

# **UNIT 1-**

## **INTRODUCTION TO FINANCIAL ACCOUNTING**

### **CONCEPTS**

#### **Synopsis:**

1. Introduction
2. Book-keeping and Accounting
3. Function of an Accountant
4. Users of Accounting
5. Advantages of Accounting
6. Limitations of Accounting
7. Basic Accounting concepts

#### **1. INTRODUCTON**

As you are aware, every trader generally starts business for purpose of earning profit. While establishing business, he brings own capital, borrows money from relatives, friends, outsiders or financial institutions. Then he purchases machinery, plant , furniture, raw materials and other assets. He starts buying and selling of goods, paying for salaries, rent and other expenses, depositing and withdrawing cash from bank. Like this he undertakes innumerable transactions in business. Observe the following transactions of small trader for one week during the month of July, 1998.

1998		Rs.
July 24	Purchase of goods from Sree Ram	12,000
July 25	Goods sold for cash	5,000
July 25	Sold gods to Syam on credit	8,000
July 26	Advertising expenses	5,200
July 27	Stationary expenses	600
July 27	Withdrawal for personal use	2,500
July 28	Rent paid through cheque	1,000
July 31	Salaries paid	9,000
July 31	Received cash from Syam	5,000

The number of transactions in an organization depends upon the size of the organization. In small organizations, the transactions generally will be in thousand and in big organizations they may be in lakhs. As such it is humanly impossible to remember all these transactions. Further, it may not be possible to find out the final result of the business without recording and analyzing these transactions.

Accounting came into practice as an aid to human memory by maintaining a systematic record of business transactions.

#### **1.1 History of Accounting:**

Accounting is as old as civilization itself. From the ancient relics of Babylon, it can be well proved that accounting did exist as long as 2600 B.C. However, in modern form accounting based on the principles of Double Entry System came into existence in 17<sup>th</sup> Century. Fra Luka Paciolo, a Fransiscan monk and mathematician published a

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book *De computis et scripturis* in 1494 at Venice in Italy. This book was translated into English in 1543. In this book he covered a brief section on 'book-keeping'.

## 1.2 Origin of Accounting in India:

Accounting was practiced in India thousand years ago and there is a clear evidence for this. In his famous book *Arthashastra* Kautilya dealt with not only politics and economics but also the art of proper keeping of accounts. However, the accounting on modern lines was introduced in India after 1850 with the formation of joint stock companies in India.

Accounting in India is now a fast developing discipline. The two premier Accounting Institutes in India viz., Chartered Accountants of India and the Institute of Cost and Works Accountants of India are making continuous and substantial contributions. The International Accounts Standards Committee (IASC) was established as on 29<sup>th</sup> June. In India the 'Accounting Standards Board (ASB)' is formulating 'Accounting Standards' on the lines of standards framed by International Accounting Standards Committee.

## 2. BOOK-KEEPING AND ACCOUNTING

According to G.A. Lee the accounting system has two stages.

1. The making of routine records in the prescribed form and according to set rules of all events which affect the financial state of the organization; and
2. The summarization from time to time of the information contained in the records, its presentation in a significant form to interested parties and its interpretation as an aid to decision making by these parties.

First stage is called Book-Keeping and the second one is Accounting.

**Book – Keeping:** Book – Keeping involves the chronological recording of financial transactions in a set of books in a systematic manner.

**Accounting:** Accounting is concerned with the maintenance of accounts giving stress to the design of the system of records, the preparation of reports based on the recorded data and the interpretation of the reports.

### Distinction between Book – Keeping and Accountancy

Thus, the terms, book-keeping and accounting are very closely related, though there is a subtle difference as mentioned below.

**1. Object :** The object of book-keeping is to prepare original books of Accounts. It is restricted to journal, subsidiary book and ledger accounts only. On the other hand, the main object of accounting is to record, analyse and interpret the business transactions.

**2. Level of Work:** Book-keeping is restricted to level of work. Clerical work is mainly involved in it. Accountancy on the other hand, is concerned with all level of management.

**3. Principles of Accountancy:** In Book-keeping Accounting concepts and conventions will be followed by all without any difference. On the other hand, various firms follow various methods of reporting and interpretation in accounting.

**3. Final Result:** In Book-Keeping it is not possible to know the final result of business every year,

### 2.1 Meaning of Accounting

Thus, book-keeping is an art of recording the business transactions in the books of original entry and the ledgers. Accountancy begins where Book-keeping ends.

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Accountancy means the compilation of accounts in such a way that one is in a position to know the state of affairs of the business. The work of an accountant is to analyse, interpret and review the accounts and draw conclusion with a view to guide the management in chalking out the future policy of the business.

## 2.2 Definition of Accounting:

**Smith and Ashburne:** "Accounting is a means of measuring and reporting the results of economic activities."

**R.N. Anthony:** "Accounting system is a means of collecting summarizing, analyzing and reporting in monetary terms, the information about the business."

**American Institute of Certified Public Accountants (AICPA):** "The art of recording, classifying and summarizing in a significant manner and in terms of money transactions and events, which are in part at least, of a financial character and interpreting the results thereof."

Thus, accounting is an art of identifying, recording, summarizing and interpreting business transactions of financial nature. Hence accounting is the **Language of Business**.

## 2.3 Branches of Accounting:

The important branches of accounting are:

1. **Financial Accounting:** The purpose of Accounting is to ascertain the financial results i.e. profit or loss in the operations during a specific period. It is also aimed at knowing the financial position, i.e. assets, liabilities and equity position at the end of the period. It also provides other relevant information to the management as a basis for decision-making for planning and controlling the operations of the business.
2. **Cost Accounting:** The purpose of this branch of accounting is to ascertain the cost of a product / operation / project and the costs incurred for carrying out various activities. It also assist the management in controlling the costs. The necessary data and information are gathered from financial and other sources.
3. **Management Accounting :** Its aim to assist the management in taking correct policy decision and to evaluate the impact of its decisions and actions. The data required for this purpose are drawn accounting and cost-accounting.
4. **Inflation Accounting :** It is concerned with the adjustment in the values of assets and of profit in 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 (i.e recording of the assets at their historical or original cost) and the assumption of stable monetary unit.
5. **Human Resource Accounting :** It is a branch of accounting which seeks to report and emphasize the importance of human resources 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 organizational resources.

## 3. FUNCTIONS OF AN ACCOUNTANT

The job of an accountant involves the following types of accounting works :

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- 1. Designing Work :** It includes the designing of the accounting system, basis for identification and classification of financial transactions and events, forms, methods, procedures, etc.
- 2. Recording Work :** The financial transactions are identified, classified and recorded in appropriate books of accounts according to principles. This is "Book Keeping". The recording of transactions tends to be mechanical and repetitive.
- 3. Summarizing Work :** The recorded transactions are summarized into significant form according to generally accepted accounting principles. The work includes the preparation of profit and loss account, balance sheet. This phase is called 'preparation of final accounts'
- 4. Analysis and Interpretation Work:** The financial statements are analysed by using ratio analysis, break-even analysis, funds flow and cash flow analysis.
- 5. Reporting Work:** The summarized statements along with analysis and interpretation are communicated to the interested parties or whoever has the right to receive them. For Ex. Share holders. In addition, the accounting departments has to prepare and send regular reports so as to assist the management in decision making. This is 'Reporting'.
- 6. Preparation of Budget :** The management must be able to reasonably estimate the future requirements and opportunities. As an aid to this process, the accountant has to prepare budgets, like cash budget, capital budget, purchase budget, sales budget etc. this is 'Budgeting'.
- 7. Taxation Work :** The accountant has to prepare various statements and returns pertaining to income-tax, sales-tax, excise or customs duties etc., and file the returns with the authorities concerned.
- 8. Auditing :** It involves a critical review and verification of the books of accounts statements and reports with a view to verifying their accuracy. This is 'Auditing'

This is what the accountant or the accounting department does. A person may be placed in any part of Accounting Department or MIS (Management Information System) Department or in small organization, the same person may have to attend to all this work.

