumption of materials (Kg)	5	4
Material cost (Rs.)	24	14
Direct wages (Rs.)	2	3
Machine hours used	2	3
Variable overheads	4	6

Comment on the profitability of each product when :

I) Total sales potential in units is limited.

II) Total sales potential in value is limited.

III) Raw material is in short supply

IV) Production capacity (in terms of machine hours) is the limiting factor.

Solution:

Contribution Analysis

	Per unit	
	Product A (Rs.)	**Product B (Rs.)**
Sales Price	100	110
Less: Variable cost (Material, wages and variable overheads)	30	23
Contribution per unit	**70**	**87**
P/V Ratio	0.70	0.79
Contribution per kg . of material	14	21.75
Contribution per machine hour	35	29

I) When total sales potential in units is limited product B will be better than A as its contribution per units is more by Rs. 17 (i.e. Rs.87 - Rs.70)

II) When total sales potential in value is limited product B Will be better than A as its PV Ration is greater than B.

III) When raw material is in short supply, product B is better as compared to A as its contribution per kg. of material is more by Rs.7.75 (i.e. Rs.21.75 - Rs.14).

IV) When production capacity (in terms of machine hours) is the limiting factor, product A is better as compared to B as its contribution per machine hour is more by Rs.6 (i.e. Rs.35 - Rs.29).

3) Make or Buy Decisions: A concern can utilize its idle capacity for making a component required instead of buying from the market. If the marginal cost is lower than the price quoted by the supplier of component, the component should be manufactured in-house. Fixed expenses are not taken in the cost of manufacturing component when there is a idle capacity.

Illustration for Make or Buy Decision

A manufacturing company finds that while the cost of making a component part is Rs. 40, The same is available in the market at Rs. 36 with an assurance of continues supply. Give your suggestions whether to make or Buy this part. Give also your views in case the supplier reduces the price from Rs.36 to Rs.32. The cost information is as follows:

	Rs.
Materials	14
Direct labour	16
Other variable expenses	4
Fixed expenses	4
	40

Solution:

To take a decision on whether to make or buy the component part, fixed expenses need not be included in the cost. Because these will be incurred even if the part is not produced. Thus additional or marginal cost of the part will be as follows:

	Rs.
Materials	14
Direct labour	16
Other variable expenses	4
Total	34

The company can produce the component in-house at a marginal cost of Rs. 34. It is advisable to produce the product if the market price is Rs. 36. But it is advisable to buy the component when the market price of Rs. 32, as marginal cost is greater than the reduced price.

4) Selection of a suitable product mix: The problem of product mix is quite commaon, for firms manufacturing multiple products. The problem here is which product mix will give the maximum profits. The best product mix is that which yields the maximum contribution. The products which gives the maximum contribution are to be retained and their production should be increased. The products which give comparatively less contribution should be reduced or closed down altogether.

5) Effect of change in sales price: Sometimes there is need to reduce the price of the product due to competition, expansion or government regulations. It is therefore, necessary to know the effect of a cut in prices of the products. The reduced price leads to lesser contribution per unit. Firm can reduce the price as long is price is above the marginal cost. But contribution should be sufficient to recover fixed cost.

6) Maintaining a desired level of profits: Management may be interested knowing the sales required in maintaining desired level profits. In order to calculate the estimated sales at a given profit or estimated profit at a given volume or sales the following formulae are used.

$$\text{BEP (in Units)} = \frac{\text{Rs. } 50{,}000}{\text{Rs. } 200} = 250 \text{ shirts}$$

$$\text{BEP (in Rs)} = \frac{\text{Fixed cost}}{\text{P/V Ratio}}$$

7) Alternative methods of production: Marginal costing is helpful in comparing the alternative methods of production such as manual or mechanized, fully automatic or semiautomatic, big machine or small machine etc. The method which gives the greatest contribution (assuming fixed expenses remain same) is to be adopted. But, fixed expenses change, the decision will be taken on the basis of profit contributed by each alternative.

8) **Diversification of products:** Sometimes it becomes necessary for a concern to introduce a new product to utilize the idle capacity or to capture a new market. The new product must be profitable. The profitability of the new product, depends on its contribution, if there is no increase fixed cost. New product should be added if it is giving contribution.

9) **Closing down or suspending activities:** Sometimes it becomes necessary for a firm to temporarily suspend or close the activities of a particular product, department or factory as a whole due to trade recession. The decision to close down or suspend its activity will depend on whether products are making a contribution towards fixed costs or not. If the products are making a contribution towards fixed costs, it is preferable not to close business nor suspend its activities to minimize the losses.

15.8 ILLUSTRATIONS

Illustration 1

Find out BEP from the following information

a. Fixed cost: Rs. 50,000.

b. Variable cost: Rs. 300 per shirt.

c. Selling price per shirt : Rs. 500.

Solution:

$$\text{BEP (in Units)} = \frac{\text{Fixed cost}}{\text{Contribution Per Unit}}$$

Here, Contribution per unit = SP – V C per unit

= Rs. 500 - Rs. 300 = Rs. 200

$$\text{Estimated sales (in Units)} = \frac{\text{Fixed cost + Desired Profit}}{\text{Contribution Per Unit}}$$

$$\text{Estimated sales (in value)} = \frac{\text{Fixed cost + Desired Profit}}{\text{P. V Ratio}}$$

P/V Ratio = Contribution / Sales = Rs. 200 / Rs. 500 = 0.4

BEP (in Rs) =	$\frac{\text{Rs. } 50{,}000}{0.4}$	= Rs. 1,25,000

For verification:

BEP in Value = BEP in units x Selling Price per unit

Rs. 1,25,000 = 250 units x Rs. 500

Rs. 1,25,000 = Rs. 1,25,000

Illustration 2

Reshma Ltd. has furnished the following information to find BEP in value and in Units.

a. Sales: 40,000 units at Rs. 20 per unit
b. Profit volume ratio: 50 %
c. Fixed cost: Rs. 3, 20,000

Solution:

Break Even Point (BEP):

BEP (value) = Fixed cost / P/V Ratio

= 3,20,000 / 0.5 = Rs, 6,40,000

BEP (Units) = BEP Sales / Selling price per unit

= 6,40,000 / 20 = 32,000 units

Alternatively,

BEP (in units) = Fixed cost / Contribution per unit

Contribution per unit = Selling price x P V Ratio = Rs. 20 x 0.5 = Rs. 10

BEP = 3,20,000 / 10 = 32,000 units.

Illustration 3

From the following information of Ashalata Co. Ltd., calculate P/V ratio and, margin of safety (MOS)

Sales - Rs. 10,00,000

Variable cost - Rs, 4,00,000

Profit – Rs. 3,00,000

Solution

i) Profit Volume Ratio (P/V Ratio)

Let us first find out Contribution

Contribution = Sales - Variable Cost

= 10,00,000 - 4,00,000

= 6,00,000

P/V ratio = Contribution / Sales

= 6,00,000 / 10,00,000

= 0.6

ii) Margin of safety (MOS):

$$MOS = \frac{\text{Profit}}{\text{P/V ratio}}$$

= 3,00,000 / 0.6

= Rs. 5,00,000

Illustration 4

The sales and profit data of Z co. Ltd. during the two periods were as udner :

Year	Sales (Rs.)	Profits (Rs.)
2013	3,60,000	60,000
2014	4,80,000	90,000

Find out:

1. P/ V ratio
2. BEP.
3. The sales required to earn a profit of Rs. 1,20,000
4. Profit when sales are 7,00,000
5. Margin of Safety at a profit of Rs.1,50,000
6. Variable cost of the two periods.

Solution:

Working note : Change in profit and sales

Year	Sales (Rs.)	Profits (Rs.)
2013	3,60,000	60,000
2014	4,80,000	90,000
Change	**1,20,000**	**30,000**

1. P/ V ratio

$$\text{P/V Ratio} = \frac{\text{Change in Profit/loss}}{\text{Change Sales}}$$

P/V Ration = 30,000/1,20,000 = 0.25

2. BEP

$$\text{BEP (in Rs.)} = \frac{\text{Fixed cost}}{\text{P/V Ratio}}$$

Fixed cost is to be found first. It can be calculated by finding contribution.

Contribution = Sales x P/V ratio

= 3,60,000 x 0.25 = Rs. 90,000

Fixed cost = Contribution – Profit

= 90,000 – 60,000 = Rs. 30,000

BEP = 30,000/0.25 = 1,20,000

3. The sales required to earn a profit of Rs. 1,20,000

$$\text{Estimated sales} = \frac{\text{Fixed cost + Desired Profit}}{\text{P/V Ratio}}$$

$$\text{Estimated sales} = \frac{30{,}000 + 1{,}20{,}000}{0.25} = \text{Rs. } 6{,}00{,}000$$

4. Profit when sales are 7,00,000

   Profit = (Sales x P/V Ratio) – Fixed Cost

   = (7,00,000 x 0.25) – 30,000 = Rs. 1,45,000

5. Margin of Safety at a profit of Rs.1,50,000

   Margin of safety = Profit ÷ P/V ratio

   MOS = 1,50,000 x 0.25 = 37,500

6. Variable cost of the two periods.

   Variable Cost = Sales – Contribution

Year	**2013 (Rs.)**	**2014 (Rs.)**
Sales	3,60,000	4,80,000
- Contribution (Sales x P/V Ratio)	90,000	1,20,000
Contribution	2,70,000	2.60.000

15.9 EXERCISES

Exercise 1

Find out BEP from the following information

a. Fixed cost: Rs. 40,000.

b. Variable cost: Rs. 400 per unit.

c. Selling price per unit : Rs. 500.

Exercise 2

Aina Ltd. has furnished the following information to find BEP in value and in Units.

a. Sales: 50,000 units at Rs. 20 per unit

b. Profit volume ratio: 50 %

c. Fixed cost: Rs. 2,00,000

Exercise 3

The following Information related to Ramesh & Co. Pvt. Ltd.

- Fixed cost Rs.72,000
- Sales : 30,000 Units
- Selling orice per Unit Rs. 20
- BEP: 18000 Units

Calculate : I) P/V Ratio, II) Margin of sfety, III) Profit if sales are Rs, 7,20,000

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UNIT-16 : CONTEMPORARY ACCOUNTING

Structure

16.0 OBJECTIVES

After studying this chapter you should be able to:

- Understand the meaning and importance of budget;
- Understand the usage of budgetary control techniques; and
- Prepare various budgets.

16.1 INTRODUCTION

Budgeting has become an important task for all the organisations. Budgeting consists of estimation of revenues, expenses, and cash flows before commencement of an accounting period. Say for example at the beginning of the accounting year, quarter, month etc. Scope of the budgeting is not limited to only the business entity. Government and non-government organisations also prepare budget of revenue and public expenditure. Preparation of Union Budget, Rail Budget and State Government Budgets require lot of planning, information and data. Each and every business entity prepares the budget for the forthcoming year or quarter. Budget forms a basis for operations of the organisation. Budget sets targets for sales, production, cost, procurement of materials etc. Budget consists of quantitative information.

16.2 BUDGET AND BUDGETING

Budget

A budget is a financial plan expressed in quantitative and monetary terms. The budget pertaining to any of the activities of business is always forward looking.

A quantitative statement, for a defined period of time, which may include planned revenues, expenses, assets, liabilities and cash flows.

— Terminology of CIMA

Budget is prepared for a definite period, may be a month, quarter, year. Budgets are prepared in quantities and / or monetary terms. Production budget with only quantity to be produced is a quantitative budget. Production budget may be prepared with quantity as well as cost of production. Likewise sales budget may be prepared in quantitative and monetary terms. Cash budget prepared only in monetary terms.

Budgeting

Budgeting is a process of preparation, implementation and the operation of budget. In the words of Rowland Harr, “Budgeting is the process of building budgets.”

16.3 BUDGETARY CONTROL

Budgetary control is a system of using budgets for planning and controlling costs.

The establishment of budgets relating to the responsibilities of executives to the requirement of a policy, and the continuous comparison of actual with budgetary result, either to secure by individual action the objectives of that policy or to provide a basis for its revision.

— Terminology of CIMA

Budgetary control is a mechanism of exercising control through budgets. Budgets act as yardsticks for the activities of an undertaking. Budgets form basis for control.

Objectives of Budget and Budgetary Control

The objectives of budget and budgetary control are as under:

1. Needed for planning of annual operations
2. To coordinate the activities of various parts of an organization
3. To motivate managers to work for achieving the organizational goals.
4. To control the business activities
5. To eliminate or reduce wastes of all kinds.
6. To provide a yard stick against which actual results can be compared.
7. To evaluate the performance of managers.
8. To reduce the uncertainties.

Steps involved in Budgetary Control

Budgetary control involves the following steps:

1. Determining the organizational goals or objectives
2. Formulating necessary plans to accomplish desired objectives.
3. Translating plans into budgets.
4. Fixing the responsibilities of executives in tune with the requirements of a policy.
5. Recording and reporting actual performance.
6. Continuous comparison of actual with budgeted results.
7. Finding deviations, if any

8. Focusing attention on significant deviations.

9. Investigation into deviations to establish causes.

10. Reporting to the management about the variations to individual responsibility.

11. Taking corrective action to prevent recurrence of variations.

12. Provide a basis for revision of budgets.

Essentials of a Budgetary Control System

Successful implementation of a budgetary control system depends upon the following essentials.

1. Support of the top management in preparation and implementation.
2. Formal organization structure to formulate and implement budgets for every part of the organisation.
3. Budget centers such as departments, area or functions.
4. Clear cut objectives and reasonably attainable goals.
5. Every executive responsible for the implementation of budgets should be given an opportunity to take part in the preparation of budgets.
6. Budget committee.
7. Comprehensive budgeting.
8. Adequate accounting system.
9. Periodic reporting.

16.4 TYPES OF BUDGETS

Budgets can be classified on the following bases:

1. Time-Period	**2. Conditions**	**3. Capacity**	**4. Coverage**
a. Long-term Budget &	**a.** Basic Budget and	**a.** Fixed Budget and	**a.** Functional Budget and
b. Short-term Budget	**b.** Current Budget	**b.** Flexible Budget	**b.** Master Budget

a. Long term budget – Normally these budgets are prepared for a period of 3 to 10 years

b. Short term budgets – Usually for a period of one to two years

Distinction between Long term and Short term Budget

Long Term Budget	Short Term Budget
• Budget prepared for a period longer than two years are called Long Term Budget. • Such Budgets are useful for business forecasting and forward planning. • **Examples:** Capital Expenditure Budget and R&D Budget.	• Budgets which are prepared for a period less than two years year is known as Short Term Budget. • These budgets are prepared in cas where a specific action has to be immediately taken to bring any variation under control. • **Examples:** Cash Budget, Product Budget

2. Based on Condition

a. **Basic budget:** A Budget, which remains unaltered over a long period of time, is called Basic Budget. It forms base for current budget.

b. **Current budget :** A Budget, which is established for use over a short period of time and is related to the current conditions, is called Current Budget.

3. Based on Capacity:

a. **Fixed Budget :** It is a budget which is designed to remain unchanged irrespective of the level of activity attained. It does not change with the change in the level of activity. This type of budgets are most suited for fixed expenses. It is a single budget with no analysis of cost.

b. **Flexible Budget:** It is a dynamic budget. It gives different budgeted cost for different levels of activity. It is prepared by classifying of all expenses between fixed, semi variable and variable. Such budget depends up on the accuracy with which the expenses can be classified.

