

**Dr.B.R.AMBEDKAR  
OPEN UNIVERSITY**

**M B A - 5  
ACCOUNTING  
FOR  
MANAGEMENT**

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# BLOCK 1

## ACCOUNTING FRAMEWORK

This block has three units dealing with the framework of Accounting.

The first unit discusses the scope of accounting function and its emerging role in modern business. The accounting system is perceived as an information system and the needs for information of various users are explained. The scope of functions of top accounting personnel is also discussed.

Second unit deals with conceptual framework of accounting. Some widely recognised accounting concepts are explained. The need for standardising accounting practices is underscored and the role played by various accounting professional bodies in this context is highlighted.

The last unit in this block describes the purposes and uses of accounting information. It discusses specifically the uses of earnings statement and the balance sheet.

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# UNIT 1 ACCOUNTING AND ITS FUNCTIONS

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## Objectives

After studying this unit, you should be able to appreciate the:

- nature and role of accounting;
- activities and role of accountant; and
- roles of accounting personnel and the accounting function in an organisation.

## Structure

- 1.1 Introduction
- 1.2 Scope of Accounting
- 1.3 Emerging Role of Accounting
- 1.4 Accounting as an Information System
- 1.5 Role and Activities of an Accountant
- 1.6 Accounting Personnel
- 1.7 Nature of Accounting Function
- 1.8 Organisation for Accounting and Finance
- 1.9 Summary
- 1.10 Key Words
- 1.11 Self-assessment Questions/Exercises
- 1.12 Further Readings

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## 1.1 INTRODUCTION

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Accounting is often called the language of business. The basic function of any language is to serve as a means of communication. In this context, the purpose of accounting is to communicate or report the results of business operations and its various aspects. Though accounting has been variously defined, according to one commonly accepted definition, "Accounting is the art of recording, classifying and summarising in a significant manner and in terms of money, transactions and events which are, in part at least, of financial character and interpreting the results thereof". Another definition which is less restrictive interprets accounting as "the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by the users of information".

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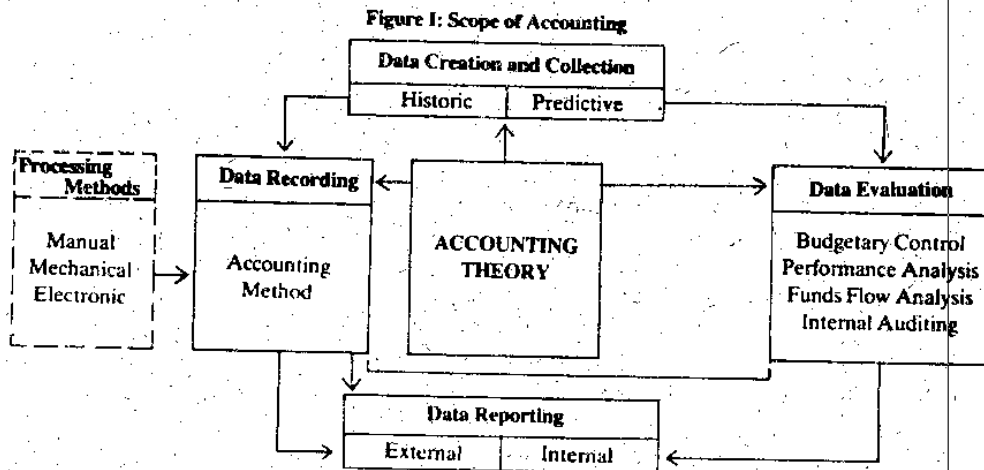
## 1.2 SCOPE OF ACCOUNTING

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Data creation and collection is the area which provides raw material for accounting. The data collected is 'historic' in the sense that it refers to events which have already taken place. Earlier, accounting was largely concerned with what had happened, rather than making any attempt to predict and prepare for future.

After the historic data has been collected, it is recorded in accordance with generally accepted accounting theory. A large number of transactions or events have to be entered in the books of original entry (journals) and ledgers in accordance with the classification scheme already decided upon. The recording and processing of information usually accounts for a substantial part of total accounting work. This type of activity of accounting may be called **recordative**. The processing method employed for recording may be manual, mechanical or electronic. Computers are also used widely in modern business for doing this job.

The scope of accounting can be presented in a diagrammatic form:



Source: Adopted from R.J. Bull, *Accounting in Business*, Butterworths, London, 1969, p.2.

Data evaluation is regarded as the most important activity in accounting these days. Evaluation of data includes controlling the activities of business with the help of budgets and standard costs (budgetary control), evaluating the performance of business, analysing the flow of funds, and analysing the accounting information for decision-making purposes by choosing among alternative courses of action.

The analytical and interpretative work of accounting may be for internal or external uses and may range from snap answers to elaborate reports produced by extensive research. Capital project analysis, financial forecasts, budgetary projections and analysis for reorganisation, take over or merger often lead to research-based reports.

Data evaluation has another dimension and this can be known as the **auditive work** which focuses on verification of transactions as entered in the books of account and authentication of financial statements. This work is done by public professional accountants. However, it has become common these days for even medium-sized organisations to engage internal auditors to keep a continuous watch over financial flows and review the operation of the financial system.

Data reporting consists of two parts – external and internal. External reporting refers to the communication of financial information (viz., earnings, financial and funds position) about the business to outside parties, e.g., shareholders; government agencies and regulatory bodies of the government. Internal reporting is concerned with the communication of results of financial analysis and evaluation to management for decision-making purposes.

You will note that **accounting theory** has been shown in the centre of the diagram. We will turn to the role of accounting theory in the next unit.

The central purpose of accounting is to make possible the periodic matching of costs (efforts) and revenues (accomplishments). This concept is the nucleus of accounting theory. However, accounting is moving away from its traditional procedure-based record-keeping function to the adoption of a role which emphasises its social importance.

### Activity 1

List the various accounting activities that your organisation is undertaking. Can you ascribe any particular reason as to why your organisation is undertaking these accounting activities?

Accounting Activity	Reason
1 .....	1 .....
2 .....	2 .....
3 .....	3 .....
4 .....	4 .....
5 .....	5 .....
6 .....	6 .....
7 .....	7 .....
8 .....	8 .....

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### 1.3 EMERGING ROLE OF ACCOUNTING

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The history of accounting indicates the evolutionary pattern which reflects changing socio-economic conditions and the enlarged purposes to which accounting is applied. In the present context four phases in the evolution of accounting can be distinguished.

#### Stewardship Accounting

In earlier times in history, wealthy people employed 'stewards' to manage their property. These stewards rendered an account of their stewardship to their owners periodically. This notion lies at the root of financial reporting even today which essentially involves the orderly recording of business transactions, commonly known as 'book-keeping'. Indeed the accounting concepts and procedures in use today for systematic recording of business transactions have their origin in the practices employed by merchants in Italy during the 15th century. The Italian method which specifically began to be known as 'double entry book-keeping' was adopted by other European countries during the 19th century. Stewardship accounting, in a sense, is associated with the need of business owners to keep records of their transactions, the property and tools they owned, debts they owed, and the debts others owed them.

#### Financial Accounting

Financial accounting dates from the development of large-scale business and the advent of Joint Stock Company (a form of business which enables the public to participate in providing capital in return for 'shares' in the assets and the profits of the company). This form of business organisation permits a limit to the liability of their members to the nominal value of their shares. This means that the liability of a shareholder for the financial debts of the company is limited to the amount he had agreed to pay on the shares he bought. He is not liable to make any further contribution in the event of the company's failure or liquidation. As a matter of fact, the law governing the operations (or functioning) of a company in any country (for instance the Companies Act in India) gives a legal form to the doctrine of stewardship which requires that information be disclosed to the shareholders in the form of annual income statement and balance sheet.

Briefly speaking, the income statement is a statement of profit and loss made during the year of the report; and the balance sheet indicates the assets held by the firm and the monetary claims against the firm. The general unwillingness of the company directors to disclose more than the minimum information required by law and the growing public awareness have forced the governments in various countries of the world to extend the disclosure (of information) requirements.

The importance attached to financial accounting statements can be traced to the need of the society to mobilise the savings and channel them into profitable investments. Investors, whether they are large or small, must be provided with reliable and sufficient information in order to be able to make efficient investment decisions. This is the most significant social purpose of financial accounting.

### **Cost Accounting**

The industrial revolution in England presented a challenge to the development of accounting as a tool of industrial management. Costing techniques were developed as guides to management actions. The increasing awareness on the part of entrepreneurs and industrial managers for using scientific principles of management in the wake of scientific management movement led to the development of cost accounting. Cost accounting is concerned with the application of costing principles, methods and techniques for ascertaining the costs with a view to controlling them and assessing the profitability and efficiency of the enterprise.

### **Management Accounting**

The advent of management accounting was the next logical step in the developmental process. The practice of using accounting information as a direct aid to management is a phenomenon of the 20th century, particularly the last 30-40 years. The genesis of modern management with its emphasis on detailed information for decision-making provided a tremendous impetus to the development of management accounting.

Management accounting is concerned with the preparation and presentation of accounting and control information in a form which assists management in the formulation of policies and in decision-making on various matters connected with routine or non-routine operations of business enterprise. It is through the techniques of management accounting that the managers are supplied with information which they need for achieving objectives for which they are accountable. Management accounting has thus shifted the focus of accounting from recording and analysing financial transactions to using information for decisions affecting the future. In this sense, management accounting has a vital role to play in extending the horizons of modern business. While the reports emanating from financial accounting are subject to the conceptual framework of accounting, internal reports – routine or non-routine are free from such constraints.

### **Social Responsibility Accounting**

Social responsibility accounting is a new phase in the development of accounting and owes its birth to increasing social awareness which has been particularly noticeable over the last two decades or so. Social responsibility accounting widens the scope of accounting by considering the social effects of business decisions, in addition to the economic effects. Several social scientists, statesmen and social workers all over the world have been drawing the attention of their governments and the people in their countries to the dangers posed to environment and ecology by the unbridled industrial growth. The role of business in society is increasingly coming under greater scrutiny. The management is being held responsible not only for efficient conduct of business as expressed in profitability, but also for what it contributes to social well being and progress. There is a growing feeling that the concepts of growth and profit as measured in traditional balance sheets and income statements are too narrow to reflect the social responsibility aspects of a business.

### **Some Recent Developments**

Two other landmark developments in financial accounting which have taken place over the recent past and which deserve mention here are: Inflation Accounting and Human Resource Accounting. Inflation Accounting is concerned with the adjustment in the values of assets (current and fixed) and of profit in the light of changes in the price level. In a way, it is concerned with the overcoming of limitations that arise in financial statements on account of

the cost assumption (that is recording of the assets at their historical or original cost) and the assumption of stable monetary unit (these are discussed in detail in the next unit). It thus aims at correcting the distortions in the reported results caused by price level changes. Generally, rising price during inflation have the distorting influence of overstating the profit. Various approaches have been suggested to deal with this problem.

Human Resource Accounting (HRA) is a branch of accounting which seeks to report and emphasise the importance of human resources (knowledgeable, trained, loyal and committed employees) in a company's earning process and total assets. It is concerned with "the process of identifying and measuring data about human resources and communicating this information to interested parties". In simple words, it is accounting for people as organisational resources (i.e., measurement of the cost and value of people for the organisation).

If this little introduction of the two new dimensions in accounting provokes you to know more about them, we suggest that you listen to the audio programme "Emerging Horizons in Accounting and Finance-Part II and III" Which deal with these two topics. You may also read "Money Measurement Concept" explained in the next unit which has a bearing on inflation accounting.

**Activity 2**

In the context of your organisation, describe some of the cost and management accounting related activities. Please also identify any particular accounting practice in the area of social responsibility.

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**1.4 ACCOUNTING AS AN INFORMATION SYSTEM**

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While discussing the scope of accounting you must have observed that accounting involves a series of activities linked with each other, beginning with the collecting, recording, analysing and evaluating the data, and finally communicating information to its users. Information has no meaning unless it is linked with a certain purpose. Accounting as a social science can be viewed as an information system since it has all the features of a system. It has its inputs (raw data), processes (men and equipment), and outputs (reports and information). If we consider accounting as an information system, then we are in a position to make some important observations. First, the goal of the system is to provide information which meets the needs of its users. If we can correctly identify the needs of the users, we are then able to specify the nature and character of the outputs of the system. Secondly, it is the output requirements that determine the type of data which would be selected as the inputs for processing into information output.

There are several groups of people who have a stake in a business organisation – managers, shareholders, creditors, employees, customers, etc. Additionally, the community at large has economic and social interest in the activities of such organisations. This interest is expressed at the national level by the concern of government in various aspects of the firms' activities, such as their economic well-being, their contribution to welfare, their part in the growth of the national product, to mention only a few examples.

We shall now briefly discuss what the information needs of various users are.

**Shareholders and Investors:** Since shareholders and other investors have invested their wealth in a business enterprise, they are interested in knowing periodically about the profitability of the enterprise, the soundness of their investment and the growth prospects of the enterprise. Historically, business accounting developed to supply information to those who had invested their funds in business enterprises.

**Creditors:** Creditors may be short-term or long-term lenders. Short-term creditors include suppliers of materials, goods or services. They are normally known as trade creditors. Long-term creditors are those who have lent money for a long period, usually in the form of secured loans. The main concern of the creditors is focused on the credit worthiness of the firm and its ability to meet its financial obligations. They are, therefore, concerned with the liquidity of the firm, its profitability and financial soundness. In other words, it can also be stated that creditors are interested mainly in information which deals with solvency, liquidity and profitability so that they could assess the financial standing of the firm.

**Employees:** The view that business organisation exist to maximise the return to shareholders has been undergoing change as a result of social changes. A broader view is taken today of economic and social role of management. The importance of harmonious industrial relations between management and employees cannot be over-emphasised. That the employees have a stake in the outcomes of several managerial decisions is recognised. Greater emphasis on industrial democracy through employee participation in management decisions has important implications for the supply information to employees. Matters like settlement of wages, bonus, and profit sharing rest on adequate disclosure of relevant facts.

**Government:** In a mixed economy it is considered to be the responsibility of the Government to direct the operation of the economic system in such a manner that it subserves the common good. Controls and regulations on the operation of private sector enterprises are the hallmark of mixed economy. Several government agencies collect information about various aspects of the activities of business organisations. Much of this information is a direct output of the accounting system, for example, levels of outputs, profits, investments, costs, and taxes, etc. All this information is very important in evolving policies for managing the economy. The task of the Government in managing the industrial economy of the country is facilitated if accounting information is presented, as far as possible, in a uniform manner. It is clear that if accounting information is distorted due to manipulations and window-dressing in the presentation of annual accounts, it will have ill-effects on the measures the government intends to take and the policies it wishes to adopt.

**Management:** Organisations may or may not exist for the sole purpose of profit. However, information needs of the managers of both kinds of organisations are almost the same. because the managerial process, i.e., planning, organising and controlling is the same. All these functions have one thing in common and it is that they are all concerned with making decisions which have their own specific information requirements. The emphasis on efficient and effective management of organisations has considerably extended the demand for accounting information. The role of accounting in so far as management is concerned was highlighted earlier when we discussed about management accounting.

**Consumers and others:** Consumers' organisations, media, welfare organisations and public at large are also interested in condensed accounting information in order to appraise the efficiency and social role of the enterprises in different sectors of the economy, that is, what levels of profits and outputs are being achieved, in what way the social responsibility is being discharged

and in what manner the growth is being planned by the enterprises in accordance with the national priorities etc.

The above discussion perhaps has indicated to you that the information needs of the various users may not necessarily be the same. Sometimes, they may even conflict and compete with each other. In any case, the objective of accounting information is to enable information users to make optimum decisions.

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## **1.5 ROLE AND ACTIVITIES OF AN ACCOUNTANT**

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Having discussed the scope of accounting and its emerging role, we are now in a position to describe as to who is an accountant. In an attempt to answer this question we reproduce below some statements in this regard:

- a) An accountant is one who is engaged in accounts-keeping.
- b) An accountant is a functionary who aids control.
- c) An accountant keeps the conscience of an organisation.
- d) An accountant is a professional whose primary duties are concerned with information management for internal and external use.
- e) An accountant is a fiscal adviser.
- f) An accountant produces an income statement and a balance sheet for an accounting period and maintains all supporting evidence and classified facts that lead to the final accounting statements.
- g) An accountant verifies, authenticates, and certifies the accounts of an entity.

Tell us about your reactions. Perhaps you do have your own ideas. Our thinking is that each of the foregoing statements contains some truth in it as it highlights some aspects of the functions of an accountant, except one statement which presents a somewhat comprehensive view. Can you identify this statement? We will help you in doing this.

Statement (a) defines a person who maintains accounts. Statement (f) echoes almost a similar notion but extends his role to the production of financial statements. The work implied in these statements is that of score-keeping and the person performing such activity is known as a financial accountant (or a maintenance accountant).

Statement (b) is about the role which an accountant can play in the management control process. It is concerned with attention-directing and problem-solving. The functionary may be designated as a management accountant (or a controller as in the United States).

Statement (e) underlines a narrow, specific role of an accountant, though of critical significance. In view of high incidence of taxes on business in India, tax planning assumes a vital role in fiscal management. By planning the operations of the enterprise in a particular manner, the tax adviser attempts to minimise the liability of the firm by availing the concessions and incentives provided for in the applicable tax laws.

Statement (g) stresses the 'audit', 'watchdog', or 'certification role' of the accountant who is not in the employ of business and who performs an external verification of accounts. Such a functionary is a trained and qualified professional who, like any other professional, has an educational status and a prescribed code of conduct. Chartered Accountants in India, England-Wales, and Certified Public Accountants in USA, belong to this category of accountants.

Statement (c) presents the accountant as a conscience-keeper. He is seen as a person whose mission is to protect and promote the interest of the employer in a positive manner. He is there to see to it that none of the staff of the organisation carries on his work in an unethical way or in a manner prejudicial to the long-term legitimate interests of the firm.

We are now left with statement (d) which defines an accountant as a professional and underlines his pre-occupation with management of information for internal use (management accounting function) and for external use (financial accounting function). We are sure, our discussion of accounting as an information system has made it easier for you to comprehend this role of

the accountant. We may clarify that information management is not necessarily associated with sophisticated (or hi-tech) area of computers. Small firms may 'manage' information without a substantial degree of mechanisation or automation. Often the role of accounting in small business is not properly recognised. It is widely known that a large number of small businesses fail and do not survive beyond a few years. One of the main reasons for their failure is that they do not have an adequate information system to help their managers to control costs, to forecast cash needs and to plan for growth. Organisations which have poor accounting system often find it considerably difficult to obtain finance from banks and outside investors.

## 1.6 ACCOUNTING PERSONNEL

There is hardly any organisation which does not have an accountant. His role is all pervasive and he is involved in a wide range of activities, particularly in a large and complex organisation. The exact duties of an accountant might differ in different organisations. However, a broad spectrum of responsibilities can be identified.

The accountants can be broadly divided into two categories, those who are in public practice and those who are in private employment. The accountants in public practice offer their services for conducting financial and/or cost audit. As such, they are known as auditors. The auditor examines the books of account and reports on the balance sheet and profit and loss account of the company as to whether they give a true and fair view of the state of affairs of the company and its profit respectively. The auditor in the company is appointed by the shareholder to whom he reports. Public accountants are generally members of professional bodies like the Institute of Chartered Accountants of India or the Institute of Cost and Works Accountants of India. In addition to conducting financial or cost audit (in accordance with the requirements of the Companies Act), as the case may be, they may also provide consultancy services for designing or improving accounting and management control systems.

Accountants in employment may be in various business or non-business organisations to perform a variety of accounting and management control functions. Accountants at higher levels generally belong to professional accounting bodies but those who are at lower levels need not be so. Accounting chiefs in different organisations, depending upon their nature of work, are variously designated as finance officers or internal auditors or chief accounts officers, etc. The term 'controller' as the head of the accounting and finance function is not very popular in India but of late it has been catching up. Several large organisations, both in the public and private sectors, have now controllers. Let us have an idea of who these people are and what they do.

**Internal Auditor:** Internal Auditor is an employee of the organisation in contrast to an external auditor who is paid a fee for his services. The internal auditor is responsible for performing monitoring activities and other services, including designing and operating the system of internal control, auditing the data reported to the directors of the company, and assisting external auditors. The head of the internal audit function reports directly either to the chief executive or to the audit committee of the Board of Directors.

Internal audit includes continuous verification of entries appearing in the books of account with the original vouchers and proper accounting of assets. Further, it attempts to ensure that the policies and procedures regarding financial matters are being complied with. Internal auditing is also concerned with administering the system of internal check so that mistakes, innocent or intentional, are prevented from taking place.

We should distinguish an internal auditor from an external auditor. While an internal auditor devotes his entire time and energy to the needs of one company (i.e., his employer), an external auditor serves many clients. The primary function of the external auditor, as pointed out earlier, is to safeguard the interests of the shareholders (by whom he is appointed) by an independent and impartial appraisal of the financial transactions of the company so that he could report on the net profit earned by the company and its financial position. His role is that of an objective outsider, expressing expert opinion as to the financial condition and operating results of the client's business.

## Accounting Framework

Apart from shareholders, other parties such as banks, lending institutions, government agencies rely on the fairness of such financial reports in making certain decisions about a given company. An auditor is bound by a set of professional regulations which include an examination on technical competence and adherence to a code of ethical conduct.

**Controller:** Controller—the other name for Chief Accountant is usually the head of the whole area of accounting, including internal audit. He is overall in-charge of all the activities comprising financial accounting, cost accounting, management accounting, tax accounting etc. He exercises authority both for accounting within the organisation and for external reporting. The external reports include reports to government revenue collecting and regulatory bodies, such as Company Law Board and Income Tax Department. He may also supervise the company's internal audit and control systems. In addition to processing historical data, he is expected to supply a good deal of accounting information to top management concerning future operations, in line with the management's planning and control needs. Besides, he is also expected to supply detailed information to managers in different functional areas (like production, marketing, etc.) and at different levels of the organisation.

We may enumerate the functions of the controller as follows:

- a) Designing and operating the accounting system
- b) Preparing financial statements and reports
- c) Establishing and maintaining systems and procedures
- d) Supervising internal auditing and arranging for external audit
- e) Supervising computer applications
- f) Overseeing cost control
- g) Preparing budgets
- h) Making forecasts and analytical reports
- i) Reporting financial information to top management
- j) Handling tax matters.

**Treasurer:** He is the custodian and manager of all the cash and near-cash resources of the firm. The treasurer handles credit reviews and sets policy for collecting receivables (debtors of the firm whom the firm has sold goods or services). He also handles relationships with banks and other lending or financial institutions.

The Financial Executive Institute (of United States of America) makes the following distinction between controllership and treasurership functions:

### Controllership

Planning and Control  
Reporting and Interpreting  
Evaluating and Consulting  
Tax Administration  
Government Reporting  
Protection of Assets  
Economic Appraisal

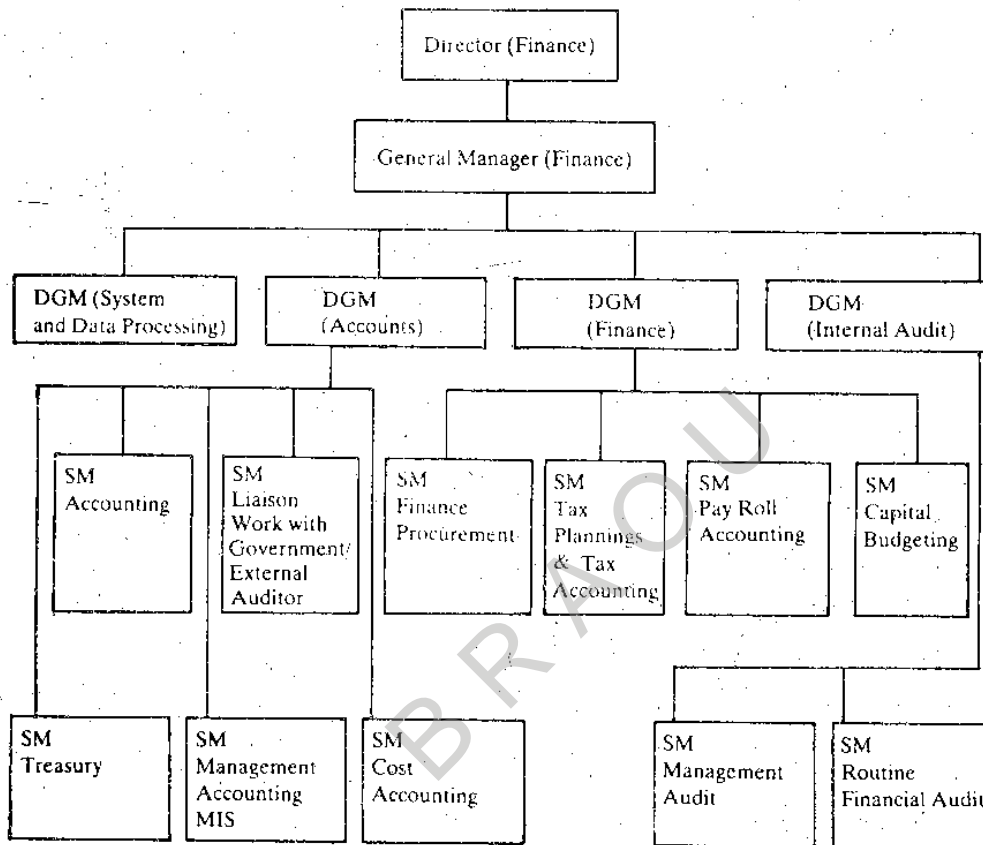
### Treasurership

Provision of Capital  
Investor Relations  
Short-term Financing  
Banking and Custody  
Credit and Collections  
Investments  
Insurance

**Finance Officer:** Finance is the life blood of business. Procuring financial resources and their judicious utilisation are the two important activities of financial management which is a specialised function. Financial management, includes three major decisions: investment decision, financing decision and dividend decision. Investment decision is perhaps the most important decision because it involves allocation of resources. It is concerned with future which being uncertain involves risk. How the firm is allocating its scarce resources and is planning growth will largely determine its value in the market place. Financing decision is concerned with determining the optimum financing mix or capital structure. It examines the various methods by which a firm

components of similar activities, e.g., financial accounting, tax planning and administration, management auditing, etc. Management audit is a comprehensive review of the various sub-systems of the organisation like objectives and goals, structure, technical system, personnel policies, (including succession planning), control and coordination policies and procedures; adequacy and effectiveness of communication system, etc. This type of audit is usually done by a team of people comprising the internal resource persons drawn from various functional areas and external management consultant.

Figure II: Organisation for Accounting and Finance



DGM = Deputy General Manager

SM = Senior Manager

We hope you now have a reasonably good idea of what accounting is, what its scope is, and what are the different types of activities which are generally included in accounting. While basic functions of accounting and finance are performed in all types of organisations, their relative emphases or relevance might differ in different types of organisations. Keeping this in view we have prepared an audio programme "Accounting and Finance Function in Different Types of Organisations" and we suggest that you listen to this tape. This will not only augment your familiarity with the basic aspects and functions of accounting but will also develop your appreciation for relative divergencies.

## 1.9 SUMMARY

Accounting is an important service activity in business and is concerned with the collecting, recording, evaluating and communicating the results of past events. The history of accounting development reflects its changing rôle in response to the changing business and social needs.

## Accounting Framework

With the emergence of management accounting, the focus of accounting has been shifting from mere recording of transactions to that of aiding the management in decisions.

Accounting can be perceived as an information system which has its inputs, processing methods and outputs. The usefulness of accounting lies in its capacity to provide information to various stakeholders in business so that they could arrive at the correct decisions.

The top accounting personnel are designated with various nomenclature. The practice in this regard differs in different companies. The organisational setting for accounting and finance function may also vary in different organisations, depending upon their peculiarities, nature and size of business, technology and structural form. At the helm of affairs is usually the Director of Accounts and Finance who is a member of the Board of Directors. He is assisted by a General Manager who in turn is helped by Deputy General Managers in charge of various sub-functions like, accounts, finance, internal audit, and data processing, etc. Each of the sub-functions is further sub-divided into activities which are the responsibility of a subordinate manager.

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### 1.10 KEY WORDS

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**Accountant** is a professional who is responsible for the processing of financial data for score-keeping, attention-directing and problem-solving purposes.

**Controller** or the management accountant is a staff-functionary who uses accounting information for management planning and control.

**Auditive work** of an accountant comprises authentication of accounting statements.

**Recordative work** extends to routine recording and classified posting of financial transactions and events.

**Score-keeping** is the process of data accumulation or record-keeping which enables interested parties (internal and external) to ascertain how the organisation is performing.

**Attention-directing** role of accounting consists of directing managerial attention to situations where corrective action is needed in the case of unfavourable (or even favourable) differences in operations, outputs or inputs.

**Information system** is a system, sometimes formal and sometimes informal, for collecting, processing, and communicating data at the most relevant time to all levels of management. The data flowing from the system is helpful to managers for decision-making in the areas of planning and control, or is otherwise needed for financial reporting required under the laws. An essential requirement of information system is feedback i.e., communicating the results of performance to operating managers for needed modifications.

**External reporting** is the production of financial statements for the use by external interest groups like shareholders and government.

**Planning** is goal identification and decision-making.

**Control** is the action that implements the planning decision and evaluates performance.

**Feedback** comprises the performance reports which managers can use for improving their decision-making.

**Staff function** is performed in an advisory capacity and without line or decision-making authority.

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### 1.11 SELF-ASSESSMENT QUESTIONS/EXERCISES

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- 1 "Financial Accounting is an extension of Stewardship Accounting". Comment.
- 2 What new developments in Accounting have taken place over the past 20-25 years? Examine the main factors which have affected such developments.
- 3 State the group of persons having an interest in a business organisation and examine the nature of their information needs.
- 4 Discuss the role of accountants in modern business organisations.
- 5 Differentiate between recordative, interpretative and auditive functions of Accounting.
- 6 How can accounting reports, prepared on a historical basis after the close of a period, be useful to managers in directing the activities of a business?
- 7 Distinguish management accounting from financial accounting.
- 8 How does the accountant help in the planning and control process of a large commercial organisation?
- 9 State whether the following statements are true or false:
 

a) To have an accountant is the privilege of a joint stock company only	True/False
b) A controller is entrusted with the responsibilities of raising funds.	True/False
c) Management control differs from engineering control since the latter is fully automatic and the former is highly complex.	True/False
d) An accountant is the custodian of the properties and financial interests of a business enterprise.	True/False

#### Answers to Self-assessment Questions/Exercises

- 9 (a) False, (b) False, (c) True, (d) True.