#### **4. USERS OF ACCOUNTING INFORMATION**

Different categories of users need different kinds of information for making decisions. The users of accounting can be divided in two broad groups (1). Internal users and (2). External users.

##### **4.1 Internal Users:**

**Managers :** These are the persons who manage the business, i.e. management at the top, middle and lower levels. Their requirements of information are different because they make different types of decisions.

Accounting reports are important to managers for evaluating the results of their decisions. In addition to external financial statements, managers need detailed internal reports either branch division or department or product-wise. Accounting reports for managers are prepared much more frequently than external reports.

Accounting information also helps the managers in appraising the performance of subordinates. As such Accounting is termed as "the eyes and ears of management."

##### **4.2 External Users :**

**1. Investors :** Those who are interested in buying the shares of company are naturally interested in the financial statements to know how safe the investment already made is and how safe the proposed investments will be.

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**2. Creditors :** Lenders are interested to know whether their loan, principal and interest, will be paid when due. Suppliers and other creditors are also interested to know the ability of the firm to pay their dues in time.

**3. Workers :** In our country, workers are entitled to payment of bonus which depends on the size of profit earned. Hence, they would like to be satisfied that the bonus being paid to them is correct. This knowledge also helps them in conducting negotiations for wages.

**4. Customers :** They are also concerned with the stability and profitability of the enterprise. They may be interested in knowing the financial strength of the company to rent it for further decisions relating to purchase of goods.

**5. Government:** Governments all over the world are using financial statements for compiling statistics concerning business which, in turn, helps in compiling national accounts. The financial statements are useful for tax authorities for calculating taxes.

**6. Public :** The public at large is interested in the functioning of the enterprises because it may make a substantial contribution to the local economy in many ways including the number of people employed and their patronage to local suppliers.

**7. Researchers:** The financial statements, being a mirror of business conditions, are of great interest to scholars undertaking research in accounting theory as well as business affairs and practices.

## 5. ADVANTAGES FROM ACCOUNTING

The role of accounting has changed from that of a mere record keeping during the 1<sup>st</sup> decade of 20<sup>th</sup> century of the present stage, which it is accepted as an information system and decision making activity. The following are the advantages of accounting.

- 1. Provides for systematic records:** Since all the financial transactions are recorded in the books, one need not rely on memory. Any information required is readily available from these records.
  - 2. Facilitates the preparation of financial statements:** Profit and loss account and balance sheet can be easily prepared with the help of the information in the records. This enables the trader to know the net result of business operations (i.e. profit / loss) during the accounting period and the financial position of the business at the end of the accounting period.
  - 3. Provides control over assets:** Book-keeping provides information regarding cash in hand, cash at bank, stock of goods, accounts receivable from various parties and the amounts invested in various other assets. As the trader knows the values of the assets he will have control over them.
  - 4. Provides the required information:** Interested parties such as owners, lenders, creditors etc., get necessary information at frequent intervals.
  - 5. Comparative study:** One can compare the present performance of the organization with that of its past. This enables the managers to draw useful conclusion and make proper decisions.
  - 6. Less Scope for fraud or theft:** It is difficult to conceal fraud or theft etc., because of the balancing of the books of accounts periodically. As the work is divided among many persons, there will be check and counter check.
  - 7. Tax matters:** Properly maintained book-keeping records will help in the settlement of all tax matters with the tax authorities.
  - 8. Ascertaining Value of Business:** The accounting records will help in ascertaining the correct value of the business. This helps in the event of sale or purchase of a business.
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- 9. Documentary evidence:** Accounting records can also be used as an evidence in the court to substantiate the claim of the business. These records are based on documentary proof. Every entry is supported by authentic vouchers. As such, Courts accept these records as evidence.
- 10. Helpful to management:** Accounting is useful to the management in various ways. It enables the management to assess the achievement of its performance. The weakness of the business can be identified and corrective measures can be applied to remove them with the help of accounting.

## **6. LIMITATIONS OF ACCOUNTING**

The following are the limitations of accounting.

- 1. Does not record all events:** Only the transactions of a financial character will be recorded under book-keeping. So it does not reveal a complete picture about the quality of human resources, locational advantage, business contacts etc.
- 2. Does not reflect current values:** The data available under book-keeping is historical in nature. So they do not reflect current values. For instance, we record the value of stock at cost price or market price, whichever is less. In case of, building, machinery etc., we adopt historical cost as the basis. Infact, the current values of buildings, plant and machinery may be much more than what is recorded in the balance sheet.
- 3. Estimates based on Personal Judgment:** The estimate used for determining the values of various items may not be correct. For example, debtors are estimated in terms of collectibility, inventories are based on marketability, and fixed assets are based on useful working life. These estimates are based on personal judgment and hence sometimes may not be correct.
- 4. Inadequate information on costs and Profits:** Book-keeping only provides information about the overall profitability of the business. No information is given about the cost and profitability of different activities of products or divisions.

## **7. BASIC ACCOUNTING CONCEPTS**

Accounting has been evolved over a period of several centuries. During this period, certain rules and conventions have been adopted. They serve as guidelines in identifying the events and transactions to be accounted for measuring, recording, summarizing and reporting them to the interested parties. These rules and conventions are termed as **Generally Accepted Accounting Principles**. These principles are also referred as standards, assumptions, concepts, conventions doctrines, etc. Thus, the accounting concepts are the fundamental ideas or basic assumptions underlying the theory and practice of financial accounting. They are the broad working rules for all accounting activities developed and accepted by the accounting profession.

Basic accounting concepts may be classified into two broad categories.

1. Concept to be observed at the time of recording transactions.(Recording Stage).
  2. Concept to be observed at the time of preparing the financial accounts (Reporting Stage)
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## FINAL ACCOUNTS

**INTRODUCTION:** The main object of any Business is to make profit. Every trader generally starts business for the purpose of earning profit. While establishing Business, he brings his own capital, borrows money from relatives, friends, outsiders or financial institutions, then purchases machinery, plant, furniture, raw materials and other assets. He starts buying and selling of goods, paying for salaries, rent and other expenses, depositing and withdrawing cash from Bank. Like this he undertakes innumerable transactions in Business.

The number of Business transactions in an organization depends up on the size of the organization. In small organizations the transactions generally will be in thousands and in big organizations they may be in lacks. As such it is humanly impossible to remember all these transactions. Further it may not be possible to find out the final result of the Business with out recording and analyzing these transactions.