Distinction between Fixed and Flexible Budget

Particulars	Fixed Budget	Flexible Budget
Meaning	This budget remains unchanged irrespective of the level of activity actually attained.	This budget, differentiates between fixed, semi variable and variable costs and changes based on level of activity attained.
Rigidity	It does not change with actual volume of activity achieved.	It can be forecasted on the basis of level of activity to be achieved.
Level of Activity	It operates on one level of activity and under one set of conditions.	It gives budgets for different levels of activity

4. Based on Coverage

a. Functional Budget: Functional budgets are prepared by heads of functional departments for their respective departments and are subsidiary to the master budget. Master budget is consolidated budget of all functional budgets. Budgets prepared for individual functions in an organization, are known as Functional Budgets, e.g. purchase Budget, Sales Budget, Production Budget, plant Utilization Budget and Cash Budget. The various commonly used functional budgets are:

- Sales budget
- Production budget
- Plant utilization budget
- Direct material usage budget
- Direct material purchase budget
- Direct labour (personnel) budget
- Factory overhead budget
- Production cost budget 9.Endinginventory budget
- Cost of goods sold budget
- Selling and distribution cost budget
- Administration expenses budget
- Research and development cost budget
- Capital expenditure budget
- Cash budget

b. Master Budget: A Master Budget which is also called as 'Comprehensive Budget' is a consolidation of all the functional budgets. It shows the projected Profit & Loss Account and Balance Sheet of the business organization. For preparation of this budget, all functional budgets are combined together and the relevant figures are incorporated in preparation of the projected Profit & Loss Account and Balance Sheet. Thus Master Budget is prepared for the entire organization and not for individual functions. It is a consolidated summary of the various functional budgets. It serves as the basis upon which budgeted Profit & Loss Account and forecasted Balance Sheet are prepared.

16.5 STEPS IN PREPARATION OF BUDGETS

1. **Defining objectives:** A budget is an action plan for the achievement of certain operational objectives. The objectives form base for preparation of budgets. The objectives should be clearly specified.

2. **Finding the key or limiting factor:** Key factor/s set a limit to the total activity. It could be limited power supply, material, machine hours, labour, demand etc. While preparing the budget, total availability of key factors should be considered.

3. **Appointment of controller** : Formulation of a budget requires the services of a whole time senior executive. Budget committee assists in this work. A budget committee consists of all the heads of department along with the Managing Director as the Chairman. The Controller is responsible for coordinating and development of budget programmes and preparing the manual of instruction, known as Budget manual. The Budget manual is a schedule, document or booklet which shows, in written forms the budgeting organization and procedures. The manual should be well written and indexed so that a copy thereof may be given to each departmental head for guidance.

4. **Budget Period:** The tenure for which budget prepared is known as budget period. There is no general rule governing the selection of the budget period. The budget committee decides the length of the budget period suitable for the business. Normally, a calendar year or a period coterminous with the financial year is adopted. The budget period is then subdivided into shorter periods it may be months or quarters or such periods as coincide with period of trading activity.

5. **Standard of activity or output:** Budgets cannot be prepared only on the basis of past data. Past data usually represents combination of good and bad factors. Therefore, though results of the past should be studied but these should only be applied when there is a likelihood of similar conditions repeating in the future. Also, while setting the targets for the future, it must be remembered that in a progressive business, the achievement of a year must exceed those of earlier years.

Illustration-1

The budgeted cost of production for 500 units at 100 % capacity utilisation in a factory are furnished below:

		Rs. per unit
Material cost		140
Labour cost		50
Variable factory over head		40
Fixed over head	(Rs. 10,000)	20
Variable expenses (Direct)		10
Selling expenses (20% fixed)		30
Distribution overhead (10% fixed)		20
Administration expenses (Rs, 5,000)		10

Prepare a flexible budget for production at 100 per cent and 80 per cent.

Solution:

Flexible Budget

	Output 500 units (100%)		Output 400 units (80%)	
	Per Unit (Rs)	Total (Rs)	Per Unit (Rs)	Total (Rs)
Material	140.00	7,00,000	140.00	5,60,000
Labour	50.00	2,50,000	50.00	2,00,000
Direct expenses, (variable)	10.00	50,000	10.00	40,000
	200.00	**10,00,000**	**200.00**	**8,00,000**
Factory overhead :				
Variable	40.00	2,00,000	40.00	1,60,000
Fixed	20.00	1,00,000	25.00	1,00,000
	260.00	**13,00,000**	**265.00**	**10,60,000**
Administrative expenses	10.00	50,000	12.50	50,000
	270.00	**13,50,000**	**277.50**	**11,10,000**
Selling expenses				
Fixed (20% of 30)	6.00	30,000	7.50	30,000
Variable (80% of 30)	24.00	1,20,000	24.00	96,000
Distribution expenses:				
Fixed (10% of Rs. 20)	2.00	10,000	2.50	10,000
Variable (90% of 20)	18.00	90,000	18.00	72,000
	320.00	**16,00,000**	**329.50**	**13,18,000**

Explanation: Fixed costs remain same in total and per unit it changes based on number of units to be produced. Variable costs remain constant per unit and change in total based on number of units to be produced.

Illustration 2

The Expenses Budgeted for production of 10,000 units in a factory are furnished below :

	Rs. per unit
Material	140
Labor	50
Variable overheads	40
Fixed overheads (Rs.2,00,000)	20
Variable Expenses	10
Selling expenses (10% Fixed)	26
Administrative expenses (Fixed)	10
Distribution Expenses (20% Fixed)	14
Total	310

Prepare a budget for a production of (a) 8,000 units and (b) 6,000 units.

Solution:

Working notes

1. Selling expenses

Total selling Expenses (10,000 x 26)	2,60,000
Less :Fixed (10% of 2,60,000)	26,000
Total variable Selling Expenses	2,34,000
Variable selling expense per unit 2,34,000/10,000	**23.40**

2. Distribution Expenses

Total distribution Expenses (10,000 x 14)	1,40,000
Less : Fixed (20% of 1,40,000)	28,000
Total variable distribution Expenses	1,12,000
Variable distribution expenses per unit 1,12,000 /10,000	11.20

Flexible Budget

Particulars	6,000 Units	8,000 units	10,000 units
Variable Cost			
Materials (Rs. 140 per unit)	8,40,000	11,20,000	14,00,000
Labour (Rs. 50 per unit)	3,00,000	4,00,000	5,00,000
Variable overheads (Rs. 40 per unit)	2,40,000	3,20,000	4,00,000
Variable Expenses (Rs. 10 per unit)	60,000	80,000	1,00,000
Total Variable Cost (A)	**14,40,000**	**19,20,000**	**24,00,000**
Semi Variable Cost			
Selling expenses W N #1:			
Fixed	26,000	26,000	26,000
Variable	1,40,400	1,87,200	2,34,000
Distribution Expenses W N #2:			
Fixed	28,000	28,000	28,000
Variable	67,200	89,600	1,12,000
Total Semi variable Cost (B)	**2,61,600**	**3,30,800**	**4,00,000**
c) **Fixed Expenses :**			
Fixed overheads	2,00,000	2,00,000	2,00,000
Administrative Expenses	1,00,000	1,00,000	1,00,000
Total Fixed Cost (C)	**3,00,000**	**3,00,000**	**3,00,000**
Grand Total (A+B+C)	**20,01,600**	**25,50,800**	**31,00,000**

Illustration 3

A manufacturing company submits the following figures of product 'P' for the last quarter of 2013 -14.

a. Sales (in units)

- January 10,000
- February 8,000
- March 12,000

b. Selling price per unit Rs. 500

c. Sales target of 1st quarter 2015:

- Sales quantity increases by 20%
- Sales price increases by 10%

Prepare sales budget for the first quarter of 2014-15.

Solution:

Sales Budget for the First Quarter of 2014-2015

Months	Units	Price per unit (Rs.)	Value (Rs.)
January	12,000	550	66,00,000
February	9,600	550	52,80,000
March	14,400	550	79,20,000
Total	**1,80,000**		**1,98,00,000**

Illustration 4

A company manufacturing product P submits the following information for the first quarter of 2014.

a. Sales:

January 90,000 units

February 72,000 units

March 1,08,000 units

b. Stock position: 1-1-2014 (% of January 2014 sales) : 50%

c. Stock position: 31-3-2014 : 60,000 units.

d. Stock position: End January & February 50% of subsequent month's sales.

You are required to prepare production budget for the first quarter of 2015.

Solution :

Production Budget for the First Quarter of 2015

Month	Sales (Units)	+ closing stock (Units)	- Opening stock (in Units)	Production (units)
January	90,000	36,000	45,000	81,000
February	72,000	54,000	36,000	90,000
March	1,08,000	60,000	54,000	1,14,000
				2,85,000

16.6 CASH BUDGET

Cash budget is prepared after preparing all other functional budgets. It is a statement showing estimated cash inflows and cash outflows over the budgeted period. The cash budget is prepared on the basis of the forecasted cash flows. It summarizes the anticipated cash receipts and cash payments for the budget period. There are three methods for preparing the cash budget. They are:

a. The receipts and payment method

b. Adjusted Profit and Loss account method

c. Balance sheet method.

Illustration 5

A company is expecting to have Rs. 25000 cash in hand on 1st April 2014. Prepare a Cash Budget for the quarter ending June 2014 from the following information.

Month	Sales (Rs.)	Purchase (Rs.)	Wages (Rs.)	Expenses (Rs.)
March	80,000	40,000	8,000	5,000
April	92,000	50,000	9,000	5,000
May	1,00,000	60,000	10,000	6,000
June	1,08,000	50,000	12,000	6,000

Other information:

1. Period of credit allowed by suppliers – 1 month
2. 25% of sale is for cash and one month credit is allowed to debtors.
3. Lag in payment of wages and expenses – one month.

Solution:

Cash Budget for the Quarter ending June 2014

Particulars	April (Rs.)	May (Rs.)	June (Rs.)
Opening balance	25,000	55,000	85,000
Receipts:			
Cash sales	23,000	25,000	27,000
Cash from debtors	60,000	69,000	75,000
Total Receipts (A)	**1,08,000**	**1,49,000**	**1,87,000**
Payments:			
Creditors	40,000	50,000	60,000
Wages	8,000	9,000	10,000
Expenses	5,000	5,000	6,000
Total Receipts (B)	**53,000**	**64,000**	**76,000**
Closing balance (A - B)	**55,000**	**85,000**	**1,11,000**

16.7 EXERCISES

Exercise 1

The budgeted cost of production for 1000 units in a factory are furnished below:

		Rs. per unit
Material cost		150
Labour cost		80
Variable factory over head		30
Fixed over head	(Rs. 10,000)	20
Variable expenses (Direct)		20
Selling expenses (20% fixed)		30
Distribution overhead (10% fixed)		20
Administration expenses (Rs, 5,000)		20

Prepare a flexible budget for production of 800 units.

Exercise 2

A manufacturing company submits the following figures of product 'P' for the last quarter of 2013 -14.

a. Sales (in units)

- January 1,00,000
- February 80,000
- March 1,20,000

b. Selling price per unit Rs. 500

c. Sales target of 1st quarter 2015:

- Sales quantity increases by 20%
- Sales price increases by 10%

Prepare sales budget for the first quarter of 2014-15.

Exercise 3:

A company manufacturing product P submits the following information for the first quarter of 2014.

a. Sales:

January	9,00,000 units
February	7,20,000 units
March	10,80,000 units

b. Stock position: 1-1-2014 – 50 % of January 2014 sale

c. Stock position: 31-3-2014 : 6,00,000 units

d. Stock position: End January & February 50% of subsequent month's sales

You are required to prepare production budget for the first quarter of 2015.

Exercise 4:

A company is expecting to have Rs. 15,000 cash in hand on 1st April 2014. Prepare a Cash Budget for the quarter ending June 2014 from the following information.

Other information:

1. Period of credit allowed by suppliers – 1 month
2. 25% of sale is for cash and one month credit is allowed to debtors.
3. Lag in payment of wages and expenses – one month.

16.8 REFERENCES

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UNIT – 17 : ACCOUNTING STANDARDS

Structure :

17.0 OBJECTIVES

After studying this unit, you will be able to:

- Give meaning of accounting standards
- Explain the benefits of setting accounting standards
- Describe the standard setting process adopted both internationally and in India
- Bring out various types of accounting standards set in India
- Explain the need and importance of convergence of accounting standards
- Give meaning of IFRS
- Describe the process of convergence in India

17.1 INTRODUCTION

Accounting reports serve the purpose of several users. The users could be owners or shareholders, employees, creditors, lenders, suppliers, customers, government and its agencies and society at large. Management also remains a big internal user of accounting reports. The accounting reports are expected to be reliable, comparable and verifiable. The general purpose accounting principles (GAAPs) have been developed over a period of time to make accounting documents more acceptable and useful from users' perspective. However, the greater flexibility in GAAPs has eroded the confidence level of various users and doubts have been ascribed on the preparers and accounting reports. A desire across accountants, management and users to harmonize the recording and reporting practices resulted in the promulgation of accounting standards at national levels. In view of globalization of businesses with the free movement of capital and labour the national level accounting standards were harmonized into a common accounting rules or principles in the form of International Financial Reporting Standards (IFRS).

17.2 MEANING AND DEFINITION OF ACCOUNTING STANDARDS

Accounting Standards (ASs) are minimum requirements or characters that accounting reports or statements should possess to make them more intelligible. They are basic traits of financial statements and are regarded as the best practices of accounting. They are prescribed or standardized rules or principles of recognition, measurement, recording and reporting. Accounting standards codify the divergent accounting practices among accountants and make accounting reports more predictable and reliable. They are also regarded uniform methods of recording and reporting of business transactions.

They are defined as ‘written statements issued from time to time by institutions of the accounting profession or institutions in which it has sufficient involvement and which are established expressly for this purpose.’

Littleton defines an ‘accounting standard as an agreed upon criteria of what is proper practice in a given situation; a basis for comparison and judgement; a point of departure when variation is justifiable by the circumstances and reported as such. Standards are not designed to confine practice within rigid limits but rather to serve as guideposts to truth, honesty and fair dealing.’ Bromwich defines accounting standards as ‘uniform rules for financial reporting applicable either to all or to a certain class of entity promulgated by what is perceived of as predominantly an element of the accounting community specially created for this purpose.’

However, ASs do not aim at putting accounting in a straight jacket. They aim at limiting accounting flexibility and give practitioners realistic working guidelines. If another alternative approach is more suitable to a business unit, the accountant or the firm has to justify the degree to which the different approach results in better approach. Therefore, it should be remembered that the ASs aim at achieving both uniformity and flexibility.

17.3 BENEFITS OF ACCOUNTING STANDARDS

As have evolved as a result of concern and criticism of the accounting practices over a period. The difficulty in comparison, whimsical approach in the use o accounting methods, increasing number of accounting scandals, etc., affected the acceptability of accounting statements. ASs are prescribed methods of identification, measuring, recording and reporting of business transactions. They are expected to benefit they whole lot of users of accounting information besides helping the preparers also.

- Improve credibility – it is the basic requirement of financial statements of a firm to have a minimum degree of acceptability or dependability. ASs lend an element of credibility to the various users by providing a structural framework within which financial reports are prepared. They limit the accountant’s freedom and make accounting a more predictable science than an unpredictable one.

- Benefits accountants and auditors – the existence of a set of ASs help the accountants in their own professional conduct. Accounting, on account of ASs, becomes a credible science. The actions and approaches can be justified with ASs. Auditors are facilitated by the reduction in accounting choices in measuring, recording and reporting.