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### 1.12 FURTHER READINGS

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Anthony, Robert N. And James S.Reece, 1987. *Accounting Principles*, All India Traveller Book Seller: New Delhi (Chapter I).

Bhattacharya S.K. and John Dearden, 1987 *Accounting for Management: Text and Cases*, Vikas Publishing House: New Delhi. (Chapter I).

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## UNIT 2 ACCOUNTING CONCEPTS AND STANDARDS

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### Objectives

After studying this unit, you should be able to:

- appreciate the need for a conceptual framework of accounting;
- understand and appreciate the Generally Accepted Accounting Principles (GAAP); and
- develop an understanding of the importance and necessity for uniformity in accounting practices.

### Structure

- 2.1 Introduction
- 2.2 Accounting Framework
- 2.3 Accounting Concepts
- 2.4 Accounting Standards
- 2.5 Changing Nature of GAAP
- 2.6 Attempts towards Standardisation
- 2.7 Accounting Standards in India
- 2.8 Summary
- 2.9 Key Words
- 2.10 Self-assessment Questions Exercises
- 2.11 Further Readings
- 2.12 Appendices

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### 2.1 INTRODUCTION

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Any activity that you perform is facilitated if you have a set of rules to guide your efforts. Further, you find that these rules are of more value to you if they are standardised. When you are driving your vehicle, you keep to the left. You are in fact following a standard traffic rule. Without the drivers of vehicles adhering to this rule, there would be much chaos on the road. A similar principle applies to accounting which has evolved over a period of several hundred years, and during this time certain rules and conventions have come to be accepted as useful. If you are to understand and use accounting reports- the end- product of an accounting system-you must be familiar with the rules and conventions behind these reports.

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### 2.2 ACCOUNTING FRAMEWORK

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The rules and conventions of accounting are commonly referred to as the conceptual framework of accounting. As with any discipline or body of knowledge, some underlying theoretical structure is required if a logical and useful set of practices and procedures are to be developed for reaching the goals of the profession and for expanding knowledge in that field. Such a body of principles is needed to help answer new questions that arise. No profession can thrive in the absence of a theoretical framework. According to Hendriksen (1977), Accounting theory may be defined as logical reasoning in the form of a set of broad principles that (i) provide a general frame of reference by which accounting practice can be evaluated and (ii) guide the development of new practices and procedures. Accounting theory may also be used to explain existing practices to obtain a better understanding of them. But the most important goal of accounting theory should be to provide a coherent set of logical principles that form the general frame of reference for the evaluation and development of sound accounting practices.

The American Institute of Certified Public Accountants (AICPA) discusses financial accounting theory and generally accepted accounting principles as follows:

Financial statements are the product of a process in which a large volume of data about aspects of the economic activities of an enterprise are accumulated, analysed, and reported. This process should be carried out in accordance with generally accepted accounting principles. Generally accepted accounting principles incorporate the consensus at a particular time as to which economic resources and obligations should be recorded as assets and liabilities by financial accounting, which changes in assets and liabilities should be recorded, when these changes should be recorded, how the assets and liabilities and changes in them should be measured, what information should be disclosed and how it should be disclosed, and which financial statements should be prepared.

Generally accepted accounting principles encompass the conventions, rules and procedures necessary to define accepted accounting practice at a particular time ..... generally accepted accounting principles include not only broad guidelines of general application, but also detailed practices and procedures.

(Source: AICPA. Statement of the Accounting Principles Board No. 4. "Basic Concept and Accounting Principles Underlying Financial Statement of Business Enterprises". October, 1970. pp. 54-55.)

The word 'Principle' is used to mean a "general law or rule adopted or professed as a guide to action, a settled ground or basis of conduct or practice". You will note that this definition describes a principle as a general law or rule that is to be used as a guide to action. This implies that accounting principles do not prescribe exactly how each detailed event occurring in business should be recorded. Consequently, there are several matters in accounting practice that may differ from one company to another.

Accounting principles are man-made. They are accepted because they are believed to be useful. The general acceptance of an accounting principle (or for that matter any principle) usually depends on how well it meets the three criteria of relevance, objectivity, and feasibility. A principle is relevant to the extent that it results in meaningful or useful information to those who need to know about a certain business. A principle is objective to the extent that the information is not influenced by the personal bias or judgement of those who furnished it. Objectivity connotes reliability or trustworthiness which also means that the correctness of the information reported can be verified. A principle is feasible to the extent that it can be implemented without undue complexity or cost.

### 2.3 ACCOUNTING CONCEPTS

Earlier in Unit 1 we had described accounting as the language of business. As with language, accounting has many dialects. There are differences in terminology. In dealing with the framework of accounting theory, one is confronted with a serious problem arising from differences in terminology. A number of words and terms have been used by different writers to express and explain the same idea or notion. Thus, confusion abounds in the literature in so far as the theoretical framework is concerned. The various terms used for describing the basic ideas are: concepts, postulates, propositions, basic assumptions, underlying principles, fundamentals, conventions, doctrines, rules, etc. Although each of these terms is capable of precise definition, general usage by the profession of accounting has served to give them loose and overlapping meanings. The same idea or notion may be described by one author as a concept, by another as a postulate and still by another as a convention. For instance, the separate Business Entity idea has been described by one author as a concept and by another as a convention. To take another instance, the idea implied in Conservatism has been labelled by one author as a (modifying) convention, by another as a principle and yet by another as a doctrine. The wide diversity in terminology to express the basic framework can only serve to confuse the learner.

Without falling into the trap of this terminological maze, we are explaining below some widely recognised ideas and we call all of these concepts. We do feel, however, that some of these ideas have a better claim to be called 'concepts', while the rest should be called

'conventions'. Fundamental accounting concepts are broad general assumptions which underlie periodic financial accounts of business enterprises. The reason why some of these ideas should be called concepts is that they are basic assumptions and have a direct bearing on the quality of financial accounting information. The alteration of any of the basic concepts (or postulates) would change the entire nature of financial accounting.

### Business Entity Concept

In accounting we make a distinction between business and the owner. All the records are kept from the viewpoint of the business rather than from that of the owner. An enterprise is an economic unit separate and apart from the owner or owners. As such, transactions of the business and those of the owners should be accounted for and reported separately. In recording a transaction the important question is how does it affect the business? For example, if the owner of a shop were to take cash from the cash box for meeting certain personal expenditure, the accounts would show that cash had been reduced even though it does not make any difference to the owner himself. Similarly, if the owner puts cash into the business, he has a claim against the business for capital brought in.

This distinction can be easily maintained in the case of a limited company because a company has a legal entity (or personality) of its own. Like a natural person it can engage itself in economic activities of producing, owning, managing, storing, transferring, lending, borrowing and consuming commodities and services. Distinction, however, is difficult in the case of partnership, and even more so in the case of one-man business. Nevertheless, accounting still maintains separation of business and owner. This implies that owner's personal and household expenses or obligations (e.g., expenditure on food, clothing, housing, entertainment, debts, mortgages, etc.) will not appear in the books of account. It may be clarified that it is only for accounting purposes that partnerships and sole proprietorships are treated as separate and apart from the owners, though law does not make such distinction. A creditor would be justified in looking to both the business assets and the private estate of the owner for satisfaction of his claim. One reason for this distinction is to make it possible for the owners to have an account of the performance from those who manage the enterprise. The managers are entrusted with funds supplied by owners, banks and others; they are responsible for the proper use of those funds. The financial accounting reports are designed to show how well this responsibility has been discharged.

#### Activity 1

Apart from the reason mentioned above, can you think of any other reason for justification of Business Entity Concept?

#### Activity 2

The proprietor of a firm withdrew Rs. 50,000 for his personal use. This was shown as an expense of the firm. Profits were reduced to pay a lower tax. Is this right from accounting point of view?

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### Money Measurement Concept

In accounting, only those facts which can be expressed in terms of money are recorded. As money is accepted not only as a medium of exchange but also as a store of value, it has a very important advantage since a number of widely different assets and equities can be expressed in terms of a common denominator. Without this, adding heterogeneous factors like five buildings, ten machines, six trucks will not have much meaning.

While money is probably the only practical common denominator and a yardstick, we must realise that this concept imposes two severe limitations. In the first place, there are several facts which, though vital to the business, cannot be recorded in the books of account because they cannot be expressed in money terms. For example, the state of health of the Managing Director of a company who has been the key contributor to the success of business is not recorded in the books. Similarly, the fact that the Production Manager and the Chief Internal Auditor are not on speaking terms, or that a strike is about to begin because labour is dissatisfied with the poor working conditions in the factory, or that a competitor has recently taken over the best customer, or that it has developed a better product and so on will not be recorded even though all these events are of great concern to the business.

From this standpoint, one could say that accounting does not give a complete account of the happenings in the business. You will appreciate that all these have a bearing on the future profitability of the company.

Secondly, use of money implies that a rupee today is of equal value to a rupee ten years back or ten years later. In other words, we assume stable or constant value of rupee. In the accounts, money is expressed in terms of its value at the time an event is recorded. Subsequent changes in the purchasing power of money do not affect this amount. You are perhaps aware that most economies today are in inflationary conditions with rising prices. The value of a rupee of 1950's has depreciated to an unbelievably low level in the 80s. Most accountants know fully well that purchasing power of rupee does change but very few recognise this fact in accounting books and make allowance for changing price level. And this is so despite the fact that accounting professional has devoted considerable attention to this problem and numerous suggestions have been made to account for the effects of changes in the purchasing power of money. In fact, one of the major problems of accounting today is to find means of solving the measurement problem, that is, how to extend the quality and the coverage of meaningful information. It will be desirable to present in a supplementary analysis the effect of price level changes on the reported income of the business and the financial position.

#### Activity 3

Suppose the Managing Director of a company is killed in a plane crash. To the extent "an organisation is the lengthened shadow of a man", the real value of the company will change immediately and this will be reflected in the market price of the company shares. Will this have any effect as far as the accounts of the company are concerned?

### Continuity Concept

Accounting assumes that the business (an accounting entity) will continue to operate for a long time in the future unless there is good evidence to the contrary. The enterprise is viewed as a **going concern**, that is, as continuing in operation, at least in the foreseeable future. The owners have no intention nor have they the necessity to wind up or liquidate its operations.

This assumption is of considerable importance for it means that the business is viewed as a mechanism for adding value to resources it uses. The success of the business can be measured by the difference between output values (sales or revenues) and input values (expenses). Therefore, all unused resources can be reported at cost rather than at market values.

The assumption that the business is not expected to be liquidated in the foreseeable future, in fact, establishes the basis for many of the valuations and allocations in accounting. For example, depreciation (or amortisation) procedures rest upon this concept. It is this assumption which underlies the decision of investors to commit capital to enterprise. The concept holds that continuity of business unit for which the accounting function is being performed. Only on the basis of this assumption can the accounting process remain stable and achieve the objective of correctly recording and reporting on the capital invested, the efficiency of management, and the position of the enterprise as a going concern. Under this assumption neither higher current market values nor liquidation values are of particular importance in accounting. This assumption provides a basis for the application of cost in accounting for assets.

However, if the accountant has good reasons to believe that the business, or some part of it, is going to be liquidated or that it will cease to operate (say within a year or two), then the resources could be reported at their current values (or liquidation values).

#### Activity 4

A company revalues its buildings which were purchased at a cost of Rs. 1,00,000 in 1967 to Rs. 20,00,000 in 1986 and records the difference of Rs. 19,00,000 as profit for the year 1986. Is this practice right?

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#### Cost Concept

The resources (land, buildings, machinery, property rights, etc.) that a business owns are called assets. The money values that are assigned to asset are derived from the cost concept. This concept states that an asset is worth the price paid for or cost incurred to acquire it. Thus, assets are recorded at their original purchase price and this cost is the basis for all subsequent accounting for the assets. The assets shown on the financial statements do not necessarily indicate their present market worth (or market values). This is contrary to what is often believed by an uninformed person reading the statement or report. The term 'book value' is used for amount shown in the accounting records.

In case of certain assets the accounting values and market values may be similar; cash is an obvious example. In general, the longer an asset has been owned by the company the lesser are the chances that the accounting value will correspond to the market value.

The cost concept does not mean that all assets remain on the accounting records at their original cost for all time to come. The cost of an asset that has a long but limited life is systematically reduced during its life by a process called 'depreciation' which will be discussed at some length in a subsequent unit. Suffice it to say at this point that depreciation is a process by which the cost of the asset is gradually reduced (or written off) by allocating a part of it to expense in each

accounting period. This will have the effect of reducing the profit of each period. In charging depreciation the intention is not to charge depreciation equal to the fall in the market values of the asset. As such, there is no relationship between depreciation and changes in market value of the assets. The purpose of depreciation is to allocate the cost of an asset over its useful life and not to adjust its cost so as to bring it closer to the market value.

You must be wondering as to why assets are shown at cost even when there are wide differences between their costs and market values. The main argument is that the cost concept meets all the three basic criteria of relevance, objectivity and feasibility.

### Accrual Concept

The accrual concept makes a distinction between the receipt of cash and the right to receive it, and the payment of cash and legal obligation to pay it. In actual business operations, the obligation to pay and the actual movement of cash may not coincide. The accrual concept recognises this distinction. In connection with the sale of goods, revenue may be received (i) before the right to receive arises, or (ii) after the right to receive has been created. The accrual concept provides a guideline to the accountant as to how he should treat the cash receipt and the rights related thereto. In the former case the receipt will not be recognised as the revenue of the period for the reason that the right to receive the same has not yet arisen. In the latter case the revenue will be recognised even though the amount is received in the subsequent period.

Similar treatment would be given to expenses incurred by the firm. Cash payments for expenses may be made before or after they are due for payment. Only those sums which are due and payable would be treated as expenses. If a payment is made in advance (i.e., it does not belong to the accounting period in question) it will not be treated as an expense, and the person who received the cash will be treated as a debtor until his right to receive the cash has matured. Where an expense has been incurred during the accounting period but no payment has been made, the expense must be recorded and the person to whom the payment should have been made is shown as a creditor.

### Activity 5

The accounting year of a firm closes on 31st December each year. The rent for business premises of Rs. 9,000 for the last quarter could not be paid to the owner on account of his being away in a foreign country. Should the rent payable be taken into account for computing the firm's income for the accounting year?

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theoretically correct treatment. For example, a paper stapler costing Rs. 10 may last for three years. However, the effort involved in allocating its cost over the three year period is not worth the benefit than can be derived from this operation. Since the item obviously is immaterial when related to overall operations, the cost incurred on it may be treated as the expense of the period in which it is acquired. Some of the stationery purchased for office use in any accounting period may remain unused at the end of that period. In accounting, the amount spent on entire stationery would be treated as expense of the period in which the stationery was purchased, notwithstanding the fact that a small part of it still lies in stock. The value (or cost) of the stationery lying in stock would not be treated as an asset and carried forward as a resource to the next period. The accountant would regard the stock lying unused as immaterial. Hence, the entire amount spent on stationery would be taken as the expense of the period in which such expense was incurred.

Where to draw the line between material and immaterial events is a matter of judgement and common sense. There are no hard and fast rules in this respect. Whether a particular item or occurrence is material or not should be determined by considering its relationship to other items and the surrounding circumstances. It is desirable to establish and follow uniform policies governing such matters.

### Consistency Concept

In practice, there are several ways to record an event or a transaction in the books of account. For example, the trade discount on raw material purchased may be deducted from the cost of goods and net amount entered in the books, or alternatively trade discount may be shown as the income with full cost of raw material purchased entered in the books. Similarly, there are several methods to charge depreciation ( which is a decrease in the value of assets caused by wear and tear, and passage of time) on an asset or of valuing inventory. The consistency concept requires that once a company has decided on one method and has used it for some time, it should continue to follow the same method or procedure for all subsequent events of the same character unless it has a sound reason to do otherwise. If for valid reasons the company makes any departure from the method it has been following so far, then the effect of the change must be clearly stated in the financial statements in the year of change.

You will appreciate that much of the utility of accounting information lies in the fact that one could draw valid conclusions from the comparison of data drawn from financial statements of one year with data of the other year. Comparability is essential so that trends or differences may be identified and evaluated. Inconsistency in the application of accounting methods might significantly affect the reported profit and the financial position. Further, inconsistency also opens the door for manipulation of reported income and assets. The comparability of financial information depends largely upon the consistency with which a given class of events are handled in accounting records year after year.

### Activity 7

A company had been charging depreciation on a machine at Rs. 10,000 per year for the first 3 years. Then it began charging Rs. 9,000 for 4th year and Rs. 7,800 for 5th year and so on. Is this practice justified? Give reasons for your answer.

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### Periodicity Concept

Although the results of operations of a specific enterprise can be known precisely only after the business has ceased to operate, its assets have been sold off and liabilities paid off, the knowledge of the results periodically is also necessary. Those who are interested in the operating results of business obviously cannot wait till the end. The requirements of these parties therefore force the accountant to report for the changes in the wealth of a firm for short time periods. These time periods in actual practice vary though a year is the most common interval as a result of established business practice, tradition and government requirements. Some firms adopt calendar year, some others financial year of the government. But more and more firms are changing to the 'natural' business year the end of which is marked by relatively lower or lowest volume of business activity in the twelve-month period. The custom of using twelve-month period is applied only for external reporting, the firms usually adopt a shorter span of interval, say one month or three months, for internal reporting purposes.

The allocation of long-term costs and the difficulties associated with this process directly stem from this concept. While matching the earnings and the cost of those earnings for any accounting period, all the revenues and all the costs relating to the year in question have to be taken into the account irrespective of whether or not they have been received in cash or paid in cash. Despite the difficulties that arise in allocations and adjustments, short-term reports (i.e. yearly reports) are of such importance to owners, management, creditors, and other interested parties that the accountant has no option but to resolve such difficulties. Obviously, the utility of the periodic financial statements outweighs the difficulties.

Some other concepts, e.g., Matching concept, Realisation concept and Dual Aspect concept are discussed in Units 4 and 5 and as such they have not been taken up here.

While going through all these concepts, probably you have developed a feeling that they come in conflict with each other. You are right. We illustrate this by considering some of these concepts in the context of valuation of business properties. Suppose, a firm acquired a piece of land in 1965 for a price of Rs. 60,000. Factory premises were constructed in 1966 and operations commenced in 1967. The firm has been a great success with a profit profile for the past eighteen years. The Balance Sheet (a statement of assets and liabilities) for the year 1985 is being prepared and 'Land' is required to be valued. The estimated current market price of this land is Rs. 6,00,000.

Should you recommend that the land be valued at Rs. 6 lakhs? The answer is 'no' obviously. Land would be carried on the Balance Sheet at its original cost of Rs. 60,000 only. This decision is supported by several of the concepts discussed in this section. In the first place, the stability of purchasing power of money implied in the money measurement concept prevents us from recognising accretion in values as a result of changing price levels. Then, the realisation concept will not allow unrealised profits to be included as long as land is held by the company and not sold away. You may note that the continuity or going concern concept makes any possible market value of land irrelevant for balance sheet because the firm has to continue in business and land will be needed by it for its own use. In this connection, it could be argued that if land were shown on the balance sheet at its estimated current market value, the owner might decide to discontinue the business, sell the land and retire. The principle of objectivity is now introduced into the argument. It can be easily seen that in a situation like this the cost of acquisition of land at Rs. 60,000 in 1965 is the objective fact because it is based on a transaction that actually took place and this objective evidence is capable of being verified. In contrast, the estimate of current market value figure may be suspect. It raises many questions. Do you have a market quotation for an identical plot of land? Has a similar plot of land been sold recently and can we pick it up as verifiable evidence of the current market price? It may be said that even if market price for an identical plot of land is not available, estimates by an accredited valuer may be accepted as verifiable evidence of the market price. Further complications may be noticed if buildings and facilities have been erected on the plot of land. Is it possible to estimate the value

of land without factory buildings and other facilities constructed on it? The answer is a flat 'no' and the conservatism concept will then deter you from accepting an estimate of market value since it cannot be ascertained with reasonable accuracy.

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## 2.4 ACCOUNTING STANDARDS

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The basic concepts discussed in the foregoing paragraphs are the core elements in the theory of accounting. These concepts (postulates or conventions), however, permit a variety of alternative practices to co-exist. As a result, the financial results of different companies cannot be compared and evaluated unless full information is available about the accounting methods which have been used. The variety of accounting practices have made it difficult to compare the financial results of different companies. Further, the alternative accounting methods have also enabled the reporting of different results even by the same company.

**Need for Standards:** The information contained in published financial statements is of particular importance to external users, such as shareholders and investors. Without such information they would not be able to take right decisions about their investments. As in several other countries, Parliament in India has specified in the Companies Act the type and minimum level of information which companies should disclose in financial statements. It is the responsibility of the accounting profession to ensure that the required information is properly presented. It is evident that there should not be too much discretion to companies and their accountants to present financial information the way they like. In other words, the information contained in financial statements should conform to carefully considered standards. Public confidence in accounting information contained in financial statements will grow if they are satisfied as to the logic, consistency and fairness of the figures shown therein. For instance, a company could incur a loss and still pay dividends by manipulating the loss into a profit. In the long run this course may have a disastrous effect on the company and its investors.

You would be better able to appreciate the function of accounting standards by relating them to the basic purpose of financial statements which is the communication of information affecting the allocation of resources. Ideally, such information should make it possible for investors to evaluate the investment opportunities offered by different firms and allocate scarce resources to the most efficient ones. In theory, this process should result in the optimal distribution of resources within the economy and should maximise the potential benefit to society.

In this context unless there are reasonably appropriate standards, neither the purpose of the individual investor nor that of the nation as a whole can be served. The purpose is likely to be served if the accounting methods used by different firms for presenting information to investors allow correct comparisons to be made. For example, they should not permit a company to report profits which result simply from a change in accounting methods rather than from increase in efficiency. If companies were free to choose their accounting methods in this way, the consequences might be that deliberate distortions are introduced, leading eventually to misallocation of resources in the economy. The relatively less efficient companies will be able to report fictitious profits, and as a result scarce capital of society will be diverted away from the more efficient companies which have adopted more strict and consistent accounting methods.

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## 2.5 CHANGING NATURE OF GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP)

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Generally accepted accounting principles are usually developed by professional accounting bodies like American Institute of Certified Public Accountants (AICPA) and Institute of Chartered Accountants of India (ICAI). In developing such principles, however, the accounting profession has to reflect the realities of social, economic, legal and political environment in which it operates. Besides academic research, regulatory and tax laws of the government e.g., Companies Act, 1956, Income Tax Act, 1961 etc., in a large measure, influence the formulation of acceptable

accounting principles. Stock exchanges and other regulatory agencies like Controller of Capital Issues (CCI) have laid down rules for disclosure and extent of accounting information.

Since the environment in which business operates undergoes constant changes as a result of changes in economic and financial policies of the Government and changes in the structure of business, continued evaluation of the relevance of generally accepted accounting principles is required. In this sense, the principles of accounting are not ever-lasting truths. You will appreciate that it is the development of relevant accounting principles in tune with the present day needs of the society that would make it possible for the business enterprises to develop financial statements which would be acceptable and of value to the end users.

Now we give you a brief account of the development of standards in the United Kingdom, United States of America, India, and at the international level.

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## 2.6 ATTEMPTS TOWARDS STANDARDISATION

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**Standardisation in UK and USA:** Though the Institute of Chartered Accountants in England and Wales began making recommendations since 1942, the real progress started with the establishment of Accounting Standards Committee (ASC) by the Institute in 1969 in the wake of public criticism of financial reporting methods which permitted diverse practices. As a result of diversity in practices some big investors had suffered heavy losses on their investments in well known companies. The main objective of ASC has been to narrow areas of difference and variety in accounting practices. The procedure used for standardisation is initiated by the issue of an 'Exposure Draft' on a specific topic for discussion by accountants and the public at large. Comments made on exposure draft are taken into consideration when drawing up a formal statement of the accounting methods for dealing with that specific topic. The Statement known as a Statement of Standard Accounting Practice (SSAP). Once the statement of standard accounting practice is adopted by the accounting profession (the fact that a statement has been issued by the Institute in itself signifies the acceptance by the profession), any material departure by any company from the standard practice in presenting its financial reports is to be disclosed in that report. So far, nineteen statements of standard accounting practice, in addition to some exposure drafts under consideration, have been issued by the ASC.

The need for evolving standards in the USA was felt with the establishment of Securities Exchange Commission (SEC) in 1933. The SEC is the Government agency to regulate and control the issuance of and dealings in securities of the companies. A research-oriented organisation called the Accounting Principles Boards (APB) was formed in 1957 to spell out the fundamental accounting postulates. The Financial Accounting Standards Board (FASB) was formed in 1973. The FASB pronounces statements from time to time articulating the generally accepted accounting principles. The constant support given by SEC to FASB pronouncements has given considerable credibility to its accounting policy statements. The FASB till 1985 has issued five statements of concepts and eighty-eight statements of financial accounting standards.

**Standards at International Level:** In view of the growth of international trade and multinational enterprises, the need for standardisation at international level was felt. An International Congress of Accountants was organised in Sydney, Australia in 1972 to ensure the desired level of uniformity in accounting practices. Keeping this in view, International Accounting Standards Committee (IASC) was formed and was entrusted with the responsibility of formulating international standards. All the member countries of IASC resolved to conform to the standards developed by IASC or at least to disclose variations from recommended standards. After its formation in 1973, the IASC has issued 26 international accounting statements to date. Another professional body, the International Federation of Accountants (IFAC) was established in 1978.

Attempts have also been made in countries of European Economic Community (EEC) and Canada for standardisation of accounting practices regarding disclosure and consistency of procedures.

## 2.7 ACCOUNTING STANDARDS IN INDIA

With a view to harmonise varying accounting policies and practices currently in use in India, the Institute of Chartered Accountants of India (ICAI) formed the Accounting Standards Board (ASB) in April 1977 which includes representatives from industry and government. In line with the procedure followed in other countries, the preliminary drafts prepared by the study groups and approved by ASB are circulated amongst various external agencies, including the representative bodies of trade commerce and industry. So far, ten standards have been issued by ASB, a brief description of which is provided in Appendix I to this unit.

The standards are recommendatory in nature in the initial years. They are recommended for use by companies listed on a recognised Stock Exchange and other large commercial, industrial and business enterprises in the public and private sectors.

We advise that you read all or atleast some of these standards in order to get a feel of what these standards are all about. What policies and procedures of accounting these standards aim to standardise and why? Do not worry if you are unable to understand some of the ideas or expressions contained in the standards. You may like to come back to these standards after you have been through all the blocks of this course in order to have a better grasp of them.

Regarding the position in India, it has been stated that the standards have been developed without first establishing the essential theoretical framework. Without such a framework, it has been contended, any accounting standards and principles developed are likely to lack direction and coherence. This type of shortcoming also existed in UK and USA but then it was recognised and remedied long back. In the United States the first task which FASB undertook was to develop a conceptual framework project which aimed at defining the objectives of financial reporting (a sample of which is presented in Appendix II). This was to be followed by the spelling out of concepts and standards establishing what have been frequently referred to as generally accepted accounting principles (GAAP). Any attempt to develop a conceptual framework regarding the objectives of reporting will have to take into consideration the answers to the following questions:

- i) Who are the users of financial reports?
- ii) What decisions these user groups have to take?
- iii) What information can be provided which would assist them to take such decisions.

The objectives, as you have already noted, depend upon the economic, social, legal and political environment of the country.

At this point it will be useful for you to watch Video Programme: **Understanding Financial Statements-Part I.**

## 2.8 SUMMARY

Accounting as a field of study in its developmental process has evolved a theoretical framework consisting of principles or concepts over a period of time. These concepts enjoy a wide measure of support of the accounting profession; that is why they are known as Generally Accepted Accounting Principles (GAAP). Several concepts and their implications for business and information users were discussed in this unit.

Since the accounting principles are broad guidelines for general application, they permit a wide variety of methods and practices. The lack of uniformity in accounting practice makes it difficult to compare the financial reports of different companies. Moreover, the multiplicity of

## Accounting Framework

accounting practices makes it possible for management to conceal economic realities by selecting those alternative presentations of financial results which allow earnings to be manipulated. The financial statements prepared under such conditions, therefore, may have limited usefulness for several users of information. This problem has been recognised all over the world and various professional bodies are engaged in the task of standardising accounting practices. There is a movement towards consensus building even at the international level. Such professional bodies, in fact, first look at the practices used by practising accountants. They then try to obtain a refinement of those practices by a process of consensus. It is in this manner that the theory of accounting is built. In India also, some headway has been made by establishing ten standards for accounting practice.

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### 2.9 KEY WORDS

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**Accounting framework** includes generally accepted accounting principles (GAAP) on the basis of which accounting data is processed, analysed and reported.

**Accounting theory** is a set of inter-related principles and propositions which provide a general framework for accounting practice and deal with new developments in the area.

**Consistency** concept envisages that accounting information should be prepared on a consistent basis from period to period, and within periods there should be consistent treatment of similar items.

**Conservatism** concept forbids the inclusion of unrealised gains but advocates provision for possible losses.

**Entity** concept separates the business from owner(s) from the standpoint of accounting.

**Going concern** concept refers to the expectation that the organisation will have indefinite life. This assumption has an important bearing on how the assets are to be valued.

**Materiality** concept admonishes that events of relatively small importance need not be given a detailed or theoretically correct treatment. They may be ignored for separate recording.

**Money measurement** concept ignores intangibles like employee loyalty and customer satisfaction as they cannot be expressed in money terms. It also assumes records on the basis of a stable monetary unit.