Accounting came in practice as an aid to human memory by maintaining a systematic record of Business transactions.

### **BOOK KEEPING AND ACCOUNTING:**

According to G.A.Lee the Accounting system has two stages. First stage is Book keeping and the second stage is accounting.

#### **[A]. BOOK KEEPING:**

Book keeping involves the chronological recording of financial transactions in a set of books in a systematic manner

“Book keeping is the system of recording Business transactions for the purpose of providing reliable information to the owners and managers about the state and prospect of the Business concepts”.

Thus Book keeping is an art of recording business transactions in the books of original entry and the ledges.

#### **[B]. ACCOUNTING:** Accounting begins where the Bookkeeping ends

1. **SMITH AND ASHBUNNE:** Accounting means “measuring and reporting the results of economic activities”.

2. **R.N ANTHONY:** Accounting is a system of “collecting, summarizing, Analyzing and reporting in monster terms, the information about the Business”.

3. **ICPA:** Recording, classifying and summarizing is a significant manner and in terms of money transactions and events, which are in part at least, of a financial character and interpreting the results there.

Thus accounting is an art of recording, classifying, summarizing and interpreting business transactions of financial nature. Hence accounting is the “Language of Business”.

### **ADVANTAGE OF ACCOUNTING**

The following are the advantages of Accounting.....

1. **PROVIDES FOR SYSTEMATIC RECORDS:** Since all the financial transactions are recorded in the books, one need not rely on memory. Any information required is readily available from these records.
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2. FACILITATES THE PREPARATION OF FINANCIAL STATEMENTS: Profit and Loss account and balance sheet can be easily prepared with the help of the information in the records. This enables the trader to know the net result of Business operations (i.e. profit/loss) during the accounting period and the financial position of the business at the end of the accounting period.
3. PROVIDES CONTROL OVER ASSETS: Book keeping provides information regarding cash in hand, cash at hand, stock of goods, accounts receivable from various parties and the amounts invested in various other assets. As the trader knows the values of the assets he will have control over them.
4. PROVIDES THE REQUIRED INFORMATION: Interested parties such as owners, lenders, creditors etc, get necessary information at frequent intervals.
5. COMPARITIVE STUDY: One can compare present performance of the organization with that of its past. This enables the managers to draw useful conclusions and make proper decisions.
6. LESS SCOPE FOR FRAUD OR THEFT: It is difficult to conceal fraud or theft etc. because of the balancing of the books of accounts periodically. As the work is divided among many persons, there will be check and counter check.
7. TAX MATTERS: Properly maintained Book keeping records will help in the settlement of all tax matters with the tax authorities.
8. ASCERTAINING VALUE OF BUSINESS: The accounting records will help in ascertaining the correct value of the Business. This helps in the event of sale or purchase of a business.
9. DOCUMENTARY EVIDENCE: Accounting records can also be used as evidence in the court of substantial the claim of the Business. Thus records are based on documentary proof. Authentic vouchers support every entry. As such, courts accept these records as evidence.
10. HELPFUL TO MANAGEMENT: Accounting is useful to the management in various ways. It enables the management to assess the achievement of its performance. The weaknesses of the business can be identified and corrective measures can be applied to remove them with the help of accounting.

### LIMITATIONS OF ACCOUNTING

The following are the limitations of accounting.....

1. DOES NOT RECORD ALL EVENTS: Only the transactions of a financial character will be recorded under book keeping. So it does not reveal a complete picture about the quality of human resources, locational advantages, business contacts etc.
  2. DOES NOT REFLECT CURRENT VALUES: The data available under book keeping is historical in nature. So they do not reflect current values. For instance we record the values of stock at cost price or market price, whichever is less. In case of building, machinery etc., we adapt historical cost as the basis. Infact, the current values of Buildings, plant and machinery may be much more than what is recorded in the balance sheet.
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3. ESTIMATES BASED ON PERSONAL JUDGEMENT: The estimates used for determining the values of various items may not be correct. For example, debtors are estimated in terms of collectibles, inventories are based on marketability and fixed assets are based on useful working life. These estimates are based on personal judgment and hence sometimes may not be correct.

4. INADEQUATE INFORMATION ON COSTS AND PROFITS: Book keeping only provides information about overall profitability of the business. No information is given about the cost and profitability of different activities of products or divisions.

### **BASIC ACCOUNTING CONCEPTS**

Accounting is a system evolved to achieve a set of objectives. In order to achieve the goals, we need a set of rules or guidelines. These guidelines are termed here as "BASIC ACCOUNTING CONCEPTS". The term concept means an idea or thought. Basic accounting concepts are the fundamental ideas or basic assumptions underlying the theory and practice of FINANCIAL ACCOUNTING. These concepts help in bringing about uniformity in the practice of accounting. In accountancy following concepts are quite popular.

1. BUSINESS ENTITY CONCEPT: In this concept "Business is treated as separate from the proprietor". All the Transactions recorded in the book of Business and not in the books of proprietor. The proprietor is also treated as a creditor for the Business.

2. GOING CONCERN CONCEPT: This concept relates with the long life of Business. The assumption is that business will continue to exist for unlimited period unless it is dissolved due to some reasons or the other.

3. MONEY MEASUREMENT CONCEPT: In this concept "Only those transactions are recorded in accounting which can be expressed in terms of money, those transactions which can not be expressed in terms of money are not recorded in the books of accounting".

4. COST CONCEPT: According to this concept, an asset is recorded at its cost in the books of account. i.e., the price, which is paid at the time of acquiring it. In balance sheet, these assets appear not at cost price every year, but depreciation is deducted and they appear at the amount, which is cost, less depreciation.

5. ACCOUNTING PERIOD CONCEPT: Every Businessman wants to know the result of his investment and efforts after a certain period. Usually one-year period is regarded as an ideal for this purpose. This period is called Accounting Period. It depends on the nature of the business and object of the proprietor of business.

6. DUAL ASPECT CONCEPT: According to this concept "Every business transaction has two aspects", one is the receiving benefit aspect and another one is giving benefit aspect. The receiving benefit aspect is termed as "DEBIT", whereas the giving benefit aspect is termed as "CREDIT". Therefore, for every debit, there will be corresponding credit.

7. MATCHING COST CONCEPT: According to this concept "The expenses incurred during an accounting period, e.g., if revenue is recognized on all goods sold during a period, cost of those goods sold should also be charged to that period."

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8. REALISATION CONCEPT: According to this concept revenue is recognized when a sale is made. Sale is considered to be made at the point when the property in goods passes to the buyer and he becomes legally liable to pay.

### **ACCOUNTING CONVENTIONS**

Accounting is based on some customs or usages. Naturally accountants have to adopt that usage or custom.

They are termed as accounting conventions in accounting. The following are some of the important accounting conventions.

1. FULL DISCLOSURE: According to this convention accounting reports should disclose fully and fairly the information. They purport to represent. They should be prepared honestly and sufficiently disclose information which is of material interest to proprietors, present and potential creditors and investors. The Companies Act, 1956 makes it compulsory to provide all the information in the prescribed form.

2. MATERIALITY: Under this convention the trader records important facts about the commercial activities. In the form of financial statements if any unimportant information is to be given for the sake of clarity it will be given as footnotes.