- Determining managerial accountability – ASs facilitates in determining specific corporate accountability and regulation of the company and thus help in measuring the effectiveness of management's stewardship. They help in assessing managerial skill in maintaining and improving the profitability of the company, depict the progress of the company, its solvency and liquidity and help in improving the performance of the firm.

- Reform in accounting theory and practice – ASs have lent an element of credibility to the financial statements of the business entities. The reduction in ambiguity and flexibility have added to the utility of accounting information. The actions and approaches of accounting discipline become more justifiable in view of existence ASs. The practices of accountants can pass the test of legal scrutiny in view of ASs.

17.4 CLASSIFICATION OF ACCOUNTING STANDARDS

There are several ways of classifying ASs. They may be classified on the basis of nature or functions, financial statements involved, enforceability, agencies involved in the development of accounting standards, etc.

1. On the basis of nature or functions
   a. Measurement Standards
   b. Presentation Standards
   c. Disclosure or Reporting Standards
2. On the basis of enforceability
   a. Mandatory Standards
   b. Voluntary Standards
3. On the basis of financial statements involved
   a. Income Statement Standards
   b. Balance Sheet Standards
4. On the basis of Issuers
   a. Government Standards
   b. Private Standards
   c. Standards issued by Accountant Bodies

Measurement standards remove the ambiguity surrounding the valuation of business transactions, like depreciation, inventory valuation, fixed assets, borrowing costs, etc. the value at which a fixed asset is recorded is determined by the standard relating to fixed asset while the amount of depreciation is ascertained using the standard pertaining to depreciation. Presentation standard help in identifying the form of appearance and statement where an accounting item need to be depicted as for example in income statement or balance sheet; within the balance sheet either as a part of current liability or owners' account. In recent years many new ASs have been brought into the existence with a view to provide more information to the users. The disclosure standard disaggregate the aggregated data and provide information in the form of segmented information, related party disclosure, consolidated statements, impairment of assets, etc.

Standards which are compulsory and where non-compliance is intolerable from the point of accounting regulating bodies, market regulator, government, etc., are regarded as mandatory ASs. ASs which have emerged as a result of business entities good accounting practices and ethics may be regarded as voluntary or non-mandatory. In India ASs are earmarked as mandatory and non-mandatory based upon the importance of standard, size of business, listing status, etc. ASs which income statement in the form of revenues, expenses, etc., may be regarded as income statement standards while standards affecting the appearance of items in the balance sheets as balance sheet standards. Though this classification is a difficult proposition as a particular standard might affect both the statements, generally measurement standards are regarded as measurement standards and disclosure standards as balance sheet standards.

The standards set by the government are government standards and set by the accounting regulating body like ICAI as professional ASs. A standard which emerges out of the good practice of a particular business or set by a particular business representative group like FICCI, CII, ASSOCHAM, etc., may be regarded as privately set standards. In India, ASs are set by the ICAI with the approval of the government while in US the standards are set by a private professional accounting body, namely FASB. Even IFRSs are set by an international private professional body, namely IASB.

17.5 STANDARD SETTING PROCESS

How do ASs are set? Who sets them? ASs do not occur all of sudden. They are the outcome of systematic process. The process varies across countries and across different setters. Standard setting in US is not similar to India. The government standard setting is much cumbersome than privately set standards of businessmen. Further, the standard setting may be a top down or bottom up process. In a bottom up approach, the standard setting process begins with the identification of accounting issues which require standards while in top down process it is the regulating or government bodies which generally identifies a particular area which needs to be standardized. In general, the following can be considered as steps involved in the process of setting ASs under bottom up approach.

1. Identification of areas of accounting which are contentious and divergent
2. Set up of an expert body or a task force representing a broad spectrum of experts by the standard setting agency to delve at length the issues involved and plausible solution to the problem/s
3. Discussion and deliberations among the members of the expert body
4. Presentation of the draft of the recommendations of the body to the standard setting agency
5. Publication of the exposure draft across varied users for eliciting their views
6. Reviewing the exposure draft in the light of suggestions and views expressed by varied users
7. Final approval and issue of Accounting Standard by the regulating body

The ASs once set are reviewed periodically in the light of evolving environment and conditions. Revision may become a necessary when underlying business conditions change or when a new solution is found to be advisable. Changes in law may also warrant a revision in ASs.

17.5.1Standard setting in India

Since 1970s India has embarked on a path of developing a framework to accounting in view of divergent practices across various practitioners. However, India rather than leading the process of development of ASs has always initiated the process to fall in line with the international accounting profession. In other words, the Indian approach to standard setting is emulating rather than evolving. Further, the process of setting ASs was taken up by the accounting professional body than by any government constituted body. At a later stage the Central Government of India took the initiative by setting up its own body but the government body ratified the ASs set by the professional accounting body. The Institute of Chartered Accountants of India (ICAI), which is a professional accounting regulating body in India, took the initiative of developing the profession of accounting in India on par with the international standards in 1977 when it established the Accounting Standard Board (ASB) with the following mandate:

- To formulate ASs which may be established by the Council of ICAI in India
- To propagate the ASs and persuade the concerned parties to adopt them in the preparation and presentation of financial statements
- To issue guidance notes on the ASs and give clarification on issues arising there from

- To review the ASs at periodical intervals

The ASB of ICAI has adopted a very broad based approach in the development of ASs in India and has considered the views and opinions of wider sections of the users like representatives of government, public sector undertaking, industry and other organizations. In general, its approach to the development of standard is a mixture of both top down and bottom up approach. The initial standards where set using the bottom up approach while the subsequent standards have come into the existence using the top down approach.

17.6 TYPES OF ASS SET IN INDIA

The ICAI with the help of ASB has developed 32 ASs in India so far. However, these standards have been revised over the years and presently India has embarked on a process of converging its standards with IFRS.

AS No	Name of the ASs	AS No	Name of the ASs
1	Disclosure of Accounting Policies	18	Related Party Disclosures
2	Valuation of Inventories	19	Leases
3	Cash Flow Statements	20	Earnings Per Share
4	Contingencies and Events Occurring after the Balance Sheet Date	21	Consolidated Financial Statements
5	Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies	22	Accounting for taxes on income
6	Depreciation Accounting	23	Accounting for Investments in Associates in CFS
7	Construction Contracts	24	Discontinuing Operations
9	Revenue Recognition	25	Interim Financial Reporting
10	Accounting for Fixed Assets	26	Intangible Assets
11	The Effects of Changes in Foreign Exchange Rates	27	Financial Reporting of Interests in Joint Ventures
12	Accounting for Government Grants	28	Impairment of Assets
13	Accounting for Investments	29	Provisions, Contingent Liabilities and Contingent Assets
14	Accounting for Amalgamations	30	Financial Instruments: Recognition and Measurements
15	Accounting for Retirement Benefits in the Financial Statements of Employers	31	Financial Instruments: Presentation
16	Borrowing Costs	32	Financial Instruments: Disclosure
17	Segment Reporting		

17.7 LEGAL ENFORCEABILITY OF ACCOUNTING STANDARDS IN INDIA

For a very long period of time, ASs in India lacked the legal enforceability. Only listed companies were expected to comply with them by SEBI. Even the non-compliance was not viewed seriously. In the event of non-compliance companies were merely asked to explain for reasons for non-compliance and effect of non-compliance on reported profits. With the emergence of corporate governance norms the world over and eruption of corporate scandals, it was felt necessary by the Government of India, ICAI, SEBI and others to mandatorily enforce the ASs. In 1998, the Companies (Amendment) Ordinance, 1998 was promulgated by the President of India. This ordinance gave statutory recognition to ASs. The ordinance also provided for the constitution of the National Advisory Committee on Accounting Standards (NACAS). Subsequently this ordinance attained the legal status under the Companies (Amendment) Act 1999. Sub-sections (3A), (3B) and (3C) of section 211 were inserted to provide for compliance for ASs by the reporting entity. For this purpose the ASs would refer to ASs recommended by ICAI which are notified by the Central Government in consultation with NACAS. This will be the position until ASs are formulated and prescribed by the Central Government.

According to Section 211 (3A) 'every profit and loss account and balance sheet of the company shall comply with the accounting standards,' while according to Section 211 (3B) 'where the profit and loss account and the balance sheet of the company do not comply with the accounting standards, such companies shall disclose in its profit and loss account and balance sheet, the following, namely:-

- the deviation from the accounting standards;
- the reasons for such deviation; and
- the financial effect, if any, arising due to such deviation'

Section 211 (3C) deals with definition of accounting standards. According to the Section 'for the purposes of this section, the expression "accounting standards" means the standards of accounting recommended by the Institute of Chartered Accountants of India, constituted under the Chartered Accountants Act, 1949 (38 of 1949), as may be prescribed by the Central Government in consultation with the National Advisory Committee on Accounting Standards established under sub- section (1) of section 210A. For this purpose NACAS was constituted under section 210A as referred to under section 211 (3C) to advise the Central Government on formulation and laying down of the accounting standards for adoption by companies or class of companies. On the recommendation of NACAS, the Ministry of Company Affairs, has issued a Notification dated 7th December, 2006, whereby it has prescribed Accounting Standards 1 to 7 and 9 to 29, as recommended by the Institute of Chartered Accountants of India, which are included in the said Notification.

As far as the reporting of compliance with the Accounting Standards by the management is concerned, clause (i) under the new sub-section 2AA of Section 217 of the Companies Act, 1956, (inserted by the Companies Amendment Act, 2000) prescribes that the Board's report should include a Directors' Responsibility Statement indicating therein that in the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures.

In spite of legal provisions relating to ASs in India it can be said here that the compliance is less than satisfactory. On average, only 50% of listed companies comply. Even the unlisted companies are poor in compliance. Some of the reasons for poor compliance levels are:

1. Poor enforcement machinery in India though SEBI acts as a regulator for listed firms
2. Absence of fines and penalties for non-compliance
3. SMEs delay non-compliance citing cost of adoption and compliance
4. Lack of firmness at government level for enforcement
5. Absence shareholder activism
6. Poor governance standards
7. Dominance of family managed companies which generally avoid disclosures

17.8 CONVERGENCE OF INDIAN ASS WITH IFRSS

With the advent of globalization, the boundaries of financial market have vanished and funds are crossing geographical boundaries. As a result, the international investors require prompt and transparent financial reports to judge the safety and profitability of the investment. But due to differences in accounting practices (GAAPs), the financial report often fail to deliver necessary information which the international investors deserve to be informed of. Hence there is a move to harmonise all accounting practice into a single set of ASs at the global level known as International Financial Reporting Standards (IFRSs). IFRS are believed to bring uniformity and transparency especially in International Financial Reporting. This job is done by converging GAAPs of respective region towards IFRS by a series of amendments. In India, the ICAI plays the role of a catalyst to bring about Indian ASs in line with IFRS.

17.8.1 Meaning of Convergence in GAAPs

Convergence in generally accepted accounting principles refers to achieving harmony among the various accounting principles followed in different countries. This may be done by introducing common reporting standards which are acceptable to all and gradually modifying the respective GAAPs to move in line with such common standards at the global level. Such an attempt is made by IASB by introducing IFRS. IFRS will be guiding light towards which the GAAPs of various countries are gradually converged.

17.8.2 Need for Convergence:

The present era of globalization and liberalisation has made the world an economic village. With the advent of new technologies and new changes like e-commerce has erased geographical boundaries for the business. The globalisation of the business world and the emergence of transnational corporations in search of money have necessitated raising of capital from all parts of the world. Each country has its own set of rules and regulations for accounting and financial reporting. When an enterprise decides to raise capital from the markets other than the country in which it is located, the rules and regulations of that country will apply. This in turn will require that the enterprise is in a position to understand the differences between the rules governing financial reporting in the foreign country vis-à-vis its own country of origin. Therefore translation and re-instatement are of utmost importance. For this the accounting standards and principles need to be robust so that the larger society develops a degree of confidence in the financial statements put forward by organization.

The use of different accounting frameworks in different countries, which require inconsistent treatment and presentation of the same underlying economic transactions, creates confusion for users of financial statements. This confusion leads to inefficiency in capital markets across the world. Therefore, increasing complexity of business transactions and globalisation of capital markets call for a single set of high quality accounting standards. High standards of financial reporting underpin the trust investors place in financial and non-financial information (ICAI's Concept Paper on Convergence with IFRSs in India, 2006). Thus there arises a need to have a single globally accepted financial reporting system.

Early attempts of formulating global accounting standards began with the setting up of IASC in 1973 to issue international accounting standards. However recent developments like formulation of IASB for issue of IFRS have prompted many countries to pursue convergence of national accounting standards with IFRSs. Amongst others, countries of the European Union, Australia, New Zealand and Russia have already adopted IFRSs for listed enterprises. China has decided to adopt IFRS from 2008 and Canada from 2011. Insofar as US is concerned, Financial Accounting Standards Board (FASB) of USA and IASB are also working towards convergence of the US GAAPs and the IFRSs.

Neighboring countries of India like Nepal, China, Pakistan, Myanmar and Mauritius have either adopted IFRS or are in the process of convergence. India is also in the process of converging its accounting standards with IFRS.

17.8.3 Benefits of convergence with a single global set of standards

There are many beneficiaries of convergence with IFRSs such as economy, investors, industry and accounting professionals. The concept paper on convergence with IFRS in India enumerates following benefits of convergence to:

- **The Economy**

The convergence benefits the economy by increasing the growth of its international business. It facilitates maintenance of orderly and efficient capital markets and also helps to increase the capital formation and thereby economic growth. It encourages international investing and thereby leads to more foreign capital flows to the country.

- **Investors**

A strong case for convergence can be made from the viewpoint of the investors who wish to invest outside their own country. Investors want the information that is more relevant, reliable, timely and comparable across the jurisdictions. Financial statements prepared using a common set of accounting standards help investors better understand investment opportunities as opposed to financial statements prepared using a different set of national accounting standards. For better understanding of financial statements, global investors have to incur more cost in terms of the time and efforts to convert the financial statements so that they can confidently compare opportunities. Investors' confidence would be strong if accounting standards used are globally accepted. Convergence with IFRSs contributes to investors' understanding and confidence in high quality financial statements.

- **The industry**

A major force in the movement towards convergence has been the interest of the industry. The industry is able to raise capital from foreign markets at lower cost if it can create confidence in the minds of foreign investors that their financial statements comply with globally accepted accounting standards. With the diversity in accounting standards from country to country, enterprises which operate in different countries face a multitude of accounting requirements prevailing in the countries. The burden of financial reporting is lessened with convergence of accounting standards because it simplifies the process of preparing the individual and group financial statements and thereby reduces the costs of preparing the financial statements using different sets of accounting standards.

- **The accounting professionals**

Convergence with IFRSs also benefits the accounting professionals in a way that they are able to sell their services as experts in different parts of the world. The thrust of the movement towards convergence has come mainly from accountants in public practice. It offers them more opportunities in any part of the world if same accounting practices prevail throughout the world. They are able to quote IFRSs to clients to give them backing for recommending certain ways of reporting. Also, for accounting professionals in industry as well as in practice, their mobility to work in different parts of the world increases. (ICAI's Concept Paper on Convergence with IFRSs in India, 2006)

17.8.4 Creation of IASB

International Accounting Standards Committee (IASC) Foundation is the parent body consisting of 22 Trustees. IASC was founded in 1973, with headquarters in London (UK). It comprises of members who are professional accountancy bodies of over a hundred countries (including ICAI from India). It was formed with the objectives of:

a) formulating and publishing in the public interest, accounting standards to be observed in the presentation of financial statements and promoting their worldwide acceptance and observance; and

b) Working for improvement and harmonisation of regulations, accounting standards and procedures relating to the presentation of financial statements (Vijay Kumar, 2012).