**Objectivity** principle requires that only the information based on definite and verifiable facts be recorded.

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### 2.10 SELF-ASSESSMENT QUESTIONS/EXERCISES

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- 1 Examine the role of accounting concepts in the preparation of financial statements.
- 2 Is it possible to give a true or a fair view of a company's position using accounting information.
- 3 Do you find any of the accounting concepts conflicting with each other? Give examples.
- 4 In what way can accounting information help in the proper allocation of resources?
- 5 Why accounting practices should be standardised? Explain.
- 6 What progress has been made in India regarding standardisation of accounting practices?
- 7 Answer whether the following statements are true or false:
  - a) The materiality concept refers to the state of ignoring small items and values from accounts

True/False

- b) The generally accepted accounting principles prescribe a uniform accounting practice True/False
- c) The conservatism concept leads to the exclusion of all unrealised profits True/False
- d) 'Statements of Standard Accounting Practice' were formulated by the Financial Accounting Standards Board of USA. True/False
- e) The Securities Exchange Commission of USA has played an important role in evolving the conceptual framework for accounting. True/False
- 8 Conceptual framework of accounting implies
- i) making entries in the books of accounts
  - ii) a code of conduct for the accounting profession
  - iii) general principles for the preparation of accounting information
  - iv) planning and control of enterprise operations
  - v) none of the above
- 9 Accounting Standards are statements prescribed by
- i) law
  - ii) government regulatory bodies
  - iii) bodies of shareholders
  - iv) professional accounting bodies
  - v) none of the above
- 10 Accounting concepts are
- i) broad assumptions
  - ii) methods of presenting financial accounts
  - iii) bases selected to prepare a specific set of accounts
  - iv) none of the above
- 11 Name the accounting concept violated, if any, in each of the following situations:
- a) The Rs. 1,00,000 figure for inventory on a Balance Sheet is the amount for which it could be sold on the balance sheet date.
  - b) The Balance Sheet of a retail store which has experienced a gross profit of 40% on sales contains an item of merchandise inventory of Rs. 1,15,00,000: Merchandise inventory (at cost) Rs. 69,00,000.
  - c) Company M does not charge annual depreciation, preferring instead to show the entire difference between original cost and proceeds of sale as a gain or loss in the period when the asset is sold. It has followed this practice for many years.

#### Answers to Activities

- 1 If 'separate entity concept' is not observed, it becomes difficult to calculate the profitability of business and ascertain its financial position. It would be particularly difficult if the owner has several distinct businesses.
- 2 Proprietary withdrawals reduce the capital of the enterprise unless they are in lieu of anticipated profits. It is not proper to show them as operating expenses. They are also not admissible as deductions from profits for tax purposes.

## Accounting Framework

- 3 No, the 'money measurement' concept does not permit the recording of such events. What effect this event will have on the business cannot be objectively determined.
- 4 Revaluation violates several concepts like, 'cost concept', 'conservatism concept', and 'continuity concept'. To take credit for an extraordinary gain like this, is normally, not considered justified. However, where substantial gap exists between historical cost of a fixed asset and its market value, it has been observed that the accounting profession has been supporting such revaluations so that balance sheet could show a realistic position of the enterprise.
- 5 It should be taken into account otherwise profit would be overstated.
- 6 It should be taken into account otherwise profit would be understated.
- 7 It violates the 'consistency concept' unless there is a solid reason for departing from the earlier practice.

### Answers to Self-assessment Questions/Exercises

7 (a) False, (b) False, (c) True, (d) False, (e) True.

8 (iii)

9 (iv)

10 (i)

11 (a) conservatism concept, (b) no violation, (c) periodicity concept.

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## 2.11 FURTHER READINGS

Anthony, Robert, N. and James Reece, 1987. *Accounting Principles*, All India Traveller Book Seller: New Delhi (Chapters 1-3).

Meigs, Walter, B. and Robert F. Meigs, 1987. *Accounting: The Basis for Business Decisions*, McGraw Hill: New York (Chapter 1).

Hendriksen, E.S., 1984. *Accounting Theory*, Khosla Publishing House: Delhi (Chapters 2, 3 and 6).

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## 2.12 APPENDICES

### Appendix I

#### Accounting Standards in India

Institute of Chartered Accountants of India (ICAI) has so far issued the following ten accounting standards (AS):

- AS- 1: Disclosure of Accounting Policies
- AS- 2: Valuation of Inventories
- AS- 3: Changes in Financial Position
- AS- 4: Contingencies and Events Occurring After the Balance Sheet Date
- AS- 5: Prior Period and Extraordinary Items and Changes in Accounting Policies
- AS- 6: Depreciation Accounting
- AS- 7: Accounting for Construction Costs
- AS- 8: Accounting for Research and Development
- AS- 9: Revenue Recognition
- AS-10: Accounting for Fixed Costs

**Accounting Standard-1** deals with the disclosure of significant accounting policies followed in the preparation and presentation of financial statements. Some of the areas in which accounting policies adopted by different enterprises may differ include: methods of depreciation, depletion and amortisation, treatment of expenditure during construction, conversion or translation of foreign currency items, valuation of inventories, treatment of

goodwill, valuation of investments, treatment of retirement benefits, recognition of profit on long-term contracts, calculation of fixed assets, treatment of contingent liabilities etc.

The purpose of this standard is to promote a better understanding of financial statements by establishing through an accounting standard the disclosure of significant accounting policies in the financial statements and the manner of doing so.

Any change in the accounting policies which has a material effect in the current period or which is reasonably expected to have a material effect in later periods should be disclosed. In the case of a change in accounting policies which has a material effect in the current period, the amount by which any item in the financial statements is affected by such change should also be disclosed to the extent ascertainable. Where such amount is not ascertainable, wholly or in part, the fact should be indicated.

Major considerations governing the selection and application of accounting policies are prudence, substance over form and materiality. Compliance with this standard should go a long way in facilitating a more meaningful comparison between financial statements of different enterprises.

**Accounting Standard-2** deals with the principle of valuing inventories for the financial statements. This standard seeks to narrow the differences in the current practices of inventory valuation, and to ensure adequate disclosure in the financial statements. Any change in the accounting policy relating to inventories, which has a material effect in the current period or which is reasonably expected to have a material effect in later periods, should be disclosed.

**Accounting Standard-3** is concerned with the Statement of Changes in Financial Position (SCFP), commonly known as Funds Flow Statement. It deals with the financial statement, which summarise the sources and application of funds of an enterprise for a given period.

In India, though there is no legal requirement to publish this statement, there is a growing practice to do so along with other financial statements. The objective of AS-3 is to encourage and strengthen this practice.

**Accounting Standard-4** deals with the treatment, in the financial statements, of contingencies and events occurring after the balance sheet date.

A contingency is a condition or situation, the ultimate outcome of which, gain or loss, will be known or determined only on the occurrence or non-occurrence of one or more uncertain future events.

Events occurring after the balance sheet date are those significant events, both favourable and unfavourable, that occur between the balance sheet date and the date on which the financial statements are approved by the Board of Directors of a company.

Adjustments to assets and liabilities are required to take care of significant events occurring after the balance sheet date which provide additional information materially affecting the determination of the amounts relating to conditions existing at the balance sheet date. For example, an adjustment may be made for a loss on a trade receivable account which is confirmed by the insolvency of a customer which occurs after the balance sheet date.

If a contingent loss is not provided for, its nature and an estimate of its financial effect are generally disclosed by way of a note unless the possibility of loss is remote. Similarly, the existence and nature of contingent gains are usually disclosed by way of a note in the financial statements if it is reasonably certain that the gain will be realised by the enterprise.

**Accounting Standard-5** deals with the treatment of prior period and extraordinary items and changes in accounting policies. Any change in accounting policy which has a material effect should be disclosed.

**Accounting Standard-6** deals with depreciation accounting and the disclosure requirements in connection with it.

Depreciation has a significant effect in determining and presenting the financial position and the results of operations of an enterprise. Depreciation is charged in each accounting period by reference to the extent of the depreciable amount (historical cost, or other amount substituted for historical cost in the financial statements, less the estimated

## Accounting Framework

residual value) irrespective of an increase in the market value of the assets. According to the Companies Act, 1956, provision of depreciation should either be based on the reducing balance method (as per Income-tax Act/Rules), or on the corresponding straightline depreciation rates, which would write off 95 per cent of the original cost over the specified period.

The method of depreciation should be applied consistently to provide comparability of the results of operations of the enterprise from period to period.

The depreciation method(s) used, the total amount of depreciation for each class of assets, the gross amount of each class of depreciable assets and the related accumulated depreciation should be disclosed in the financial statements along with disclosure of other accounting policies. A change in the method of depreciation is treated as a change in an accounting policy, and should be disclosed accordingly.

**Accounting Standard-7** deals with accounting for construction contracts in the financial statements of contractors. A construction contract is a contract for the construction of an asset or a combination of assets which together constitute a single project.

The principal problem relating to accounting for construction contracts is the allocation of revenues and related costs to accounting periods over the duration of the contract. Two methods of accounting for contracts commonly followed by contractors are the percentage of completion method and the completed contract method.

When there is a change in the accounting policy used for construction contracts, the disclosure of the effect of change and its amount should be made in the financial statements.

**Accounting Standard-8** is concerned with accounting for research and development. This standard deals with the treatment of costs of research and development (R&D) in financial statements. In order to achieve a reasonable degree of comparability between enterprises and between accounting periods of the same enterprise, it is necessary to identify the elements comprising R&D costs. Amounts of R&D costs should be charged as an expense of the periods in which they are incurred. The R&D costs of a project may be deferred to future periods under certain conditions. If R&D costs are deferred they should be allocated on a systematic basis to future accounting periods. The total of R&D costs, including the amortised portion of deferred costs, charged as expense should be disclosed in the Profit and Loss Account for the period. Deferred R&D expenditure should be separately disclosed in the Balance Sheet under the head "Miscellaneous Expenditure".

**Accounting Standard-9** deals with the bases for recognition of revenue in the profit and loss statement of an enterprise. The statement is concerned with the recognition of revenue arising in the course of the normal activities of the enterprise from (1) the sale of goods, (2) the rendering of services, and (3) the use by others of the enterprise resources yielding interest, royalties and dividends. The revenue should be recognised, provided that at the time of performance, it is not unreasonable to expect ultimate collection. At the time of raising of any claim, if it is unreasonable to expect ultimate collection, revenue recognition should be postponed.

**Accounting Standard-10** deals with accounting for fixed costs. Some of its highlights are: (a) The gross book value of a fixed asset should be either historical cost or a revaluation computed in accordance with this standard. (b) The cost of a fixed asset should comprise its purchase price and any attributable costs of bringing the asset to its working condition for its intended use, (c) Financing costs relating to deferred credits or to borrowed funds attributable to construction or acquisition of fixed assets for the period up to the completion of construction or acquisition of fixed assets should also be included in the gross book value of the asset to which they relate.

The cost of a self-constructed fixed asset should comprise those costs that relate directly to the specific asset and those that are attributable to the construction activity in general and can be allocated to the specific asset.

Fixed assets acquired in exchange for shares or other securities in the enterprise should be recorded at their fair market value, or the fair market value of the securities issued, whichever is more clearly evident.

Subsequent expenditures related to an item of fixed asset should be added to its book value if they increase future benefits from the existing asset beyond its previously assessed standard of performance. Fixed asset should be eliminated from the financial statements on disposal or where no further benefit is expected from its use and disposal.

Losses arising from the retirement, or gains or losses arising from disposal of fixed asset which is carried at cost should be recognised in the profit and loss statement. When a fixed asset is revalued upwards, any accumulated depreciation existing at the date of the revaluation should not be credited to the profit and loss account. An increase in net book value arising on revaluation of fixed assets should be credited directly to owners' interests under the head of revaluation reserve.

Goodwill should be recorded in the books only when some consideration in money or money's worth has been paid for it.

The following information should be disclosed in the financial statements:

- 1 gross and net book values of fixed assets at the end of an accounting period showing additions, disposals, acquisitions and other movements;
- 2 expenditure incurred on account of fixed assets in the course of construction or acquisition; and
- 3 revalued amount substituted for historical costs of fixed assets, the methods adopted to compute the revalued amounts, the nature of indices used, the year of any appraisal made, whether an external valuer was involved, in case where fixed assets are stated at revalued amounts.

## Appendix II

### Financial Accounting Standards Board (FASB)

#### Concepts No. 1: 'Objectives of financial reporting by business enterprise'.

The three objectives which are included in concepts No. 1 are reproduced below:

- 1 Financial reporting should provide information that is useful to the present and potential investors and creditors and other users in making rational investment, credit and similar decisions. The information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence.
- 2 Financial reporting should provide information to help present and potential investors and creditors and other users in assessing the amounts, timing, and uncertainty of prospective cash receipts from dividends or interest and the proceeds from the sale, redemption, or maturity of securities or loans. Since investors' and creditors' cash flows are related to enterprise cash flows, financial reporting should provide information to help investors, creditors and others, assess the amounts, timing, and uncertainty of prospective net cash inflows to the related enterprise.
- 3 Financial reporting should provide information about the economic resources of an enterprise, the claims to those resources (obligations of the enterprise to transfer resources to other entities and owner's equity), and the effects of transactions, events, and circumstances that change its resources and claim to those resources.

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## UNIT 3 ACCOUNTING INFORMATION AND ITS APPLICATIONS

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### Objectives

After studying this unit, you should be able to appreciate the:

- nature of accounting information;
- major purposes of accounting information;
- role of information in the control process;
- uses of earnings information; and
- uses of information contained in balance sheet.

### Structure

- 3.1 Introduction
- 3.2 Purposes of Accounting Information
- 3.3 Accounting and Control in Organisation
- 3.4 Profit and Cash Balance Distinguished
- 3.5 Uses of Earnings Information
- 3.6 Uses of Balance Sheet
- 3.7 Summary
- 3.8 Key words
- 3.9 Self-assessment Questions/Exercises
- 3.10 Further Readings

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### 3.1 INTRODUCTION

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As you have observed in unit 1, historically, accounting developed as a system for reporting information to the owners including shareholders and other investors of the business. In the process of its evolution, accounting has branched off into two distinct directions—one dealing with information processing for external uses and the other dealing with information processing for internal (or managerial) uses. We refer to the first one as **financial accounting** and the second as **managerial accounting**. But when we talk about 'accounting information, we generally look at it in a broader sense to encompass information processing for both internal and external uses. In this unit we shall deal with some illustrative uses of accounting information so as to give you a feel of what accounting could contribute.

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### 3.2 PURPOSES OF ACCOUNTING INFORMATION

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At the outset, let us share with you that accounting information is useful for (1) score-keeping, (2) attention-directing, and (3) problem-solving. Let us ask a question: What precise information should the accountant provide for these purposes? Obviously, the type-coverage of information needed may vary from organisation to organisation. Further, the specific information needs in the actual decision-making process at different organisational levels influence the scope of an accounting information system.

**Score-keeping:** The score-keeping function is one of the primary purposes of accounting information. It basically deals with the financial health of the enterprise. In other words, it answers: How are we doing? Good, bad, or indifferent? Though it appears to be a simple question, a moment's reflection will show that it is not that simple. It involves answering questions such as: What is doing good? What is doing bad? Is profit earned good? If so, how much? Is it that profit alone is not sufficient? Thus we can go on increasing the string of questions intending to further clarify the basic question. Thus, score-keeping has two aspects, one is that of keeping record of actual data on performance - a constant process of measurement and valuation. The other aspect is concerned with putting the data in relation to predetermined

standards. In order to answer the question whether the performance is good, bad or indifferent we have to have a constant process of comparison against some norms, standards or benchmarks. This is achieved by preparing a series of reports based on comparison of actual data with the planned data.

**Activity 1**

Complete five questions (two are already given below) that will lead to the assessment of the financial health of a business organisation.

- 1 How much profit was made by the organisation in the preceding accounting year?
- 2 Does the organisation have sufficient funds to meet its day to day expenditures?
- 3 .....
- 4 .....
- 5 .....

**Attention-directing:** Attention-directing is nothing but the process of giving a signal to the user of accounting information about the need to take a decision. As such the accounting information supplied arouses the user's attention to take decision. For example, a report from an accountant comparing the actual performance data against budget data is a score-keeping record. In the hands of a decision-maker it is an attention-directing information. This would enable him to immediately focus his attention on the deviations or variances from the budgets or the plans. A whole series of actions will be triggered by this, namely, evaluation of reasons for the deviations, remedial actions to be taken, modifications in the feedback for future and so on.

Most of the formal reporting takes the form of annual reports. An annual report is the score card of activities for an accounting period. If properly analysed, this report can be helpful in understanding the problems of overall nature faced by the enterprise. It can also help the shareholders in assessing the actual performance of the company vis-a-vis their expectations.

**Problem-solving:** The problem-solving function of accounting information involves provision of such information which enables the manager to find solutions to the problems. There are many problems which accounting information could highlight and provide for their possible solutions, such as 'make or buy decisions' with respect to components, parts or products, 'continue or drop decisions' with respect to product line, 'leasing or acquisition decisions' with respect to assets etc. Problem-solving is therefore an important purpose of accounting information system.

Let us summarise the purposes of accounting information:

Accounting, in its score card role, accumulates data and enables interested persons, both internal and external, to understand and take stock of the organisation's performance.

In its attention-directing role accounting information, by reporting and analysing the data, focuses a manager's attention on operational deficiencies, weaknesses, threats and opportunities. In this role accounting complements day to day operational planning and control activities.

In its problem-solving role, accounting enables quantification of the different alternative solutions, their relative merits and demerits.

**Activity 2**

Fill in the blanks:

- 1 Financial accounting deals with reporting information for ..... uses and ..... deals with reporting information for managerial uses.

## Accounting Framework

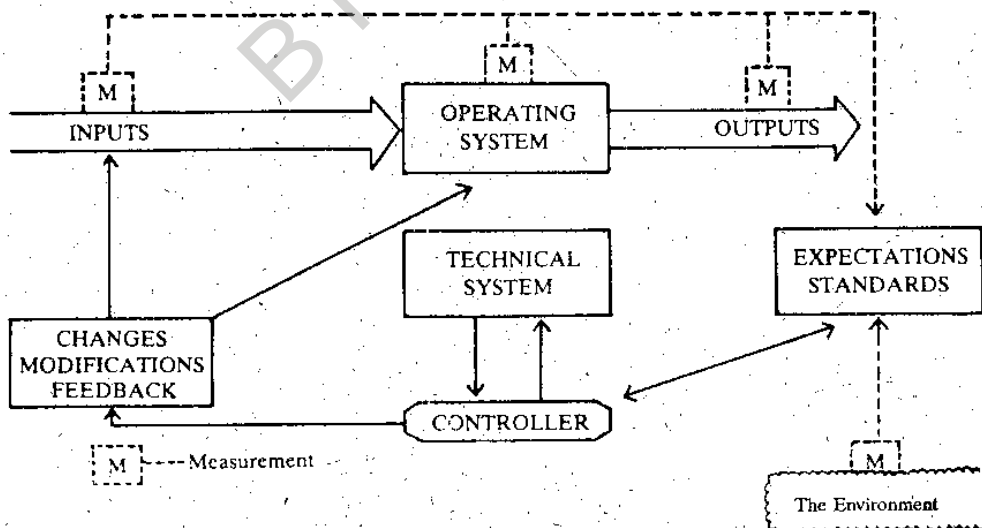
- 2 Accounting information addresses itself to three distinct activities, (i) ..... (ii) ..... (iii) .....
- 3 Score-keeping activity involves two functions, first, keeping ..... and second a constant process of .....
- 4 Attention -directing information triggers the need for taking ..... in the recipient's mind.
- 5 Problem-solving in accounting involves provision of ..... to enable managers to find ..... to problems.

### 3.3 ACCOUNTING AND CONTROL IN ORGANISATION

In this course we shall deal with financial and management accounting together. You, probably know that both these branches of accounting, after all, are concerned with providing information about the same business.

One of the tasks of the management is to control the operations of the organisation. Accounting is closely connected with control system in an organisation. To understand this, let us have a look at the control system in an organisation as shown in Figure I. You know that the organisation is a system of inter-related parts and is linked with the environment. It derives its inputs from the environment and transforms them with the help of the operating system into outputs which it delivers to the environment. To control organisational system, we have first to measure inputs, operations and outputs. The measurements obtained then have to be evaluated against standards. This information has to be supplied to the concerned managers so that they could take appropriate actions from future point of view. In all these activities i. e., measuring, evaluating and providing feedback the accountant is deeply involved. The process of evaluation brings out deviations which provide the basis for feedback in a system and lead to changes in inputs for operations to achieve desired outputs.

Figure I: Structure of Control in an Organisation



The annual accounts or financial statements of a business comprise balance sheet and profit and loss account. Sometimes they also include the fund flow statement.

All these statements have only historical significance since they relate to an accounting period which has already expired. However, balance sheet and profit and loss account provide valuable information linking the profit to investment or assets used in business. We try to measure organisational performance using this information.

The idea of relating profit to asset use can provide a basis for judgement about the efficiency of an organisation. As business often operates in an environment of uncertainty, estimation of 'normal' profits is not easy. By making the best use of accounting information of the past in relation to the expectations of future, we try to make integrated financial plan for an organisation. Such plan includes projections about level of activity, resources, profit, financial assets, and cash resources.

From Figure I it is obvious that controller (or accountant) and managers obtain such information which enables them to diagnose the situation. They are able to identify and define the problem at hand.

Let us try to identify and define a problem in a hypothetical setting. Suppose you are managing a firm which sells three products  $P_1$ ,  $P_2$ ,  $P_3$ . You are confronted with a problem that the profit of your firm is decreasing. Now falling profits may be due to many reasons. The first thing that you would like to do is to identify the problem more precisely before you set about solving it. Some of the possible hypotheses are: which of the three products is losing money? Are all of them losing money? If all of them are losing money, are they losing money to the same extent? Is the firm losing money due to increasing cost or decreasing prices? Many such questions would enable you in diagnosing the problem more accurately. In general, such questions enable a manager to specify the causes of the problem.

Let us examine how the accounting information could be helpful in identifying a problem of this nature. The following table is the summarised profit and loss account of a firm whose situation has been described above.

		Figures in Rs.	
Year	19 x 0	19 x 1	
Sales		1000	1000
Less:			
Cost of goods sold	400	500	
Depreciation	200	200	
Other operating expenses	100	100	800
Profit		300	200

From the above, it is clear that in one year the profit has declined by Rs. 100. An examination of the profit and loss account would show that sales have remained the same and all expenses other than the cost of goods sold have also remained the same. We are now in a position to state the problem thus:

**Problem:** Decrease in profits during the period has come about as a result of overall increase in the cost of goods sold.

If the organisation was dealing with a single product, the problem is easily identifiable. But as it is dealing with three products, you have to answer the question: Which product is losing money? The product-wise accounting information with respect to sales and costs can help us in identifying the problem better.

Year	19 x 0			19 x 1		
	$P_1$	$P_2$	$P_3$	$P_1$	$P_2$	$P_3$
Products						
Sales	300	300	400	400	400	200
Less: Cost of sales	150	150	100	200	200	100
Gross Profit	150	150	300	200	200	100

Please recall that other costs which are common to all the products did not change). With the above additional information on different products you can now redefine the problem more precisely.

## Accounting Framework

- Problem:**
- 1 Sales of  $P_1$  and  $P_2$  have increased. Cost of sales retains the same relationship with sales.
  - 2 Sales of  $P_3$  has decreased. Cost of sales in relation to sales has doubled.

What we have done is nothing but a very simple use of accounting information to pinpoint the problem so that we could initiate action.

### 3.4 PROFIT AND CASH BALANCE DISTINGUISHED

How do we evaluate the results of a firm? The answers could be many depending on what your interests are. But there is no difference of opinion regarding two important aspects:

- 1 What is the worth of the business?
- 2 How much does it earn?

The results of these two inquiries usually become the basis for several decisions of the management and their action plans. The initiatives the management takes in connection with improving the profitability of the enterprise and its worth will, in a large measure, be a reflection of managerial effectiveness.

#### Illustration

Shyam decided to start a small casting and machine shop. He undertakes job orders for castings. He hired a shop floor with a backyard, bought the necessary equipment and hired a few workers. Shyam thought he had very successful operation during the first year, because he was engaged throughout the year.

He tried to prepare his accounts and discovered that his collection from customers was Rs. 24,000 and he had borrowed Rs. 30,000 from the bank. He had spent Rs. 72,000 for running the business. He has run down his savings substantially (Exhibit I). Shyam discussed the situation with his friend who is a graduate student of management. He worked out Shyam's operating results for the period (Exhibit II).

#### Exhibit I

##### Shyam Enterprises

##### Summary of Cash transactions

		Figures in Rs.	
<b>Receipts</b>		<b>Payments</b>	
Receipts from bank loan	30,000	Wages to employees	12,000
Collections from customers	24,000	Materials purchased	36,000
		Payment of instalment for equipment purchased	5,000
		Electricity charges	1,000
		Withdrawals for personal use	15,000
		Other payments for expenses	3,000
			<u>72,000</u>
Excess payments over receipts	<u>Rs. 18,000</u>		

Shyam's friend with the help of Exhibit II could convince Shyam that the situation is not very bad. For proper appreciation of the situation he gathered several pieces of information, as given below:

- 1 He made sales of Rs. 36,000 (at selling price), one-third of it (Rs. 12,000) is yet to be collected. In other words, on an average 4 month's sales remain uncollected.

- 2 Even though he purchased materials worth Rs. 36,000 he consumed only one-half of it for production and sales. In other words, materials sufficient for one year's consumption remain in inventory.
- 3 Cash generation during the year was Rs. 54,000 whereas the need for payments amounted to Rs. 72,000.

**Exhibit II**  
**Shyam Enterprises**  
**Operating Summary**

		Figures in Rs.
Collection from sales		24,000
Sales yet to be collected		12,000
		36,000
Less:		
Cost of sales:		
Purchases of materials paid	36,000	
Inventory at close	18,000	18,000
Wages		12,000
Electricity		1,000
Other expenses		3,000
Total Expenses		34,000
Net Profit		2,000

Exhibit II is based on the additional information presented above and shows that Shyam has made a profit of Rs. 2,000 on sales of Rs. 36,000. You will appreciate that there is a fundamental difference in approach and utility of information contained in the two Exhibits. While Exhibit I looks at the problem purely from the viewpoint of increases and decreases in cash. Exhibit II summarises all the revenues and expenses which belong to the period of one year irrespective of whether or not all the revenues have been received in cash and whether or not all the expenses have been paid in cash. In fact, in doing so we are making practical use of Accrual Concept (discussed in the preceding unit) and principles of revenue recognition (discussed in the next unit). You may note that cash balance is not synonymous with net profit earned by the business. A business firm might have earned a profit and still be short of cash and *vice-versa*. In this particular example you have seen that the business has earned a profit of Rs. 2,000 but without cash balance showing any surplus. In fact, payments, as shown in Exhibit I, have far exceeded the receipts. The excess of payments over receipts amounted to Rs. 18,000 and this deficit was financed through the personal savings of Shyam. Since payments can never be more than receipts, the deficit must have been made good through Shyam's personal sources. This subject will be further expanded in Unit 6 dealing with funds flow and cash flow analysis.

### 3.5 USES OF EARNINGS INFORMATION

The earnings information is useful for (1) measuring accomplishment, (2) deciding how much could be withdrawn from the business without impairing its current level of operations, (3) identifying the problems, and (4) determining a market value for the enterprise.

**Accomplishments:** Profit is an important indicator of the accomplishment of business. Other things remaining the same, higher the profits greater is the accomplishment. Accomplishment of Shyam's enterprise can be summarised as follows:

It has earned a net profit of Rs. 2,000 during the year (Exhibit II)

At the same time, it should be seen from Exhibit I that there is a severe cash constraint. Understandably, it was the start up situation which might have been responsible for the cash constraint.

The profit earned in the very first year of operations shows that the business could be viable. But Shyam will have to predict several aspects such as whether sales can increase, whether costs remain the same, whether the earnings rate remains the same, and so on. At the same time, he will have to ensure better management to his cash resources.

**Appropriation Decision:** An important question with which owners of a business are often confronted is: How much money can be withdrawn without impairing its current level of operations? This question in fact is concerned with appropriation decision. A prudent management would not only like to maintain the capital or the present capability of the enterprise intact but would also plan for future growth. The maximum amount that the owners can withdraw from business for their personal expenses should be limited to the amount of earnings which remain after making good all the resources that have been used (or consumed) in the process of generating those earnings. In other words, it is the net profit after charging depreciation and all other losses incurred in the course of business operations that is available to the owners for withdrawal, provided the business has no tax liability. In case the business has tax liability the amount that can be withdrawn will be reduced by the estimated amount of tax liability. Thus, the remainder is the amount which is available for withdrawal without impairing its current level of operations. However, if business has any plan for future growth, the amount available for withdrawal by or distribution among owners shall be further reduced by a portion of profit (or cash) needed for future growth depending upon the judgement of the management. In this context, the withdrawal by Shyam of Rs. 15,000 against a profit of Rs. 2,000 cannot be defended.

**Problem Identification Using Earnings Data:** From the earnings data several problem areas can be identified. This is best done by computing ratios i.e., by examining the relationship of one item of earnings statement with another item. This will be taken up in detail in a subsequent unit. At this stage it may only be stated that the lower earnings may be on account of excessive cost of inputs, excessive expenditure on overheads or low margin of profit on sales or excessive piling of inventories or other unanticipated losses. Insofar as Shyam's enterprise is concerned, we can identify two problems even from the very limited data that we have regarding his business. They are:

- 1) The inventory acquisition was not in tune with production and sales. This has led to large amount of accumulated inventory to the tune of one year's consumption.
- 2) Credit granted to customers, shown by credit sales, amounts to four months' sales. This shows either grant of credit on liberal terms or slow collection of receivables.

However, an analysis of operating summary along with cash summary will show that the business is facing a cash crisis since the present cash needs and cash availability are not in tune with each other.

**Determining the Market Value of a Firm:** You will recall that we have viewed the business as a distinct operating entity. The economic value of the firm is determined by the size and reliability of the stream of earnings (cash flows) produced by the business. Let us attempt the valuation of a hypothetical firm. Bharat Kitchenaids, which was incorporated as a company in 19x0 by four non-resident young Indians to market a simple but revolutionary cooking gas lighter invented by one of its founders. In order to conserve its limited capital the company opened its business in rented premises with Rs. 80,000 worth of equipment used mainly for research and development work. Arrangements were made with an established manufacturer to make the gas lighter on order under rigid supervision of one of the members of the young

team. Because the gas lighter was able to meet a long felt need, the company reported a modest profit in its very first year of operations.

The four-men team was remarkably well balanced combining talents in engineering research, marketing and management. In the next two years they developed three more appliances that were well received in the market. By 19 x 5 the turnover had grown to about Rs. 1 crore and net profit amounted to Rs.14 lakhs. At this point the total investment (or equity) of the owners amounted to Rs. 32 lakhs. Annual earnings, therefore, represented an after tax rate of return of approximately 44 per cent of the equity. The high return could be attributed to using the facilities of other manufacturers rather than building their own, the patents that the company registered and the scientific and managerial skill the team possessed.