3. CONSISTENCY: It means that accounting method adopted should not be changed from year to year. It means that there should be consistency in the methods or principles followed. Or else the results of a year cannot be conveniently compared with that of another.

4. CONSERVATISM: This convention warns the trader not to take unrealized income into account. That is why the practice of valuing stock at cost or market price, whichever is lower is in vogue. This is the policy of "playing safe"; it takes into consideration all prospective losses but leaves all prospective profits.

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## UNIT-2

### KEY WORDS IN BOOK-KEEPING

1. TRANSACTIONS: Any sale or purchase of goods or services is called the transaction.

Transactions are two types.

[a]. cash transaction: cash transaction is one where cash receipt or payment is involved in the exchange.

[b]. Credit transaction: Credit transaction will not have cash, either received or paid, for something given or received respectively.

2. GOODS: Fill those things which a firm purchases for resale are called goods.

3. PURCHASES: Purchases means purchase of goods, unless it is stated otherwise it also represents the

Goods purchased.

4. SALES: Sales means sale of goods, unless it is stated otherwise it also represents these goods sold.

5. EXPENSES: Payments for the purchase of goods or services are known as expenses.

6. REVENUE: Revenue is the amount realized or receivable from the sale of goods or services.

7. ASSETS: The valuable things owned by the business are known as assets. These are the properties

Owned by the business.

8. LIABILITIES: Liabilities are the obligations or debts payable by the enterprise in future in the term

Of money or goods.

9. DEBTORS: Debtors means a person who owes money to the trader.

10. CREDITORS: A creditor is a person to whom something is owned by the business.

11. DRAWINGS: cash or goods withdrawn by the proprietor from the Business for his personal or Household is termed to as "drawing".

12. RESERVE: An amount set aside out of profits or other surplus and designed to meet contingencies.

13. ACCOUNT: A summarized statements of transactions relating to a particular person, thing,

Expense or income.

14. DISCOUNT: There are two types of discounts..

a. cash discount: An allowable made to encourage frame payment or before the expiration of the period allowed for credit.

b. Trade discount: A deduction from the gross or catalogue price allowed to traders who buys them for resale.

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## **CLASSIFICATION OF BUSINESS TRANSACTIONS**

All business transactions are classified into three categories:

- 1.Those relating to persons
- 2.Those relating to property(Assets)
- 3.Those relating to income & expenses

Thus, three classes of accounts are maintained for recording all business transactions. They are:

- 1.Personal accounts
- 2.Real accounts
- 3.Nominal accounts

1.Personal Accounts:Accounts which are transactions with persons are called "Personal Accounts" .

A separate account is kept on the name of each person for recording the benefits received from ,or given to the person in the course of dealings with him.

E.g.: Krishna's A/C, Gopal's A/C, SBI A/C, Nagarjuna Finance Ltd.A/C, ObulReddy & Sons A/C , HMT Ltd. A/C, Capital A/C, Drawings A/C etc.

2.Real Accounts: The accounts relating to properties or assets are known as "Real Accounts" .Every business needs assets such as machinery , furniture etc, for running its activities .A separate account is maintained for each asset owned by the business .

E.g.: cash A/C, furniture A/C, building A/C, machinery A/C etc.

3.NominalAccounts:Accounts relating to expenses, losses, incomes and gains are known as "Nominal Accounts". A separate account is maintained for each item of expenses, losses, income or gain.

E.g.: Salaries A/C, stationery A/C, wages A/C, postage A/C, commission A/C, interest A/C, purchases A/C, rent A/C, discount A/C, commission received A/C, interest received A/C, rent received A/C, discount received A/C.

Before recording a transaction, it is necessary to find out which of the accounts is to be debited and which is to be credited. The following three different rules have been laid down for the three classes of accounts....

1.Personal Accounts: The account of the person receiving benefit (receiver) is to be debited and the account of the person giving the benefit (given) is to be credited.

**Rule:** "Debit----The Receiver  
Credit---The Giver"

2.Real Accounts: When an asset is coming into the business, account of that asset is to be debited .When an asset is going out of the business, the account of that asset is to be credited.

**Rule:** "Debit----What comes in  
Credit---What goes out"



3. Nominal Accounts: When an expense is incurred or loss encountered, the account representing the expense or loss is to be debited . When any income is earned or gain made, the account representing the income or gain is to be credited.

**Rule**: “Debit----All expenses and losses  
Credit---All incomes and gains”

## **JOURNAL**

The first step in accounting therefore is the record of all the transactions in the books of original entry viz., Journal and then posting into ledges.

JOURNAL: The word Journal is derived from the Latin word ‘journ’ which means a day. Therefore, journal means a ‘day Book’ in day-to-day business transactions are recorded in chronological order.

Journal is treated as the book of original entry or first entry or prime entry. All the business transactions are recorded in this book before they are posted in the ledges. The journal is a complete and chronological(in order of dates) record of business transactions. It is recorded in a systematic manner. The process of recording a transaction in the journal is called “JOURNALISING”. The entries made in the book are called “Journal Entries”.

The proforma of Journal is given below.

Date	Particulars	L.F. no	Debit RS.	Credit RS.
1998 Jan 1	Purchases account to cash account(being goods purchased for cash)		10,000/-	10,000/-

## **LEDGER**

All the transactions in a journal are recorded in a chronological order. After a certain period, if we want to know whether a particular account is showing a debit or credit balance it becomes very difficult. So, the ledger is designed to accommodate the various accounts maintained the trader. It contains the final or permanent record of all the transactions in duly classified form. “A ledger is a book which contains various accounts.” The process of transferring entries from journal to ledger is called “POSTING”.

Posting is the process of entering in the ledger the entries given in the journal. Posting into ledger is done periodically, may be weekly or fortnightly as per the convenience of the business. The following are the guidelines for posting transactions in the ledger.

1. After the completion of Journal entries only posting is to be made in the ledger.
  2. For each item in the Journal a separate account is to be opened. Further, for each new item a new account is to be opened.
  3. Depending upon the number of transactions space for each account is to be determined in the ledger.
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4. For each account there must be a name. This should be written in the top of the table. At the end of the name, the word "Account" is to be added.
5. The debit side of the Journal entry is to be posted on the debit side of the account, by starting with "TO".
6. The credit side of the Journal entry is to be posted on the debit side of the account, by starting with "BY".

*Proforma for ledger:*    **LEDGER BOOK**

Particulars account

Date	Particulars	Lfno	Amount	Date	Particulars	Lfno	amount

sales account

Date	Particulars	Lfno	Amount	Date	Particulars	Lfno	amount

cash account

Date	Particulars	Lfno	Amount	Date	Particulars	Lfno	amount

### **SUBSIDIARY BOOKS**

In a small business concern, the numbers of transactions are limited. These transactions are first recorded in the journal as and when they take place. Subsequently, these transactions are posted in the appropriate accounts of the ledger. Therefore, the journal is known as "Book Of Original Entry" or "Book of Prime Entry" while the ledger is known as main book of accounts.

On the other hand, the transactions in big concern are numerous and sometimes even run into thousands and lakhs. It is inconvenient and time wasting process if all the transactions are going to be managed with a journal.