IASC receives financial support from major accounting firms, private financial institutions and industrial companies throughout the world. IASC was renamed as the International Accounting Standard Board (IASB) in the year 2001. IASB commenced its operations in 2001. The IASB has been vested with full powers and discretion in developing and pursuing the technical agenda for setting Accounting Standards. IASB has 14 board members including 2 part time members. Final approval of technical pronouncements is subject to approval of at least 9 out of 14 members. In carrying out its Standard setting task, IASB interacts with other national standard setting bodies. At the time of its inception, IASB adopted standards (known as IASs) issued by the IASC, which was its predecessor. Standards further issued by IASB are termed as International Financial Reporting Standards (IFRS). The earlier Standing Interpretation Committee was succeeded by International Financial Reporting Interpretation Committee (IFRIC).

17.9 MEANING OF IFRS

The introduction of IFRS marks a big leap in global convergence of GAAPs. IFRS is fast becoming the global accounting language. Over 100 countries have now adopted IFRS and many have committed to make the transition within few years. For understanding the significance of IFRS, it becomes necessary to first understand the basic structure of IFRS documents issued till date.

IFRS refers to "a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions," (Yadav and Sharma, 2012). The components of IFRS include:

- IFRS – International Financial Reporting Standards
- IAS – International Accounting Standards
- IFRIC - International Financial Reporting Interpretations (by IFRI Committee)
- Standing Interpretations (by Standing Interpretation Committee)

Financial statements may not be described as complying with IFRS unless they comply with all the requirements of each of the above set of standards. As at 1st Jan 2012 there are 67 documents forming IFRS literature. The lists of documents are provided below.

17.9.1 Types of IFRS

IFRS are the standards for international financial reporting issued by IASB after 2001. So far IASB has issued 13 standards. In addition to this there are- 'Preface for IFRS' that introduces the structure of IFRS and 'The Framework for the preparation and presentation of financial statements' which sets out concepts that underlie in the preparation and presentation of financial statements for external users. The following is the list of IFRS documents:

IFRSs	
Preface to International Financial Reporting Standards	
Framework for the Preparation and Presentation of Financial Statements	
IFRS 1	First-time Adoption of International Financial Reporting Standards
IFRS 2	Share-based Payment
IFRS 3	Business Combinations
IFRS 4	Insurance Contracts
IFRS 5	Non-current Assets Held for Sale and Discontinued Operations
IFRS 6	Exploration for and evaluation of Mineral Resource
IFRS 7	Financial Instruments: Disclosures
IFRS 8	Operating Segments
IFRS 9	Financial Instruments
IFRS 10	Consolidated Financial Statements
IFRS 11	Joint Arrangements
IFRS 12	Disclosure of Interests in Other Entities
IFRS 13	Fair Value Measurement

17.9.2 International Accounting Standards

International Accounting standards (IASs) are the standards issued by the erst-while IASC, prior to 2001. These standards have been accepted by IASB and some of them are still in force. Presently there are 28 IAS in force. Following is the list of IAS presently in force:

International Accounting Standards	
IAS 1	Presentation of Financial Statements
IAS 2	Inventories
IAS 7	Statement of Cash Flows
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors
IAS 10	Events after the Reporting Period
IAS 11	Construction Contracts
IAS 12	Income Taxes
IAS 16	Property, Plant and Equipment
IAS 17	Leases
IAS 18	Revenue
IAS 19	Employee Benefits
IAS 20	Accounting for Government Grants and Disclosure of Government Assistance
IAS 21	The Effects of Changes in Foreign Exchange Rates
IAS 23	Borrowing Costs
IAS 24	Related Party Disclosures
IAS 26	Accounting and Reporting by Retirement Benefit Plans
IAS 27	Consolidated and Separate Financial Statements
IAS 28	Investments in Associates
IAS 29	Financial Reporting in Hyperinflationary Economies
IAS 32	Financial Instruments: Presentation
IAS 33	Earnings per Share
IAS 34	Interim Financial Reporting
IAS 36	Impairment of Assets
IAS 37	Provisions, Contingent Liabilities and Contingent Assets
IAS 38	Intangible Assets
IAS 39	Financial Instruments: Recognition and Measurement
IAS 40	Investment Property
IAS 41	Agriculture

17.9.3 International Financial Reporting Interpretations Committee (IFRICs)

These are the interpretations of accounting standards which give specific guidance on unclear issues. Unlike IFRS, they only have restricted area of application based on the facts and circumstances of different class of cases. These are developed by the International Financial Reporting Interpretations Committee. This committee replaced the Standing Interpretation Committee in March 2002 after getting the approval from IASC Foundation Trustees. Presently there are 16 IFRIC interpretations in force. Below is the list of IFRICs:

IFRICs	
IFRIC 1	Changes in Existing Decommissioning, Restoration and Similar Liabilities
IFRIC 2	Members' Shares in Co-operative Entities and Similar Instruments
IFRIC 4	Determining whether an Arrangement contains a Lease
IFRIC 5	Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds
IFRIC 6	Liabilities arising from Participating in a Specific Market-Waste Electrical and Electronic Equipment
IFRIC 7	Applying the Restatement Approach under IAS 29
IFRIC 10	Interim Financial Reporting and Impairment
IFRIC 12	Service Concession Arrangements
IFRIC 13	Customer Loyalty Programmes
IFRIC 14	IAS 19-The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction
IFRIC 15	Agreements for the Construction of Real Estate
IFRIC 16	Hedges of a Net Investment in a Foreign Operation
IFRIC 17	Distributions of Non-cash Assets to Owners
IFRIC 18	Transfers of Assets from Customers
IFRIC 19	Extinguishing Financial Liabilities with Equity Instruments
IFRIC 20	Stripping Costs in the Production Phase of a Surface Mine

17.9.4 Standing Interpretations Committee (SIC)

SICs are interpretations issued by Standing Interpretations Committee prior to IFRIC. Standing Interpretations Committee was created in 1997 to enhance the rigorous application and worldwide comparability of financial statements that are prepared using IAS by interpreting potentially contentious accounting issues. IASB however accepted SICs and some of them are still in force. At present there are 8 SIC interpretations in force. They are listed as follows:

SICs	
SIC-7	Introduction of the Euro
SIC-10	Government Assistance-No Specific Relation to Operating Activities
SIC-15	Operating Leases-Incentives
SIC-25	Income Taxes-Changes in the Tax Status of an Enterprise or its Shareholders
SIC-27	Evaluating the Substance of Transactions Involving the Legal Form of a Lease
SIC-29	Disclosure-Service Concession Arrangements
SIC-31	Revenue-Barter Transactions Involving Advertising Services
SIC-32	Intangible Assets-Web Site Costs

17.10 CONVERGENCE PROCESS IN INDIA

The inception of the idea of convergence of Indian GAAP with IFRS was made by the former Prime Minister of India Dr. Manmohan Singh by committing in G20 to align Indian accounting standards with IFRS. Thereafter ICAI has decided to converge its accounting standards with IFRS in a phased manner as envisaged in the 'Roadmap to IFRS' formulated by the Ministry of Corporate Affairs (MCA). For smooth transition to IFRS, ICAI has taken up the matter of convergence with the National Advisory Committee on Accounting Standards and various regulators such as the RBI, SEBI and IRDA, CBDT. IASB, the issuer of IFRS, is also supporting the ICAI in its endeavors towards convergence.

Earlier the roadmap provided by MCA specified dates for adoption of IFRS in India on the basis of a company's net worth as indicated by the exchange on which they are traded. Following was the earlier roadmap for companies (other than banking, insurance and non-banking financial companies).

Phase	**Companies covered**	**Opening balance sheet**	**First financial statements**
Phase I	• Companies that are part of NSE ? Nifty 50 Index • Companies that are part of BSE Sensex 30 Index • Companies that have shares or other securities listed in overseas stock exchanges ; and • Listed and Unlisted Companies with net worth in excess of Rs 1000 cr	1 April; 2011	31 March 2012
Phase II	• Listed and Unlisted Companies with net worth in excess of Rs 500 cr but not exceeding Rs. 1000 cr.	1 April; 2013	31 March 2014
Phase III	• Listed entities with networth of Rs 500 cr or less	1 April; 2014	31 March 2015

Earlier roadmap for banking, insurance and non-banking financial companies

Class of Companies	Criteria for phased implementation	Opening balance sheet	First financial statements
Insurance Companies	All Insurance companies	1 April 2012	31 March 2013
Banking Companies	• All Scheduled Commercial Banks	1 April 2013	31 March 2014
	• Urban Co?operative Banks with net worth in excess of Rs. 300 Crores	1 April 2013	31 March 2014
	• Urban Co?operative Banks with net worth in excess of Rs 200 Crores but not exceeding Rs. 300 Crores.	1 April 2014	31 March 2015
Non?Banking Financial Companies (NBFCs)	• NBFCs that are part of NSE ? Nifty 50 Index • NBFCs that are part of BSE Sensex 30 Index • Listed and Unlisted NBFCs with net worth in excess of Rs 1,000 Crores	1 April 2013	31 March 2014
	• All Listed NBFCs that do not fall into the above categories	1 April 2014	31 March 2015
	• Unlisted NBFCs that do not fall into the above categories and which have a net worth in excess of Rs 500 Crores	1 April 2014	31 March 2015
Urban Co?operative Banks with networth less than Rs 200 Crores, Regional Rural Banks and Unlisted NBFCs with networth less than Rs 500 Crores are exempt from following the Converged Indian Accounting Standards, though they may voluntarily opt to do so.			
Class of Companies	**Criteria for phased implementation**	**Opening balance sheet**	**First financial statements**
Insurance Companies	All Insurance companies	1 April 2012	31 March 2013
Banking Companies	• All Scheduled Commercial Banks	1 April 2013	31 March 2014
	• Urban Co?operative Banks with networth in excess of Rs. 300 Crores	1 April 2013	31 March 2014
	• Urban Co?operative Banks with networth in excess of Rs 200 Crores but not exceeding Rs. 300 Crores.	1 April 2014	31 March 2015
Non?Banking Financial Companies (NBFCs)	• NBFCs that are part of NSE ? Nifty 50 Index • NBFCs that are part of BSE Sensex 30 Index • Listed and Unlisted NBFCs with networth in excess of Rs 1,000 Crores	1 April 2013	31 March 2014

However there were several hurdles for smooth implementation. Laws governing corporates needed a great deal of changes. More over the corporate world was not much prepared to accept the changes. As a result of this the IFRS convergence plan was not implemented as per the earlier roadmap.

Later on the new Companies bill incorporated several changes in line with IFRS including revision of Schedule VI pertaining to format of financial statement. It has been decided that there shall be two sets of Accounting Standards under the Companies Act. The new set of standards which have been converged with IFRS are now known as Indian Accounting Standards or Ind AS. The Ministry of Corporate Affairs has notified the 35 Ind AS on 25 February 2011. The date on which these will come into force is yet to be notified. Any changes in the Ind AS vis-à-vis corresponding IAS/IFRS are given in Appendix 1 appearing at the end of each Ind AS. The text of the 35 Ind AS are now available at the Ministry of Corporate Affairs portal. The following are the converged Indian Accounting Standards (Ind ASs) hosted by MCA on its website.

Converged Indian Accounting Standards – Ind AS	
1.	Framework for the Preparation and Presentation of Financial Statements in accordance with Indian Accounting Standards
2.	Ind AS 101 First-time Adoption of Indian Accounting Standards
3.	Ind AS 102 Share based Payment
4.	Ind AS 103 Business Combinations
5.	Ind AS 104 Insurance Contracts
6.	Ind AS 105 Non-current Assets Held for Sale and Discontinued Operations
7.	Ind AS 106 Exploration for and Evaluation of Mineral Resources
8.	Ind AS 107 Financial Instruments: Disclosures
9.	Ind AS 108 Operating Segments
10.	Ind AS 1 Presentation of Financial Statements
11.	Ind AS 2 Inventories
12.	Ind AS 7 Statement of Cash Flows
13.	Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors

Later on the ICAI has recommended a new roadmap for adopting International Financial Reporting Standards by Indian companies. On February 20, 2013 NACAS endorsed the ICAI's new roadmap for International Financial Reporting Standards (IFRS) convergence.

As per the revised road map, companies with a net worth of over Rs 1,000 crore will have to adopt International Financial Reporting Standards (IFRS) from April 1, 2015 for preparing their financial statements. For companies with net worth of Rs 500-1,000 crore, the recommended date is April 1, 2016. For all other companies (including listed ones), the recommended date is April 1, 2017. The new IFRS roadmap does not cover banks and insurance companies. The date of IFRS enforcement in case of banks and insurance companies has been left to the respective regulators — Reserve Bank of India and Insurance Regulatory and Development Authority — to decide. (The Hindu – Business Line, 13th & 23rd February -2013)

Revised roadmap recommended by ICAI.

Phase	Companies covered	Date of adoption
Phase I	• Companies that are part of NSE ? Nifty 50 Index • Companies that are part of BSE Sensex 30 Index • Companies that have shares or other securities listed in overseas stock exchanges ; and • Listed and Unlisted Companies with net worth in excess of Rs 1000 Crores	1 April; 2015
Phase II	• Listed and Unlisted Companies with net worth in excess of Rs 500 Crores but not exceeding Rs. 1000 Crores.	1 April; 2016
Phase III	• Listed entities with networth of Rs 500 Crores or less	1 April; 2017

17.11 CHECK YOUR PROGRESS

1. Accounting standards are developed in India by
   a. ICWAI
   b. ICSI
   c. SEBI
   d. ICAI
2. The accounting standards influence decision-making process of:
   a. Management
   b. Owners
   c. Lenders
   d. All of the above
3. IFRS stands for
   a. Indian Foreign Revenue Service
   b. International Financial Reporting Statement
   c. International Financial Reporting Standards
   d. None of these
4. Accounting Standards are enforced in India through
   a. Provisions of Companies Act
   b. Through Listing Agreement of Stock Exchanges
   c. Through Audit Standards of ICAI
   d. All of the above

Answer to Check Your Progress: 1 (d), 2 (d), 3 (c), 4 (d)

17.12 SUMMARY

Accounting standards represent minimum norms to be complied by the preparers of financial statements. They prescribe the rules and process of accounting for business transactions. Their adoption reduces the element of divergence in accounting practices across various companies and make accounting reports more useful and effective. In view of this increased importance of accounting standards the ICAI has made strenuous efforts in developing a set of accounting standards to be complied by listed and other companies. However, the efforts of ICAI are not supported by the actions of Government of India. The Central Government created its own standard setting body, namely, NACAS. The body adopted ICAI accounting standards and is enforcing the same across registered companies in India.

The changes in world environment and due to liberalization of global economies the need has been felt by the Government to converge or harmonize the Indian accounting standards with the international accounting standards known as IFRS which are set by IASB. However, the road map to adoption of IFRS by Indian companies has been delayed and postponed to future due to apprehensions of Corporate India. The importance of IFRS is being felt across all countries the world over and smaller countries like Nepal, Bangladesh, Pakistan etc., have adopted IFRS. It is high time that the Indian accounting standards fully converge with the IFRS to make financial reports of Indian companies acceptable globally.