An interesting development then took place. A large manufacturer in the household goods sector wanted to acquire the company and offered the owners a very attractive price. The four owners wanted to consider the offer (and make a decision) but asked for a few weeks' time to make up their mind.

The owners knew that they had established a solid position in the industry and had no doubt that they would be able to maintain this position. They, however, felt that the potential for further growth was limited. They drew very good salaries which they would continue to enjoy even if they were to sell the business.

To work how much equity in the Bharat Kitchenaids was worth to them so that they could take a decision on the price offered, the four men started by forecasting the company's future profits or cash flows ( we shall assume here that the figures of profits and cash flows are the same). They believed that the net profit would continue to be around Rs.14 lakhs each year for the next 10 years. Further, if they did not sell out in 19x6, they could sell their interest in business (that is their equity) 10 years later for about Rs. 50 lakhs. In accordance with these estimates the anticipated net earnings from continued ownership would be as follows:

Year	Earnings
1 to 10	14 lakhs a year
10	50 lakhs

You know that money has time value. You attach more value to an amount to be received now than the one to be received, say, a year or two later. Rs. 14 lakhs of profit to be received in the second year will be of lesser value to you than Rs. 14 lakhs to be received in the first year. Similarly Rs. 14 lakhs to be received in the third year will be of lesser value to you than Rs. 14 lakhs to be received in the second year, and so on. In other words, the value of amounts to be received in future will progressively decline as time passes by. The process of reducing the future earnings to present values is known as discounting, but for this purpose a discounting rate is required. The discounting rate is nothing but the return which the owners desire to earn on their investment. The desired rate of return in a way is a rate of return which satisfies the owners of investment.

The owners in this case thought that the rate of 15 per cent after taxes was a satisfactory return on investment for the type of business they were engaged in. The question before them was how much the anticipated earnings were worth presently at this rate. At 15 per cent desired rate they calculated the present value of the stream of earnings of Rs. 14 lakhs a year for ten years plus Rs. 50 lakhs they were to receive at the end of 10th year. They found that the present value was Rs. 82.62 lakhs. However, in accordance with the concept of present value, you will agree with us that the present value of earnings of Rs. 140 lakhs to be received over a period of 10 years and lump sum of Rs. 50 lakhs to be received at the end of 10th year, i.e., a total amount of Rs. 190 lakhs, must be considerably less than this amount.

## Accounting Framework

Under these assumptions, therefore, the owners would not accept an offer of an amount less than say Rs. 80 lakhs which is the present value of the business or their equity. However, if the owners feel that Bharat Kitchenaids would continue to produce Rs. 14 lakhs a year indefinitely if it was managed adequately, the present value can be calculated simply by dividing the annual earnings by the desired rate of return:

$$\frac{14 \text{ lakhs}}{.15} = 93.33 \text{ lakhs}$$

On this basis the value of owner's business would be 93.33 lakhs. The process of ascertaining the value of business with the help of earnings and a desired rate of return is also known as the **capitalisation of earnings**. It means that if Rs. 93.33 lakhs is paid for infinitely long series of payments of Rs. 14 lakhs a year, the rate of return on investment will be 15 per cent:

$$\frac{14 \text{ lakhs}}{93.33 \text{ lakhs}} = 15 \text{ percent}$$

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### 3.6 USES OF BALANCE SHEET

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The balance sheet is a summary of a firms' assets and liabilities, including share capital and reserves at a defined moment in time. That is why it has been described as a 'snapshot or still picture' of the financial position of a business entity. It is also called the position statement.

In addition to profit and loss account, the various groups interested in the company can also draw useful inferences from an analysis of the information contained in the balance sheet. Shareholders usually have twin interests: an interest in receiving a regular income and an interest in the appreciation of their investment in shares. The market worth of their shares depends not only on the dividends they receive but also on the extent of retained earnings which the company has accumulated over the years. The materialisation of the shareholders' expectations regarding bonus shares also depends on the retained earnings built up by the company. Investment decisions of the prospective investors and disinvestment decisions of the existing investors are influenced by the composition of assets and liabilities shown in the balance sheet.

The main interest of the trade creditors centres on the liquidity position of the company. They would like to make an assessment as to whether the company will be able to meet its obligations when the occasion arises. They are, therefore, concerned about the working capital available with the enterprise and its cash resources. All this information can be gleaned from the balance sheet. The interest of long-term creditors lies in two things; they are interested in the regular servicing of their debts (that is payment of periodic interest) and repayments of their loans after the expiry of stipulated period. They are interested not only in the profitability of the enterprise but also in its long-term solvency and financial viability. A study of the balance sheet of the company over the past several years can yield a lot of useful information to such long-term investors.

Similarly, other interested parties like regulatory and developmental agencies of the Government, consumer and welfare organisations can derive useful conclusions from a study of the balance sheets about the working of the corporate sector and its contributions to the national economy.

It should be emphasised here that it is not the profit and loss account and the balance sheet in isolation with each other but both of them in conjunction with each other that can yield a harvest of information for the interested parties or analysts. All this pertains to the broad area of analysis of financial statements which will be taken up in detail in a subsequent unit.

#### Activity 3

1 Mention four important uses of earnings information.

i) .....

- ii) .....
- iii) .....
- iv) .....

2 Mention the three parts into which net profits are usually appropriated.

- i) .....
- ii) .....
- iii) .....

3 Value of a firm is determined in the main based on ..... of earnings.

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### 3.7 SUMMARY

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Accounting information system addresses itself to three important business related problems, namely, score-keeping, attention-directing and problem-solving. Accounting information acquires relevance only in the context of an organisation. In this context accounting is closely related to control. Accounting helps in the process of guiding actions of the organisation into desired directions. In the process of initiating control actions, it helps the whole gamut of activities involving planning, organising and controlling.

There may not necessarily be an exact correspondence between cash balance and the profit earned during an accounting period.

The earnings information is useful for several purposes. It helps in measuring achievement of business and its management. It provides a basis for appropriation decisions and for determining the market value of the firm. It helps to identify the problems currently faced by the enterprise.

The balance sheet reflects the financial position of the enterprise. It provides useful information to various users of information who might be interested in the firm. A proper analysis of the information contained in the balance sheet can enable them to draw conclusions which in turn help them in taking decisions.

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### 3.8 KEY WORDS

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**Problem-solving** role of accounting consists of supplying such information as would be useful to managers for taking a variety of routine and non-routine decisions.

**Profit and loss Account** is a summary of the revenues and expenses, including gains and losses from extraordinary items of a business unit for an accounting period.

**Balance Sheet** is a statement of financial position of a business unit disclosing at a given moment of time its assets, liabilities and ownership equities.

**Appropriation of net profits** means the (allocation) disposal of net profit for various purposes. In the case of non-corporate entities, the net profit is distributed to the owners. In the case of corporate entities usually a part of the net profit is provided for estimated tax liability, a part is retained in business to strengthen its financial position and for future growth, a part is distributed to shareholders in the form of dividends and any amount left is carried forward to the next period.

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### 3.9 SELF-ASSESSMENT QUESTIONS/EXERCISES

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- 1 What are the purposes of accounting information? Explain briefly, What purpose, in your opinion, is the most important and why?
- 2 "Accounting is closely connected with control". Elaborate the statement and discuss the role of accounting feedback in the process of control.
- 3 Explain the uses of earnings information. Can you think of uses other than the four uses mentioned in this unit?
- 4 What is a Balance Sheet and what information it conveys to an outsider?
- 5 What groups of people would be interested in accounting reports and why?
- 6 "An outsider, who reads the data relating to the business as revealed by the accounting statements, tends to assume that accounting gives an exact picture of the business." Utilising your understanding of accounting concepts, including the limitations imposed by such concepts on accounting information, discuss the above statement with your fellow students/accounting colleagues/office friends.
- 7 Ram invested Rs. 20,000 of his own money in small service business and borrowed another Rs. 10,000 from a bank, also for business use. At the end of his first year of operations, he found that there was Rs. 34,000 in the enterprise's bank account. He owed his suppliers Rs. 6,000 and had not repaid the bank loan. His business assets other than cash were negligible. During the year he had paid himself his salary of Rs. 12,000.
  - a) What conclusions would you draw about his first year's operations?
  - b) For what decisions would this information be used? What additional information would the decision makers be likely to call for in making these decisions?

#### Answers to Activities

##### Activity 2

- 1 External, management accounting.
- 2 (i) Score-keeping, (ii) attention-directing and (iii) problem- solving.
- 3 Records of actuals, relation.
- 4 Decisions.
- 5 Information, solutions.

##### Activity 3

- 1 (i) Measuring accomplishment,  
(ii) Profit distribution,  
(iii) Identifying problems,  
(iv) Market valuation of the firm.
- 2 (i) Taxation  
(ii) Distribution to owners,  
(iii) Retained earnings.
- 3 Future stream.

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### 3.10 FURTHER READINGS

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Meigs, Walter, B. and Robert F. Meigs, 1987, *Accounting: The Basis for Business Decisions*, McGraw Hill: New York. (Chapter 1).

Gray, Jack and Kenneth S. Johnston, 1977, *Accounting and Management Action*, Tata Mc Graw Hill: New Delhi (Chapter 2).

BRAOU

## UNIT 4 CONSTRUCTION AND ANALYSIS OF BALANCE SHEET

### Objectives

After having studied this unit, you should be able to:

- understand and explain the terms used in a balance sheet
- classify the different assets, liabilities and capital accounts as they would appear on a balance sheet
- apply simple principles of valuation of assets
- understand the idea of balance sheet equation.

### Structure

- 4.1 Introduction
- 4.2 Conceptual Basis of a Balance Sheet
- 4.3 Constructing a Balance Sheet
- 4.4 Balance Sheet Contents
- 4.5 Form and Classification of Items
- 4.6 Summary
- 4.7 Key Words
- 4.8 Self-assessment Questions/Exercises
- 4.9 Further Readings

### 4.1 INTRODUCTION

One of the basic objectives of accounting is to convey information. This is achieved by different accounting reports prepared by an entity. One of the most important reports is the Balance Sheet.

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

### 4.2 CONCEPTUAL BASIS OF A BALANCE SHEET

The above concept can be elaborated by an example:

I want to purchase a car costing Rs. 80,000. To do so, I have to borrow. A bank agrees to finance me if I can invest Rs. 30,000 on my own.

Now let us follow the sequence of events when I approach the bank with the proposal. Granting my ability to repay the loan, the banker will ask two specific questions:

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

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

Things of value owned by me	Rs.	Amount owned by me	Rs.
Balance with bank	35,000	Personal loan from friend	10,000
Fixed deposits	15,000		
Other personal belongings	50,000		
	1,00,000		10,000

This implies I own Rs. 1,00,000 worth things of value, Rs. 35,000 of this could be withdrawn at any time in cash. We say I have Rs. 35,000 in liquid form. Another Rs. 15,000 is in monetary investment and the remaining Rs. 50,000 is in non-monetary property. Further, I owe Rs. 10,000 to a friend of mine. In other words, he has got a claim against the things of value owned by me to the extent of Rs. 10,000. In brief, we can say I am worth Rs. 1,00,000, claim against my worth is Rs. 10,000 and hence my net worth is Rs. 90,000. This implies Rs. 90,000 is my own claims against the things of value owned by me or my net worth.

Now I can present my financial position in the following form:

**Financial Position Statement I**

Things of value owned		Claims against things of value	
Balance with bank	35,000	Personal loan from friend	10,000
Fixed deposits	15,000	Own claim or net worth	90,000
Other personal belongings	50,000		
	<u>1,00,000</u>		<u>1,00,000</u>

Now that the bank grants me the loan of Rs. 50,000 and I buy the car for Rs. 80,000. After purchase of the car my financial position statement will change as follows:

**Financial Position Statement 2**

Things of value owned		Claims against things of value	
Balance with bank	5,000	Personal loan from friend	10,000
Fixed deposits	15,000	Mortgage loan from bank	50,000
Car	80,000	Own claim or net worth	90,000
Other personal belongings	50,000		
	<u>1,50,000</u>		<u>1,50,000</u>

Now, as a result of this transaction my worth has increased from Rs. 1,00,000 to Rs. 1,50,000. However, since there is also an equal increase in claims against my worth in the form of mortgage loan from the bank, my net worth remains the same.

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

The amounts owed by an entity or individual which represent claims against its or his assets by outsiders are liabilities. It is the claims of outsiders which are legally enforceable claims against an individual or entity that are referred to as liabilities.

The assets owned by the entity, less liabilities or outsiders' claims, is the net worth. Since the net worth represents the claims of owner(s) in case of an entity, it is referred to as owner's equity.

Now we can understand that the position statement is a summary of the assets, liabilities and net worth as of a specific point in time.

A comparison of the two position statements before and after purchase of the car will help to clarify some of these ideas better.

**Comparative Financial Position Statement**

	Assets		Liabilities and Net Worth	
	Before I	After II	Before I	After II
Balance				
with Banks	35,000	5,000	Personal loan from friend	10,000
Fixed Deposits	15,000	15,000	Mortgage loan from Bank	50,000
Car	-	80,000		
Other personal belongings	50,000	50,000	Net Worth	90,000
	<u>1,00,000</u>	<u>1,50,000</u>		<u>1,00,000</u>
				<u>1,50,000</u>

The following points may be noted from the above examples:

1 Even after purchasing the car, my net worth remains the same. This is due to the fact that increase in assets of Rs. 50,000 was balanced by increase in liability of Rs. 50,000. However, it could be noticed that the Rs. 30,000 spent from my savings amounts to only a transformation of my assets from bank deposit to motor car.

2 Outsiders' claim has priority over the owners' claim on the assets and hence net worth or owners' equity is a residual claim against assets. It follows from this that at any point in time, owners equity and liabilities for any accounting entity will be equal to assets owned by that entity. This idea is fundamental to accounting and could be expressed as the following equalities:

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNERS EQUITY} \dots (1)$$

$$\text{OWNERS EQUITY} = \text{ASSETS} - \text{LIABILITIES} \dots (2)$$

It could easily be visualised that the position statements we prepared are nothing that the equality (1). In simple terms, a position statement which shows the balance between assets owned by an entity and its liabilities and owner's equity is referred to as a balance sheet. Our position statements were based on a personal situation and a single transaction. In a business situation there can be scores of such transactions. However, these impacts could be reflected on the fundamental equality in the same way. This equation represents the corner-stone on which the accounting edifice is built. It shows the duality represented by 'benefit- sacrifice' from the point of view of an entity. In other words, assets of an entity are always equal to the claims of the outsiders and owners. This equality enables us to reduce the impact of all transactions in terms of the following possibilities:

- 1 An increase in assets is followed by an increase in liabilities and/or equity and vice versa.
- 2 A decrease in assets is followed by a decrease in liabilities and/or equity and vice versa.
- 3 An increase in an assets is followed by a decrease in another asset and vice versa.
- 4 An increase in a liability is followed by a decrease in another liability and vice versa.

**Activity 1**

Please answer by completing the blanks.

1 An increase in asset in a position statement is possible:

- a) .....
- b) .....
- c) .....

2 An increase in liability could result in:

- a) .....
- b) .....
- c) .....

3 Outsiders' claim against assets of an entity is called:

.....  
 .....  
 .....

4 Things of value to the entity are called by accountants as:

.....  
 .....  
 .....

Activity 2

Mark whether the following statements are 'True' or 'False' by circling T or F opposite each statement.

- 1 An increase in asset always results in increase in owner's equity T/F
- 2 Assets = liabilities+owner's equity is always true T/F
- 3 Outsiders claim against business is a residual claim T/F
- 4 An increase in assets could be equalled by increase in liabilities T/F
- 5 Losses result in increase in owner's equity T/F
- 6 All assets in the balance sheet are valued at their realisable value T/F

Activity 3

Answer the following questions by filling in the boxes with figures or words.

1 The fundamental accounting equation could be written as:

$$\boxed{\phantom{000000}} = \boxed{\phantom{000000}} + \boxed{\phantom{000000}}$$

2 If the owner's equity is Rs. 10,000 and total liabilities Rs. 15,000, what is the value of total assets?

$$\boxed{\phantom{000000}} = \boxed{10,000} + \boxed{15,000}$$

3 If total assets of a business are Rs. 1,00,000 and total liabilities Rs. 75,000 what is the amount of owner's equity?

$$\boxed{\phantom{000000}} = \boxed{\phantom{000000}} + \boxed{\phantom{000000}}$$

- 4 If the total assets of a business amount to Rs. 1,00,000 and owner's equity is Rs. 30,000 what is the amount of liabilities?

$$\boxed{\phantom{000000}} = \boxed{\phantom{000000}} + \boxed{\phantom{000000}}$$

### 4.3 CONSTRUCTING A BALANCE SHEET

Now, let us examine how the ideas we have learned so far could be used in a business situation. Please recall that based on the entity principle we shall be dealing with the 'business' as distinct and separate from the owners. We shall demonstrate this by means of an illustration:

Ram starts a store on January 1, 19x1 with an investment of Rs. 20,000 from his personal savings. He decides to call his venture **Ramstore**.

Suppose now, we want to prepare the balance sheet of Ramstore on January 1, 19x1. How do we proceed? Based on the equality we have studied, we have to answer the following questions:

- 1 What are the assets of Ramstore on that date?
- 2 What are the liabilities of Ramstore on that date?

If we have answers to these questions it also follows that assets minus liabilities is Ram's equity and this information would complete the equality and hence the balance sheet answer to the first question is that the only asset of Ramstore on January 1, 19x1 is Rs. 20,000 in cash. Answer to the second question is that Ramstore has no liability on that date or, in other words, it does not owe anything to outsiders. Thus, it follows that the only claim on the assets is that of Ram. This could be represented as the balance sheet below:

**RAMSTORE**

Balance Sheet as on January 1, 19x1

Assets	Liabilities and Owner's Equity		
Cash	Rs. 20,000	Owner's equity	Rs. 20,000

On January 2 the Store purchases a shop for Rs. 50,000 paying Rs. 10,000 cash and signing a mortgage for Rs. 40,000. This transaction changes the balance sheet as of January 2 as follows:

- 1 Cash is reduced by Rs. 10,000 on account of payment for the shop premises, hence cash balances is Rs. 10,000.
- 2 A new asset, shop, is acquired worth Rs. 50,000.
- 3 A new liability, mortgage on the shop, is contracted in the amount of Rs. 40,000.
- 4 Owner's equity = Total assets - liabilities = Rs. 60,000 - Rs. 40,000 = Rs. 20,000. That is, there is no change in the owner's equity since increase in an asset is followed by an increase in liability. Thus the new balance sheet will be as follows:

## RAMSTORE

## Balance Sheet as on January 2, 19x1

Assets		Liabilities & Owner's Equity	
	Rs.		Rs.
Cash	10,000	Mortgage on shop	40,000
Shop premises	50,000	Owner's equity	20,000
	<u>60,000</u>		<u>60,000</u>

On January 3, the store purchased Rs. 5,000 worth of merchandise paying cash and Rs. 15,000 worth of merchandise on credit from Mr. Vanik. The impact of these transactions is that the assets in the form of merchandise increase by Rs. 20,000. These assets are intended for resale and hence have a short life span. However, part of this increase is accounted by decrease in another asset, cash. The other Rs. 15,000 increase is accounted by the liability owed to Vanik. The amounts payable on account of purchases of merchandise are called **accounts payable** or **sundry creditors**. Usually these are short duration liabilities to be paid at the end of the normal credit period. The balance sheet on January 3, 19x1 reflects the position of the business after these transactions.

## RAMSTORE

## Balance Sheet as on January 3, 19x1

Assets		Liabilities	
	Rs.		Rs.
Cash	5,000	Accounts payable	15,000
Merchandise inventory	20,000	Mortgage on shop	40,000
Shop premises	50,000	Owner's equity	20,000
	<u>75,000</u>		<u>75,000</u>

On January 4, he sells half the merchandise inventory (that is Rs. 10,000 worth inventory) for Rs. 15,000 cash. Apparently this transaction shows the transformation of an asset into another asset at higher monetary value. This is yet another basis of economic transaction where business profits are earned in the process of exchange of utility differential for a monetary differential. The balance sheet after this transaction will clarify some of the conceptual issues arising out of this transaction.

## RAMSTORE

## Balance Sheet as on January 4, 19x1

Assets		Liabilities	
	Rs.		Rs.
Cash	20,000	Accounts payable	15,000
Merchandise inventory	10,000	Mortgage on shop	40,000
Shop premises	50,000	Owner's equity	25,000
	<u>80,000</u>		<u>80,000</u>

Please note the change in the owner's equity figure. For the first time since we started following the transactions of Ramstore, the owner's equity figure has changed. How did this come about? The answer is simple. We followed the equality of "Assets-liabilities = Owner's equity". Thus the increase in owner's equity is the result of increase in assets arising out of exchange of merchandise inventory for cash at a higher monetary value. Thus we find that the owner's equity increase is to the extent of revenue earned over the cost of earning that revenue. In this case

the revenue earned is Rs. 15,000 (the amount realised from sales of merchandise is usually referred to as sales revenue). The direct cost of earning that revenue was the merchandise inventory parted with in the amount of Rs. 10,000. We refer to this as **cost of goods sold**.

Another important fact should also be noted in this context. All along we represented the assets on the balance sheet at the original cost. The unsold inventory is still valued at the original cost. This is yet another concept we follow in the preparation of balance sheet. As a general principle all assets are valued at their original cost.

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

$$\text{OWNERS EQUITY} = \text{CONTRIBUTED CAPITAL} + \text{RETAINED EARNINGS...}(3)$$

The above illustrations would enable us to evaluate the balance sheet in the context of accounting concepts.

- The **dual aspect principle** has particular relevance to balance sheet. This is shown by the **equality of assets to liabilities and owner's equity**.
- All the figures are expressed in **monetary units** irrespective of its nature. In our example we had cash, merchandise inventory and shop premises all expressed in **monetary quantities**.
- All the transactions we reflected were in respect of only the **business entity**, 'Ramstore', rather the methodology was applied to the specific entity.
- All the valuations were based on the assumption of a **going concern**, and not based on break up value.
- All the assets were based on **cost** as the basis of valuation.

#### Activity 4

Complete the following blanks:

1 Balance Sheet is prepared at the end of a specified period. This period in accounting is variously referred to as:

- a) \_\_\_\_\_
- b) \_\_\_\_\_
- c) \_\_\_\_\_

2 Balance Sheet prepared at the end of an year summarises the balances in:

- a) \_\_\_\_\_ accounts. b) \_\_\_\_\_ accounts.
- c) \_\_\_\_\_ accounts.

3 Assets on a balance sheet are usually grouped together as:

- a) \_\_\_\_\_ assets. b) \_\_\_\_\_ equipment.
- c) \_\_\_\_\_ assets.

4 Claims against the assets on the balance sheet are summarised as:

- a) \_\_\_\_\_ liabilities b) \_\_\_\_\_ liabilities
- c) \_\_\_\_\_ equity.

#### 4.4 BALANCE SHEET CONTENTS

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

The balance sheet as prepared at the end of the accounting period shows the year end status of each of the assets of the firm and the various claims on these assets. We could also say that the balance sheet shows the **year end balance** in the asset, liability and capital accounts.

Read the following illustration carefully. It is a typical summarised balance sheet. We shall follow this balance sheet for subsequent discussions. It shall be useful if you could copy it on a sheet of paper for ready reference. It may be clarified that there are two conventions of preparing the Balance Sheet - the American and the English. According to the American convention, assets are shown on the left hand side and the liabilities and the owner's equity on the right hand side. The English convention is just the opposite, i.e., assets are shown on the right hand side of the Balance Sheet and the liabilities and the owner's equity on the right hand side. In India, generally the English convention is followed. However, in all our illustrations and working here in this booklet, we shall be using the American pattern because it appears to be more logical as it is in tune with the way the transactions are recorded in the books of account and the balances are taken out.

#### Illustration

Table I: RAMSONS LTD.

Balance Sheet as on December 31, 19x1

(in Rupees thousands)

Assets		Liabilities and Owner's Equity.	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash	500	Notes Payable	600
Marketable Securities	200	Accounts Payable	200
Notes/Bills Receivable	300	Accrued Liabilities	800
Accounts Receivable	1,000	Income Tax Payable	400
Less: Estimated Loss on Collection	<u>100</u> 900	Total Current Liabilities	<u>3,000</u>
Merchandise Inventory	1,100	<b>Long-term Liabilities</b>	
		10% Debentures	1,000
Prepaid Expense	500	Secured Long-term Loan from IFCI	2,000
Total Current Assets	<u>3,500</u>	Total Liabilities	<u>6,000</u>
<b>Property, Plant &amp; Equipment</b>		<b>Shareholders' equity</b>	
		9% Cumulative	
Land	2,000	Preference Shares	
Buildings, Plant	3,000	of Rs. 100 each	500
Less: Accumulated Depreciation	<u>1,000</u> 2,000	Ordinary Shares of Rs. 10 each	2,000
		Capital Reserves	500
		Reserves & Surplus	1,000
<b>Other Assets</b>			
Goodwill	1,500	Total Liabilities and	
Deferred Expenditure	1,000	Shareholder's Equity	
Total Assets	<u>10,000</u>	<u>10,000</u>	

## 4.5 FORM AND CLASSIFICATION OF ITEMS

The balance sheet lists assets, liabilities and capital separately. It is an accepted convention that the assets and liabilities are shown into sub-groups and listed in order of their **liquidity**. Liquidity implies the length of time required to convert them into cash. Assets which are likely to be converted into cash in the near future are grouped as **current assets**. Similarly, liabilities which are due for payment in the short run are classified as **current liabilities**.

The balance sheet in our example is presented in the I account form. That is the assets are listed on one side and liabilities and owner's equity on the other. Another commonly used way of presentation is the **report form** where liabilities and capital is listed below the assets. However, the presentation matters very little since the balance sheet represents the equality between assets and liabilities and capital.

### Current Assets

Current assets are assets which will normally be converted into cash within a year or within the **operating cycle**. The operating cycle is the duration in time taken by a unit of cash to circulate through the business operations. For example, in a simple trading operation, we use cash to buy merchandise and sell it to recover cash. The operating cycle in such a situation will consist of the period for which cash, merchandise inventory, and receivables are held. The cycle starts with cash and ends with the collection of cash.

The items comprising current assets are listed in the order of their **relative liquidity**, and hence, cash is listed first.

### Cash

Cash is usually taken to include currency (legal tender), cheques or any other document that circulates as cash. Cash is usually classified as a current asset when it is available for a firm's day-to-day operations. It includes cash kept in the cash chest as also deposits on call or current accounts with banks. If cash is specifically earmarked for any purpose and not available for transactions it is better classified as **other assets**.

### Temporary Investments

Whenever firms have short-term excess cash it may be invested in readily marketable securities. These securities may include shares, debentures and Government securities. These assets are readily marketable and could be sold whenever cash is required. They are classified as current assets only when these investments are held with the objective of realisation within a year.

These securities are usually recorded at cost at which they are acquired. Since they are only held for short duration and should reflect their cash value, the principle of accounts receivable to their estimated realisable value. For instance: lower than the original cost, they are valued at their market price or realisable value.

Apparently, the valuation rule 'lower of cost or market price' may look contradictory. Why should one not value the securities at higher than cost? This distinction is made, based on the **generally accepted accounting principles**. We do not anticipate gains but only losses. Gains are recognised in accounting only when outside transaction takes place. This is the essence of **conservatism** in accounting.

When the firm values its securities at cost or market price, whichever is lower, we say the firm is conservative. That is, whenever presented with two alternatives the firm chooses the one which shows the lower valuation of assets or higher valuation of liabilities.

## Accounts Receivable

Accounts receivable are amounts owed to the company by debtors. This is the reason why we also use the term **sundry debtors** to denote the amounts owed to the firm. This represents amounts usually arising out of normal commercial transactions. In other words, 'accounts receivable' or **sundry debtors** represent unpaid customer accounts. In the balance sheet illustration these represent amounts owed to the firm by customers on the balance sheet date. These are also known as **trade receivables**, since they arise out of normal trading transactions. Trade receivables arise directly from credit sales and as such provide an important information for management and outsiders. In most situation these accounts are unsecured and have only the personal security of the customer.

It is normal that some of these accounts default and become uncollectible. These collection losses are called **bad debts**. It is not possible for the management to know exactly which account and what amount will not be collected. However, based on past experience, it is possible for the management to estimate the loss on the receivables or **sundry debtors** as a whole. Such estimates reduce the gross value of accounts receivable to their estimated realisable value, For instance:

Accounts Receivable	7,50,000
Less: Estimated collection loss at 10%	75,000
	<hr/>
Net realisable value of accounts receivable	<u>6,75,000</u>

The estimated collection loss is variously referred to as **reserve for doubtful debts**, **reserve for bad debts** or **reserve for collection losses**. It is also not an uncommon practice to refer to this as a **provision** instead of **reserve**.

It is a usual practice for debts to be evidenced by formal written promises to pay or acceptance of an order to pay. These formal documentary debts represent **Promissary Notes Receivable** or **Bills Receivable**. These instruments used in trade are negotiable instruments and hence enable the trader to assign any of his receivables to another party or a bank for realising immediate liquidity.

It is also usual for accounts receivables to be pledged or assigned mostly to banks against short-term credits in the form of **cash credits** or **overdrafts**

## Inventory

In a trading firm inventory is merchandise held for sale to customers in the ordinary course of business. In case of manufacturing firms inventory would mainly consist of materials required to manufacture the products, namely, raw materials, materials remaining with the factory at various stages of completion i.e., work in process and goods ready for sale or finished goods. A part from these there may be inventory of stores and supplies. Thus we have raw material inventory, work in process inventory, finished goods inventory and stores and supplies inventory.

It is common to refer to inventory as **stock-in-trade** and thus we could come across **stock** or **raw materials**, **stock of work in process** and **stock of finished goods**.

Inventory is usually valued on the basis of "lower of cost or market price". Market price is taken to mean the cost of replacement either by purchase or by reproduction of the material in question. As a general principle, inventory is valued on cost at situation. It implies that all normal costs incurred to make the goods available at the place where it can be sold or used are treated as costs of the inventory.

## Understanding Financial Statements

In trading firms, inventory costs include freight-in, transit insurance costs, import or entry levies as also the invoice cost. Warehouse costs, handling costs, insurance costs in storage and interest costs are not included as costs. They are treated as expenses of a period of the firm.