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Therefore, a convenient device is made. Smaller account books known as subsidiary books or subsidiary journals are distributed to various sections of the business house. As and when transactions take place, they are recorded in these subsidiary books simultaneously without delay. The original journal (which is known as Journal Proper) is used only occasionally to record those transactions which cannot be recorded in any of the subsidiary books.

**TYPES OF SUBSIDIARY BOOKS:**-- Subsidiary books are divided into eight types. They are,

1. Purchases Book
2. Sales Book
3. Purchase Returns Book
4. Sales Returns Book
5. Cash Book
6. Bills Receivable Book
7. Bills Payable Book
8. Journal Proper

1. **PURCHASES BOOK** :- This book records all credit purchases only. Purchase of goods for cash and purchase of assets for cash. Credit will not be recorded in this book. Purchases book is otherwise called Purchases Day Book, Purchases Journal or Purchases Register.

2. **SALES BOOK** :- This book is used to record credit sales only. Goods are sold for cash and sale of assets for cash or credit will not be recorded in this book. This book is otherwise called Sales Day Book, Sales Journal or Sales Register.

3. **PURCHASE RETURNS BOOK** :- This book is used to record the particulars of goods returned to the suppliers. This book is otherwise called Returns Outward Book.

4. **SALES RETURNS BOOK** :- This book is used to record the particulars of goods returned by the customers. This book is otherwise called Returns Inward Book.

5. **CASH BOOK** :- All cash transactions, receipts and payments are recorded in this book. Cash includes cheques, money orders etc.

6. **BILLS RECEIVABLE BOOK** :- This book is used to record all the bills and promissory notes are received from the customers.

7. **BILLS PAYABLE BOOK** :- This book is used to record all the bills or promissory notes accepted to the suppliers.

8. **JOURNAL PROPER** :- This is used to record all the transactions that cannot be recorded in any of the above mentioned subsidiary books.

#### **FORMAT FOR PURCHASE BOOK**

Date	Name of supplier	Invoice No	Lf no	Details	Amount(Rs.)

#### **FORMAT FOR SALES BOOK**

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Date	Name of customer	Invoice No	Lf no	Details	Amount(Rs.)

**FORMAT FOR PURCHASE RETURNS BOOK**

Date	Name of supplier	Debit note No	Lf no	Details	Amount(Rs.)

**FORMAT FOR SALES RETURNS BOOK**

Date	Name of supplier	Credit note No	Lf no	Details	Amount(Rs.)

**CASH BOOK**

Cash book plays an important role in accounting. Whether transactions made are in the form of cash or credit, final statement will be in the form of receipt or payment of cash. So, every transaction finds place in the cash book finally.

Cash book is a principal book as well as the subsidiary book. It is a book of original entry since the transactions are recorded for the first time from the source of documents. It is a ledger in a sense it is designed in the form of cash account and records cash receipts on the debit side and the cash payments on the credit side. Thus, a cash book fulfils the functions of both a ledger account and a journal.

Cash book is divided into two sides. Receipt side (debit side) and payment side (credit side). The method of recording cash sample is very simple. All cash receipts will be posted on the debit side and all the payments will be recorded on the credit side.

*Types of cash book:* cash book may be of the following types according to the needs of the business.

- Simple cash book
- Double column or two column cash book
- Three column cash book
- Petty cash book

**SINGLE COLUMN CASH BOOK:** The simple cash book is a record of only cash transactions. The model of the cash book is given below.

# CASH BOOK

Date	Particulars	Lf no	Amount	Date	Particulars	Lf no	Amount

**TWO COLUMN CASH BOOK:** This book has two columns on each side one for discount and the other for cash. Discount column on debit side represents loss being discount allowed to customers. Similarly, discount column on credit side represents gain being discount received.

Discount may be two types.

- (i) Trade discount
- (ii) cash discount

**TRADE DISCOUNT:** when a retailer purchases goods from the wholesaler, he allows some discount on the catalogue price. This discount is called as Trade discount. Trade discount is adjusted in the invoice and the net amount is recorded in the purchase book. As such it will not appear in the book of accounts.

**CASH DISCOUNT:** When the goods are purchased on credit, payment will be made in the future as agreed by the parties. If the amount is paid early as promptly a discount by a way of incentive will be allowed by the seller to the buyer. This discount is called as cash discount. So cash discount is the discount allowed by the seller to encourage prompt payment from the buyer. Cash discount is entered in the discount column of the cash book. The discount recorded in the debit side of the cash book is discount allowed. The discount recorded in the credit side of the cash book is discount received.

CASH DISCOUNT COLUMN CASH BOOK

[illegible]

PETTY CASH BOOK: We have seen that all the cash receipts and payments will be recorded in the cash book. But in the case of big concerns if all transactions like postage, cleaning charges, etc., are recorded in the cash book, the cash book becomes bulky and un wieldy. So, all petty disbursement of cash is recorded in a separate cash book called petty cash book.

***Note: Problems to be solved on subsidiary books***

## **TRAIL BALANCE**

The first step in the preparation of final accounts is the preparation of trail balance. In the double entry system of book keeping, there will be credit for every debit and there will not be any debit without credit. When this principle is followed in writing journal entries, the total amount of all debits is equal to the total amount all credits.

A trail balance is a statement of debit and credit balances. It is prepared on a particular date with the object of checking the accuracy of the books of accounts. It indicates that all the transactions for a particular period have been duly entered in the book, properly posted and balanced. The trail balance doesn't include stock in hand at the end of the period. All adjustments required to be done at the end of the period including closing stock are generally given under the trail balance.

**DEFINITIONS:** SPICER AND POGLAR :A trail balance is a list of all the balances standing on the ledger accounts and cash book of a concern at any given date.

J.R.BATLIBOI:

A trail balance is a statement of debit and credit balances extracted from the ledger with a view to test the arithmetical accuracy of the books.

Thus a trail balance is a list of balances of the ledger accounts' and cash book of a business concern at any given date.

**PROFORMA FOR TRAIL BALANCE:**

Trail balance for MR..... as on .....

NO	NAME OF ACCOUNT (PARTICULARS)	DEBIT AMOUNT(RS.)	CREDIT AMOUNT(RS.)