17.13 KEY WORDS

Accounting Standards	–	Codes of Best Accounting Practices
IFRS	-	Accounting Standards at the global level issued by IASB
Convergence	–	A phenomenon where a nation's GAAPs are similar to global GAAPs
Financial Reports	–	Financial Statements prepared at the end of a year by a company
Ind Accounting Standards	–	These are Indian Accounting Standards which converge with IFRS

17.14 QUESTIONS FOR SELF-STUDY

1. What do you mean by accounting standards? State their advantages
2. Explain the process the development of accounting standards in India
3. How do you classify accounting standards?
4. Define IFRS.
5. Describe the process of convergence of Indian Accounting Standards with IFRS in India.
6. What precautions should India take in switching over to IFRS?
7. Explain the concept of related party.

8. What do you mean by segment reporting? How segments are identified?

9. What is deferred tax? Give its classification.

10. State the importance of recognition of impairment of assets.

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UNIT – 18 : HUMAN RESOURCE ACCOUNTING

Structure

18.1 OBJECTIVES

After studying this unit you will be able to:

- Give meaning of human resource accounting
- Explain the importance of human resource accounting
- Mention the difference between HR valuation and accounting
- Describe the cost and value based methods of HRA
- Identify the differences between various methods of HRA

18.2 INTRODUCTION

The importance of human assets cannot be overemphasized. According to Alfred Marshall 'the most valuable of all capital is the investment in human beings.' In fact, it is said that all other resources remain as resources without the human beings. The utility or value of other resources depend on human resource. It is human resource which gives value to other resources by converting them into valuable assets. Land, building, machinery, vehicles, cash, materials, etc., are of no use if the firm neglects or reduces investment in human resources. Hence, it is human resource is resource of all resources. Honesty, hard work, discipline, knowledge, punctuality, dedication, etc., are all attributes of human beings which make them more useful. The investment in human being has come to be recognized as 'knowledge capital' or as 'intellectual capital' though there are varied views on what constitutes knowledge or intellectual capital. Investment in human beings is an intangible investment which cannot be copied or replicated by other entities. In other words, the human resource (HR) produces benefits which provide a lasting competitive advantage to the entities. The IT industry, bio-technology, education, hospitals, entertainment sector, organized retailing, etc., spend huge sums of money to develop and nourish the talents of their human resources.

In spite of the importance of the human resources to the organization survival, accountants have a narrow approach in recognition of HR as organizational or business assets. The resource is not depicted on the balance sheet of the firm. The principles of accounting have not been changed to accommodate the recognition of HR as human resource. The arguments given against the valuation and accounting for HR are:

18.3 ARGUMENTS AGAINST HRA

1. Human beings cannot be owned – A resource is recognized as an asset provided the following three conditions are fulfilled:

   a. The ability to control to future benefits

   b. The cost of acquisition or development can reasonably be calculated

   c. The asset is expected to generate future benefits

♦ The right to control emerges out of legal ownership of the firm. A firm can have a legal ownership of all other assets but not HR. Slavery is not permitted. HR cannot be legally owned. Further other assets can be conditioned. HR being a psychological resource it cannot be conditioned. The manager cannot force a worker to generate a particular level of output. On other the hand, through motivation techniques, the desired level of output can be expected from HR. it is only HR which requires motivation and not other resources.

♦ What is the cost of acquisition of HR? A machine bought can be accounted because its cost is exact. Land acquired is accounted because of the cost involved. Similarly other assets are recorded. However, an employer hires a readily available or educated or trained labour force from the labour market. The cost of acquisition cannot be equal to recruitment and selection cost. It is much more than that. Further, all the costs are incurred immediately. The costs are incurred in the form of salaries, etc., over a period. Even the salaries paid cannot be taken as cost because salaries are paid for the services received. Salary is an expense and not a cost. Salaries are paid only when an employee renders services. Salary is just like a depreciation of a fixed asset. Depreciation is a cost of consuming the services of fixed asset. Depreciation is only an allocation of the cost of acquisition of fixed asset which is incurred at the beginning. Since no cost is incurred in acquiring HR, it becomes very difficult in identifying HR as an asset

♦ An asset is recognized only when the future benefits can be estimated with reasonable accuracy. Though there is an element in uncertainty in all other assets also but the element of uncertainity is relatively very high in HR. the benefits from HR cannot be predicted with greater accuracy as employees' psyche is influenced by several factors.

2. Difficult to Value – What is the value of an HR? This is a million dollar question. The value is influenced by several factors and quantifying them in the case of HR is difficult and leads to subjectivity. Subjectivity has no place in accounting. Cost is an objective figure. Since there are no costs involved in acquiring and developing HR, other methods

like replacement cost, current cost and others may have to be employed. The accounting principles and standards disallow recording assets with subjective valuation models.

3. Absence of strong theoretical base – Another reason cited for non-recognition of HR as assets is the absence a strong theoretical framework concerned with the models and approaches concerning HR. though certain models have been invented in recent years, they are yet to be applied in a concrete manner.

4. Higher cost involved – It is argued that the cost involved in appraising the value of HR would be higher than the benefits expected from such valuation and accounting aspects. Smaller entities cannot be expected to afford the cost of HR valuation and accounting.

5. Unclear tax laws – Tax laws of many countries do not recognize HR as assets and all expenses incurred in developing and provisioning for HR may not be allowed to be treated as business expenses.

18.4 ARGUMENTS IN SUPPORT OF HRA

Despite of all these limitations and shortcomings in the process of valuation and accounting for HR, the necessity for HR accounting (HRA) is on the rise. More and more economists and valuation experts recommend for the valuation and accounting for HR. at present in all fields, HR being considered as assets. One of the first attempts to estimate the value of human beings in monetary terms was made around 1691 by Sir William Petty. Petty considered labour 'the father of wealth' and felt that labour must be included in any estimate of national wealth. This first attempt at human assets valuation was made by estimating the value of human capital by capitalizing the wage bill in perpetuity at the market interest rate. Further efforts were made by William Farr in 1853 and Earnest Engle in 1883.

The real work on the subject started from 1960 when it was discovered that human behavior is a significant factor affecting human efficiency which resulted in giving a thought to treat human beings as assets. A few names who worked on it and produced models are Schultz (1960), Hermanson (1964), Likert (1967), Hekimian and Hones (1967), Likert and Pyle (1971), Lev and Schwartz (1971), Flamholtz and Pyle (1969) etc.

Some of the arguments in support of HRA are:

1. It is true that an organization does not own HR but can definitely own right of an employee to provide a service. An entity can prevent the employee from rendering

the service elsewhere and can demand the rightful work from him. Further, there is a growing tendency towards 'job security.' A worker joining an organization at a 25 years age can be expected to serve the organization for 35 years if the age of retirement is 60. In other words, for this length of permanent employment the organization can secure the benefits from the employee. This ability to control the behavior of employee, prevent rendering the similar to others, monitor work on quality aspects, etc., can be enough for an organization to recognize the HR as assets. In the words, even expectation of benefit is sufficient to consider a property (resource) as an asset.

2. The difficulty to value HR cannot be an excuse for non-valuation. Subjective valuation applies to other assets also. It is said that 'there is no such thing as exact value.' All values are subjective. Even cost could be subjective. Available models are fair enough to provide better indicator for value of HR.

3. Poor theoretical or conceptual base applies to the whole accounting phenomenon. It is a young science and social science. In last two or three decades attempts are being carried world over to provide a theoretical base to accounting in the form of accounting standards and concepts. These accounting standards are serving the purpose of conceptual framework. Similar attempts are also being done for HRA by several experts.

4. HRA is not necessarily expensive. It can be tailored to the requirements and need of a business unit.

5. A concerted effort is required to convince the tax man regarding the HR being treated as asset. Moreover, the tax laws in all the countries allow as the expenses incurred in labour as business expenses.

6. The value drivers for modern business are not traditional assets like land, building, machinery. The value built around these assets is not permanent. Any entity can replicate. Modern entities recognize the temporal nature of value around tangible assets and build value on intangibles especially HR. HR provides a lasting advantage and such advantages are difficult to copy and follow.

7. The financial statements are expected to depict a true and fair view. A lopsided view of business can endanger its survival. The company might be a takeover target if the balance sheet does not reveal the value of HR. Capital structure could be lopsided. Firm could end up showing higher returns, thus leading to government intervention

and entry of new competitive players.

8. There is a need to separate HR valuation and HRA. A firm can always value its HR. Such valuation helps a firm in many ways. Besides accounting HR valuation can help a firm in evaluating the relative contribution of various sections of HR to the total value of firm; initiate value improvement strategies like training and development, motivation strategies, etc., on the other hand, HRA is concerned with the depiction of HR value on the balance sheet which the present accounting principles do not permit.

18.5 MEANING AND DEFINITION OF HRA

HRA is a broader concept than the HR valuation. It is a process of measurement, recording and reporting HR related information to permit informed judgement and decisions by the users of the information. Therefore, HRA is basically an information system. It is expected to provide information relating to HR to various interested users for facilitating decision-making process. The American Accounting Association's Committee on HRA defines HRA as 'a process of identifying and measuring data about HR and communicating this information to interested parties.' Rensis Likert defines HRA as 'an activity devoted to attaching dollar estimates to the value of a firm's human organization and its customer goodwill.

18.6 OBJECTIVES OF HRA

The following are the objectives of HRA:

i) To help the management in making better decisions about investment in HR

ii) To help the persons interested in the organization to know whether the HR are giving a return equivalent to their worth or not.

iii) To know whether the HR have been properly utilized and allocated

iv) To inform the organization and the society about the worth of HR of the organization.

18.7 CLASSIFICATION OF HR COSTS

On the basis of the purpose for which the costs are incurred, the costs of HR are classified into three broad categories:

1. **Acquisition Costs –** These are the costs incurred in recruiting and putting the employee on the job and includes the costs like advertisement, screening of

applications, written test and interview costs, etc.

2. **Development Costs –** Costs incurred in making the employee more useful to the organization. The development cost comprises salary of both the trainees and trainers, cost of materials, consultancy fee, cost of reduced output, costs of rework, etc.

3. **Operational Wages and Salaries –** These HR costs include the wages and salaries paid employees, employer's contribution to provident and pension funds, cost of fringe benefits, costs of non-monetary benefits, etc.

18.8 METHODS OF VALUATION OF HR

The various methods to valuation of HR are classified into following two broad methods:

18.8.1 Cost Approaches or Methods (also known as HR Cost Accounting)

18.8.2 Value Approaches or Methods (also known as HR Value Accounting)

The cost approaches include the following methods:

a) Acquisition Cost Method

b) Replacement Cost Method

c) Standard Cost Method

d) Opportunity Cost Method

e) Current Purchasing Power Method

The value approaches include the following methods:

a) Present Value of Future Earnings Method or Lev and Schwartz Model

b) Adjusted Discounted Future Wages Method

c) Unpurchased Goodwill Method

d) Flamholtz's Stochastic Reward Valuation Model

e) Human Assets Multiplier Model

f) Economic Value Method

g) Net Benefit Method and Certainty Equivalent Net Benefit Method

h) Residual Income Method

i) Statistical Based Methods

18.8.1.1 Acquisition Cost Method

The method was developed by Brummet, Flamholtz and Pyle who individually and collectively developed concepts, models and techniques for measuring the historical cost of HR. the method is also known as the 'capitalization of historic cost method.' Costs which are incurred in the form of recruitment, hiring, training, familiarization and development of an employee are capitalized and are written off over the period for which the employee remains with the firm. If an employee leaves the organization or expires the remaining unabsorbed costs are written against the profits of the firm in the year in which the employee retires. It is the only method that is put into practice by R G Barry Corporation, Columbus, Ohio USA.

The method is simple and easy to understand. However, there are many limitations. The value of HR cannot be restricted to the cost incurred in recruiting, hiring and development them. The value should depend on the expected benefits from HR rather the cost of recruitment and development. Moreover, it is very difficult to ascertain all the cost that is incurred in hiring, etc. the cost also varies across different grades and categories of employees. Skilled workers cost less in development than unskilled workers. Across same grade workers differs in terms of attitudes, abilities, etc. Cost cannot be restricted only to cost incurred at the beginning. Subsequent costs in the form of additional training, motivational costs, counseling, etc., are ignored. Wages and salaries do constitute cost of employees. However, the method does not treat them as acquisition cost.

18.8.1.2 Replacement Cost Method

Replacement cost is defined as the cost incurred in replacing existing asset by similar asset. When applied to HR value of HR is the cost that a firm would be incurring if existing employees are replaced by a new set of employees. It indicates what it would cost the firm if it has been newly started to recruit, hire, training and develop HR to their present level of technical proficiency and familiarity with the organization and its operations.

Any decrease in the value is charged to income statement or adjusted against 'replacement reserve account' (if exists) and a decrease is to be treated as unrealized gain and carried to replacement reserve account. New value is amortized over the useful years of service of HR.

The method is a continuation of the principles of historical cost method. The only difference is it considers current cost rather than historical cost. Method is useful is appraising the worth of existing and senior staff whose replacement would cost a substantially or whose replacement is impossible. However, replacement cost is a theoretical model in view of non-availability of similarly qualified, motivated and trained employees.

18.8.1.3 Standard Cost Method

Standard cost is a predetermined cost that indicates what a product or asset or resource should cost under certain normal conditions. To compute the value of HR under the method all the standard cost of recruiting, hiring, training and developing per grade of employees are developed and established and made up to-date every year. The total standard cost is computed by multiplying the standard cost per grade of employee by the number of employees recruited and employed. The method looks to be logically attractive but has practical difficulties. It is very difficult to develop standard costs of recruiting, hiring, training and developing per grade of employees. Costs vary over the period of time and over different grades. Some costs could be fixed in nature and developing standards for fixed costs is a difficult proposition.

18.8.1.4 Opportunity Cost Method

Opportunity cost is deep-rooted in economics and is the cost of alternative use. It is the cost of next best alternative forgone. The method was suggested by Hekimian and Jones to overcome the limitations of replacement cost method. According to the authors the value of an employee is determined by taking his value in his alternative use. That value is taken as the basis for estimating the value of human resources employed by the organization. If the employees can be hired easily externally, there is no opportunity cost of them. Further, if an employee is useful in only one job, he has no opportunity. If an employee is useful in several departments his opportunity would be high. Therefore, to determine the opportunity cost, Hekimian and Jones have suggested the use of 'Competitive Bidding Method.' Value of an employee is determined on the basis of his value to an alternative department. The department with higher bid would acquire the particular human resource and would include its price in its investments base.

Though the method is intuitively looks to be very appealing there are practical difficulties in its adoption. An employee who is useful to a particular department only has no value under the method. Thus, the valuation shown as per this method will be misleading and far from real facts. The method can also create psychological problems for employees receiving lower bid value in competitive departments.

18.8.1.5 Current Purchasing Power Method

The method takes into account inflationary conditions in adjusting for the value of HR. instead of valuing HR at their acquisition cost, the method adjusts the historical acquisition cost by an index number representing the HR. if the index number has doubled, the value o HR should also be doubled. The converted value will be the value of HR to be amortized in rest of the years as per policy of the firm. The increase/decrease is to be dealt with as described under replacement cost method.

18.8.2.1 Capitalization of Salary Method

The method was suggested by Lev and Schwartz and hence is also known as Lev and Schwartz Model. It is also known as Present Value of Future Earnings Model. The model is based on the assumption that the value of HR is based on the discounted value of future earnings expected to be earned by them from the organization till the age of retirement. The annual average earnings per employee in each group are determined for various ranges of age. The total earnings which each group will get up to the date of retirement are calculated. This is then discounted at the rate of cost of capital as it is used in the capital budgeting decisions. The value thus arrived at will be the value of human assets. Value so arrived at is presented in the balance sheet on both asset and liabilities side as 'Human Assets' and 'Human Capital' respectively.