In case of manufacturing units, valuation of inventory costs is more complex and involved. As a general rule all costs of materials, labour and plant facilities used for manufacturing the goods are included in the valuation of inventory.

In valuing inventory at lower of cost or market price, care should be taken to see that the valuation does not exceed the realisable value or selling price in the ordinary course of business.

### Prepaid Expenses

In many situations, as a custom, some of the items of expenses are usually paid in advance such as rent, taxes, subscriptions and insurance. The rationale of including these prepayments as current assets is that if these prepayments were not made they would require use of cash during the period.

### Fixed Assets

Fixed assets are tangible, relatively long lived items owned by the business. The benefit of these assets are available not only in the accounting period in which the cost is incurred but over several accounting periods. Current assets provide benefits to the organisation by their exchange into cash. In the case of fixed assets, value addition arises by facilitating the process of production or trade. In other words, benefits from fixed assets are indirect rather than direct.

All man made things have limited life. In accounting we are concerned with useful life of the assets. Useful life is the period for which a fixed asset could be economically used. This implies that the benefits from the fixed assets will flow to the organisation throughout its useful life. Another aspect of this is that the cost incurred in the period of purchase of the asset will be providing benefits over the useful life of the asset.

Valuation of the fixed assets is usually made on the basis of original cost. However, since the assets have limited life the cost will be expiring with the expiration of the life. Thus, valuation of the assets is reduced proportionate to the expired life of the asset. Such expired cost is referred to as depreciation in accounting. We shall discuss this idea in more detail in a subsequent unit. The conceptual basis could be clarified with an example.

Suppose a trader buys a delivery van at a cost of Rs. 1,00,000. Assume that the van will have to be discarded as junk at the end of five years. Thus at the time of purchase the asset value is:

Delivery van at cost	Rs. 1,00,000
At the end of first year it will be represented as:	
Delivery van at cost	Rs. 1,00,000
Less: Depreciation to date	20,000
Net Value	Rs. 80,000

At the end of second year it will be:

Delivery van at cost	Rs. 1,00,000
Less: Depreciation to date	40,000
Net Value	Rs. 60,000

The process of providing depreciation for each year will continue. At the end of five years the valuation of the asset will be zero. The value of the assets at cost is usually referred to as gross

fixed assets and the amount of depreciation to date as accumulated depreciation. Net value of the asset is usually referred to as net fixed assets.

Please note that we reckoned the amount of depreciation by equally distributing the cost of asset over its useful life. This is the simplest method of determining the annual depreciation of the assets. Thus, we can say that the annual depreciation over the useful life of the asset shall not exceed its net cost. We say net cost because the actual cost of the asset to be depreciated is its purchase cost less any salvage value at the end of its useful life. Hence depreciated cost of the asset is net cost which is equal to original cost minus salvage value. The relationship between cost and depreciation could be visualised as follows:

Year 1 Depreciation	Year 2 Depreciation	Year 3 Depreciation	Year 4 Depreciation	Year 5 Depreciation
Rs. 20,000	Rs. 20,000	Rs. 20,000	Rs. 20,000	Rs. 20,000

Rs. 1,00,000

Cost of the asset

Depreciation represents the cost of earning the revenue in an accounting period on account of use of fixed assets. Fixed assets are valued on the basis of cost of making the asset available and ready for use. Thus cost includes the price as well as charges for delivery, assembly and erection.

Fixed assets normally include assets such as land, buildings, plant, machinery and motor vehicles. All these items, with the exception of land, are depreciated. Land is not subject to depreciation and hence shown separately from other fixed assets.

### Intangible and Other Assets

Intangible assets are assets or things of value without physical dimensions. They cannot be touched, they are incorporeal, representing intrinsic value without material being. One of the most common of these assets is goodwill. Goodwill reflects the ability of a firm to earn profits in excess of normal return. Almost all firms may have some goodwill. However, they appear in the books and balance sheet only when it has been purchased. Usually, when a going concern is purchased, the purchase price paid in excess of the fair value of the assets is considered goodwill. This amount is classified as another asset 'goodwill' on the balance sheet.

Many intangible assets have limited life too. Examples are patent rights, copy rights, franchise rights, incorporation costs and so on. Since they have limited useful life, the cost of acquiring such assets have to become expired costs over such useful life. This process of expiration of the cost of intangible asset is called amortisation. Even those intangible assets which have almost infinite life are amortised over a limited period. In reality the material effect of amortisation and depreciation is almost the same.

The category "Other Assets" is used to classify assets which are not normally classified as current, fixed and intangible.

### Current Liabilities

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

### **Acceptances and Promissory Notes Payable**

Acceptances are bills of exchange accepted by the firm usually for goods purchased. Similarly, promissory notes are written promises to pay the debts at specified future dates. Both these liabilities specify the amount payable on due date and any other conditions of payment. If such notes or bills payable are for longer duration than one year, then the portion which is due for payment during the current period alone is treated as current liability. Long-term bills may be used for purchase of machinery.

### **Accounts Payable**

Accounts payable or sundry creditors are usually debts owed by the firm. These are also referred to as payables on open accounts. They are not evidenced by any formal written acceptance or promise to pay. They represent credit purchase of goods or services for which payment has not been made as of the date of the statement.

### **Accrued Liabilities**

Accrued liabilities represent expenses or obligations incurred in the previous accounting period but the payment for the same will be made in the next period. In many cases where payments are made periodically, such as wages, rent and similar items, the last month's payment may appear as accrued liabilities (especially if the practice is to pay the same on the first working day of a month). This obligation shown on the balance sheet indicates that the firm owed the said amount on the balance sheet date.

### **Provisions or Estimated Liabilities**

Where the liabilities are known but the amounts cannot be precisely determined, we estimate the liability and provide for it as a liability. A common example is **income taxes payable**. Unless the tax liability is determined the amount payable cannot be accurately determined. There could be other examples too, such as product warranty expenses to be met and so on. The common practice is to estimate these liabilities based on past experience.

### **Contingent Liabilities**

Contingent liabilities should be distinguished from estimated liabilities. Estimated liabilities are known liabilities where the amount is uncertain. Contingent liabilities on the other hand are no liabilities as of now. They become liabilities only on the happening of a certain event. In other words, both the amount and the liability (or obligation) are uncertain till the specified event occurs in future. These may include items like a claim against the company contested in a court. Only if the court gives an unfavourable verdict, it becomes a liability. They are not listed as liabilities in the body of the balance sheet. However, in order to give a fair view of all known facts about the affairs of the firm, contingent liabilities are disclosed as **foot-notes** to the balance sheet. They are not mentioned in the balance sheet as the firm is not liable as on that date; they are mentioned as notes because all those who are concerned may know that there is a possibility that the events might occur.

### **Long-term Liabilities**

Long-term liabilities are usually for more than one year. they cover almost all the liabilities not included in the **current liabilities** and **provisions**. These liabilities may be unsecured or secured. Security for long-term loans are usually the fixed assets owned by the firm assigned to the lender by a pledge or mortgage. All details such as interest rate, repayment commitment and nature of security are disclosed in the balance sheet. Usually, such long-term liabilities include debentures and bonds, borrowings from financial institutions and banks.

**Activity 5**

Fill in the blanks:

- 1 As a convention, items appearing on the balance sheet are listed in the order of their relative \_\_\_\_\_
- 2 Balance sheet could be presented either in
  - a) \_\_\_\_\_ form, or
  - b) \_\_\_\_\_
- 3 Operating cycle is the duration \_\_\_\_\_
- 4 Temporary investments are valued in the balance sheet by applying the principle of \_\_\_\_\_
- 5 Accounts receivable are also referred to as \_\_\_\_\_
- 6 Expired cost with respect to a fixed asset is referred to as \_\_\_\_\_ expense.
- 7 Expiration of cost of intangible assets is referred to as \_\_\_\_\_
- 8 Sundry creditors are also referred to as \_\_\_\_\_

**Activity 6**

- 1 We judge an item as a current asset if it is converted into cash during an .....
- 2 Liquidity refers to nearness of an item to .....
- 3 Items classified as current assets are usually listed in the order of their relative .....
- 4 The basis of valuation as applied to temporary investment is .....
- 5 Asset losses expected out of non-collection of receivables are called .....
- 6 Formal written/documentated debts refer to .....
- 7 Items commonly referred to as inventory include (i) ..... (ii) ..... and (iii) .....
- 8 Inventory is usually valued on the basis of .....

**Capital**

We have seen earlier in this unit that the fundamental accounting equality states: **assets=liabilities +owners equity**. From the example of balance sheet we can easily establish this. See Ramsons balance sheet:

Total assets	Rs.	1,00,00,000
Total liabilities	Rs.	60,00,000
Owner's equity	Rs.	40,00,000

We also know that the owner's equity consists of the contributed capital and the retained earnings of the firm. If Ramsons were an individual proprietorship business, the owner's equity will be reflected directly as:

Capital      Rs. 40,00,000

If 'Ramsons' were a partnership firm with four partners W, X, Y and Z all sharing equally, the capital would be represented as:

## Understanding Financial Statements

Capital - Partner W	Rs. 10,00,000
Partner X	Rs. 10,00,000
Partner Y	Rs. 10,00,000
Partner X	Rs. 10,00,000
	<u>Rs. 40,00,000</u>

In our example the balance sheet was titled 'Ramsons Ltd.', implying that it was an incorporated limited company. We did not provide the detailed balance sheet incorporating all the legal requirements in order to avoid confusion. According to the company law the capital has to be disclosed in greater detail. This requirement could be related to the corporate legislation's need for ensuring maintenance of capital or keeping the firm's assets intact. This is ensured by insisting that the distribution by way of dividends to shareholders is made only out of accumulated earnings.

According to the legal requirements, the owner's equity section of the company balance sheet is divided into two parts: (1) the share capital representing contributed capital and (2) reserves and surplus representing retained earnings. The contributed capital is the amount paid in by shareholders.

Share capital is the joint stock predetermined by the company at the time of registration. It may consist of either ordinary share capital or preference share capital (having preferential right to fixed dividend and repayment of capital at the time of liquidation), or both. This share capital stock is divided into units or shares. Thus if the company decides to have a share capital it could be either ordinary shares alone or ordinary and preference shares.

A company has an authorised share capital of Rs. 2,00,000 divided into 15,000 ordinary shares of Rs. 10 each and 500 10% cumulative preference shares of Rs.100 each.

This will be represented as:

Authorised capital:		
15,000 ordinary shares of Rs. 10 each		Rs. 1,50,000
500 10% cumulative preference shares of Rs. 100 each		<u>Rs. 50,000</u>
Total		<u>Rs. 2,00,000</u>

The company need not raise the entire amount of the predetermined or authorised capital. That portion of the authorised capital which has been issued for subscription is referred to as **issued capital**.

Suppose the company offered to the public 7500 ordinary shares and 500 preference shares for cash which were fully subscribed and paid up.

The share capital of the company in summary will be:

<b>Authorised Capital:</b>		
15,000 ordinary shares of Rs. 10 each	Rs. 1,50,000	
500 10% cumulative preference shares of Rs. 100 each	<u>50,000</u>	<u>Rs. 2,00,000</u>
<b>Issued Capital:</b>		
7,500 ordinary shares of Rs. 10 each	75,000	
500 10% cumulative preference shares of Rs. 100 each	<u>Rs. 50,000</u>	<u>Rs. 1,25,000</u>
<b>Subscribed, called up and paid up:</b>		
7,500 ordinary shares of Rs. 10 each	75,000	
500 10% cumulative preference shares of Rs. 100 each	<u>50,000</u>	<u>Rs. 1,25,000</u>

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

### Ordinary and Preference Shares

Preference shares are also so called because they have some preferences over the ordinary shares. These preferences relate to repayment of capital and payment of dividend. In the event of liquidation of the company the assets that remain after payments to creditors are first distributed to preference shareholders. Similarly, whenever the company earns profits and decides to distribute dividends the preference shareholders are first paid their pre-fixed dividend in preference to ordinary shareholders. Preference shares could be made redeemable after a specified period. Similarly, the preference shares could be granted the right to cumulate unpaid dividends. It is also possible to provide to preference shareholders the opportunity to share in the excess profits (i.e., over and above their fixed dividends). Under the company law it is not necessary that a company should have preference shares.

Ordinary shares have not preferential or fixed rights with respect to either repayment of capital or distribution of profits. They have the residual claims against after the claims of creditors and preference shareholders have been met.

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

### Reserves and Surplus

Reserves and surplus or retained earnings normally arise out of profitable operations. These are surpluses earned by the firm not distributed as dividends. In other words, these are profits decided to be retained within the business. When a firm starts its operations it has no retained earnings. If in the first year it earns say Rs. 10,000 profit and decides to distribute Rs. 5,000 as dividends, the reserves and surplus at the end of the year will be Rs. 5,000. During its second year of operation if the firm makes a loss of Rs. 3,000 then the retained earnings at the end of the year will be Rs. 2,000. Retained earnings (or reserves and surplus) are in the nature of earned capital for the firm. We have seen earlier that the dividends are limited to retained earnings. This implies that at no point in time the original capital of the firm is depleted. In other words, the capital originally contributed is maintained intact.

It is possible to allocate the profits earned and accumulated as reserves or retained earnings to be earmarked for specific purposes. The earmarked reserves are not distributed. Only non-earmarked or free reserves are available for distribution as dividends.

### Activity 7

Fill in the blanks with the correct word(s)

- 1 Balance Sheet is a statement of \_\_\_\_\_
- 2 \_\_\_\_\_ represents the owners' claim against assets of a business
- 3 \_\_\_\_\_ are claims of outsiders against the business
- 4 \_\_\_\_\_ increase owners' equity
- 5 Amounts owed by a business on account of purchase of inventory are usually called \_\_\_\_\_ or \_\_\_\_\_
- 6 Amounts receivable by a firm against credit sales are usually called \_\_\_\_\_

## Understanding Financial Statements

- 7 As a general rule all assets are valued at their \_\_\_\_\_ to the business
- 8 Owner's equity could be understood as comprising two parts: \_\_\_\_\_ and \_\_\_\_\_
- 9 The dual aspect principle has special relevance to \_\_\_\_\_
- 10 All valuation in a balance sheet are based on the assumption about the entity as a \_\_\_\_\_

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### 4.6 SUMMARY

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

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### 4.7 KEY WORDS

**Asset:** Anything, tangible or intangible, of monetary value to a business entity.

**Liability:** Any amount owed by one person (the debtor) to another (the creditor). In a balance sheet all those claims against the assets of the entity, other than those of the owners.

**Current Assets:** All those assets held by a firm with the objective of conversion to cash within the operating cycle or within one year whichever is longer. Current Assets include items such as cash, receivables, inventory and prepayments.

**Current Liabilities:** claims against the assets of the firm to be met out of cash or other current assets within one year or within the operating cycle, whichever is longer. Usually include items such as accounts payable, tax or other claims payable, and accrued expenses.

**Intangible Assets:** Any long-term assets useful to the business and having no physical characteristics. Include items such as goodwill, patents, franchises, formation expenses and copyrights.

**Contingent Liability:** A liability which has not been recognised as such by the entity. It becomes a liability only on the happening of a certain future event. An example could be the liability which may arise out of a pending law suit.

**Fixed Asset:** Tangible long-lived asset. Usually having a life of more than one year. Includes items such as land, building, plant, machinery, motor vehicles, furniture and fixtures.

**Owner's Equity:** It is the owner's claim against the assets of a business entity. It could be expressed as total assets of an entity less claims of outsiders or liabilities. Includes both contributed capital and retained earnings.

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### 4.8 SELF-ASSESSMENT QUESTIONS/EXERCISES

1. Explain the following terms giving examples;
  - Accounts Receivable
  - Inventory
  - Current Liabilities
  - Reserves and Surplus
  - Contingent Liabilities

- 2 By definition, a balance sheet 'balances'. -Can you think of any advantages that flow from accountants' adherence to this convention?
- 3 "Financial statements are most useful if they report only the value of assets that are tangible". Do you agree?
- 4 "Current assets are producing assets. The most profitable firm will practically have few assets which are current compared to other assets". Evaluate fully.
- 5 For a company, the excess of assets over liabilities is commonly represented by several items. What are they? What is the caption placed over them?
6. "Fixed assets are physical assets that provide operating capacity for a number of accounting periods". Explain with the help of suitable examples. Are all fixed assets depreciable assets?

7 Peninsular Transport Company began trucking operations on January 1, 19x1. The company's bank account showed a balance of Rs.90,000 on December 31, 19x1, which was in agreement with the bank statement received on the same date. The company had Rs. 6,000 cash in the office and Rs. 4,000 worth cheques received from customers.

On December 31, receivables outstanding amounted to Rs. 3,00,000. Company also had Rs. 30,000 worth promissory notes signed by their customers. Employees had drawn festival advance, which was outstanding in the amount of Rs. 6,000. Peninsular owed Rs. 3,60,000 to Southern Service Station as of December 31, 19x1.

During the year Peninsular purchased stationery and office supplies costing Rs. 11,000 from Ramalinga Iyer & Sons. The use of stationery and supplies during the year was estimated at Rs. 8,000.

Peninsular purchased eight trucks during the year, each costing Rs. 4,00,000. They owed Rs. 20,00,000 to Southern Sales and Finance at the end of the year on account of trucks bought. The obligation was supported by hire purchase agreement for payment of the rate of Rs. 50,000 per month. Depreciation was Rs. 80,000 per truck for the year. Spare parts and tyres inventory amounted to Rs. 13,000.

Company had rented a garage on a 30 year lease, office space and parking space at Rs. 1,00,000 a year on the NH 47 within the city limits. Because of the real estate boom, Peninsular could easily sublet the premises for Rs.1,50,000 a year. On January 1, 19x1 when Peninsular started operations they had paid first two years' rent in advance.

On December 31, 19x1 Peninsular purchased an airconditioned car for office use costing Rs. 1,00,000. Insurance and registration cost amounted to Rs. 8,000.

The company had a bulk storage tank for diesel needed for its trucks. The tank was filled on 4 occasions with 50,000 litres each. On December 31 the meter reading indicated that 1,80,000 litres had been used during the year. Average cost per litre of diesel was Rs. 3.00.

Peninsular paid employees' salary on the last day of each month. Bonus for the employees was due in the amount of Rs. 2,12,000 relating to 19x1 and will be paid along with first salary in 19x2.

The owners of Peninsular originally invested Rs. 6,00,000. Net income for 19x1 was Rs. 2,08,000. Drawings by the owners during the year amounted to Rs. 1,00,000.

Prepare the balance sheet as on December 31, 19x1 for Peninsular Transport Company in the blank pro forma provided as Table II.

**Table II**  
**Peninsular Transport Company**  
**Balance Sheet as on 31 December, 19x1**

Assets	(in Rs.)	Liabilities and Capital	(in Rs.)
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash	_____	Accounts payable	_____
Cash at Bank	_____	Hire purchase payment	_____
Promissory Notes	_____	due in one year	_____
Accounts receivable	_____	Bonus payable to employees	_____
Advances to employees	_____	<b>Long term Liabilities</b>	_____
Office supplies inventory	_____	Hire purchase payment	_____
Prepaid insurance & licence	_____	outstanding	_____
Prepaid Rent & licence	_____	<b>Capital</b>	_____
Inventory of diesel	_____	Owner's capital	_____
Spare parts inventory	_____	Net income for the year	_____
Total current assets	_____	Less: Owner's drawings	_____
<b>Plant and Equipment</b>			
Trucks	_____		
Less: Accumulate			
Depreciation	_____		
Motor Car	_____		
Total Assets	_____	Total Liabilites and Capital	_____

8 The following Balance were extracted from the books of account of Punjab Ceramics Limited, at 30th June, 19x6 after the income statement for the year had been prepared and all the relevant adjustments had been made.

Balances as at 30th June 19x6	Rs.
Freehold land and building at cost	32,000
Bank overdraft	27,200
Cash in hand	1,680
Inventory	74,400
Creditors	18,560
10% Debentures	34,000
Dividends Proposed - 8% Preference shares	1,600
Ordinary shares	6,000
Accrued expenses	2,400
General reserves (at 1 July 19x5 : Rs. 8,000)	20,000
Share Capital: 200 8% Preference shares of Rs. 100 each	20,000
6,000 Ordinary shares of Rs. 10 each	60,000
Investments at cost	14,800
Motor vehicles at cost	37,200
Provision for Depreciation at 30 June 19x6	9,600
Plant and Machinery at cost	84,960
Provision for depreciation at 30 June 19x6	24,160
Retained income (at 1 July 19x5, Rs. 28,000)	32,800
Share premium	14,240
Accounts Receivable	25,520

The authorised share capital consists of 400 8% preference shares of 100 each and 1,200 ordinary shares of Rs.10 each.

Prepare the Balance Sheet of Punjab Ceramics Limited as at 30th June, 19x6. Also ascertain the net income for the year.

Answers to Activities

1. 1. a) By a decrease in another asset. b) by an increase in liability. c) by an increase in owners' equity.
2. a) an increase in asset. b) decrease in another liability. c) decrease in owners' equity.
3. Liability.
4. Assets.
2. 1F. 2T. 3F. 4T. 5F. 6F.
3. 1 Assets = liabilities + owner's equity  
2 Rs. 25,000.  
3 Rs. 25,000 = Rs. 1,00,000 — Rs. 75,000.  
4 Rs. 70,000 = Rs. 1,00,000 — Rs. 30,000.
4. 1 (a) Accounting period (b) fiscal year (c) financial year  
2 (a) asset (b) liability (c) capital  
3 (a) current (b) property, plant (c) other  
4 (a) current (b) long-term (c) shareholders.
5. 1 liquidity  
2 a) account form  
b) report.  
3 in time taken by a unit of cash to circulate through the business.  
4 lower of cost or market price  
5 sundry debtors  
6 depreciation  
7 amortisation  
8 accounts payable
- 6.1 Operating cycle.  
2 Cash.  
3 Liquidity.  
4 'Lower of cost or market price'.  
5 Bad debts.  
6 Promissory Notes receivable or bills receivable.  
7 (i) Raw material (ii) Work-in-Process (iii) Finished goods.
- 8 Lower of cost or market price if Ramsons were an individual proprietorship business, the owners equity will be reflected directly as:
7. 1 Assets, Liabilities and capital  
2 Owners equity  
3 Liability  
4 Profits  
5 Accounts payable or sundry creditors  
6 Accounts receivable or sundry debtors  
7 Original cost  
8 Contributed capital and retained earnings  
9 Balance sheet  
10 Going concern

Answers to Self-assessment Questions/Exercises

7 Solution:

**Peninsular Transport Company**  
**Balance Sheet as on 31 December, 19x1**

Assets			Liabilities and Capital	
<b>Current Assets</b>			<b>Current Liabilities</b>	
Cash	10,000		Hire purchase payment	
Cash at Bank	90,000		due in one year	6,00,000
Promissory Notes	30,000		Accounts payable	3,60,000
Accounts receivable	3,00,000		Bonus payable	<u>2,12,000</u>
Advances to employees	6,000			
Office supplies inventory	3,000		<b>Long Term Liabilities</b>	11,72,000
Prepaid insurance and licence	8,000		Hire Purchase payable	14,00,000
Prepaid rent	1,00,000		<b>Capital</b>	
Inventory of diesel	60,000		Owners' Capital	6,00,000
Spare parts inventory	13,000		Net income for	
			the year	2,08,000
	<u>6,20,000</u>		Less: Owner's drawings	1,00,000
				<u>1,08,000</u>
<b>Plant and equipment</b>				
Trucks	32,00,000			
Less: Accumulated depreciation	6,40,000	25,60,000		
Motor Car		1,00,000		
<b>Total Assets</b>		<u>32,80,000</u>	<b>Total Liabilities and Capital</b>	<u>32,80,000</u>

8. Balance Sheet total Rs. 2,36,800  
Net income Rs. 24,400

**4.9 FURTHER READINGS**

Glantier M.W.E., Underdown B. and A.C. Clark, 1979. *Basic Accounting Practice*, Arnold Hieneman: New Delhi: (Chapter 5, Section 2).

Bhattacharya, S.K. and John Dearden, 1984. *Accounting For Management: Text and Cases* (2nd Ed.), Vani: New Delhi. (Chapter 3,10 and 11)

Hingorani, N.L. and A.R. Ramanathan, 1986. *Management Accounting*, Sultan Chand : New Delhi. (Chapter 3).

## UNIT 5 CONSTRUCTION AND ANALYSIS OF PROFIT AND LOSS ACCOUNT

### Objectives

The purpose of this unit is to introduce to you the profit and loss account. After you have studied this unit, you should be able to:

- appreciate the importance of income measurement
- classify income and expense accounts
- prepare a profit and loss account
- appreciate the linkage between accounting records and profit and loss account
- appreciate the linkage between profit and loss account and balance sheet.

### Structure

- 5.1 Introduction
- 5.2 Profit and Loss Account and Balance Sheet: The Linkage
- 5.3 Measurement of Income
- 5.4 Preparation of Profit and Loss Account
- 5.5 Some Indirect Expenses
- 5.6 Methods of Depreciation
- 5.7 Form of Profit and Loss Account
- 5.8 Costs of Goods Sold
- 5.9 Methods of Inventory Valuation
- 5.10 Gross Profit
- 5.11 Operating Profit
- 5.12 Net Profit
- 5.13 Summary
- 5.14 Key Words
- 5.15 Self-assessment Questions/Exercises
- 5.16 Further Readings

### 5.1 INTRODUCTION

The balance sheet, as we have studied in the previous unit, is intended for reporting the value of assets, liabilities and owners' equity at a particular point in time. It does not disclose any thing about the details of operation of the business. All it tells about are the details of operation of the business. It tells about the net change in owners' equity brought about by operations during the period between the previous balance sheet and present one. Was it a good year or a bad year? What was the volume of operations? What was the margin available on sales? How was sales rupee distributed among different expenses and profit? All these questions cannot be answered without the help of an additional financial statement addressed exclusively to summarise revenues and expenses of the particular period. This statement is what is referred to variously as Profit and Loss Account, Income Statement or Income Summary. This statement is so named since it summarises all the revenues or incomes and all the expenses for earning that revenue showing the net difference, that is profit or loss for the period.

### 5.2 PROFIT AND LOSS ACCOUNT AND BALANCE SHEET: THE LINKAGE

When you sell an item costing Rs. 70 for Rs. 100, assuming no other costs, you earn a profit of Rs.30. What we have done is nothing but measurement of the net income. This is achieved

by comparing the revenue from sales against the cost of materials parted with for earning that revenue. Net difference of this comparison, in simple terms, represents the net income or profit.

The importance of Profit and its measurement in accounting leads in turn to the significance of profit and loss account. However, it will be interesting to see how this document is related to the balance sheet. In the previous lesson we have seen that the earning of revenue increases owners' equity. Please recall the balance sheet equation we had seen in the previous unit. It stated.

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNERS' EQUITY} \dots(1)$$

We also saw that owners equity at any point in time is represented by the following relationship:

$$\text{Owners' Equity} = \text{Assets} - \text{Liabilities} \dots(2)$$

This implies that except in the case of first balance sheet, owners' equity need not be equal to contributed capital. We also saw that the owners' equity changed with the sale transactions. How did this happen? It happened as follows:

1 The amount of sales revenue realised increased the owners' equity.

2 The amount of goods parted with decreased the owners' equity. Thus, resultant increase in owners' equity was equal to the net increase in assets. That is, equal to the profit.

We explained owners' equity in the previous unit as:

$$\text{'Contributed Capital} + \text{Retained Earnings'}$$

Assuming no withdrawals, 'retained earnings' is nothing but all the revenue minus expenses. Thus, we could write our relationship as follows:

$$\text{Retained earnings} = \text{Revenue} - \text{Expenses} \dots(3)$$

Now, substituting right hand side of equality (1) in our earlier balance sheet equation we have

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \text{Revenue} - \text{Expenses} \dots(4)$$

It is the last two terms in equality (4) above which are referred to as profit and loss account or income summary. Thus, we find that profit and loss account is an integral part of any balance sheet in that it is an expansion of one of the terms of the balance sheet. In order to appreciate and understand profit and loss account, we should clearly understand the conceptual basis of the same.

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### 5.3 MEASUREMENT OF INCOME

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Profit and loss account measures the income generated by the equity. The income is generated from or with the use of its assets. Thus, the concern of the profit and loss account is the income arising out of the assets, rather than the assets themselves. In order to make this segregation and make the process of measurement practical, we should have precise idea of what constitutes revenue and expenses. Recognition and measurement of revenue and expense are based on the ideas of realisation, accrual, accounting period, and matching.

#### Realisation

Realisation is technically understood as the process of converting non-cash resources and rights into money. It is understood to mean sale of assets for cash or claims to cash. As an accounting principle, it is used to identify precisely the amount of revenue to be recognised and the amount of expense to be matched to such revenue for the purpose of income measurement.

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

Realisation being the point of recognition of revenue, it also enables us in recognising the **expiration of costs** incurred in making available such goods or services. Thus, the realisation principle facilitates the process of income measurement by identifying revenues and the expiration of costs with respect to such revenues. By implication, if costs are incurred in producing the goods, such costs are not considered as expenses unless sales are made.

There are two major exceptions to the notion that an exchange is needed to justify the realisation of revenue. First, in case of **long run constructin contracts** revenue is often recognised on the basis of a proportionate or partial completion method. Thus in this case revenue is recognised without satisfying the test of completion and delivery. Second, in case of **long run instalment sales contracts**, depending on the uncertainties involved, revenue is regarded as realised only in proportion to the actual cash collections. In this case even though delivery is complete at the time of contract, recognition of revenue is deferred and related to actual cash collections.

### Accrual

It is generally accepted in accounting that the basis of reporting income is **accrual**. Resources and obligations change in time period other than those in which money is received or paid. Economic activity of an enterprise in a short period is complete if the cycle of productive resources to money is completed. In reality, continuous production, use of credit, and long lived assets produce several overlapping cycles. This makes the process of evaluation of income very complex.

Accrual principle tries to evaluate every transaction in terms of its impact on the owners' equity. In simple terms it implies that recognised revenue result in increases in the owners' equity while expired costs or recognised expenses result in decrease in the owners' equity. The essence of the accrual concept is that **net income arises from events that change the owners' equity in a specified period and that these are not necessarily the same as change in the cash position of the business**. Thus, realisation and accrual together lay down the ground rules for measurement of income.