## **Trail Balance**

### **Specimen of trial balance**

1	Capital	Credit	Loan
2	Opening stock	Debit	Asset
3	Purchases	Debit	Expense
4	Sales	Credit	Gain
5	Returns inwards	Debit	Loss
6	Returns outwards	Debit	Gain
7	Wages	Debit	Expense
8	Freight	Debit	Expense
9	Transport expenses	Debit	Expense
10	Royalties on production	Debit	Expense
11	Gas, fuel	Debit	Expense
12	Discount received	Credit	Revenue
13	Discount allowed	Debit	Loss
14	Bas debts	Debit	Loss
15	Dab debts reserve	Credit	Gain
16	Commission received	Credit	Revenue

17	Repairs	Debit	Expense
18	Rent	Debit	Expense
19	Salaries	Debit	Expense
20	Loan Taken	Credit	Loan
21	Interest received	Credit	Revenue
22	Interest paid	Debit	Expense
23	Insurance	Debit	Expense
24	Carriage outwards	Debit	Expense
25	Advertisements	Debit	Expense
26	Petty expenses	Debit	Expense
27	Trade expenses	Debit	Expense
28	Petty receipts	Credit	Revenue
29	Income tax	Debit	Drawings
30	Office expenses	Debit	Expense
31	Customs duty	Debit	Expense
32	Sales tax	Debit	Expense
33	Provision for discount on debtors	Debit	Liability
34	Provision for discount on creditors	Debit	Asset
35	Debtors	Debit	Asset
36	Creditors	Credit	Liability
37	Goodwill	Debit	Asset
38	Plant, machinery	Debit	Asset
39	Land, buildings	Debit	Asset
40	Furniture, fittings	Debit	Asset
41	Investments	Debit	Asset
42	Cash in hand	Debit	Asset
43	Cash at bank	Debit	Asset
44	Reserve fund	Credit	Liability
45	Loan advances	Debit	Asset
46	Horse, carts	Debit	Asset
47	Excise duty	Debit	Expense
48	General reserve	Credit	Liability
49	Provision for depreciation	Credit	Liability
50	Bills receivable	Debit	Asset
51	Bills payable	Credit	Liability
52	Depreciation	Debit	Loss
53	Bank overdraft	Credit	Liability
54	Outstanding salaries	Credit	Liability
55	Prepaid insurance	Debit	Asset
56	Bad debt reserve	Credit	Revenue
57	Patents & Trademarks	Debit	Asset
58	Motor vehicle	Debit	Asset
59	Outstanding rent	Credit	Revenue



## **FINAL ACCOUNTS**

In every business, the business man is interested in knowing whether the business has resulted in profit or loss and what the financial position of the business is at a given time. In brief, he wants to know (i) The profitability of the business and (ii) The soundness of the business.

The trader can ascertain this by preparing the final accounts. The final accounts are prepared from the trial balance. Hence the trial balance is said to be the link between the ledger accounts and the final accounts. The final accounts of a firm can be divided into two stages. The first stage is preparing the trading and profit and loss account and the second stage is preparing the balance sheet.

### **TRADING ACCOUNT**

The first step in the preparation of final account is the preparation of trading account. The main purpose of preparing the trading account is to ascertain gross profit or gross loss as a result of buying and selling the goods.

*Trading account of MR..... for the year ended .....*

Particulars	Amount	Particulars	Amount
To opening stock	Xxxx	By sales      xxxx	
To purchases    xxxx		Less: returns    xxx	Xxxx
Less: returns    xx	Xxxx	By closing stock	Xxxx
 To carriage inwards	Xxxx		
To wages	Xxxx		
To freight	Xxxx		
To customs duty, octroi	Xxxx		
 To gas, fuel, coal, Water	Xxxx		
 To factory expenses			
To other man. Expenses	Xxxx		
To productive expenses	Xxxx		
To gross profit c/d			
	Xxxx		
	Xxxx		
			Xxxx
	Xxxx		

Finally, a ledger may be defined as a summary statement of all the transactions relating to a person, asset, expense or income which have taken place during a given period of time. The up-to-date state of any account can be easily known by referring to the ledger.

### **PROFIT AND LOSS ACCOUNT**

The business man is always interested in knowing his net income or net profit. Net profit represents the excess of gross profit plus the other revenue incomes over administrative, sales, Financial and other expenses. The debit side of profit and loss account shows the

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expenses and the credit side the incomes. If the total of the credit side is more, it will be the net profit. And if the debit side is more, it will be net loss.

PROFIT AND LOSS A/C OF MR.....FOR THE YEAR ENDED.....

PARTICULARS	AMOUNT	PARTICULARS	AMOUNT
TO office salaries	Xxxxxx	By gross profit b/d	Xxxxx
TO rent,rates,taxes	Xxxxx	Interest received	Xxxxx
TO Printing and stationery	Xxxxx	Discount received	Xxxx
TO Legal charges		Commission received	Xxxxx
Audit fee	Xxxx	Income from	
TO Insurance	Xxxx	investments	
TO General expenses	Xxxx	Dividend on shares	Xxxx
TO Advertisements	Xxxxx	Miscellaneous	Xxxx
TO Bad debts	Xxxx	investments	
TO Carriage outwards	Xxxx	Rent received	xxxx
TO Repairs	Xxxx		
TO Depreciation	Xxxxx		
TO interest paid	Xxxxx		
TO Interest on capital	Xxxxx		
TO Interest on loans	Xxxx		
TO Discount allowed	Xxxxx		
TO Commission	Xxxxx		
TO Net profit-----→	Xxxxx		
(transferred to capital a/c)			
	xxxxxx		Xxxxxx

## **BALANCE SHEET**

The second point of final accounts is the preparation of balance sheet. It is prepared often in the trading and profit, loss accounts have been compiled and closed. A balance sheet may be considered as a statement of the financial position of the concern at a given date.

**DEFINITION:** A balance sheet is an item wise list of assets, liabilities and proprietorship of a business at a certain state.

**J.R.botliboj:** A balance sheet is a statement with a view to measure exact financial position of a business at a particular date.

Thus, Balance sheet is defined as a statement which sets out the assets and liabilities of a business firm and which serves to ascertain the financial position of the same on any particular date. On the left-hand side of this statement, the liabilities and the capital are shown. On the right-hand side all the assets are shown. Therefore, the two sides of the balance sheet should be equal. Otherwise, there is an error somewhere.

BALANCE SHEET OF ..... AS ON .....

Liabilities and capital	Amount	Assets	Amount
-------------------------	--------	--------	--------

Creditors	Xxxx	Cash in hand	Xxxx
Bills payable	Xxxx	Cash at bank	Xxxx
Bank overdraft	Xxxx	Bills receivable	Xxxx
Loans	Xxxx	Debtors	Xxxx
Mortgage	Xxxx	Closing stock	Xxxx
Reserve fund	Xxxx	Investments	Xxxx
Capital xxxxxx		Furniture and fittings	Xxxx
<u>Add:</u>		Plats&machinery	
Net Profit xxxx		Land & buildings	Xxxx
-----		Patents, tm	Xxxx
xxxxxxx		,copyrights	Xxxx
-----		Goodwill	
<u>Less:</u>		Prepaid expenses	Xxxx
Drawings xxxx	Xxxx	Outstanding incomes	Xxxx
-----	XXXX		XXXX

Advantages: The following are the advantages of final balance .

1. It helps in checking the arithmetical accuracy of books of accounts.
2. It helps in the preparation of financial statements.
3. It helps in detecting errors.
4. It serves as an instrument for carrying out the job of rectification of entries.
5. It is possible to find out the balances of various accounts at one place.

## **FINAL ACCOUNTS -- ADJUSTMENTS**

We know that business is a going concern. It has to be carried on indefinitely. At the end of every accounting year. The trader prepares the trading and profit and loss account and balance sheet. While preparing these financial statements, sometimes the trader may come across certain problems. The expenses of the current year may be still payable or the expenses of the next year have been prepaid during the current year. In the same way, the income of the current year still receivable and the income of the next year have been received during the current year. Without these adjustments, the profit figures arrived at or the financial position of the concern may not be correct. As such these adjustments are to be made while preparing the final accounts.