The method has found its utility across several countries. However, there are several flaws observed in the adoption of the method:

1. Salary of an employee till the age of retirement can be forecasted with accuracy.
2. Moreover, salary cannot remain static for all the years of the service
3. Salary should be base to value an employee because there is no rationality in fixing the salary.
4. A person may like to work at a salary lower than what he actually deserves.
5. An employee may leave organization for reasons other than death or retirement, thus leading to overstatement of employee's expected service life and his future earnings.
6. The method does not take into account the changes in the career of an employee due to education, training, promotion, etc.
7. It also ignores considerations as seniority, bargaining capacity, skill, experience, etc., which may result in the payment of higher or lower salaries.

18.8.2.2 Reward Valuation Model

Considering the defects of Lev and Schwartz model, Flamholtz suggests this method which takes into consideration the possibility and probability of employee's movement from one role to another in his career and of his leaving the firm earlier than his retirement or death. The following are the steps involved under the method:

1. An employee's exclusive set of 'service states' is defined and the value of each service state is also determined. The value could be the income expected to be received by the employee or value of service rendered to the firm.
2. The probable period which a person will occupy each possible service state in future in the organization is determined.
3. The expected future earnings for each service state is determined by multiplying the value of each service state multiplied by the period of possible service in each state.
4. The expected future earnings thus arrived at are discounted at an appropriate rate to find the present value of human resources.
5. Value so arrived at is recorded in the balance sheet on both sides as 'human assets' and 'human capital' respectively.

The method suffers from all the limitations of Lev and Schwartz Model. It is very difficult to obtain the possible 'service states' and the length of each 'service state.' Further the method does not define clearly the value of an employee.

18.8.2.3 Adjusted Discounted Future Wages Model

The model was developed by Roger H Hermanson. Under the model the value o HR is the product of present value of employees' future earnings and efficiency ratio. The present value of employees' future earnings is determined taking into account the future wage payments over the next five years discounted at the rate of return of owned assets in the economy for the most recent year. The efficiency ratio is calculated by dividing the firm's average rate of return by the average rate of return of all the firms in the economy. Symbolically:

Therefore, value of HR = Present Value of Future Earnings X Efficiency Ratio

The method has the following limitations:

1. The model considers only five years' of service lie of employees
2. The model is based on unrealistic assumption of average of rate of return of owned assets in the economy which is difficult to compute.
3. Efficiency ratio is based on illogical approach

18.8.2.4 Unpurchased Goodwill Method

The model has been suggested by Roger H Hermanson only. The method is simple and is based on the traditional method of estimating goodwill using the super profits method. A firm's super profits or excess earnings are computed considering its actual earnings and normal earnings. The excess earnings are capitalized at normal rate of return earned all firms in an industry to compute the value of HR. the basic idea of the method is that a firm earns its excess earnings due to the efficiency, extra work and superior qualities of its employees. It becomes very difficult to accept this particular logic because besides HR other intangible assets might also contribute to the excess earnings of the firm. Such other intangible assets include brands, copy rights, trade marks, customers' lists, patents, etc. a due consideration should be given even to these assets.

18.8.2.5 Human Assets Multiplier Method

A variation of the Present Value Method suggested in the Human Assets Multiplier Method. To avoid complicated calculations of the present value method, the present salary is directly multiplied by a factor called as 'Human Assets Multiplier.' A multiple is given to job grading and to the person individually and is applied to the remuneration received by each to arrive at an asset value for the balance sheet. The multipliers are determined rather arbitrarily based on the importance of the person/grade (more important the grade/person, the higher the multiplier). The total arrived at is the value o the HR.

18.8.2.6 Economic Value Method

The method has been suggested by Brummet, Flamholtz and Pyle. The method is based on the philosophy that the value of HR is that part of total economic value of a firm which is contributed by its HR without deducting the remuneration paid to HR. the economic value of a firm is ascertained by capitalizing its future earnings by a rate of return which suitably reflects the rate of return earned in the industry. The present value of physical resources used in earning the profits of the firm are deducted to arrive at the value of HR.

The method looks almost similar to all other methods explained above and suffers from similar limitations. It is difficult to determine the future earnings of a firm in the first instance. Secondly, it is difficult to determine the normal rate of return. Thirdly, the physical assets may be difficult to estimate in all cases.

18.8.2.7 Net Benefit Method and Certainty Equivalent Net Benefit Method

Another variation of the economic value method that has been suggested by Morse and Pekin Ogan is that instead of taking the total future services, net benefits from the services rendered should be considered to calculate the value of HR.

The Net Benefit Method has been suggested by Morse. He says that the value of HR will be equal to the present value of the gross value of services to be rendered in future by human beings both in an individual capacity as well as collective capacity minus the present value of future payments (direct and indirect) to human beings.

Pekin Ogan has further expanded the Morse idea. According to him the certainty with which the net benefits in future will accrue should also be taken into account. The method involves:

1. The net benefits from each employee are ascertained
2. Certainty factor for getting these benefits is estimated
3. Certainty Equivalent Net Benefit of each employee is estimated by multiplying the net benefits by the certainty factor.
4. The Certainty Equivalent Net Benefit of employees is computed by aggregating the certainty equivalent net benefit of each employee.
5. The value HR is the discounted value of the sum of certainty equivalent net benefits of all the employees.

The method has several practical difficulties in its application. It is very difficult to estimate the net benefits of each employee because of reasons like service period, etc. it is also difficult to estimate certainty factor in the method suggested by Pekin Ogan.

18.8.2.8 Residual Income Concept

This method has been proposed by Kenneth Sinclair. Its main purpose has been to suggest, how human resource accounting can help in decision making by the use of residual income concept. The method of valuation of HR suggested under this method is the same as suggested under the acquisition cost method, but for decision-making it has been suggested to use the residual income arrived at after deducting a capital charge based on total assets (human and non-human) from the total income from operations.

18.8.2.9 Statistical Based Methods

Under the statistical based methods of human beings, no accounting is involved except that they give a descriptive information about human resources. Many companies in India and abroad are stating information in this manner.

18. 9 CHECK YOUR PROGRESS

1. Human Resource Accounting involves:
   a. Recognition of HR attributes
   b. Determination of HR Value
   c. Reporting of HR Value
   d. All of the above
2. HR information helps in:
   a. Identifying the worth of an employee
   b. Suspending the indisciplined employee
   c. Recruiting the new workers
   d. None of these
3. Under present value of earnings method, value is determined taking:
   a. Employee age
   b. Employee's past service
   c. Employee's remaining service
   d. None of these
4. Certainty Equivalent Net Benefit Method was suggested by
   a. Baruch Lev
   b. Flamholtz
   c. Morse
   d. Pekin Organ

Answers to Check your progress: 1 (c), 2 (a), 3 (c), 4 (d).

18.10 SUMMARY

HR is viewed as resource of all resources and remaining resources are unproductive without the application of this resource. Therefore, proper valuation and accounting of this resource is sine quo non for the long run operation of any firm. Financial statements which fail to recognize the value of HR fail to provide a true and fair view of the firm. Besides improving the quality of financial information the HR valuation and accounting would also help managerial personnel and others associated with the firm in their decision-making process.

However, there are no simple methods of valuation and accounting for HR. each method has its own merits and demerits. Some of the methods are too simplistic in nature and some are highly complex and difficult to implement. The assumptions of the most of the methods seem to be unrealistic. Therefore, a comprehensive model which recognizes good of every method is needed. However, such method might be difficult to implement.

A separate accounting standard might be needed to address all the issues associated with HRA. Business entities should be encouraged to reveal information relating to HR as part of directors or chairman's report or as a part of governance reports. Presently companies provide only lip sympathy to the contribution of HR to the total value of firm. A segregation of that into different parts would add value to the users of financial statements.

18.11 KEY WORDS

Accounting	–	An information system designed to serve decision-making process of users
Human Resource	–	Employees expected to contribute to the value of organization
Replacement Cost	–	Cost incurred to replace existing asset by new asset
Service State	–	A particular official position of an employee in an organization which he holds for a particular organization
Economic Value	–	Value of Earnings of the firm capitalized at a normal rate of return

18.12 QUESTIONS FOR SELF-STUDY

1. Define human resource accounting. State the objectives.
2. What is the rationale behind the HRA? Explain
3. Describe the arguments for and against the human resource valuation and accounting.
4. Differentiate between human resource valuation and HRA.
5. Describe different methods of valuation of human resources.
6. Explain cost methods of valuation of human resources.
7. What is meant by prevent value of earnings? Explain its limitation.
8. What is the difference between acquisition cost and replacement cost methods of valuation of HR?
9. Explain reward valuation model.
10. What is meant by human assets multiplier? How is it useful in valuation of HR?

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UNIT – 19 : RESPONSIBILITY ACCOUNTING

Structure

19.1 OBJECTIVES:

After reading this Unit, you will be able to:

1. Define the term responsibility accounting
2. Explain the objectives and significance of responsibility accounting
3. Mention the differences between various responsibility centres
4. Describe the prerequisites of responsibility accounting
5. Identify the steps involved in the implementation of responsibility accounting.

19.2 INTRODUCTION

Control of business organizations has to be effective. It is effective if only the business as a whole is controlled. That may not be always. Large organizations are relatively difficult to control. The control becomes only peripheral. It is only in aggregate. Sometimes bigger weaknesses might be overlooked while small weaknesses might be overemphasized. To improve the ability of managerial control over activities, business organizations, especially larger organizations, are being organized into smaller units. These smaller divisions are known as responsibility centres or divisions or sections or as segments. Each of these divisions is entrusted to a manager who is responsible for the overall performance of the division or section. The traditional financial accounting, which is aggregate in nature for the whole of the business unit, is less useful in appraising the performance of the centre or division. To overcome the limitations of the traditional accounting, a new system of accounting was designed aimed at recording and reporting on divisional basis. The system is known as responsibility accounting.

19.3 MEANING AND DEFINITION OF RESPONSIBILITY ACCOUNTING

It is a process of recording and reporting by responsibility centres. It is a system of disaggregating the aggregated information by department-wise or section-wise. It refers to the various concepts and tools used by managerial accountants to measure the performance of people and departments in order to ensure that the achievement of the goals set by the top management. Therefore, it represents a method of measuring the performances of various divisions of an organization. Charles T Horngren defines RA 'as a system o accounting that recognizes various responsibility centres throughout the organization and reflects the plans and actions of each of these centres and assigning particular revenues and costs to the person having the pertinent responsibility.' Kohler defines RA 'as a method of accounting in which costs are identified with persons assumed to be capable of controlling them rather than with products or functions.' According to Chartered Institute of Management Accountant (ICMA), London 'RA is system of management accounting under which accountability is established according to the responsibility delegated to various levels of management and management information and reporting system instituted to give adequate feedback in terms of terms of the delegated responsibility.

19.4 PRINCIPLES OF RESPONSIBILITY ACCOUNTING

RA follows the basic principles of any system of cost control like budgetary control and standard costing. It differs only in the sense that it lays emphasis on human beings and fixes responsibility for individuals. It is based on the belief that control can be exercised by human beings; so responsibilities should also be fixed for individuals. Principles of RA are as follows:

a) A target is fixed for each responsibility centre

b) Actual performance is compared with the target

c) The variances from the budgeted plan are analyzed so as to fix the responsibility on the responsibility centre

d) Corrective action is taken by the higher management and is communicated to the responsibility centre; i.e., individual responsible.

e) All apportioned costs and policy costs are excluded in determining the responsibility or costs.

19.5 PREREQUISITES FOR RESPONSIBILITY ACCOUNTING

The system of RA, for its introduction, has certain minimum requirements. They are:

1. Responsibility centres within the organization are identified
2. The area of responsibility and authority for each centre should be well defined (usually by the organization chart);
3. Each responsibility centre should have a clear set of goals for the manager;
4. Controllable and non-controllable activities at various levels of responsibility centre are identified.
5. Accounting system to accumulate information by areas of responsibility is specified.

6. Only the revenues, expenses, profits and investments that are controllable by the managers of a responsibility centre should be included in the performance report for that centre;

7. Performance reports for each responsibility centre should be prepared highlighting variances, the items requiring management's attention;

8. The manager of each responsibility centre should participate in establishing the goals that are going to be used to measure their performance.

19.6 TYPES OF RESPONSIBILITY CENTRES

One of the pre-requisites for the successful implementation of RA is establishment of responsibility centre. The organization must be clearly segmented into a suitable number of centres depending upon the requirement. A responsibility centre is a personalized group of cost centre or others under the control of a responsible individual. The accounting generates information on the basis of managerial responsibility, allowing that information to be used directly in motivating and controlling each manager's actions in-charge of responsibility centre. The responsibility centres are classified into:

- Cost Centre
- Revenue Centre
- Profit Centre
- Investment Centre

19.6.1 Cost Centre

A section of an organization where in a manager is accountable only for the cost incurred in his centre. The manager's responsibility is restricted to controllable cost of his section or centre. Cost centre is a location, function or items of equipment in respect of which costs may be ascertained and related to cost units for control purpose. CIMA defines cost centre as 'a production or service, function activity or item of equipment whose costs may be attributed to cost units.' From functional point of view, a cost centre may be of any of the following:

Production Cost Centre – A cost centre where production is done, e.g., assembly department, finishing department, etc.

Service Cost Centre - A cost centre which render services to production centres, e.g., personnel accounting, repair shop,, boiler plant, etc.

Ancillary Manufacturing Centres such as those concerned with producing packing materials, etc.

19.6.2 Revenue Centre

A section or segment of the organization where a manager is responsible only for the revenues and not responsible for the costs of goods or services that the centre sells. The sales department in an organization is a best example of revenue centre where the marketing manager's performance is evaluated in terms of revenue items, like selling price, units sold, value of sales, area covered, type of customers covered, etc.

19.6.3 Profit Centre

A broader concept of responsibility centre where the responsibility of the manager extends to both costs incurred in his or her centre as well as the revenue generated. The manager's performance is evaluated in terms of amount of profit generated for a particular period and profit is taken to be the difference between the revenues earned and cost incurred. The manger should be sufficiently be authorized within the company to make decisions about selling prices and output levels at those prices. A profit centre's performance report measured in absolute terms would show profit on the bottom line. If a share of head office overheads is charged to the profit centre, these non-controllable costs should be shown separately and kept distinct from directly attributable costs.

A profit centre could be a business centre, business unit or a strategic business unit depending upon the concept of management responsibility prevailing in the entity concerned. A profit centre is an independent business unit or division. As for example in a multi-business entity each product or service might be earmarked as a separate business unit expecting manager to be responsible for revenues and cost of his unit. The revenues might come from external sales of goods or services or from internal work done for other profit centres, for which a notional selling price (transfer price) can be charged. The internal sale is revenue to one profit centre and a cost to the 'buying' profit centre. A profit centre may sell its output to another responsibility centre as a case of outside sale. A responsibility centre can be turned into a profit centre by determining a selling price for its output since profit is a better measure of one's accomplishment. A profit manager is motivated to make decisions about inputs and outputs that increase profit of his centre. The profit manager is allowed to take his own decisions which provide an opportunity to learn and to assume higher responsibilities independently.