### Activity 1

Fill in the blanks

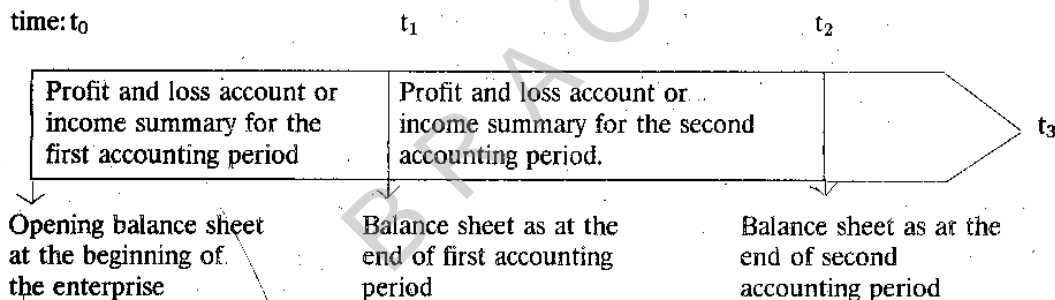
- 1 Profit and loss account is a summary of ..... and ..... for an accounting period.
- 2 Realisation in accounting is the basis of ..... recognition.
- 3 Income measurement is achieved by matching .....
- 4 Costs with respect to realised revenue are considered as .....
- 5 Recognised revenue ..... to owners' equity.
- 6 Expenses result in ..... of owners' equity.
- 7 Expenses could be recognised in relation to ..... realised or an ..... period.

## Accounting Period

Once we accept the concept of 'going concern', it is inconceivable to approach the problem of profit measurement without a clear understanding of the idea of accounting period. The most accurate way to measure the results of an entity's operations will be to measure them at the time of liquidation.

Considering the whole life of the business, net income is nothing but the excess of amount the owners get over what they have put into it (investment). But it is inconceivable and impractical to imagine that one has to wait till the winding up of the business for ascertaining the profit. Accountants choose some convenient segment of time, such as a calendar year, to collect, summarise and report all information on material changes in the owners' equity during that period. There is no sanctity about an accounting period being a year. It has evolved as a convention out of convenience over the years. There is some historical evidence to suggest that accounting periods used to be a couple of years or the entire life time of a venture and so on, in the past. Even now, there are firms which follow the system of certain number of weeks as an accounting period. However, generally, as a convention, most enterprises try to have a uniform length of accounting period for period to period comparison of results.

The crux of the matter is that the realisation and accrual principle, as we have seen earlier, will have to be applied in the context of the accounting period. It is the revenue which is realised during that accounting period which is treated as accruing to the owners' equity. Thus, accounting period enables us to have a practical system of valuation and measurement. Accounting periods are bounded by balance sheets at the beginning and at the end of the period. Operations during the period are summarised by income statements. This process can be illustrated in the following form:



Here accounting periods could be seen as links in the chain which makes up the life of the enterprise. Accounting period is variously referred to as **fiscal year** and **financial year** also.

## Matching

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

## Revenue

In a broad sense revenue is the total amount realised from the sale of goods or provision of services together with earnings from interest, dividend, rents and other items of income. Revenue is recognised when the enterprise has a right to income. In practice we make a segregation of an enterprise's income as obtained from its main operations and from activities incidental to the main operations. The former is referred to as **operating income** and the latter as **other income** or **non-operating income**. Realised revenue as we have seen earlier need not be realised in cash. If the right to receive that income is created or the time to which the income.

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

### Measurement of Expenses

Expenses are costs incurred in connection with the earnings of revenue. As such **the point of reference for recognition of expenses becomes the recognition of revenue.** Costs incurred do not become expenses until the goods or services in question are exchanged. Expense is sacrifice made, resource consumed in relation to the revenues earned during an accounting period. Thus, cost is not synonymous with expense. Only costs that have expired during an accounting period are treated as expenses. Consider the following example:

Rakesh purchases merchandise worth Rs.1,000 during the period and sells one half of this during the same period for Rs. 750.

Here, we have:

Cost	: Rs. 1,000	The purchase price of the merchandise.
Revenue	: Rs. 750	The sale proceeds realised in exchange of one half of the merchandise.
Expense	: Rs. 500	The cost of the merchandise parted with or given over to the customer in exchange for the <b>revenue</b> i.e., cost with respect to the revenue earned and hence <b>expired cost</b> .
Inventory	: Rs. 500	The unexpired cost. An asset i.e., merchandise inventory (as a convention, valued at cost).

Generally, unexpired costs represent assets. All assets which have limited life expire as expenses with respect to revenue earned during their useful life.

Expense means a decrease in owners' equity that arises from the operation of a business during a specified accounting period. Thus, cost means any sacrifice, whether or not the sacrifice affects the owners' equity during a given accounting period. American Accounting Association provides the following description for expense:

Expense is the expired cost, directly or indirectly related to a given fiscal period of the flow of goods or services to the market and of related operations. Recognition of cost expiration is based on a complete or partial decline in the usefulness of assets, or on the appearance of a liability without a corresponding increase in assets.

Expenses of a given period are:

- i) Expenses of this year. These are costs incurred during the accounting period which become expired costs during the same period. Example: cost of materials bought and sold during the same accounting period.
- ii) Costs incurred in a previous accounting period that becomes expenses or expired costs during this year. Example: inventory purchased during the previous period but sold during this period. The amount of inventory which represented unexpired costs and hence an asset at the close of the previous accounting period becomes expired costs and hence expense during the period in which it is sold.
- iii) Expenses of this year the monetary outlay for which will be made during a subsequent period. These are also expired costs of the current period, but the costs are incurred by contracting a liability.

Expenses are recognised under the following circumstances.

- a) Expenses are given recognition in the period in which there is a direct identification or association with the revenue of the period. This implies that recognition of expense is directly related to the realisation of revenue.

- b) An indirect association with the revenue of the period. Example: rent, salaries, insurance, depreciation and such other costs which are not usually inventoried.
- c) Measurable expiration of assets though not associated with the production of revenue for the current period. Example: loss from flood, fire and similar events.

**Assets that become expenses**

Examination of some specific cases of assets that become expenses will enable us to understand the concept very clearly.

**Inventories:** Inventory of merchandise becomes expense when it is sold. In case of manufacturing organisations all the costs incurred on transformation of raw materials add value to the inventory. These costs are treated as expenses only when the inventory in question is sold.

**Prepaid Expenses:** Prepaid expenses represent services or assets paid for prior to their actual use. Thus, they represent unexpired costs. They become expenses when the services are used or assets are consumed.

**Long-lived Assets:** Fixed assets have a limited useful life. The costs of such assets expire during the life of the assets in question. Such expiration of costs of the assets are referred to as depreciation.

What we have examined so far are some of the conceptual bases necessary for the understanding and preparation of a profit and loss account. In the subsequent part of this unit we shall examine the mechanics of how to prepare a profit and loss account.

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**5.4 PREPARATION OF PROFIT AND LOSS ACCOUNT**

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Profit and Loss Account, as we have seen, is a summary of all 'accounts' dealing with transactions relating to revenue and expenses. An account is a statement wherein information is accumulated relating to an item or a group of similar items. This accumulation is done in such a manner that it is fairly easy to summarise by combining several such items. In case of profit and loss account, the process of preparation is nothing but a summarisation of all individual accounts, accumulating information on different items of expense and revenue.

We have seen the expanded balance sheet equation at the beginning of this unit (using abbreviations) as follows:

$$A = L + C + R - E \dots\dots\dots (4)$$

Where:

- A = assets
- L = liabilities
- C = contributed capital
- R = revenues
- E = expenses

For the sake of simplicity we ignore withdrawals. However, if we consider withdrawals, it will imply assets being less to that extent and equality being provided with one more negative term for withdrawals or drawings. Thus, the equality will be:

$$A = L + C + R - (E + D) \dots\dots\dots (5)$$

Where D = dividends or drawings

By transposing this equality it is possible for us to write it without negative symbols. Thus we have:

$$A + E + D = L + C + R \dots\dots\dots (6)$$

This equality is the basic accounting equality. The quantities on the left hand side (LHS) are normally referred to as 'debit' or 'Dr'. in short and quantities on the right hand side (RHS) as 'credit' or 'Cr'. in short. We have also seen that because of the basic balance sheet equality, this accounting equality will always hold true.

### Construction and Analysis of Profit and Loss Account

The terms on the RHS and LHS are represented by one or more separate accounts where information is accumulated using the same framework. LHS terms, namely, A, E and D have debit balances. In other words, normally these accounts have debit side entries more than or equal in value to entries on the credit side. Hence, for those accounts:  $\text{Debits} - \text{Credits} \geq 0$ . When it is equal to zero there is no balance in the account. Similarly, the accounts relating to the terms on the RHS of the equality, that is L, C, and R, normally have credit balances. Hence, these accounts imply:  $\text{Credits} - \text{Debits} \geq 0$ .

The process of accumulating information is also simple. In the accounts representing LHS terms, all increases of those items are debited in the respective accounts and decreases are credited, net difference showing actual position at any point in time. Similarly, in case of accounts representing RHS, increases with respect to an item are credited in a particular account, and decreases are debited to that account. Net difference shows balance of that item as of a point in time. From this, it is also clear that the terms 'debit' and 'credit' in accounting have no more practical significance than 'left' and 'right' of an account.

An account thus could be represented as a capital letter T denoting the nature of information accumulated in that. Thus, we have 'cash account' or 'receivable account' or 'payables account' or 'inventory account' and so on.

Example:

Dr.	Cash Account	Cr.

In this case LHS will represent all cash receipts or increase and RHS will represent all cash payments or decreases.

Let us illustrate the ideas we have discussed with the help of a simple example:

- January 1 - Started business with Rs. 1000.
- January 1 - Bought merchandise worth Rs. 800 and stored it.
- January 8 - Received order for half the merchandise from A.
- January 10 - Delivered the merchandise, customer invoiced Rs. 500.
- January 15 - Received order for the other half of merchandise.
- January 17 - Delivered merchandise and cash received Rs. 500
- January 31 - Customer (A) pays.

#### Accounts of the above transactions

Rs. Debit	Cash A/c	Rs. Credit
Capital	1,000	Merchandise inventory
Sales	500	Balance
Receivable(A)	500	1,200
	2,000	
Balance	1,200	2,000

**Understanding Financial Statements**

Rs. Debit	Capital A/c	Rs. Credit
Balance	1,000 Cash	1,000
	<u>1,000</u>	<u>1,000</u>
	Balance	1,000

Rs. Debit	Merchandise Inventory A/c	Rs. Credit
Cash	800 Cost of goods sold	400
	Cost of goods sold	400
	<u>800</u>	<u>800</u>

Rs. Debit	Sales A/c	Rs. Credit
Profit & Loss A/c.	1,000 Receivables (A)	500
	Cash	500
	<u>1,000</u>	<u>1,000</u>

Rs. Debit	Receivables (A) A/c	Rs. Credit
Sales	500 Cash	500
	<u>500</u>	<u>500</u>

Rs. Debit	Cost of Goods Sold A/c	Rs. Credit
Merchandise inventory	400 Profit & Loss A/c	800
Merchandise inventory	400	
	<u>800</u>	<u>800</u>

Rs. Debit	Profit & Loss A/c	Rs. Credit
Cost of goods sold	800 Sales	1,000
Retained earnings	200	
	<u>1,000</u>	<u>1,000</u>

Rs. Debit	Retained Earnings A/c	Rs. Credit
Balance	200 Profit & Loss A/c.	200
	<u>200</u>	<u>200</u>
	Balance	200

Balance Sheet			
Assets	Rs.	Liabilities and Capital	Rs.
Cash	1,200	Capital	1,000
		Retained Earnings	200
	<u>1,200</u>		<u>1,200</u>

In the above example what we have attempted is to complete the accounting process based on a very simple situation. The process of recording and summarising we resorted to could be explained as follows:

Starts business with Rs. 1,000. This transaction affects two accounts: Cash increase—entry on the debit side of the account. Capital increase—entry on the credit side of the account.

Purchases merchandise and stores them. Merchandise inventory increase—entry on the debit side of the account. Cash account decrease—entry on the credit side of the account.

Receipt of order for half the merchandise. Receipt of order does not warrant any record. We consider realisation of revenue only when goods are delivered.

a) Delivered goods and customer invoiced. Since cash is not collected simultaneously, it represents a credit transaction. It results in an increase in claims against 'A'. Accounts receivable is debited. Revenue is earned, sales account is credited.

b) We should also consider the cost of sales. We part with merchandise inventory worth Rs. 400. An expired cost, hence a reduction in owner's equity, is an expense. Debit cost of sales account with increase in expense or expiration of cost. We credit the merchandise inventory account to show the reduction in inventory.

Cash received for sales. Debit cash and credit increase in revenue, sales.

We also recognise expense by debiting cost of sales account and crediting merchandise inventory account.

Receivables collected. Cash increase is recorded by debit in cash account and a credit to receivables (A) account. The credit to receivables account shows the liquidation of our claim (asset). In practice this amounts to repayment of the debt by A.

## 5.5 SOME INDIRECT EXPENSES

In the example discussed above, we dealt only with direct revenue and direct expense. Revenue arose from two sale transactions—one on credit and the other on cash. The expense was one simple direct item of expense—the cost of sale or the recognition of expiration of inventory cost. Before we proceed to examine the detailed profit and loss account, we should discuss some of the important indirect expenses.

### Bad Debt Expense

In most business situations sale 'on credit' is common. We also treat such sale as 'realised' since they produce a certain asset 'receivable'. Thus, credit sale is recognised at the point of sale during the accounting period in which the transaction takes place. Uncollected balance at the close of the accounting period is reflected as an asset on the balance sheet.

Now, if the customer could not make payment or will not make payment, both these records (record as revenue of the period and record as asset at the close of the period) will amount to overstatement in the records. However, we have no basis for estimating the exact amount of such collection losses. This is so since the uncollectability is known only in a subsequent accounting period. It is this situation which warrants us to estimate the amount of expense with respect to collection losses. Let us consider the following example:

Suppose, a business makes four credit sales of Rs. 250 each during a period. Cost of sales for the same being Rs. 500.

Profit and Loss Account		
	Rs.	Rs.
Cost of sales	500	1,000
Profit	500	
	1,000	1,000

The balance sheet records arising from this transaction will be:

**Balance Sheet**

Assets	Rs.	Liabilities & Capital	Rs.
Accounts receivable	1,000	Retained earnings	500

Now assuming that one of the accounts is going bad, the collection loss will amount to Rs. 250. If we do not take this into account, the implications are: we have overstated receivables (asset in the balance sheet), sales (revenue in the profit and loss account) and profit (retained earnings in the balance sheet). It is possible for us to estimate these losses on account of **bad debts** and reduce the revenues and thereby profits to that extent. It is achieved by recognising this amount as our increase in expense –bad debts expense–thereby reducing profit. Thus, we will prepare profit and loss account and balance sheet as follows:

Debit	Profit and Loss Account		Credit
	Rs.		Rs.
Cost of sales	500	Sales	1,000
Bad debt expense	250		
Profit	250		
	<u>1,000</u>		<u>1,000</u>

**Balance Sheet**

Assets	Rs.	Liabilities & Capital	Rs.
Accounts receivable	1,000	Retained earnings	250
Less: Estimated collection loss	<u>250</u>		
	750		

Usually the possible collection losses are estimated and provided for by charging them as expenses of the period. Such estimate is reduced from the value of the asset receivables to show the realisable value of the asset.

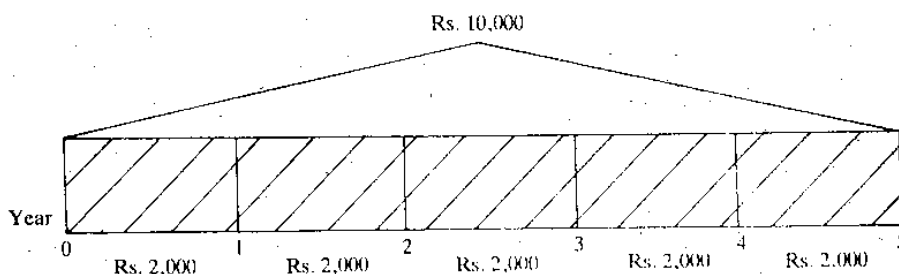
**Depreciation on Fixed Assets**

In our study earlier we have seen that fixed assets have long life and provide benefits beyond one operating cycle. While discussing the idea of expense we saw that expenses are expired costs. All costs incurred on any asset with limited life, thus, expire during its life time. Now it is not difficult to perceive what depreciation is. Consider the following illustration.

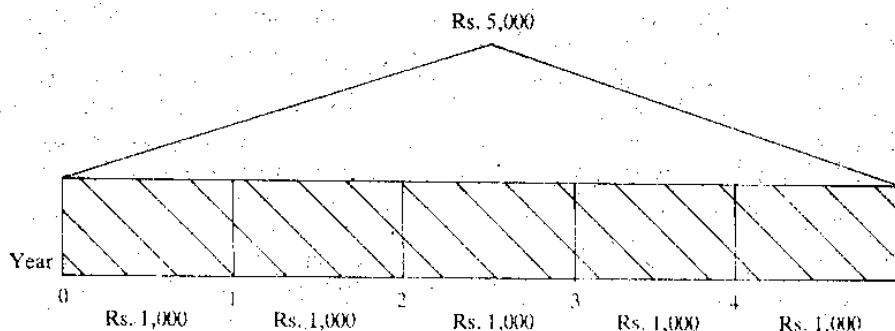
A machine purchased for Rs. 5,000 having five year life and no salvage value is used in a business. During the life of the asset, it will be able to earn a revenue of Rs. 10,000.

It is simple arithmetic to say that by using the machine we make a profit of Rs. 5,000 over its life time (Rs. 10,000 revenues less Rs. 5,000 cost of the machine) assuming no other costs. The problem of depreciation arises when we have to measure the profits annually. What should be the amount of profit to be recognised every year?

We can approach this problem diagrammatically. Assume that the following scale shows the amount of revenue earned. We take it that the revenue is earned in equal amounts during



the five years of the life of the asset. Assuming no other costs and no salvage value, the cost of the asset becomes expense over a five year period. Now the question is how should we apportion this cost over the life of the asset? If we make the simple assumption that the cost expires in equal proportion, we have the simplest solution. This we could represent as follows:



Now, having made the assumption of spreading the cost equally, we have come to the conclusion that one-fifth of the cost of the asset expires annually. That portion of the cost of the asset which is reckoned to expire during an accounting period is what is termed as **depreciation expense**. This also clarifies that, normally, the total amount of depreciation of an asset shall not be more than the depreciable cost of the asset. It is this 'expense' which is matched against the revenues of a period for determining profit.

From the above example we can easily determine that the profit per annum is Rs. 1,000, that is, Rs. 5,000 over the useful life of the asset. Thus, to recapitulate, **depreciation expense is the cost of a fixed asset written off against the revenues of different periods during which the asset is used.**

## 5.6 METHODS OF DEPRECIATION

There are several methods of depreciation which differ from one another only from the standpoint of how the cost is treated as expiring over the life of the asset. We shall briefly discuss only two of the most commonly used methods. However, in order to understand the methods we should be clear about the following ideas:

**Original cost of the asset:** This is the cost incurred in making the asset available for use in the first instance.

**Salvage value:** The expected recovery or sales value of the asset at the end of useful life.

**Useful life:** The expected time period for which the asset is to provide economic service i.e., the period for which the asset could be used for production.

**Depreciable cost:** This is original cost less salvage value. This is the amount of expense the enterprise will be incurring on account of expired costs of the machine over its useful or economic life.

**Written down value:** Written down value of an asset at any point of time is original cost less depreciation to date (accumulated depreciation). This is also referred to as **book value**.

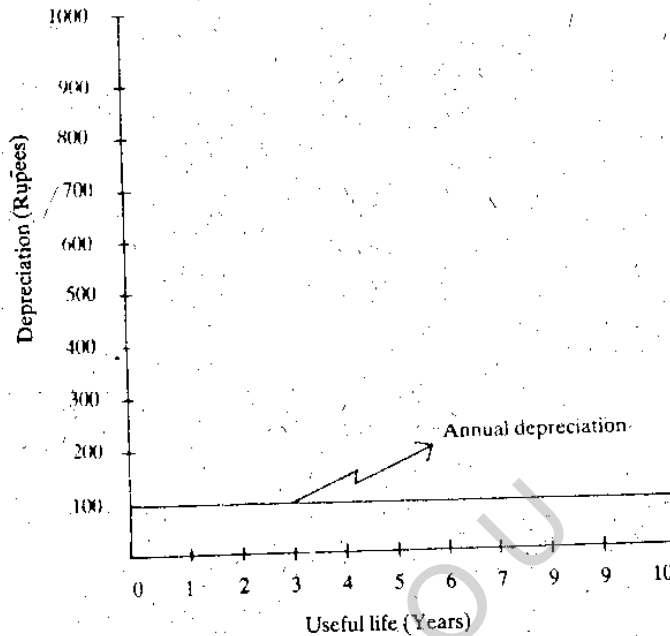
### Straight Line Method

Under the straight line method the depreciable cost of the asset is proportionately allocated as expense against the revenues during each year of the useful life of the asset.

Assume that a company acquires a machine at the beginning of operations at Rs. 1,000. It is expected that the machine will last 10 years and will have no salvage value at that time.

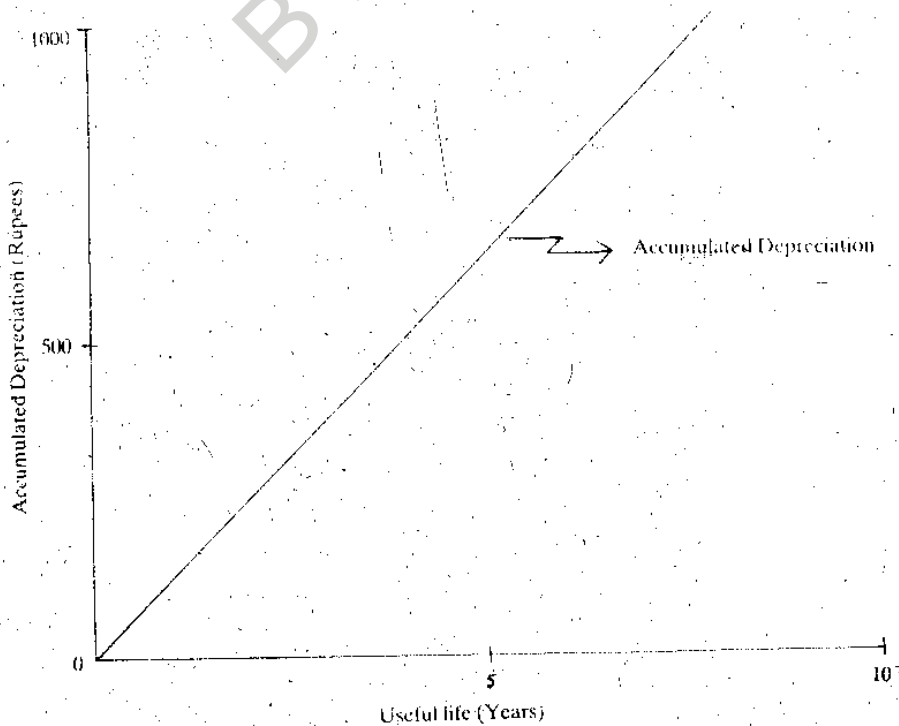
The depreciation for the machine every year under straight line method will be Rs. 100, or Rs.  $1,000 \div 10$ . The written down value at the end of first year will be  $1,000 - 100 = 900$ , at the end of second year  $1,000 - (100 + 100)$  or  $(900 - 100) = 800$  and so on, becoming zero at the end of 10 years. Graphically, it could be shown as follows:

Figure I: Straight-line Method-Annual Depreciation Charge



If we draw a graph showing the annual depreciation it will be a straight line parallel to the base line. Hence the name straight line method (Figure I). The accumulated depreciation will be

Figure II: Straight-line Method--Accumulated Depreciation



### Depreciation Method: Impact on Profit Measurement

What we could learn from the discussion of the depreciation methods is that, depending on the method used, we have a different amount of charge for annual depreciation. It may also be noticed that over the entire life of an asset the total amount of depreciation charge cannot be different. Thus, the difference is only in terms of annual apportionment. The net effect of the methods is thus in terms of showing less or more profit in any particular year. This could be explained by continuing with the example.

Suppose that the company using the machine in our earlier example earns Rs. 500 per annum before depreciation. The difference in annual measurement of profit under straight line and written down value methods will be as follows (Table 2):

Table 2: Profits under Written Down Value and Straight Line Method of Depreciation

(1) Year	(2) Profit before depreciation	(3) Straight line depreciation	(4) Net Profit under straight line method of depreciation (2)-(3)	(5) Written down value depreciation	(6) Net Profit under written down value method of depreciation
	Rs.	Rs.	Rs.	Rs.	Rs.
1	500	100	400	200	300
2	500	100	400	160	340
3	500	100	400	128	372
4	500	100	400	102	398
5	500	100	400	82	418
6	500	100	400	66	434
7	500	100	400	52	448
8	500	100	400	42	458
9	500	100	400	34	466
10	500	100	400	134*	366
Total	5,000	1,000	4,000	1,000	4,000

\*Includes the unallocated depreciation charge, since there is no salvage value for the asset. Under this method there will always be a terminal unabsorbed depreciation. Figures are rounded off.

### 5.7 FORM OF PROFIT AND LOSS ACCOUNT

So far we have been discussing profit and loss account in the 'account' format. That is, listing all the revenues earned on the RHS and all the expenses incurred on the LHS showing profit in case of a credit balance and loss in case of a debit balance.

Modern practice is to present the information in a summarised statement giving the details in attached schedules. This achieves the same result because of the relationship:  
Revenue - Expense = Profit/Loss.

We give below a condensed profit and loss account in both the formats. We shall then discuss the items presented. It may help you to copy out this profit and loss account since subsequent discussions will be based on this example.

**TOOLS INDIA LTD.**  
**Profit and Loss Account**  
 For the year ending December 31, 19x1

(Rs. in Millions)

Debit		Credit
Cost of goods sold (Schedule 3)	130	Sales net (Schedule 1) <span style="float: right;">225</span>
Gross profit	130	Other income (Schedule 2) <span style="float: right;">5</span>
	<u>260</u>	<u>260</u>
Personnel (Schedule 4)	49	Gross profit <span style="float: right;">130</span>
Depreciation (Schedule 5)	11	
Other expenses (Schedule 6)	28	
Operating profit	42	
	<u>130</u>	<u>130</u>
Interest (Schedule 7)	12	Operating income <span style="float: right;">42</span>
Profit before taxes	30	
	<u>42</u>	<u>42</u>
Income-tax provision	12	Profit before taxation <span style="float: right;">30</span>
Net profit after tax	18	
	<u>30</u>	<u>30</u>

Alternatively, the same profit and loss account could be presented as follows:

**TOOLS INDIA LTD.**  
**Profit and Loss Account**  
 For the year ending December 31, 19x1

(Rs. in Millions)

Sales	(Schedule 1)	255
Other income	(Schedule 2)	5
		<u>260</u>
Cost of goods sold	(Schedule 3)	130
		<u>130</u>
Gross Profit		
Operating expenses:		
Personnel	(Schedule 4)	49
Depreciation	(Schedule 5)	11
Other expenses	(Schedule 6)	28
		<u>88</u>
Operating Profit		42
Less: Interest expense	(Schedule 7)	12
		<u>30</u>
Net Profit before Income Taxes		12
Less: Provision for Taxes		<u>18</u>
Net Profit		<u>18</u>

The condensed profit and loss account will be accompanied by schedules providing details of various items forming the total.

**Sales:** Net sales shown in the profit and loss account is after deductions made from gross sales of Rs. 5 million. Schedule 1 also provides the detailed break up of sales by different divisions of the company as also the domestic market and export sales.

## Schedule 1: Sales

		(Rs. in Millions)
<b>Gross Sales</b>		<b>260</b>
<b>Less: Sales returns and allowances</b>	1.75	
<b>    Sales discount</b>	3.25	<b>5</b>
<b>Net Sales (inland)</b>		<b>255</b>
Machine Tools Group	83	
Watch Group	87	
Tractor Group	60	
Lamp Group	13	
Dairy Machinery Group	2	
		<b>245</b>
<b>Export:</b>		
Machine Tools Group	6	
Watch Group	2	
Others	2	<b>10</b>
<b>Total Net Sales</b>		<b>255</b>

**Sales Returns and Allowances:** Sales records are prepared as and when goods are shipped to customers. Goods which are not according to specifications, damaged or defective may be returned by the customers and refund or credit sought.

Such refunds or allowances are separately accumulated for the purpose of control by management. At the time of preparation of profit and loss account such allowances are set off against the gross sales and net sales taken as operating revenue earned. Many companies may not disclose this information in published accounts.

**Sales Discount** is a reduction from invoice price granted for prompt payment of the invoice within a specified time limit. This is also sometimes called **cash discount**. In our example, Tools India Ltd., allowed Rs. 3.25 million in discounts to customers.

It is usual practice to state the discount offered to customer on the invoice. Discounts or terms of payments are usually presented in short forms or symbols. They may be 'Net amount' or 'No cash discount' (N); Net Amount due at End of the Month (N/EOM); Net amount due in 30 days of invoice, no cash discounts (N/30); 5 per cent discount if payment is made in 10 days, net amount to be paid in 30 days (5/10, N/30).

An invoice of '5/10, N/30' simply means that 5 per cent discount will be allowed if payment is made within ten days. It also implies that by not paying in 10 days you could avail the normal credit of 30 days. Suppose you have Rs. 1,000 invoice with '5/10, N/30'. You are losing 5 per cent for 20 days credit. In other words it costs you  $360/20 \times 5\% = 90\%$  per annum in equivalent interest. This knowledge will definitely help you in planning your short term finances more effectively.

**Trade discounts** are used as adjustments in price and used when bulk sales are made by wholesaler to retailers. These are never brought into accounts. Rather, the sales are valued at net of trade discount.

**Other Income:** The revenue earned by an enterprise is usually bifurcated into two parts, operating income and non-operating income. Operating income usually refers to income derived from the main-line operations of the business. Other income usually arises from activities incidental to the business. Schedule 2 lists the details of non-operating incomes of Tools India Ltd.