The adjustments to be made to final accounts will be given under the Trial Balance. While making the adjustment in the final accounts, the student should remember that "every adjustment is to be made in the final accounts twice i.e. once in trading, profit and loss account and later in balance sheet generally". The following are some of the important adjustments to be made at the time of preparing of final accounts:-

### **1. CLOSING STOCK :-**

(i) If closing stock is given in Trail Balance: It should be shown only in the balance sheet "Assets Side".

(ii) If closing stock is given as adjustment :

1. First, it should be posted at the credit side of "Trading Account".
2. Next, shown at the asset side of the "Balance Sheet".

### **2. OUTSTANDING EXPENSES :-**

(i) If outstanding expenses given in Trail Balance: It should be only on the liability side of Balance Sheet.

(ii) If outstanding expenses given as adjustment :

1. First, it should be added to the concerned expense at the debit side of profit and loss account or Trading Account.
2. Next, it should be added at the liabilities side of the Balance Sheet.

### **3. PREAPID EXPENSES :-**

(i) If prepaid expenses given in Trial Balance: It should be shown only in assets side of the Balance Sheet.

(ii) If prepaid expense given as adjustment :

1. First, it should be deducted from the concerned expenses at the debit side of profit and loss account or Trading Account.
2. Next, it should be shown at the assets side of the Balance Sheet.

### **4. INCOME EARNED BUT NOT RECEIVED [OR] OUTSTANDING INCOME [OR] ACCURED INCOME :-**

(i) If incomes given in Trial Balance: It should be shown only on the assets side of the Balance Sheet.

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(ii) If incomes outstanding given as adjustment:

1. First, it should be added to the concerned income at the credit side of profit and loss account.
2. Next, it should be shown at the assets side of the Balance sheet.

5. INCOME RECEIVED IN ADVANCE: UNEARNED INCOME:-

(i) If unearned incomes given in Trail Balance : It should be shown only on the liabilities side of the Balance Sheet.

(ii) If unearned income given as adjustment :

1. First, it should be deducted from the concerned income in the credit side of the profit and loss account.
2. Secondly, it should be shown in the liabilities side of the Balance Sheet.

6. DEPRECIATION:-

(i) If Depreciation given in Trail Balance: It should be shown only on the debit side of the profit and loss account.

(ii) If Depreciation given as adjustment

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deducted from the concerned asset in the Balance sheet assets side.

7. INTEREST ON LOAN [OR] CAPITAL :-

(i) If interest on loan (or) capital given in Trail balance : It should be shown only on debit side of the profit and loss account.

(ii) If interest on loan (or) capital given as adjustment :

1. First, it should be shown on debit side of the profit and loss account.
2. Secondly, it should be added to the loan or capital in the liabilities side of the Balance Sheet.

8. BAD DEBTS:-

(i) If bad debts given in Trail balance : It should be shown on the debit side of the profit and loss account.

(ii) If bad debts given as adjustment:

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deducted from debtors in the assets side of the Balance Sheet.

9. INTEREST ON DRAWINGS :-

(i) If interest on drawings given in Trail balance: It should be shown on the credit side of the profit and loss account.

(ii) If interest on drawings given as adjustments :

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1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be deducted from capital on liabilities side of the Balance Sheet.

10. INTEREST ON INVESTMENTS :-

(i) If interest on the investments given in Trail balance : It should be shown on the credit side of the profit and loss account.

(ii) If interest on investments given as adjustments :

1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be added to the investments on assets side of the Balance Sheet.

**Note: Problems to be solved on final accounts**

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# DEPRECIATION, RESERVES AND INVENTORY VALUATION

## SYNOPSIS:

1. Introduction
2. Factors Determining the amount of Depreciation
3. Depreciation Methods
4. Accounting Standards – Depreciation Accounting
5. Accounting for Reserves
6. Accounting for Provisions
7. Valuation of Inventories

## 1. INTRODUCTION

Depreciation is the gradual reduction or loss in the value of fixed assets like building, plant, furniture etc. For example, one company purchased machinery costing ₹ 50 lakhs. The life of the machinery is estimated as 10 years. Then it will loose value of ₹ 50,000 per year. This reduction in the value of the asset, every year, is known as depreciation.

The depreciation in the value of an asset may be due to wear and tear; obsolescence, pass of the time, or permanent fall of the market. Whatever may be the reasons for the depreciation, it must be charged to profit and loss account properly. Then only the true profit or loss of the business can be ascertained. Further, true and fair value of the Balance Sheet can be presented only when the assets are shown after providing for depreciation.

### 1.1 Depreciation – Definition:

The word “Depreciation” is derived from a Latin word *Depretium*, ‘*De*’ means decline and ‘*pretium*’ means price and totally it means decline in price. Let us now go through the definitions given by various experts in Accounting for depreciation.

**Pickles:** Depreciation may be defined as the permanent and continuous diminution in the quality, quantity or the value of an asset.

**J.H. Burton:** Depreciation is the shrinkage in the value of an asset at a given date as compared with its value at a previous date.

**Institute of Cost and Management Accountants (ICMA, London):** Depreciation is the diminution in intrinsic value of the asset due to use and /or the lapse of time.

Thus, depreciation is a permanent, gradual and continuous decline in book value of a fixed asset over a period of time due to various reasons.



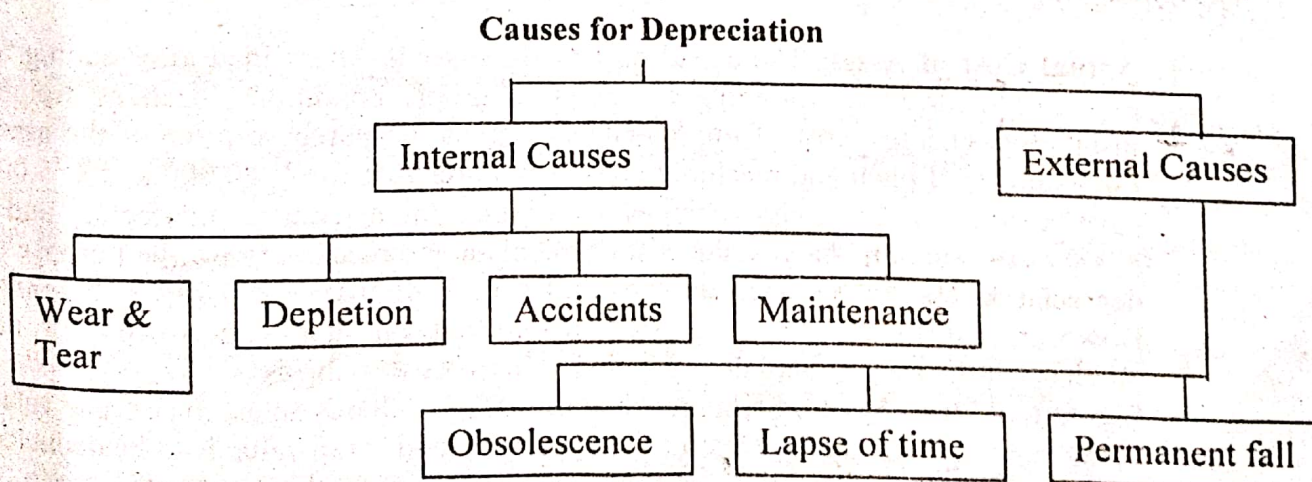
## 1.2 Depreciation and Related words

In addition to depreciation, we come across many words like depletion, obsolescence, amortization, fluctuations, dilapidation. Some use these words synonymously. But there is a difference between depreciation and these related words. As such let us go through the differences between depreciation and these words.