Advantages of profit centre

Profit centres may be suitable for a decentralized organization where:

a) Divisions have access to markets both for suppliers and customers

b) Inter-divisional business is not too important

c) Divisional managers are allowed considerable independence

If these conditions are not satisfied, it becomes very difficult to judge whether profit centres are beneficial or not. In general, the following are the advantages of profit centres:

- Motivates managers to perform well in areas they control
- Encourages initiative
- Uses divisional managers' specialized market knowledge
- Gives local managers responsibility for making trade-offs
- Emphasis on 'bottom line' spotlights poor performance anywhere
- Permits management by exception
- Frees top management's time and energy for other tasks
- Helps in training future managers

Some possible disadvantages of treating divisions as profit centres are:

- Confuses division's results with manager's performance
- Over-emphasizes on short-term results
- Risks, mistakes by divisional managers which top managers might avoid
- Underutilizes corporate competence
- Duplicate staff activities
- Difficult to identify suitable profit centres
- Hard to arrange for goal congruence
- Complicated by transfer price problems

19.6.4 INVESTMENT CENTRE

This is the responsibility centre of a highest order where a manager is responsible for cost, revenues, profit and return on investment. Such a form of responsibility centre approach is followed if the manager is authorized to decide on the level of investment in his division or unit. If capital budgeting and working capital investment decisions are decided at the divisional level the investment centre form of establishing responsibility centre becomes useful.

Managers of subsidiary companies will often be treated as investment centre managers, accountable for profits and capital employed. Within each subsidiary, the major divisions might be treated as profit centres, with each divisional manager having the authority to decide the prices and output volumes for the products or services of the division. Within each division, there will be departmental managers. All managers should receive regular, periodic performance reports for their own areas of responsibility.

The performance of the investment centre is not measured by the absolute of profit earned but the related amount of profit. Such a measure is known as 'Return on Investment (ROI).' There are many variants of ROI which can be employed. Some such useful measures are:

- Return on Equity
- Return on Capital Employed
- Return on Total Assets

The actual measure depends upon the relative freedom of the manager. If manager has no authority to borrow and all borrowings are done at the corporate level then the return on equity measure could be employed. If a manager has an authority only on long-term basis the return on capital employed measure could be used. On the other hand, if the corporate delegates enough power for the divisional managers to borrow both on short-term and long-term basis, the return on total assets measure could be employed.

Table given below reconciles the different forms of divisionalization or of establishment of responsibility centres:

Type of responsibility centre	Manager's Control	Principal Performance Measure Used
Cost Centre	Over only Controllable Costs	Budgets, Standard Costing Variance Analysis, Various Efficiency Ratios
Revenue Centre	Over Revenues Generated	Market Share, Number of Areas or Customers Covered, Selling Price Recovered, Sales Variances Measures, etc
Profit Centre	Extends to costs, revenues and profit	Amount of profit reported
Investment Centre	Extends to costs (controllable), sales prices (including transfer prices), output volumes, investment in fixed and current assets	Return on Investment measures like return on equity, return on capital employed, etc. Profit variances can also be used

19.7 IMPLEMENTATION OF RESPONSIBILITY ACCOUNTING

RA is a way of managing modern, multi-business and complex form of business organizations. It frees top management from many mundane activities and authorizes or delegates the power to take decisions at the divisional or centre level. However, the system can provide benefits provided certain minimum conditions are taken care while implementing the RA.Some of the basic requirements are:

- The organizational structure must be clearly defined, and responsibility delegated so that each person knows his role
- The extent and limits of functional control must be determined
- The responsible individuals should be fully involved in repairing plans if they are to be held responsible for results
- Responsible individuals must be serviced with regular performance reports
- Means must be established to enable plans to be revised in line with actual performance in such a way that responsible individuals are involved
- Every item should be the responsibility of some individual within the organization.

19.8 BENEFITS OF RESPONSIBILITY ACCOUNTING

There are many benefits to flow from the implementation of responsibility accounting. Some of the important benefits are:

1. It contributes to the firm's management by providing relevant information on a continuous basis
2. It is the only way of managing the more complex and decentralized business organizations
3. It compels management to set realistic plans and budgets and improves the rate of success at the divisional level
4. The system facilitates the delegation of decision making authority to lower managers and helps in grooming to assume more important responsibilities in future. In other words, a firm will be grooming the potential business leaders internally with the responsibility centres.
5. It frees the top management time and helps in using the principle of management by exception
6. It provides a system of closer control
7. It measures the performance of individuals in an objective manner
8. It creates a sense of cost consciousness among managers and their subordinates

19.9 DEMERITS OF RESPONSIBILITY ACCOUNTING

Though RA can be very useful method of managing modern multi-product organizations, it can create problems to the top management. The system has its own pre-requisites. If they are not properly taken care while implementing, the system can produce more demerits than the merits. Some of the important disadvantages of RA are:

1. It increases the cost of management or administration as many new responsibilities are created.
2. It might create information overload for top management and may lead to ignoring some important points of divisions.
3. A sense of independence might be created amongst divisional managers leading to fierce competition. Each divisional manager may overemphasize his own division or centre at the cost of business interest.

4. It might encourage deceptive accounting, budgeting and reporting. The top management may guard against all these by conducting frequent audits, visits, investigations, etc.
5. Difficulties may surface regarding the choice of suitable performance measure. Use of one measure may be resented by the divisional heads.
6. The entire accounting system has to undergo a change leading to the complex accounting framework.
7. The top management may have to handle issues relating to inter-divisional transfer prices, difficulties, etc.
8. Setting a suitable transfer price and related tax issues may complicate the system.

19.10 RESPONSIBILITY REPORTING

Responsibility Accounting requires a very sound, effective and comprehensive responsibility reporting. Responsibility reporting is an accounting and management reporting system directed towards controlling costs according to responsibility centres. It involves defining and grouping of responsibilities within an organization structure, determination and assignment of costs to appropriate levels of activities and strong emphasis on controllability. The following points should be kept in mind in preparation of an ideal responsibility report:

- The report should include costs incurred for a particular responsibility centre
- Costs incurred should be distinguished into controllable costs and non-controllable costs depending upon the controllability relating to the concerned responsibility centre
- Common or joint costs pertaining to various responsibility centres should be allocated to responsibility centre on suitable basis so that the allocated costs represent the responsibility of the concerned responsibility centre
- Variance should be highlighted between costs incurred and budgeted costs for the purpose of comparison and to take remedial measures for adverse variance.

19.11 CHECK YOUR PROGRESS

1. Responsibility accounting is a form of:

   a. Management control

   b. Financial control

c. Grouping Business

d. All of the above

2. The highest form of responsibility centre is:

a. Cost centre

b. Revenue centre

c. Profit centre

d. Investment centre

3. Return on investment is a better measure of evaluation for:

a. Investment centre

b. Cost centre

c. Profit centre

d. None of these

4. A responsibility centre where manager is responsible for setting prices of the product sold by him is known as:

a. Profit centre

b. Revenue centre

c. Investment centre

d. All of the above

5. Controllable cost at the divisional is:

a. Variable cost

b. Share in common cost

c. Divisional manager's salary

d. None of these

Answers to Check Your Progress: 1 (d), 2 (d), 3 (a), 4 (d) and 5 (a).

19.11 SUMMARY

RA is an outgrowth of growing complexities of modern businesses involved in manufacture and sale of several products or group companies. The system enables a business to be managed more effectively by establishing separate divisions or centres and entrusting the management to each responsible manager. The divisional manager is held accountable for the performance of his or her division depending upon the type of divisions created by the management. However, the system works well only when its requirements are taken care by the management. A sound organizational structure and reporting framework is required to ensure the benefits of RA. Further, the top management has to devote time and energy in reviewing the reports generated by the RA for its effectiveness.

19.12 KEY WORDS

Responsibility Centre	-	A section of an organization created for management control purpose
Report	–	A feedback received from divisional head regarding the performance of the unit
Exception	–	A principle where management is undisturbed for day to day activities
Cost	–	Amount of Expenses incurred in manufacturing a product or rendering a service
Investment	–	Amount invested in fixed assets or current assets of the business unit

19.13 QUESTIONS FOR SELF-STUDY

1. What is responsibility accounting? State its objectives
2. Describe various responsibilities centres created under responsibility accounting.
3. What is an investment centre? Explain its advantages over other centres.
4. Give meaning of profit centre. Explain merits and demerits of profit centre.
5. What is revenue centre? What are its characteristics?
6. Explain the pre-requisites involved in the implementation of responsibility accounting.
7. Describe the steps involved in implementing responsibility accounting.
8. What is responsibility reporting? Explain its merits.
9. Describe the merits and demerits of responsibility accounting
10. State the different measures used in evaluating the performance of responsibility centres.

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UNIT – 20 : FORENSIC ACCOUNTING

Structure

20.1 Objectives

20.2 Introduction

20.3 Meaning and Definition of Forensic Accounting

20.3.1 Forensic Accounting v/s Financial Audit

20.4 Principal Duties of a Forensic Accountant

20.4.1 Specific Assistance in Investigative Accounting and Litigation Support

20.5 Why Engage a Forensic Accountant?

20.6 Key Benefits of Using Forensic Accountants

20.7 Areas covered by Forensic Accounting

20.8 Approaches to a Forensic Investigation

20.9 Common Accounting Fraud Areas

20.10 Forensic Accounting in India

20.11 Check Your Progress

20.12 Summary

20.13 Key Words

20.14 Questions for Self-Test

20.15 References

20.1 OBJECTIVES

After reading this unit, you will be able to:

1. Define the term forensic accounting
2. Explain reasons for the growth of forensic accounting
3. Describe the role of forensic accountant
4. Mention the qualifications required to become forensic accountant
5. Identify the progress of forensic accountant
6. Describe the regulatory framework of forensic accounting.

20.2 INTRODUCTION

There is increasing number of corporate financial frauds in recent years. These frauds are ubiquitous, i.e., occurring in almost all countries and in all times, though America has recorded more cases of accounting frauds. Enron, WorldCom, Tyco, Global Crossing, Xerox, Quest Communication, Dynergy Inc, Credit Suisse, Adelphia Communications, etc., are some of the companies involved in accounting irregularities in US. US had to enact a separate law to deal with the situation, namely, Sarbanes-Oxley Act, 2000. Even after that also the instances of accounting frauds are unabated. New jargons are used to describe all these developments in accounting as 'Creative Accounting, Earnings Management, Window Dressing, Big Bath Accounting, Fudging Accounting Numbers, Cooking Book Profits, Aggressive Accounting, Cosmetic Accounting, Financial Engineering, etc., In India Satyam Computers case is fresh in the minds of investors. The uncontrolled occurrences of accounting scams erode the confidence of investors in the financial reports as well as in the working of corporate entities. It can stunt the growth of industrial activity and economy. The investment and saving climate might get vitiated. Hence, there is a need to control all round deterioration of accounting quality. One such measure employed in practice is 'Forensic Accounting (FA).

20.3 MEANING AND DEFINITION OF FORENSIC ACCOUNTING

FA is an application of forensic science methodology to the detection of accounting crimes. The need for forensic science is simply on account of the fact that the modern accounting crimes, which are known as 'white collar crimes' are committed by ingenious people employing ingenious or clever methods which bare eyes cannot detect. The accounting crimes of highest order need more investigative skills and craft which traditional accountant through audit or internal checks and balances might not be able to detect. The world of criminology and forensic science posses all wherewithal which can be applied to identify and investigate accounting frauds. Thus, the combination of accounting, auditing and forensic science principles to the detection and investigation of accounting frauds is known as Forensic Accounting (FA). Investopedia defines FA as utilizing accounting, auditing and investigative skills to conduct an examination into a company's financial statements.

FA is also known as Forensic Accountancy, Financial Forensics, Forensic Audit, Investigating Accounting, etc. Forensic, according to the Webster's Dictionary means, "belonging to, used in or suitable to courts of judicature or to public discussion and debate." AICPA defines FA as 'the application of accounting principles, theories and discipline to fact or hypotheses at issues in a legal dispute and encompasses every branch of accounting knowledge.' George A Manning, in his book "Financial Investigation and Forensic Accounting" defines the term as 'the science of gathering and presenting financial information in a form that will be accepted by a court of jurisprudence against the perpetrators of economic crimes.' FA provides an accounting analysis that is suitable to the court which will form the basis for discussion, debate and ultimately dispute resolution. FA utilize an understanding of economic theories, business information, financial reporting systems, accounting and auditing standards and procedures, data management and electronic discovery, data analysis techniques for fraud detection, evidence gathering and investigative techniques and litigation processes and procedures to perform their work.

20.3.1 Forensic Accounting v/s Financial Audit

In many quarters, forensic accounting is equated to financial audit but they are miles apart. Forensic accounting is usually described as the integration of accounting and auditing skills with investigative techniques and professional skepticism. Alan Zysman, a noted forensic accountant since 1987, states, FA provides an accounting analysis that is suitable to the court which will form the basis for discussion, debate and ultimately dispute resolution (Hecht and Redmond, 2012). One area of similarity is the provision in Auditing Standards that require an auditor to approach his assignment with 'professional skepticism' which requires auditors to adopt a questioning mind and a critical assessment of audit evidence in assessing audit risk of fraud (Ojo, 2012). The other important differences between FA and traditional or financial auditing are:

- It is not an assurance engagement.
- The scope is not an error identification or prevention.

- Provides conclusions on a subject matter, which is always related to fraud.
- The use of materiality may not be appropriate.
- The quality of documentation could tend to be conclusive rather than persuasive (e.g. interviews are very close to testimonies).
- Evidence gathering procedures and audit tests.
- The application of sampling may be inappropriate.
- The type of the report is not standardized and always tailored to subject matter and the type of fraud.
- Forensic Accountants do not apply professional standards on auditing.

Objective verification is the primary goal of FA. For this reason, many forensic accountants are asked to testify in court cases as expert witnesses for either the prosecution or the defense. It can be said therefore that FA is not limited to fraud detection but also assisting in litigations with the hope of recovering any losses, hence a forensic accountant assignment must be of such a quality that it can withstand scrutiny by attorneys, judges and juries. On the other hand a forensic accountant may be asked to calculate economic damages that occurred as a result of a breach of contract or provide insight into a case based on a claim of professional negligence. Also, FA is considered to be a mechanism for global war against money laundering, terrorism financing, as well as other fraudulent and social vices that have impeded the nation's march to development (Oguma, 2011)

FA in its present state can be broadly classified into two categories encompassing litigation support and investigative accounting. These two major categories form the core around which other support services, which traditionally come within the sphere of investigative services, revolve - including corporate intelligence and fraud investigation services. However, it would also be remiss not to define what encompasses litigation support and investigative accounting.

Litigation support **-** is the provision of assistance of an accounting nature in a matter involving existing or pending litigation. It is primarily focused on issues relating to the quantification of economic damages, which means a typical litigation support assignment would involve calculating the economic loss or damage resulting from a breach of contract. However, it also extends to other areas involving valuations, tracing assets, revenue recovery, accounting reconstruction and financial analysis, to name a few. Litigation support also works closely with lawyers in matters involving, but not limited to, contract disputes, insolvency litigation, insurance claims, royalty audits, shareholders disputes and intellectual property claims.

Investigative accounting - in contrast, investigative accounting is concerned with investigations of a criminal nature. A typical investigative accounting assignment could be one involving employee fraud, securities fraud, insurance fraud, kickbacks and advance fee frauds. No doubt in many assignments, both litigation support and investigative accounting services are required. In many cases, the combination of these services will not be adequate to address the problem unless there is in place an effective programme for fraud risk management and control. Creating an ethical work environment with a vigorous anti-fraud culture, implemented seriously by senior management through the promotion of a clear anti-fraud policy, is the only viable option if management is serious about preventing or reducing the recurrence of corporate fraud in its various guises.