**Schedule 2: Other Income**

(Rs. in Millions)

Interest-Banks	0.50
Interest-Staff and Offices	1.20
Export incentives	1.80
Sales agency commission	0.50
Profit on sales of assets	0.30
Dividend on trade investments	0.20
Other Miscellaneous income	0.50
<b>Total</b>	<b>5.00</b>

**5.8 COST OF GOODS SOLD**

Cost of goods sold is very complex in case of a multi-product, multi-division company where you have large amounts of semi-finished goods. But in case of a trader, who deals in commodities and where each unit bought could be identified with each unit sold, it is very simple. We confront two major problems in this regard. First is with respect to changes in the price per unit of purchases. At what price should we identify the cost of goods sold? Second, how do we evaluate cost of semi-finished goods?

Cost of goods sold in summary presented in our example could be understood more clearly from Schedule 3.

**Schedule 3: Cost of Goods Sold**

(Rs. in Millions)

Inventory on January 1, 19 x 1		81
Add: Purchases	110	
Freight in	10	
Other direct material costs	15	
<b>Total goods available</b>		<b>216</b>
Less: Raw material and semi-finished inventory on December 31, 19 x 1		71
<b>Goods available for sale</b>		<b>145</b>
Less: Finished goods inventory on December 31, 19 x 1		15
<b>Cost of goods sold</b>		<b>130</b>

**Activity 2**

Relate items in Column A to all items in Column B.

<p><b>A</b></p> <p>1 Gross Sales</p> <p>2 Sales returns and allowances</p> <p>3 Depreciation</p> <p>4 Discounts</p>	<p><b>B</b></p> <p>1 Non-cash expense of the period</p> <p>2 Total invoice value of goods sold during the period</p> <p>3 Reduction from invoice price</p> <p>4 2/5, N/30</p> <p>5 Given effect when goods are returned by customers</p> <p>6 Adjustments to recorded sales.</p>
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**5.9 METHODS OF INVENTORY VALUATION**

The only thing certain with respect to prices normally is that they are not certain. This makes it necessary to evolve a strategy for charging the cost of materials sold. Two of the most commonly used systems are the 'first in, first out' (FIFO) which assumes that the sales are made in the

**Construction and Analysis of Profit and Loss Account**

order in which they are purchased and 'last in' first out' (LIFO), which assumes that goods which are bought last are sold first.

This could be illustrated with a simple example.

		No. of units	Cost per unit Rs.	Amount Rs.
January 1	Inventory	500	3	1,500
January 5	Purchase	1,000	4	4,000
January 10	Purchase	2,000	5	10,000
January 15	Purchase	1,000	6	6,000
January 20	Purchase	3,000	4	12,000
January 25	Purchase	2,000	7	14,000
	<b>Total</b>	<b>9,500</b>		<b>47,500</b>

		Units
January 11	Sales	1,000
January 14	Sales	500
January 16	Sales	1,000
January 21	Sales	2,000
January 30	Sales	1,500
	<b>Total</b>	<b>6,000</b>

If we value the cost of sales on the basis of FIFO we have the following situation:

**Table 3: Cost of goods sold and inventory under FIFO**

Date	Quantity sold	Quantity Break-up	Rate	Amount	Total Amount
January 11	1,000	500	x 3	1,500	3,500
		500	x 4	2,000	
January 14	500	500	x 4	2,000	2,000
January 16	1,000	1,000	x 5	5,000	5,000
January 21	2,000	1,000	x 5	5,000	11,000
		1,000	x 6	6,000	
January 30	1,500	1,500	x 4	6,000	6,000
<b>Total Sales</b>	<b>6,000</b>				<b>27,500</b>
Inventory	3,500	1,500	x 4	6,000	20,000
		2,000	x 7	14,000	
<b>Total</b>	<b>9,500</b>				<b>47,500</b>

Thus, cost of goods sold and inventory under FIFO are:

Cost of goods sold	27,500
Inventory	20,000
<b>Total</b>	<b>47,500</b>

If we follow LIFO the picture will be as follows (Table 4):

**Table 4: Cost of goods sold and inventory under LIFO**

Date	Quantity sold	Quantity	Rate	Amount	Total Amount
January 11	1,000	1,000	x 5	5,000	5,000
January 14	500	500	x 5	2,500	2,500
January 16	1,000	1,000	x 6	6,000	6,000
January 21	2,000	2,000	x 4	8,000	8,000
January 30	1,500	1,500	x 7	10,500	10,500
<b>Total Sales</b>	<b>6,000</b>				<b>32,000</b>
<b>Inventory</b>	<b>3,500</b>	500	x 3	1,500	
		1,000	x 4	4,000	
		500	x 5	2,500	
		1,000	x 4	4,000	
		500	x 7	3,500	15,500
<b>Total</b>	<b>9,500</b>				<b>47,500</b>

Thus, cost of goods sold and inventory under LIFO are:

	Rs.
Cost of goods sold	32,000
Inventory	15,500
<b>Total</b>	<b>47,500</b>

From the example above we find that the FIFO cost of goods sold, which is based on prices of inventory procured earliest prior to sales would amount to Rs. 27,500. And the closing inventory of 3,500 units will be valued at Rs. 20,000 which is based on the most current purchase prices. The LIFO cost of goods sold, which is based on the most recent prices of the inventory purchased, is Rs. 32,000. Closing inventory, based on the prices of earlier purchases, is valued at Rs. 15,500. In both cases inventory plus cost of goods sold amount to the same, that is, Rs. 47,500 since it is based on actual historical cost only.

Here again, over the entire life of the entity there will be no difference, irrespective of the method used in valuing the cost of goods sold. There will also be no difference if the entire inventory is sold. The differences again reflect one of the effects of accounting periods on income measurement.

## 5.10 GROSS PROFIT

Gross profit obtained by subtracting the cost of goods sold has great managerial significance. Cost of goods sold usually reflects the direct input costs which, to a great extent, are variable with the volume of operations. In other words, per unit cost of goods sold holds a fixed relationship. The gross profit margin should be sufficient to cover operating expenses.

### Operating Expenses

All those expenses which are necessary to run the business enterprise but which are not directly associated with the company's output or production or trading are usually termed as operating expenses. Usually these expenses include all items of cost concerned with providing administrative and general support to business operations. It is the usual practice to segregate these costs as falling under two broad groups: selling and distribution and general administrative expenses. The latter also covers personnel expenses including staff and workmen's compensation and other benefits. In case of Tools India Ltd., details of the expenses on account of personnel are given in Schedule 4.

**Schedule 4: Personnel Expenses**

(Rs. in Millions)

Salaries, Wages and Bonus	37.81
House rent allowance	2.19
Gratuity	0.75
Contribution to Provident Fund	2.75
Contribution to Employees State Insurance (ESI)	0.50
Workmen and Staff Welfare expenses	5.00
<b>Total</b>	<b>49.00</b>

**Depreciation**

Depreciation, as explained earlier, is the expiration of costs on fixed assets. It is usual practice to classify the depreciation expense for different groups of assets. In case of Tools India Ltd., Schedule 5 gives the break up of depreciation for different groups of assets.

**Schedule 5: Depreciation**

(Rs. in Millions)

Fixed Assets	9.84
Tools and Instruments	0.02
Patterns, Jigs and Fixtures	1.14
<b>Total</b>	<b>11.00</b>

**Other Expenses**

'Other expenses' give detailed break up of most of the major items of operating expenses other than personnel, depreciation and financing costs. In case of Tools India Ltd., the details are provided in Schedule 6.

**Schedule 6: Other Expenses**

(Rs. in Millions)

Power and Fuel	3.10
Rent	0.50
Rates and Taxes	0.40
Insurance	0.50
Water and Electricity	0.60
Repairs to buildings	0.20
Repairs to machinery	0.80
Printing and Stationery	0.90
Advertisement and Publicity	2.40
Training	0.10
Audit fees	0.05
Royalties	0.85
Sole Selling and other Agents; Commission	4.70
Directors' Fees	2.00
Provision for bad debts and advances	0.20
Loss on assets sold or discarded	1.30
Provision for warranty repairs	1.00
Miscellaneous expenses	8.40
<b>Total</b>	<b>28.00</b>

**5.11 OPERATING PROFIT**

Operating profit, the figure obtained after depreciation, personnel, and other expenses are subtracted from gross profit, is the net result obtained from the operations. This amount is earned by the company irrespective of the method of financing, the only other expense to be met being interest expense. This is a measure of operational efficiency of the company, and is

usually referred to as OPBIT (Operating Profit Before Interest And Taxes) or EBIT (Earnings Before Interest And Taxes).

### Interest Expense

'Interest expense' arises out of management's decision to finance part of the expenses from borrowed funds. The level of interest expense represents the amount of risk the company is carrying in terms of fixed commitments, irrespective of the volume of operations and profit. Schedule 7 shows the different items of interest commitments of Tools India Ltd.

Schedule 7: Interest

	(Rs. in Millions)
Debentures	0.58
Fixed Deposits	1.50
Loans from Government	5.00
Term loans from Banks/Financial Institutions	0.42
Cash Packaging credit from banks	3.50
Others	1.00
<b>Total</b>	<b>12.00</b>

### Net Profit Before Tax

Net profit before tax is surplus after meeting all expenses including interest. This is the profit available to the company as a result of both operating and financing performance. This profit is usually referred to as PBT (Profit Before Tax) or EBT (Earnings Before Tax).

### Income Taxes

The profit before tax determines the level of taxation. As per the tax laws the amount of tax payable is not determined on the basis of reported net profit. In most cases accounting profit arrived at has to be reclassified and recomputed for determining the tax liability. Further, the tax liability, though certain, is determined only after the tax assessment is completed. This is the reason why tax liability is always provided for as a provision, implying that this liability is based on an estimate. When the amount is actually determined later on, it is set off against this provision.

## 5.12 NET PROFIT

This is the amount ultimately available to the company for appropriation. That is, this amount could be either distributed as dividends to shareholders (owners) or retained in the business as retained earnings, thereby increasing the owner's investment or equity in the business. This is variously referred to as PAT (Profit After Tax) or EAT (Earnings After Tax). After subtracting dividends declared, any surplus remaining is added to retained earnings, that is, Reserves and Surplus.

### Activity 3

Classify each item listed in Column A under appropriate classification in item B, assuming that the information relates to a small manufacturing firm.

A	B
1 Raw material consumed	i) Operating revenue
2 Interest received	ii) Non-operating revenue
3 Dividends received	iii) Cost of goods sold
4 Wages paid to workers	iv) Selling and distribution expenses
5 Carriage on goods sold	v) Administrative expenses
6 Carriage on goods purchased	vi) None of the above

- 7 Salary of clerical staff
- 8 Rent for office
- 9 Power and fuel
- 10 Selling agents' commission
- 11 Advertising
- 12 Auditors' fees
- 13 Sales tax
- 14 Municipal rates on office premises
- 15 Profit on sale of machinery
- 16 Bonus paid to workers
- 17 Sales discount
- 18 Purchase returns and allowances
- 19 Dividends paid
- 20 Interest expense on loans.

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### 5.13 SUMMARY

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In this unit we have developed and examined the profit and loss account. This account shows the net profit or earnings generated by the company. Thus, this measures the management's ability to generate income from assets.

The profit and loss account summarises the revenues and expenses of an accounting period. As a result of this summary it shows the net profit or net loss experienced by the company during the period. The reader of this account is provided with the past cost structure and profitability.

The net profit after payment of dividends shows the amount retained and hence links the balance sheet with the profit and loss account.

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### 5.14 KEY WORDS

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**Revenue:** Assets received from the sale of goods or services to customers. Also includes income generated from assets and investments usually classified as non-operating revenue. Revenues increase owners' equity.

**Expense:** Any reduction in owners' equity (total assets minus total liabilities) not resulting from distribution to owners. Represents expiration of costs, use or loss of an asset without being replaced by another asset.

**Realisation:** Recognition of the revenue in accounting based on the assumption that increase in owners' equity arises at the point of delivery or provision of goods or services.

**Accrual:** Income measured on the realisation of revenue independent of the timing of cash receipt and payment.

**Profit:** Revenue minus expenses for a given accounting period. Negative profit (income) is known as loss.

**Profit and Loss Account:** The final summary of all revenues, gains, expenses and losses during an accounting period. Shows the net profit or loss for the period.

**Depreciation:** The amortisation representing allocation of cost expiration of tangible fixed assets over their useful life.

**Cost:** The amount paid or to be paid for acquisition of goods or services.

**Matching:** Income measurement based on comparison of expenses and revenues of a period.

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### 5.15 SELF-ASSESSMENT QUESTIONS/EXERCISES

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- 1 Explain the following:  
Realisation Concept

## Understanding Financial Statements

Accounting Period Concept

Matching Concept

- 2 When should revenue be recognised?
- 3 What are bad debts? In what way do we deal with the problem of possible bad debts in accounting?
- 4 What is depreciation and what is the rationale behind making a provision for depreciation in the process of matching incomes and expenses?
- 5 Differentiate between:
  - a) Straight Line method and Written Down Value method of providing depreciation;
  - b) Operating Profit and Net Profit;
  - c) FIFO and LIFO methods of Inventory valuation.
- 6 Following is the summarised Profit and Loss Account of Shyam Enterprise for Five consecutive periods. Complete the same by supplying missing information.

	1	2	3	4	5
Sales	1000		3000		5000
Cost of goods sold	500	800		2500	3000
Gross Profit		700	1000	1500	
Administrative expenses	100		300	400	
Selling and Distribution expenses	150	200		500	600
Operating Profit		200	400		1000
Other incomes	150		200		500
Net Profit before tax		300		1000	
Corporate Income Tax	200		300		
Profit after tax		150		500	800

- 7 Following information relates to Ramsons operations for a period ending December 31, 19x0, the first year of operations. From this information complete the accompanying Profit and Loss Account and Balance Sheet.

Revenues and expenses of the period are as follows:

	Rs.
Depreciation expense	5,000
Purchases (raw material)	50,000
	25,000
Purchase discount	5,000
Sales	1,00,000
Rent	3,000
Insurance	2,000
Returns inwards and allowances	2,000
Sales discount	1,000
Interest expenses	2,000
Miscellaneous expenses	5,000
Interest on deposits received	2,000

**Construction and Analysis of Profit and Loss Account**

Balance shown by asset and liability accounts on 31 December 19x0 is as follows:

Cash	15,000
Deposits with bank	20,000
Inventory of raw material	10,000
Land	10,000
Buildings and equipments	90,000
Advance tax paid	5,000
Tax payable	?
Accounts receivable	20,000
Accounts payable	19,500
Capital	75,000
Long term loan	50,000
Retained earning	?

**RAMSONS  
Profit and Loss Account  
For the Year ending 31 December 19x0**

Rs.		Rs.	
Inventory consumed	_____	Sales	_____
Wages	_____	Less: Returns and Allowances	_____
Gross Profit	_____	Gross Profit	_____
Depreciation expense	_____	Purchases discount	_____
Rent	_____	Operating Profit	_____
Sales discount	_____	Interest on deposit	_____
Insurance	_____	Net Profit before tax	_____
Interest expenses	_____		
Miscellaneous expenses	_____		
Operating Profit	_____		
Net Profit before tax	_____		
Income Tax @ 50%	_____		
Profit retained	_____		

**RAMSONS  
Balance Sheet  
As on 31 December 19x0**

Rs.		Rs.	
<b>Assests</b>		<b>Liabilities and Capital</b>	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash	_____	Accounts payable	_____
Deposit with bank	_____	Tax payable	_____
Accounts receivable	_____	Total current liabilities	_____
Inventory	_____		
Advance tax paid	_____	Long-Term Loan	_____
Total current assets	_____	Capital	_____
		Retained earnings	_____
<b>Fixed Assets</b>			
Land	_____		
Buildings & equipment	_____		
Less : Accumulated depreciation	_____		



- iii) Identify the main information objectives of shareholders and assess the extent to which these objectives are satisfied by the financial accounts you have prepared.

**Answers to Activities**

- 1.1 Revenues and expenses.
- 2 Revenue.
- 3 Expenses to revenues.
- 4 Expired costs or expenses
- 5 Accrues.
- 6 Decrease.
- 7 Revenue, accounting

2. (1) A1 - B2 (2) A2 - B5, B6 (3) A3 - B1 (4) A4 - B3, B4

3. 1. (iii) 2. (ii) 3. (ii) 4. (iii) 5. (iv) 6. (iii) 7. (v) 8. (v) 9. (iii) 10. (iv) 11. (iv) 12. (v) 13. (vi) 14. (v) 15. (ii) 16. (iii) 17. (iv) 18. (iii) 19. (vi) 20. (v).

**Answers to Self-assessment Questions/Exercises**

**7-Solution:**

**RAMSONS**  
**Profit And Loss Account**  
**For the Year ended 31 December, 19x0**

	Rs.	Rs.		Rs.	Rs.
Purchases	50,000		Sales	1,00,000	
Less Inventory	10,000*		Less: Returns and allowance	2,000	
Inventory consumed	40,000		Sales discount	1,500	96,500
Less: purchase discount	<u>1,000</u>	39,000			
Wages		25,000			
Gross Profit		<u>32,500</u>			
		<u>96,500</u>			<u>96,500</u>
Depreciation expense		5,000	Gross Profit		32,500
Rent		3,000			
Sales Discount		2,000			
Insurance		2,000			
Interest expense		2,000			
Miscellaneous expense		5,000			
Operating Profit		<u>18,500</u>			
		<u>32,500</u>			<u>32,500</u>
Net Profit before tax		20,500	Operating Profit		18,500
		<u>20,500</u>	Interest on deposit		2,000
		<u>20,500</u>			<u>20,500</u>
Income Tax @50%		10,250	Net Profit before tax		20,500
Profit Retained		<u>10,250</u>			<u>20,500</u>
		<u>20,500</u>			<u>20,500</u>

\* Inventory figure has been obtained from the balances shown under asset and liability accounts.

**RAMSONS**  
**Balance Sheet**

As on 31 December, 19x0

<b>Assets</b>		<b>Liabilities and Capital</b>	
<b>Current Assets</b>	Rs.	<b>Current Liabilities</b>	Rs.
Cash	15,000	Accounts payable	19,500
Deposit with bank	20,000	Taxes payable	<u>10,250</u>
Accounts receivable	20,000		
Inventory	10,000	Total current liabilities	28,250
Advance tax paid	5,000	Long Term Loan	50,000
<b>Total current assets</b>	<u>70,000</u>	Capital	75,000
		Retained earnings	<u>10,250</u>
<b>Fixed Assets</b>			
Land	10,000		
Buildings and equipment	90,000		
Less:			
Accumulated depreciation	5,000		
	<u>85,000</u>		
	<u>1,65,000</u>		<u>1,65,000</u>

8 Gross Profit Rs. 1,52,300  
Operating Profit Rs. 74,400  
Net Profit Rs. 45,120

Balance Sheet Total Rs. 4,14,930

**5.16 FURTHER READINGS**

Bhattacharya, S.K. and John Dearden, 1984. *Accounting for Management : Text and Cases (2nd Ed.)* Vani : New Delhi, (Chapters 4, 8, 9, & 10.)

Glautier M.W.E., Underdown B. and A.C. Clark, 1979. *Basic Accounting Practice*, Arnold Hieneman: New Delhi: (Chapters 2-4)

Hingorani, N.L. and A.R. Ramanathan, 1986. *Management Accounting*, Sultan Chand : New Delhi. (Chapters 3-5)

Meigs, W.B. and Robert E. Meigs, 1987. *Accounting: The Basis For Business Decisions* (7th Ed.), McGraw-Hill: New York. (Chapters 3 and 4.)

## UNIT 6 CONSTRUCTION AND ANALYSIS OF FUND FLOW STATEMENT

### Objectives

After you have studied this unit, you should be able to:

- understand the idea of funds flowing through a business in a dynamic situation
- appreciate the role of working capital in the operations of a business
- understand the sources and uses of working capital during an accounting period from the financial statements
- understand and interpret changes in working capital identifying the causes of these changes
- use the fund flow statement as an analytical tool.

### Structure

- 6.1 Introduction
- 6.2 Working Capital and its Need
- 6.3 Determining Working Capital Requirements
- 6.4 Sources of Funds
- 6.5 Uses (Applications) of Funds
- 6.6 Factors Affecting Fund Requirements
- 6.7 Analysing Changes in Working Capital
- 6.8 Fund Flow Statement
- 6.9 Summary
- 6.10 Key Words
- 6.11 Self assessment Questions/Exercises
- 6.12 Further Readings

### 6.1 INTRODUCTION

Depending on the users' purpose, the term 'funds' may be used differently. Literally, it means a supply that can be drawn upon. In this sense it is used to mean cash, total current assets or working capital. We use it here in the sense of working capital meaning **total current assets less current liabilities**.

Funds flow is used to refer to changes in or movement of current assets and current liabilities. This movement is of vital importance in understanding and managing the operations of a business.

We have seen in the unit dealing with balance sheet that every material transaction changes the position statement (or Balance Sheet). This in other words implies a dynamic situation involving continuous movement of resources into the business within the business and out of the business. The complexity of these flows increases with the increasing size and volume of business. Directly or indirectly, all these flows take place in business through the medium of funds. Let us see how.

### 6.2 WORKING CAPITAL AND ITS NEED

We have earlier defined working capital as total current assets less current liabilities. This, in other words, means all the assets held by the business with the objective of conversion into cash (including cash) during an operating cycle of the business. Of these assets, a part is financed by short-term credits which are to be met during the operating cycle representing current liabilities. Thus current assets less current liabilities or working capital implies amount of resources invested in current assets from sources of finance other than current liabilities. This net amount is also the amount available for use in the business in the form of fund. Consider the following example.

'Ramsons' is a small retail outlet dealing in domestic appliances and entertainment electronics equipment, owned by Ram. The investment in the showroom, display counters, cash register, furniture, fixtures and so on is Rs. 6,00,000. Ram decides to use straight line depreciation at the rate of 10 per cent per annum.

Ramson's estimated sales is Rs. 1,50,000 per month: 50,000 cash sales and Rs. 1,00,000 on credit to be collected in four equal monthly instalments. All sales are made at 25 per cent margin on selling price.

Supply and sales constraints would warrant carrying three months sales requirement in the form of inventory. Similarly, month's cash expense requirements have to be held in cash balance.

Initial inventory is to be brought for cash and replenishment purchases will receive a month's credit from the suppliers.

Average monthly cash requirement for meeting operating expenses other than payment for purchases amount Rs.26,000. Ram needs to withdraw Rs.4,000 per month for his personal needs.

- 1 How much working capital will Ramsons require to start operations?
- 2 Will he need additional working capital during the first four months? Or will he have surplus working capital during the first four months?

You can instinctively answer these questions by saying that Ramsons needs working capital to pay for inventory, for expenses and for keeping a safe cash balance. You can also say that Ramsons will receive funds from operations to meet some of these requirements. To be more specific, how much money does he require ? This could be done by working out a schedule of cash receipts and cash payments on a monthly basis. It is also possible for us to prepare **proforma** monthly profit and loss account and balance sheet. You can also notice that we have chosen the first four months consciously since it completes one operating cycle of the business.

**RAMSONS : Schedule of Cash Payments**

Month	Explanation	Amount Rs.	Total Rs.
January	Operating expenses	26,000	30,000
	Withdrawals	4,000	
February	January purchases	1,12,500	1,42,500
	Operating expenses	26,000	
	Withdrawals	4,000	
March	February purchases	1,12,500	1,42,500
	Operating expenses	26,000	
	Withdrawals	4,000	
April	March purchases	1,12,500	1,42,500
	Operating expenses	26,000	
	Withdrawals	4,000	

**RAMSONS: Schedule of Cash Receipts**

Month	Explanation	Amount Rs.	Total Rs.
January	Cash sales	50,000	75,000
	Credit sales of the month- first instalment	25,000	
February	Cash sales	50,000	1,00,000
	Credit sales of the month first instalment	25,000	
	January sales-second instalment	25,000	

**Construction and Analysis of Fund Flow Statement**

March	Cash sales		
	Credit sales of the month- first instalment	25,000	
	January sales-third instalment	25,000	
	February sales-second instalment	25,000	1,25,000
April	Cash sales	50,000	
	Credit sales of the month- first instalment	25,000	
	January sales-fourth instalment	25,000	
	February sales-third instalment	25,000	
	March sales-second instalment	25,000	1,50,000

Opening balance sheet of Ramsons will be as follows:

**RAMSONS: Balance Sheet as of January 1, 19x0**

Assets	Rs.	Liabilities and Capital	Rs
Fixed Assets	6,00,000	Capital	9,67,500
Inventory	3,37,500		
Cash	30,000		
	<u>9,67,500</u>		<u>9,67,500</u>

We have assumed that the entire asset requirements are financed by owner's capital. Working capital of Ramsons on January 1, 19x0 is as follows:

Current Assets : Inventory	3,37,500
Cash	30,000
Total Current Assets	3,67,500
Less :Current Liabilities	Nil
Working Capital	<u>3,67,500</u>

**RAMSONS: Schedule of Cash Balances**

	January	February	March	April
Opening Balance	30,000	75,000	32,500	15,000
Cash receipts	75,000	1,00,000	1,25,000	1,50,000
Total Cash available	1,05,000	1,75,000	1,57,000	1,65,000
Less: Cash payments	30,000	1,42,500	1,42,500	1,42,500
Cash Balance	75,000	32,500	15,000	22,500

**RAMSONS: Profit and Loss Account for the Month ending**

	31 January	28 February	31 March	30th April
Sales	1,50,000	1,50,000	1,50,000	1,50,000
Less: Cost of Sales	1,12,500	1,12,500	1,12,500	1,12,500
Other expenses	26,000	26,000	26,000	26,000
Depreciation	5,000	5,000	5,000	5,000
Net Profit:	<u>6,500</u>	<u>6,500</u>	<u>6,500</u>	<u>6,500</u>

**RAMSONS: Balance Sheet as at the end of**

Assets	31 January 19 x 0	28 February 19 x 0	31 March 19 x 0	30 April 19 x 0
Fixed Assets	6,00,000	6,00,000	6,00,000	6,00,000
Less : Depreciation	5,000	10,000	15,000	20,000
Net Fixed Assets	<u>5,95,000</u>	<u>5,90,000</u>	<u>5,85,000</u>	<u>5,80,000</u>
Inventory	3,37,500	3,37,500	3,37,500	3,37,500
Receivables	75,000	1,25,000	1,50,000	1,50,000
Cash	75,000	32,500	15,000	22,500
Total current Assets	<u>4,87,500</u>	<u>4,95,000</u>	<u>5,02,500</u>	<u>5,10,000</u>
Total Assets	<u>10,82,500</u>	<u>10,85,000</u>	<u>10,87,500</u>	<u>10,90,000</u>
<b>Liabilities and capital</b>				
Capital	9,67,500	9,67,500	9,67,500	9,67,500
Add: Retained Earnings	2,500	5,000	7,500	10,000
Owner's Equity	<u>9,70,000</u>	<u>9,72,500</u>	<u>9,75,000</u>	<u>9,77,500</u>
Accounts Payable	1,12,500	1,12,500	1,12,500	1,12,500
	<u>10,82,500</u>	<u>10,85,000</u>	<u>10,87,500</u>	<u>10,90,000</u>

**RAMSONS: Schedule of Working Capital**

	31 January 19x0	28 February 19 x 0	31 March 19 x0	30 April 19 x 0
Current Assets	4,87,500	4,95,000	5,02,500	5,10,000
Less: Current Liabilities	1,12,500	1,12,500	1,12,500	1,12,500
	<u>3,75,000</u>	<u>3,82,500</u>	<u>3,90,000</u>	<u>3,97,500</u>

**Funds From Operations**

Net Profit	6,500	6,500	6,500	6,500
Add: Depreciation	5,000	5,000	5,000	5,000
Total funds generated from operations	<u>11,500</u>	<u>11,500</u>	<u>11,500</u>	<u>11,500</u>

**Initial Investment (Capital)**

Now with the example of Ramsons at hand, it is not difficult for us to understand that Ramsons have invested the 'money to make money'. Where has Ramsons invested the money? It is easy to answer this question because the balance sheet of the business tells us what all things Ramsons has done with the money. Refer to the first balance sheet and you will find Ramsons has fixed assets (show room and facilities), inventory (goods or merchandise) which he has purchased for resale and some cash for meeting expenses and personal needs. This is how Ramsons have invested the capital to start with. Let us first review these items and accounts receivable.

**Cash**

It is difficult to perceive cash kept in the vault as an investment. Rather, you would be thinking that if we invest cash, then how can cash itself be an investment? But you will realise that a certain minimum amount of cash is necessary for any business. Take a simple case: if you are a retailer, will you send away a customer who does not have exact change? However, you can entertain him only if you keep change. That is your investment in cash! Similarly, you will have

to pay your employees and suppliers at a specific time. In order to do that you need cash. Thus investment in cash is that amount which is required to be kept on hand to meet day-to-day requirements of cash. This amount is determined after taking into account the regularity and amounts of inflows of cash, the amount and frequency of outflows, as also the uncertainties related to these. Obviously, as your business grows the need for cash also will grow.

### Receivables

In most situations it will be necessary to grant credit to customers. This may be necessary either because of competition or because of the custom of trade. However, when we grant credit to customers it implies that we have to finance the cost of materials for the duration of such credit. In other words, you are financing your customers' business to the extent of the credit granted. Whenever the business is expanding, the volume of receivables also will expand. please note that the need for financing receivables is not to the full extent of the accounts receivables (sales). You are actually financing only to the extent of cost of goods sold out of the receivables (sales) in question.

### Inventory, Supplies and Prepaid Expenses

You can well appreciate the need for carrying inventory. In order to carry on operations unhindered we need to have sufficient amount of merchandise on hand. The quantum we have to keep in store will be determined by the availability and regularity of supply lead time for delivery and so on. All the same we should carry some inventory in any case. Similar is the case with non-merchandise inventory such as office and factory supplies. We have to carry a minimum stock of these to ensure smooth operations. We also know that there are several expenses which are to be paid before we actually use the services, such as rent, insurance and so on. In other words we invest our money in these items of assets in order to ensure smooth operations.

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## 6.3 DETERMINING WORKING CAPITAL REQUIREMENTS

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Understanding the existing capital needs and how these are financed will help us in understanding the process of financing of business and the flow of funds within the business. The first question we have to answer is how much working capital is needed to start the operation. We could determine the amount of capital required and compare the same with existing capital to see whether it is sufficient and whether there is any excess available for future use. Please note that we are not applying precise techniques of cash management or liquidity planning since that is beyond the scope of this unit.