20.4 PRINCIPAL DUTIES OF A FORENSIC ACCOUNTANT

What do forensic accountant do? Simply put, a forensic accountant's primary duty is to analyse, interpret, summarise and present complex financial- and business-related issues in a manner that is both understandable by the layman and properly supported by the evidence. Forensic accountants are engaged by both government and private agencies cutting across industries ranging from insurance companies, banks, police forces, regulatory agencies and other financial and business organisations. The services rendered by forensic accountants cover a wide spectrum of which the following are commonly provided:

- Investigation and analysis of financial evidence;
- Development of computerized applications to assist in the analysis and presentation of financial evidence;
- Communication of findings in the form of reports, exhibits and collections of documents; and
- Assistance in legal proceedings, including testifying in court as expert witness and preparing visual aids to support trial evidence.

To properly carry out these functions, the forensic accountant must also be familiar with legal concepts and procedures, including the ability to differentiate between substance and form when grappling with any issue.

To be successful as a forensic accounting professional, one must be detail oriented, persistent, ambitious, and highly organized. FA also requires a great deal of creativity, since you must often explain complex financial concepts to an audience that lacks basic accounting knowledge. It is not surprising that the American agency, the Federal Bureau of Investigation (FBI) confirmed that 'one key element was the creation of a standardized, professional investigative support position known as the forensic accountant in 2009'. The forensic accountant at FBI conducts the financial investigative portion of complex cases across a wide variety of Bureau programmes including investigating terrorists, spices, and criminals of all kinds who are involved in financial wrongdoings. The agency went ahead to list the responsibilities of forensic accountants to include (Mukoro, 2013):

- Conducting thorough forensic financial analysis of business and personal records and developing financial profiles of individuals or groups identified as participating in suspicious or illegal activity;
- Participating in gathering evidence and preparing search warrants/affidavits associated with financial analysis;
- Accompanying case agents on interviews of subjects and key witnesses in secure and non-confrontational settings;
- Identifying and tracing funding sources and interrelated transactions;
- Compiling findings and conclusions into financial investigative reports; and
- Meeting with prosecuting attorneys to discuss strategies and other litigation support functions and testifying when needed as fact or expert witnesses in judicial proceedings.

20.4.1Specific Assistance in Investigative Accounting and Litigation Support

The forensic accountant can provide more specific assistance in the following ways.

Investigative accounting

- Reviewing the factual situation and providing suggestions on alternative course of action.
- Assisting in the preservation, protection and recovery of assets.
- Co-ordinating with other experts, including private investigators, expert document examiners, consulting engineers and other industry specialists.
- Assisting in the tracing and recovery of assets through civil, criminal and other administrative or statutory proceedings.

Litigation support

- Assisting in securing documentation necessary to support or rebut a claim.
- Reviewing relevant documentation to provide a preliminary assessment of the case and identify potential areas of loss and recovery.
- Assisting in the examination and discovery process, including the formulation of relevant questions regarding financial evidence.
- Attending to the examination and discovery process to review the testimony, assisting with understanding the financial issues and formulating additional questions for counsel.
- Reviewing the opposing expert's reports on damages and the strengths and weaknesses of the positions taken.
- Assisting in settlement meetings and negotiations.
- Attending the trial to hear testimony of opposing experts and assisting in the cross-examination process.

20.5 WHY ENGAGE A FORENSIC ACCOUNTANT?

A logical question to pose is why bring in a forensic accountant and his team when the organization's internal auditor and management team can handle the situation which can range from a simple employee fraud to a more complex situation involving management itself? The answer would be obvious when management itself is involved and the fallout to the discovery of the fraud leads to low employee morale, adverse public opinion and perception of the company's image and organizational disarray generally. Engaging an external party can have distinct advantages from conducting an internal investigation.

20.6 KEY BENEFITS OF USING FORENSIC ACCOUNTANTS

♦ ***Objectivity and credibility*** **-** there is little doubt that an external party would be far more independent and objective than an internal auditor or company accountant who ultimately reports to management on his findings. An established firm of forensic accountants and its team would also have credibility stemming from the firm's reputation, network and track record.

♦ ***Accounting expertise and industry knowledge*** **-** an external forensic accountant would add to the organisation's investigation team with breadth and depth of experience and deep industry expertise in handling frauds of the nature encountered by the organisation.

· ***Provision of valuable manpower resources*** **-** an organisation in the midst of reorganisation and restructuring following a major fraud would hardly have the full-time resources to handle a broad-based exhaustive investigation. The forensic accountant and his team of assistants would provide the much needed experienced resources, thereby freeing the organisation's staff for other more immediate management demands. This is all the more critical when the nature of the fraud calls for management to move quickly to contain the problem and when resources cannot be mobilised in time.

· ***Enhanced effectiveness and efficiency*** **-** this arises from the additional dimension and depth which experienced individuals in fraud investigation bring with them to focus on the issues at hand. Such individuals are specialists in rooting out fraud and would recognise transactions normally passed over by the organisation's accountants or auditors.

20.7 AREAS COVERED BY FORENSIC ACCOUNTING

What is the scope of FA? It can be said here that the scope of FA is unlimited. Any kind of fraud involving financial implications or economic losses could be brought within the purview of FA. The area may pertain to finance department, marketing HR, production, purchase or engineering. The fraud to be investigated might have occurred either at the top level of management or at the bottom level. It could be unrestricted in terms of private enterprises, public enterprises or cooperative organizations. Generally, the FA is investigative in nature in nature, its scope could be restricted to malfeasance already occurred than to about to occur. Of course, FA could deter people from doing frauds in future. The following areas have been identified as the scope of FA (Ajay Kamal, 2011):

1. Certain engagement related to civil disputes viz., disagreements related to company acquisitions like business valuation, calculating and quantifying losses and economic damages through breach o contracts

2. Shareholders and partnership disputes involving detailed analysis of numerous years accounting records to quantify the issues in dispute.

3. Cyber crimes like credit frauds, ATM card frauds, cyber extortion, cyber stalking, phishing i.e., sending unsolicited e-mails and collection of sensitive information by simple techniques.

4. Forensic accounting also deals with areas of professional negligence claims

involving assessment and reporting on work of other professionals. This involves investigating whether the breach is generally agreed accounting and/or auditing principles has occurred.

5. Engagement involving criminal matters, involving assessment of accounting systems and account presentation, where forensic accountants are hired by the law enforcement agencies.
6. Business investigations involving fund tracing, asset identifications and recovery, forensic intelligence gathering and due diligence reviews.
7. Employee fraud investigations involving procedures to determine existence, nature and extent of fraud and may involve identification of the clauses, etc.
8. Business economic losses viz., contact disputes trademark and patent infringements, losses arising from breach of non-compete clauses, etc.
9. Cases involving medical insurance claims, medical malpractices resulting in economic losses.
10. Mediation arbitration in alternative disputes resolution mechanisms due to familiarity of forensic accountants with legal issues and procedures, helping individuals and businesses resolve disputes with minimum disruption and loss of time.

20.8 APPROACHES TO A FORENSIC INVESTIGATION

What does a forensic accountant do when alerted to a fraud and instructed to proceed when appointed? The approach to forensic investigation could vary from case to case. All cases need not be similar in every respect. There are usually five areas which the forensic accountant will address in his approach towards any case:

- Focus on the who, what, when, where and how of what happened - this is vital in order to understand the whole situation that is made more complex by the lack of full documentation or other evidence. A thorough analysis and evaluation of what happened would assist in framing the issues for the forensic accountant, the management and their lawyers to consider when deciding on what steps to take.
- Consider all suspects - nobody is ruled out or beyond suspicion.
- Be on the alert for forged documents - seemingly innocuous documents or transactions may hide potential frauds or lead to more incriminating evidence.

- Conduct extensive searches of company documents and computer files for evidence of fraud - this is where the forensic accountant's team of forensic IT personnel would be indispensable in any investigation.
- Interview key company employees - formally and informally.

20.9 COMMON ACCOUNTING FRAUD AREAS

Usually in any typical fraud investigation, the forensic accountant and his team would encounter similar factual scenarios or frauds, which are not peculiar to any organisation. The more common types are illustrated in the following table:

Accounting Items	**Possible Fraud Scenarios**
Revenue Recognition	(a) Premature recognition of sales (b) Phantom sales (c) Improperly valued transactions
Reserves	(a) Bad faith estimates (b) One time charges
Inventory	(a) Over-valuation (b) Non-existent inventory
Expenses	(a) Delayed expense recognition (b) Improper capitalisation of expenses
Others	(a) Related party transactions (b) Acquisition accounting

The role of forensic accountants under contemporary conditions is very important. It stems from the need for identifying and analyzing certain causes of fraud appearance as well as the jobs and tasks that forensic accountants perform. When it comes to the need for identifying the causes of fraud appearance, the events and occurrences, whose creation makes existence of frauds evitable, should be indicated. In that sense, according to the frequency of their creation as well as their importance, the following can be identified:

- anonymous accusations delivered by mail, e-mail or telephone;
- the fact that a highly ranked manager has given notice for known or possible illegal jobs;
- company-an enterprise has been identified as a subject of investigation that a legal body performs;
- an enterprise has received a summons from a court or regular agency;

- an auditor believes that he/she has deliberately been deceived by verbal information received from an enterprise or that demanded documents have been amended or their delivery has failed;
- the revelation that the client is a subject of fraud however small it might be, even in those cases when the accused is no longer an employee;
- indications that suppliers might be fictive and indications stemming from the misrepresentation of income or expenditures as well as the recognition of sale before it has been finalized, delivery before final sale, recognition of income although there is an obligation of performing important services regarding that commodity in the future, obvious recording of nonexistent income, postponing of expenditures to future periods or recognition of expenditures of future as well as current periods (2, p. 25).

20.10 FORENSIC ACCOUNTING IN INDIA

There exists vast scope for FA in India. Since liberalization India has witnessed several scams, frauds, embezzlements, etc. Harshad Mehta Scam, Ketan Parekha Scam, Bansali Scam, UTI Scam, Vanishing Companies, failure urban cooperative banks, Satyam Scam, etc. Further, it can be said that all is not well with the published financial statements of many Indian companies. It can be said that there are many Enrons in India yet to be exploded. In spite of this growing number of accounting related frauds there are no efforts made by anybody to develop the FA discipline. Recently, a small step was taken by the Central Government as a result of Naresh Chandra Committee report on Corporate Governance by establishing 'Serious Frauds Investigation Office of India (SFIO)' in the Ministry of Corporate Affairs. The SFIO is a multidisciplinary organization having experts from financial sector, capital market, accountancy, forensic audit, taxation, law, information technology, company law, customs and investigation. These experts have been taken from various organizations like banks, SEBI, CAG and concerned organizations and departments of the department. The Indian Laws which refers to FA are (Neeraj Arora)

1. Companies Act, 1956

a. Section 235 and 237 – These are provisions in the Act which empowers the Central Government to inspect the books of accounts of a company, to direct special audit, to order investigation into the affairs of a company and to launch prosecution for violation of the Companies Act. Books of accounts and other documents are inspected by the officers of the Directorate of Inspection and Investigation and Registrar of Companies.

b. Provisions of Sick Industrial Companies Act incorporated into the Companies Act, 1956 – Section 424A (5) of the Companies Act, 1956 empowers the National Company Law Tribunal (NCLT) to examine as preliminary issue whether the company is a sick industrial company under section 2 (46AA). Thus, even before examining the viability of the scheme prepared by the company for the revival the NCLT can check the genuineness of the reference made to it. Further, Sec 424B of the Companies Act, 1956 empowers the tribunal to make such inquiry as it may deem fit for determining whether any industrial company has become a sick industrial company.

2. SEBI Act, 1992.

The stock markets in India have witnessed many unfair and fraudulent trade practices in India. Regulation 11 C of the SEBI Act, 1992 empowers the SEBI to direct any person to investigate the affairs of intermediaries or brokers associated with the securities market whose transactions in securities are being dealt with in a manner detrimental to the investors or the securities market. Forensic Accountant can play a lead role in assisting the SEBI to unearth the complex share related frauds perpetrated by the brokers.

3. The Insurance Act, 1938:

Section 33of the Insurance Act empowers the IRDA to direct any person (Investigating Authority) to investigate the affairs of any insurer. The investigating authority may seek assistance of the auditor (or actuary or both) who shall be the Chartered Accountant within the meaning of Chartered Accountant Act, 1949 for the purpose of assisting him in any investigation. The books of accounts, registers and other documents are taken by the investigating authority in its custody to analyse it to find out the manipulations or fabrication in the books of accounts. Thus, Chartered Accountants play a front role as Forensic Accountants.

4. The Prevention of Money Laundering Act, 1992

Section of the Prevention of Money Laundering Act, 2002 defines the offence of money laundering as involvement of a person in any process or activity connected with the proceeds of crime and projecting it as untainted property. Forensic Accountant can often be involved in investigating and analyzing financial evidence to establish a suspicious transaction, developing computerized applications to assist in the analysis and presentation of financial evidence, etc.

5. ***The Companies (Auditor's Report) Order, 2003:***

CARO, 2003 requires the auditor to report to the effect that if a substantial part of fixed assets have been disposed off during the year, whether it has affected the going concern status. In order to carry out the duties, the auditor has to draw a corollary and reference to the Sec. 293 of Companies Act, 1956, Accounting Standards 24, etc., before making his observations on this matter. It also requires the auditor to report on frauds.

20.11 CHECK YOUR PROGRESS

1. Forensic Accounting is a work carried out by:

   a) Accountants

   b) Engineers

   c) Lawyers

   d) All of the above

2. Forensic Accounting differs from:

   a) Financial accounting

   b) Financial audit

   c) Cost accounting

   d) All of the above

3. Forensic Accountant is required to investigate:

   a) Financial frauds

   b) Financial scams

   c) Financial errors

   d) All of the above

4. Application of auditing, investigative skills and financial principles is known as:

   a) Financial audit

   b) Financial crime

   c) Forensic Accounting

   d) None of these

Answer to Check Your Progress: 1 (a), 2 (d), 3 (d), 4 (c).

20.12 SUMMARY

Accounting frauds are on the rise the world over seriously eroding the confidence of investors. Besides corporate financial statements even capital markets scams are also affecting the investors. The need for forensic accounting services are necessary to identify the financial frauds which bare eyes are difficult to detect. Forensic accounting is an application of accounting, auditing and investigative skills to detect the financial frauds and other misappropriations. The forensic accountant is expected to investigate, identify the extent of loss or damage done, find reasons and persons involved and report the same to the judiciary or other government bodies. The benefits of the forensic accountant's services have been felt everywhere and there is a growing importance of the service.

20.13 KEY WORDS

1. **Forensic** – It is a legal term which aims at assisting the judiciary in investigating a fraud
2. **Accounting** – A recording and reporting system of business transactions
3. **Audit** – An act of checking and verification of accounts of the business to establish the authenticity of accounts
4. **Fraud** – it is a deception made for personal gain

20.14 QUESTIONS FOR SELF-STUDY

1. What is forensic accounting? What are its features?
2. Differentiate between forensic accounting and financial audit.
3. Explain the basic characteristics and skills of forensic accountant.
4. Explain the steps involved in forensic accounting.
5. Write a brief note on financial fraud.
6. Explain the scope of financial accounting.
7. What are areas covered by the financial accounting?

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