We know from Ramsons that operating requirements of the business requires one month's cash expenses other than payment for creditors to be kept in cash. That is a minimum of Rs. 30,000 cash on hand is required by Ramsons (including Rs. 4,000 for his withdrawal).

Ramsons have to keep three months sales in inventory. This means that during the first month he starts with three month's sales in the form of inventory. We know that the sales per month is Rs. 1,50,000 sold at a mark up of 25 per cent on sales. Therefore, inventory required to be maintained is three times of 75 per cent of sales.

$$\text{That is, } 1,50,000 \times .75 \times 3 = \text{Rs. } 3,37,500$$

Similarly, we know from the information available that every month one-third of the sales are made on cash and two-thirds on credit to be collected in four instalments. This means, cash collection during the month will be cash sales plus one-fourth of credit sales of the period and one-fourth of three previous months' credit sales. Similarly, in the first month we will be really making one half of the sales for cash and the other half on credit. In our example:

## Understanding Financial Statements

Total Sales Rs. 1,50,000	
Cash Sales	Rs. 50,000
Credit Sales Rs. 1,00,000	
First instalment in Cash	Rs. 25,000
Total Cash Collection	Rs. 75,000

Credit period of the sales will be as follows:

First month sales on credit less first instalment Rs. 75,000.

This means:

Rs. 75,000 credit for one month

Rs. 50,000 credit for one month

Rs. 25,000 credit for one month

This is equivalent to Rs. 75,000 sales made for two months' credit. In terms of working capital requirement, we require one month's financing of the cost of sales with respect to Rs. 1,50,000 sales. That is Rs. 1,12,500 is needed for financing this amount.

Thus, we could summarise Ramson's need for funds for financing current asset to start operations, as follows:

	Rs.
3 months' inventory	3,37,500
One month's expenses as cash	30,000
	<u>3,67,500</u>

During the first month Ramsons will sell one-third of the inventory generating Rs. 75,000 in cash and the other half of Rs. 75,000 to be collected in three instalments. Thus we need some additional funds to finance our granting credit to the customers.

Similarly, we would need to replenish the inventory and make payments for expenses. We shall examine these with the help of the balance sheet and profit and loss account of Ramsons for the first four months.

## 6.4 SOURCES OF FUNDS

We have seen that working capital is required to finance that portion of current assets which is not financed by current liabilities. We also saw that the investments represented by current assets are converted into cash during the operating cycle. This implies that our need for financing is for one such cycle. Under normal circumstances every unit of investment in working capital is converted into cash at the end of the cycle at an added value, to the extent of profits.

When we are looking at the possible sources of working capital the most important source is this 'internal generation'. The very idea of internal sources implies, that there is something 'external'.

### Activity 1

Please put down what these 'internal' and 'external' sources are:

#### Internal Sources

When we are looking for sources of funds it is but natural to start searching at home. What do we have? While examining the need for working capital we could also make an assessment as to whether the existing working capital is sufficient or not. Thus, the first-internal source is any excess working capital that we might be having.

If we have any non-current assets of which do not have any use they could be disposed off, thereby generating additional working capital. Please note that this is not a regular and continuing source of funds.

We have seen earlier that every profitable sale brings with it funds in excess of what was expended on the goods sold. In other words, profits generated by the business contribute towards additional working capital. But you may also notice that whenever we measure profits, we match the revenue against all expenses relating to the revenue, whether it involves use of funds in the current period or not. Thus the profits measured do not reflect the actual amount of funds available. In order to assess the actual funds generated from current operations we should add back to the profits all those items of expenses not involving use of funds during the current period. One major example of such an item is depreciation.

Thus we could summarise the important possible sources of funds as:

- 1 Funds generated from operations. That is, profit plus depreciation and other amortisations.
- 2 Sale of non-current assets.
- 3 Any surplus working capital.

Did you guess correctly?

### Funds from Operations

Refer to Illustration-1. The profit and loss account of TIL shows that operations have provided gross addition of Rs. 360 million to funds during the period. These funds represent the sale proceeds of goods and services by the company.

We also know what part of these funds is utilised for meeting the cost of inputs such as material, personnel and other operating costs. Apart from these we have also to meet the interest commitments and costs expiration of the machinery and equipment. However, expiration of costs of machinery and equipment (depreciation) is one item which does not require use of funds in the current period.

**TOOLS INDIA LTD.**  
**Summarised Profit and Loss Account**  
**For the year ended Decemeber 31, 19x0**

		(Rs. in Million)
		Rs.
	Sales	350
	Other income*	10
		360
	Cost of goods sold	150
		210
	Gross Profit	
	Operating expenses:	
	Personnel	60.00
	Depreciation and Amortisation	11.90
	Other expenses	13.10
		85
	Operating Profit	125
	Less: Interest expense	15
		110
	Net Profit before income taxes	
	Less: Provision for taxes	55
		55
	Net Profit	
	Less: Dividends	20
		35

\* Other income includes Rs. 1 million profit on sale of furniture

Thus the funds provided from the operations are in fact the revenues earned from operations (as also non-operating incomes) less all immediate costs of goods sold requiring use of funds. In other words, it is net income or profit after taxes plus all the non-cash expenses, such as depreciation and amortisation.

The funds flow statement would show funds from operations of TIL as follows:

(Rs. in Million)

<b>Operations</b>	
Net income	55.00
Add: Depreciation and Amortisation	11.90
	66.90
Less: Profit on sale of furniture	1.00
<b>Total funds provided from operations</b>	<b>65.90</b>

**External Sources**

External sources of funds are resources raised from outside the organisation to augment funds availability for any of the uses to be discussed later. Normally, there are only two ways of doing this:

- 1 by contributing or raising additional capital,
- 2 by increasing long-term borrowing.

Please note that short-term creditors are not included as source of funds since we have already defined funds as "current assets less current liabilities". Thus, working capital represents long-term investment in current assets and hence short-term borrowing will not increase working capital.

The sources of funds, as usually presented in the fund flow statement, are enumerated below:

**Sources of Funds**

<b>Operations:</b>	
Net Profit after taxes	.....
Add: Depreciation	.....
Other amortisations	.....
<b>Funds provided by operations</b>	.....
New issue of share capital	.....
New issue of debentures/bonds	.....
Additional long-term borrowing	.....
Sale proceeds of fixed assets	.....
Sales of long-term investments	.....

**6.5 USES (APPLICATIONS) OF FUNDS**

**Need for additional Funds**

A business would require additional capital for two purposes:

- 1 Financing additional fixed assets
- 2 Financing additional working capital.

It should not be difficult to appreciate the necessity for having adequate fixed facilities with which to conduct the business. The amount we have invested in the shop, furniture and fixtures (refer to the example of Ramsons) has created the facilities for carrying on the business. It also limits the capacity. We cannot expand our business beyond a certain capacity which is limited by the facilities created by fixed assets. In case of a manufacturing firm, it will be plant capacity, in case of a transport undertaking it may be tonnage of trucks, ships or wagons; in case of show business and airlines it may be seating capacity, and so on. Any increase in such capacity would require additional investment.

Thus, investment in fixed assets is required to expand capacity or to improve the current operation. Usually, addition to investments are judged on the basis of its ability to reduce the present costs or to increase the present output.

Additional working capital is required to finance increased holding of inventory, increased credit to customers and increased cash holding requirements. Obviously, current creditors would finance part of this requirement for working capital.

If Ramsons invests in another shop or in expansion of the existing shop, they will require additional funds for investment in fixed assets as also for increased level of current assets. You will notice that whenever additional investment is to be made in non-current assets, we have to use the funds (working capital) available with us unless separate arrangement is made for their financing. Likewise, when non-current assets are sold they provide funds or result in sources of funds.

We could summarise the usual applications of funds as follows:

- 1 Acquisition of new non-current assets (fixed assets)
- 2 Repayment of non-current debt (loans)
- 3 Payment of dividends
- 4 Increase in the balance of working capital (current assets – current liabilities)

If the trading or business operations are unsuccessful, they may use funds rather than provide funds. The uses of funds, as they are usually presented in the fund flow statement, are enumerated below:

**USES OF FUNDS**

Dividends	.....
Non-operating losses not passed through P&L A/c	.....
Redemption of redeemable preference share capital	.....
Repayment of debentures/bonds	.....
Repayment of long-term loans	.....
Purchase of fixed assets	.....
Purchase of long-term investment	.....
Increase in working capital	.....

**6.6 FACTORS AFFECTING FUND REQUIREMENTS**

From the discussions we had earlier, it is not difficult to come to the conclusion that several factors affect the fund or net working capital requirements.

Fund requirements vary with the nature and type of business. A firm that provides agency services may require less working capital compared to a firm which carries on business of merchandising. The merchandising firm ofcourse would require to carry some inventory, give credit and so on. However, a firm which manufactures products may require more working capital than a retailer. The manufacturing company will have to carry inventory of raw material, work-in-process and finished goods.

Working capital requirements are directly influenced by sales volume. With every growth in sales volume we need to carry larger inventory, increased number of customers or receivables as also the operating expenses. It is possible that all the expenses may not move up proportionately. However, we will have to finance some of these increases. it is also possible that the increase in sales volume could be brought about by granting extended credits. In other words, by investing more funds we increase the volume of sales:

Fund requirements for the business may be seasonal. For example in industries using agricultural raw materials, it may be more advantageous to procure raw materials during harvest season. In case of consumer retailing it may be necessary to hold large inventories during festive season. Most of the fund requirements are restricted to a limited period, and if we provide it on a permanent basis we may have idle funds during most part of the year.

Yet another important aspect which may condition fund requirement is the **velocity of circulation of current assets**. In other words, the length of the **operating cycle** will influence the need for funds. Shorter the duration of operating cycle faster is the conversion of money invested in current assets into cash and hence lesser the need for net working capital.

Net working capital requirement is also influenced by the terms available from the suppliers. The credit terms extended by the suppliers will determine the amount of additional funds required.

A firm which carries a month's inventory and grants one month's credit to customers, has to fund the inventory cost of two months. If it could avail two months' credit from the suppliers, the need for holding inventory and funding receivables is nil.

In another situation, suppose the firm carries a balance of Rs. 10,000 of accounts payable, payable in 30 days and an average accounts receivable balance of Rs. 15,000, receivable in 45 days, the firm will have to keep a net working capital for the difference of receipts from customers and payments to creditors as follows:

	Rs.
Fund required to meet payable due within 30 days	10,000
Less: Funds received from customers -	
Received in 45 days, that is, Rs. 15,000 X 30/45	10,000
Fund required in the form of additional net working capital	Nil

Assuming the time taken for collection of receivables is 90 days the situation will be:

	Rs.
Fund required to meet payables due within 30 days	10,000
Less: Funds received from customers -	
Rs. 15,000 x 30/90	5,000
Fund required in the form of additional net working capital	5,000

We could summarise the discussion in respect of the need for working capital by saying that the ability of the firm to circulate the "cash→raw material inventory→work- in-process→ finished goods inventory→ receivables→ cash" is the most vital and important factor in determining the amount of working capital. However, the exact amount needed to be invested in all these will be determined by the period and quantum of holding of each of these elements. This in turn is also influenced by the factors we have discussed in this section.

## 6.7 ANALYSING CHANGES IN WORKING CAPITAL

In understanding the financial statements of a company, one of the first steps involved is the study of the changes in current financial position of the company and the reasons for the changes. We make an attempt at studying these changes and their causes by using the data contained in the summarised comparative balance sheet (Illustration 2) and profit and loss account of Tools India Limited.

## TOOLS INDIA LIMITED

Balance Sheet as on December 31, 19x1

(Rs. in Million)

Assets	December 31, 19x1		December 31, 19x1	
	Rs.	Rs.	Rs.	Rs.
<b>Current Assets</b>				
Cash	19.05		10.87	
Accounts receivable (Sundry debtors)	32.25		20.28	
Loans and advances	42.58		33.82	
Other current assets	17.20		15.93	
Inventory	120.92		99.10	
<b>Total Current Assets</b>		232.00		180.00
<b>Fixed Assets</b>				
Plant and equipment at cost	152.00		133.00	
Less : Depreciation	71.00	81.00	60.00	73.00
Furniture & fixture at cost	14.50		8.60	
Less: Depreciation	2.00	12.50	2.30	6.30
<b>Investments</b>		2.00		
<b>Intangible Assets</b>				
Technical assistance fees	3.00		1.00	
Less: Amortisation	0.50	2.50	0.30	0.70
<b>Total</b>		330.00		260.00
<b>Liabilities and Capital</b>				
<b>Current Liabilities</b>				
Acceptance	4.74		3.02	
Sundry Creditors (Accounts payable)	27.16		18.75	
Advances against sales	26.60		20.28	
Other liabilities	8.86		7.95	
Interest accrued but not due on loans	2.64		2.00	
<b>Provisions</b>		70.00		52.00
For taxation	25.55		20.45	
Proposed dividend	2.25		2.25	
For bonus	3.40		2.35	
Other provision	3.80		2.95	
<b>Total Current Liabilities &amp; Provisions</b>		105.00		80.00
<b>Long Term Liabilities</b>				
Banks loans	40.00		32.14	
10.5% Debentures	25.50		25.50	
Loans from Financial Institutions	24.50		22.36	
		90.00		80.00
<b>Total Liabilities</b>		195.00		160.00
<b>Capital</b>				
Authorised : 5,00,000 Shares of Rs. 100 each	50.00		50.00	
Issued, Subscribed and Paid-up 3,73,100 Shares of Rs. 100 each		37.31		37.31
Reserves and Surplus		97.69		62.69
<b>Total</b>		330.00		260.00

As we have studied at the beginning of this unit, the net change in working capital can be computed easily by subtracting the net working capital at the end of the year from the net working capital at the beginning of the year:

TOOLS INDIA LTD.		(Rs. in Million)	
Change in Working Capital			
	December 31, 19 x 0	December 31, 19 x 1	
Current assets	180.00	232.00	
Less: Current liabilities	<u>80.00</u>	<u>105.00</u>	
Working Capital	<u>100.00</u>	<u>127.00</u>	
Working capital on December 31, 19 x 1	127.00		
Working capital on December 31, 19 x 0	<u>100.00</u>		
Increase in Working Capital		<u>27.00</u>	

The Rs. 27 million increase in working capital of TIL shows the composite changes in the operating assets. This does not tell us much in terms of operations of the business. This change could be the net result of changes in all the accounts covered by current items. May be there has been qualitative changes resulting from the depletion of liquid items of current assets and increase in non-liquid items such as inventory. In order to answer these questions we try to analyse the changes in each of the working capital accounts.

### Statement of changes in working capital

A statement of changes in working capital helps us in locating where these changes took place. In the first instance we try to show the increase (decrease) in individual items and then try to classify them in terms of increase and decrease in working capital. Since working capital is measured by subtracting current liabilities from current assets, any increase in current assets and any decrease in current liabilities shows an increase in working capital. Similarly, a decrease in current assets and an increase in current liabilities represent a decrease in working capital.

The statement of changes in working capital (Table 1) shows that the increases in current assets amounted to Rs. 52 million, a major part of the increase arising out of cash, receivables and inventory. Decrease in working capital came about mostly from the increased accounts payable, advances from customers and taxes payable. Total amount of decrease in working capital resulting from increase in current liabilities amounted to Rs. 25 million, thus, showing a net increase in working capital of Rs. 27 million.

**Table 1**  
**TOOLS INDIA LTD.**  
**Statement of changes in Working Capital for the year ending December 31, 19x1**  
**(Rs. in Million)**

	December 31	December 31	Increase	Working Capital	
	19 x 1	19 x 0	(Decrease)	Increase	Decrease
<b>Current Assets</b>					
Cash	19.05	10.87	8.18	8.18	
Accounts receivable	32.25	20.28	11.97	11.97	
Loans and advances	42.58	33.82	8.76	8.76	
Other current assets	17.20	15.93	1.27	1.27	
Inventory	120.92	99.10	21.82	21.82	
<b>Total</b>	<u>232.00</u>	<u>180.00</u>	<u>52.00</u>		

## Construction and Analysis of Fund Flow Statement

### Current Liabilities & Provisions

Acceptances	4.74	3.02	(1.72)	1.72
Accounts payable	27.16	18.75	(8.41)	8.41
Advances against sales	26.60	20.28	(6.32)	6.32
Other liabilities	8.86	7.95	(0.91)	0.91
Interest accrued	2.64	2.00	(0.64)	0.64
Taxes payable	25.55	20.45	(5.10)	5.10
Proposed dividend	2.25	2.25	-	-
Bonus payable	3.40	2.35	(1.05)	1.05
Other provisions	3.80	2.95	(0.85)	0.85
Total	105.00	80.00	(25.00)	52.00
Working Capital	127.00	100.00		27.00
Increase in Working Capital	27.00			

## 6.8 FUND FLOW STATEMENT

An analysis of the fluctuations of current assets and current liabilities i.e., working capital tells us how the working capital has increased or decreased. We want to know where the increased working capital is applied if it has increased, and from where funds have been released if it has decreased. The profit and loss account gives some indication of the results of operations and its impact on the funds position. We try to integrate the impact of operations reported in the profit and loss account and balance sheet by preparing a statement of changes in financial position. It describes the sources from which funds were received and the uses to which funds were put. This statement of changes in financial position is usually referred to as **fund flow statement** or **statement of sources and application of funds**.

As the title indicates fund flow statement traces the flow of funds through the organisation. In other words, it shows the sources from where the funds were raised and the uses to which they were put.

The statement of funds flow is usually bifurcated into two logical divisions: **sources of funds** or **inflows** during the periods and **uses of funds** or **applications of funds** during the period. The division showing sources of funds summarises all those transactions which had the net effect of **increasing** the working capital. Uses of funds on the other hand deal with all those transactions which had the effect of decreasing the working capital. We shall illustrate the primary structure of flows in Figure I: (Please see in next page)

The **flow of funds** statement gives a summary of the impacts of managerial decisions. As such it reflects the policies of financing, investment, acquisition and retirement of fixed assets, distribution of profits, and the success of operations.

Let us further extend illustration 2 in order to prepare a Fund Flow Statement. From a comparative balance sheet and profit and loss account we could obtain most of the information we require for the preparation of a fund flow statement. We have studied that changes in net working capital amount are caused by the changes in non-working capital items. This could be easily seen from the summarised balance sheet of TIL (Table 2).

We have seen that the net working capital amount increased by Rs. 27 million during 19x1, January 1 to December 31. This in other words implies that the working capital from **non-current sources** should exceed **non-current uses** by Rs. 27 million.

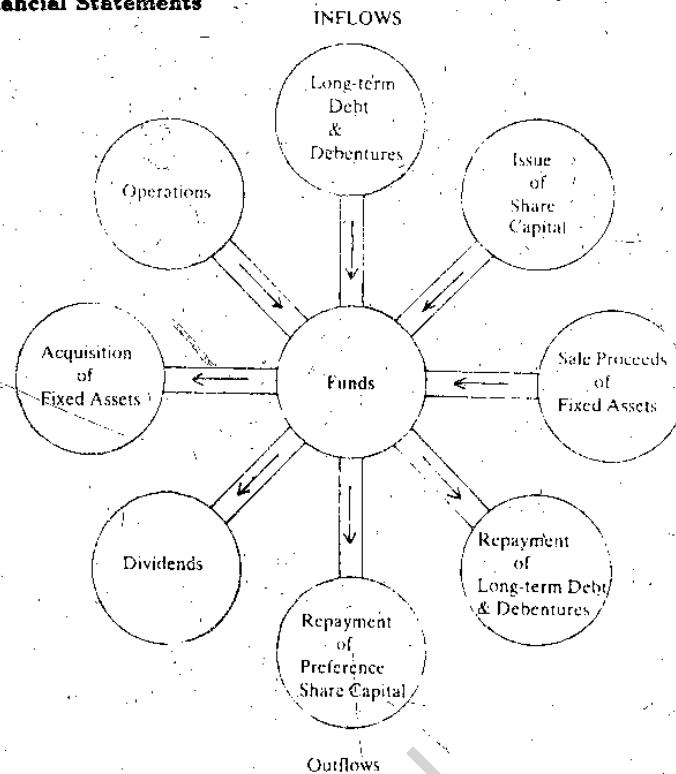


Figure I: Basic Flow of Funds

Table 2  
TOOLS INDIA LTD.

Summarised Balance Sheet

(Rs. in Millions)

	December 31, 19x1	December 31, 19x0	Change in Working Capital	
			Source	Use
<b>Working Capital</b>	127.00	100.00		27.00
<b>Fixed Assets</b>				
Plant and equipment at cost	152.00	133.00		19.00
Furniture and fixtures at cost	14.50	8.60		5.90
<b>Investments</b>	2.00	-		2.00
<b>Intangible Assets</b>				
Technical assistance fees at cost	3.00	1.00		2.00
	<u>298.50</u>	<u>242.60</u>		
<b>Long-term Liabilities</b>				
Bank loans	40.00	32.14	7.86	
10.5% Debentures	25.50	25.50		
Loans from Financial Institutions	24.50	22.36	2.14	
<b>Allowance and Amortisations</b>				
<b>Accumulated depreciation</b>				
Plant and equipment	71.00	60.00	11.00	
Furniture and fixtures	2.00	2.30		0.30
Amortisation of technical assistance fees	0.50	0.30	0.20	
<b>Capital</b>				
Share capital	37.31	37.31		
Reserves & Surplus	97.69	62.69	35.00	
	<u>298.50</u>	<u>242.60</u>	<u>56.20</u>	<u>56.20</u>

- Notes: (1) Furniture and fixtures costing Rs. 2 million with an accumulated depreciation of Rs. 1 million is sold for cash at Rs. 2 million.  
 (2) Dividend paid during the year amounted to Rs. 2.25 million.

The summarised balance sheet shows the net change in each account. That is, it does not show the increases and decreases separately. Furniture and fixtures value, for example, has increased by a net amount of Rs. 5.90 million. This increase shows an application of funds. In reality, this account was both a source and an application of funds. We purchased new furniture and fixtures worth Rs. 7.90 million (a use of funds) and sold existing furniture and fixtures which had an original cost of Rs. 2 million and on which depreciation had accumulated to the tune of Rs. 1 million (a source of funds). Since the purchase transaction was bigger in amount than the sale transaction, the net result was in the 'use of funds'.

If we are to construct a statement showing sources and uses of funds during the year, we need additional information. Some of this additional information is available from the profit and loss account and the appropriation of net income. Some other information like sale proceeds of assets will have to be obtained from other records of the company.

Funds Flow Statement

(Rs. in Million)

Sources of Funds

Funds from operations:

Net income *	37.25
Less: profit on sale of furniture	1.00
	36.25

Add: Depreciation, amortisation, provisions:

Plant	11.00
Furniture	0.70
Technical assistance fee	0.20
	12.90

48.15

Other Sources of funds

Sale of assets	2.00
Bank loan	7.86
Institutional loan	2.14
	12.00

60.15

Uses of Funds

Payment of dividends	2.25
Purchase of Plant	19.00
Purchase of furniture	7.90
Investments	2.00
Technical assistance fees	2.00
Increase of working capital	27.00
	60.15

60.15

\* Net income has been obtained by deducting the previous year's balance of Reserves and Surplus from the current year's balance i.e., 97.69 minus 62.69 = 35 million. To this, the proposed dividend for the current year of Rs. 2.25 million has been added (as it must have been taken into account while determining the net income to be transferred to Reserves and Surplus).

6.9 SUMMARY

In this unit we have tried to develop the idea of flow of funds within the organisation. Starting with the funds requirement for an organisation, we have tried to trace the sources and uses of funds.

We tried to study the important sources of funds, namely, the operations, sale of fixed assets, long-term borrowings and issue of new capital. Similarly, important uses of funds were traced to acquisition of fixed assets, payment of dividends, repayment of loans and capital. The whole

exercise reveals the areas in which funds are deployed and the sources from which they are obtained. Finally, we learned how to go about doing the funds flow analysis with the help of published accounting information.

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## 6.10 KEY WORDS

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**Working Capital:** Current assets minus current liabilities.

**Funds from Operations:** The change in working capital resulting from operations. Difference between inflow of funds in the form of revenue and outflow of funds in the form of expenses.

**Sources of funds:** The sources from which we obtain working capital for application elsewhere. Sources include operations, extraordinary profits, sale of fixed assets, new long-term borrowings, new issue of capital and the reduction of existing working capital.

**Use of funds:** Also referred to as application of funds means use of additional working capital and includes amounts lost in operations (operating loss), acquisition of fixed assets, working capital used for retiring long-term loans, payment of dividends and amounts utilised to increase working capital.

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## 6.11 SELF-ASSESSMENT QUESTIONS/EXERCISES

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- 1 What is working capital and what factors affect the size of working capital in an enterprise?
- 2 "Current assets to an extent are financed by current liabilities" Explain
- 3 "Operations provide funds" Comment.
- 4 Differentiate between "Schedule of Changes in Working Capital" and "Fund Flow Statement".
- 5 Does a substantial balance in Retained Earnings indicate the presence of large cash balance?
- 6 Please list four main sources of funds.
  - a) .....
  - b) .....
  - c) .....
  - d) .....
- 7 Please list four main uses of funds.
  - a) .....
  - b) .....
  - c) .....
  - d) .....
- 8 X Ltd. has a sales revenue of Rs. 1,000. Depreciation for the period is Rs. 200. Other operating expenses are Rs. 900. Net loss for the period is Rs. 100.
  - a) What is the amount of funds generated from operations during the period by X Ltd.?
  - b) Under what circumstances can the funds from operation be zero?

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9 The following information and the balance sheet relate to Shyamsons Ltd.,

**SHYAMSONS LTD.**

**Balance Sheet as on 31 December**

	Year 1	Year-2	Net change during the year	
			Increase	Decrease
<b>Assets</b>	Rs.	Rs.	Rs.	Rs.
Cash	10,000	15,000	5,000	
Receivables	20,000	25,000	5,000	
Inventory	20,000	35,000	15,000	
Plant and Machinery at cost	85,000	85,000		
Less: Accumulated depreciation	(15,000)	(10,000)		5,000
	<u>1,20,000</u>	<u>1,50,000</u>		
<b>Liabilities &amp; Capital</b>				
Sundry Creditors	8,000	10,000	2,000	
Outstanding expenses	7,000	10,000	3,000	
Debentures payables	10,000	5,000		5,000
Long-term loans	5,000	25,000	20,000	
Capital	50,000	50,000		
Retained earnings	40,000	50,000	10,000	
	<u>1,20,000</u>	<u>1,50,000</u>		

Net profit for the period after charging Rs. 5,000 on account of depreciation was Rs. 20,000. A piece of equipment costing Rs. 25,000 on which depreciation accumulated in the amount of Rs. 10,000 was sold for Rs. 10,000. Dividends paid during the year amounted to Rs. 10,000.

Prepare a Source and Uses of funds statement in the following format.

**SHYAMSONS LTD.**

**Sources and Uses of Funds**

Uses of Funds	Sources of Funds
Purchase of Plant and Machinery	Operations:
Repayment of Debentures	Net income
Payment of dividends	Add: Loss on sale of machinery
Increase in working capital	Add: Depreciation
	Sale of equipment
	Long-term loan
<b>Total uses of Funds</b>	<b>Total Sources of Funds</b>

## Understanding Financial Statements

10 The Balance Sheet of Bestwood Limited as at 31 March 19x6 and 31 March 19x7 are as follows:

	31 March		31 March	
	19 x 6	19 x 7	19 x 6	19 x 7
	Rs.	Rs.	Rs.	Rs.
Issued share capital	60,000	80,000	Freehold property at cost	50,000
Profit and loss account	54,000	46,000	Equipment (see note)	36,000
Corporation tax due:			Stock in trade	32,800
31 March 19 x 6	12,000	-	Debtors	27,200
31 March 19 x 7	-	8,000	Bank	4,000
Creditors	24,000	26,000		
	<u>1,50,000</u>	<u>1,60,000</u>		
			<u>1,50,000</u>	<u>1,60,000</u>

Note: Equipment movements during the year ended 31 March 19x7 were:

	Cost Rs.	Depreciation Rs.	Net Rs.
Balance at 31 March 19x6	60,000	24,000	36,000
Additions during the year	18,000		
Depreciation provided during the year		7,600	
	<u>78,000</u>	<u>31,600</u>	
Disposal during the year	8,000	6,000	
Balance at 31 March 19x7	<u>70,000</u>	<u>25,600</u>	<u>44,400</u>

The company's summarised profit calculation for the year ended 31 March 19x7 revealed:

	Rs.	Rs.
Sales		2,00,000
Gain on sale of equipment		800
		<u>2,00,800</u>
Less: Cost of goods and trading expenses	1,73,200	
Depreciation	7,600	
		<u>1,80,800</u>
Net profit		20,000
Corporation tax on profits of the year		8,000
Retained profit of the year		<u>12,000</u>

During the year ended 31 March 19 x 7 Bestwood Ltd. made a bonus issue of 1,000 ordinary shares of Rs. 10 each by capitalisation from the profit and loss account.

With the help of the above information, prepare a fund flow statement for Bestwood Ltd. revealing the sources and applications of funds during the year ended 31 March 19x7.

### Answers to self-Assessment Questions/Exercises

- 6 (a) Operations, (b) Long-term borrowing, (c) Sale of assets, (d) New investment by owners
- 7 (a) Purchase of assets, (b) Repayment of loans, (c) Payment of dividends, (d) Redemption of capital.
- 8 (a) Funds generated from operations = Rs. 100 (b) When operating cash expenses are equal to operating incomes or revenues.

9 Solution

SHYAMSONS LTD.

Sources and Uses of Funds

Uses of Funds	Rs.	Sources of Funds	Rs.	Rs.
Purchase of Plant and Machinery	25,000	Operations:		
Repayment of Debentures	5,000	Net income	20,000	
Payment of dividends	10,000	Add: Loss on sale of machinery	5,000	
Increase in net working capital	20,000	Add: Depreciation	5,000	
		Sale of equipment		30,000
		Long-term loan		10,000
Total uses of funds	60,000	Total Sources of Funds		20,000
				60,000

Working Capital Change

	Year 1	Year 2
Current Assets	50,000	75,000
Less: Current Liabilities	15,000	20,000
Working capital		
	<u>35,000</u>	<u>55,000</u>
Increase in Working Capital		20,000

10. Decrease in working Capital Rs. 400  
Funds from sale of equipment Rs. 2,800

6.12 FURTHER READINGS

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