1. **Depletion:** Depletion is the decrease in the value of natural resources like mineral deposits, oil wells etc., due to exhaustion, which may be permanent, gradual and continuing. Whereas depreciation means a permanent, gradual and continuing fall in the value of fixed assets.
2. **Obsolescence:** Obsolescence means loss in the value of an asset due to external reasons like new inventions or changed fashions. But depreciation is fall in the value of an asset mainly due to wear and tear.
3. **Amortization:** Amortization means the reduction in the value of a long-term investment in intangible assets such as copy right, patent, trademark etc. But depreciation applies only to fixed assets like plant and machinery.
4. **Fluctuations:** It is the temporary change in the market value of a floating asset. It may be a shrinkage or appreciation in the value caused all of a sudden. On the other hand, depreciation is related to the book value of the asset and there is no relation to it with the fluctuation in the market value of the asset.
5. **Dilapidations:** It is the loss or reduction in the value of a leased property. In order to return the leased property to the landlord in original condition, the lease holders set aside every year some amount and provide funds for setting right the dilapidated assets before it is to be returned. But depreciation applies only to fixed assets.

## 1.3 Causes for Depreciation:

The causes for providing depreciation may be divided into Internal causes and External causes.





## 1.4 Objectives of Depreciation:

The following are the objectives for providing depreciation in the books of accounts.

1. **For ascertaining the true profit or loss:** The true profit or loss if the business can be ascertained only when all costs for incurred for the purpose of earning revenues have been debited to the profit and loss account. Since the asset is used in earning revenues, the depreciation in the value of an asset is a revenue expense and hence should be debited to profit and loss account.
2. **For showing assets at true and fair value in the Balance Sheet:** If depreciation is not charged on assets, the assets shown at the value will be more than its actual cost. As such, the Balance Sheet will not present the 'True and Fair View' of the financial position of the business.
3. **For replacement of assets:** A portion of profits is set aside in the form of depreciation each year. It is aimed at providing a definite amount at a certain future date for the purpose of replacement of the asset.
4. **For ascertaining the true cost of production:** For ascertaining the cost of production, it is necessary to charge depreciation as an item of cost of production. If the depreciation on fixed assets is not charged, the costs records, would not present true and fair view of the cost of production.
5. **For complying with legal requirements:** In case of companies, it is compulsory to charge depreciation on fixed assets before it declares dividend under Companies Act 1956.
6. **For preventing the distribution of profits out of capital:** If depreciation is not charged the profit shown by the Profit and Loss Account will be in excess of the actual profits. The excess profit distributed among shareholders will be from capital. It is against the legal provisions and accounting principles.

## 2. FACTORS DETERMINING DEPRECIATION

The amount of depreciation to be provided on fixed assets depends on the following factors.

1. **Actual Cost of Asset:** The actual cost of the asset is determined after adding all expenses incurred for bringing the asset to usable conditions, such as freight, installation charges, cost of improvements etc., to the purchase price of the asset. For example, if plant and machinery has been purchased for ₹ 40,000 and ₹ 5,000 have been incurred as freight charges for bringing the machine to the factory and ₹ 2,000 as installation charges, the cost of the plant and machinery for the purpose of depreciation should be taken as ₹ 47,000 (i.e., ₹ 40,000 + ₹ 5,000 + ₹ 2,000). However, the financial charges such as interest on money borrowed for the purchase of the asset should not be included in the cost of the asset.
2. **Estimated Scrap Value:** Scrap, residual or salvage value is an estimated sale value of the asset at the end of the useful life. The estimated scrap value is to be deducted from the actual cost of the asset for calculating depreciation. For example, a machine is purchased for ₹ 50,000 and ₹ 4,000 are spent on its freight, ₹ 2,000 for its installation. It is estimated that its useful life will be 10 years. At the end of ten years it will have a scrap value of ₹ 4,000. Depreciation in the case will be



calculated on ₹ 52,000 (i.e., ₹ 50,000 + ₹ 4,000 + ₹ 2,000 - ₹ 4,000). Depreciation charged on this machine will be  $\frac{52,000}{10} = ₹ 5,200$  every year.

3. **Estimated Working life of the Asset:** The estimated working life of the asset must also be ascertained. It should be calculated in terms of time, i.e., months, years of hours, units of output. It should be noted here that only useful life of an asset should be considered. For example, if a machine can work for 20 years but is likely to become obsolete in 15 years, its useful life should be considered as only 15 years.
4. **Repairs:** In order to keep the asset in proper working condition, it is necessary to provide for repairs. Working life of an asset will increase if repairs are undertaken regularly.
5. **Statutory Provisions:** The statutory provisions with regards to Income Tax Act or Companies Act must be kept in mind while providing for depreciation.

### 3. METHODS OF DEPRECIATION

There are different methods of providing depreciation. Each method has its own advantage and disadvantages. Different methods of providing depreciation are suitable for different assets depending upon the nature and type of the asset. The methods of depreciation are:

1. Fixed Installment Method
2. Diminishing Balance Method
3. Annuity Method
4. Depreciation Fund Method
5. Insurance Policy Method
6. Depletion Method
7. Revaluation Method
8. Machine Hour Rate Method
9. Mileage Method.

However, in this book, the first two methods viz., Fixed installment method and Diminishing balance method only are discussed.

#### 3.1 Fixed Installment Method (or) straight line method:-

It is the simplest method of charging depreciation. Under this method, depreciation is arrived at by providing the original cost of the asset estimated life period. For example, if the value of asset is ₹ 20,000 and its useful life is estimated to be 10 years, the amount of depreciation to be charged every year will be ₹ 2,000 ( $\frac{20,000}{10}$ ).

**Scrap Value:** In certain cases, we may also be given the scrap or residual value of the assets. The residual value is to be deducted from the original cost of the asset.

$$\text{Annual Depreciation} = \frac{\text{Cost of asset} - \text{Scrap Value}}{\text{Estimated life of asset (in years)}}$$



**Explanation of Formula:**

1. **Cost of the asset:** Cost of the asset means the original cost of the asset. The cost includes the purchase price and the expenses like freight and installation charges.
2. **Scrap or residual value:** The asset being used will definitely become obsolete sooner or later. The asset can be disposed off even if it is obsolete (useless) as a scrap. The amount fetched by scrapped asset is known as its residual value.
3. **Estimated life of the asset:** Whenever asset is acquired, the manufacturer generally mentions the estimated working life of the asset. It may be in years, months, days or hours.

For the example, Chiranjeevi purchased one machinery for ₹ 5,30,000 on April 1<sup>st</sup>, 2012 and incurred ₹ 10,000 towards installation expenses. The life of the machine was estimated as 10 years and the residual value was estimated at ₹ 20,000. Calculate annual depreciation.

$$\begin{aligned}
 \text{Annual Depreciation} &= \frac{\text{Cost of the Asset} - \text{Residual Value}}{\text{Estimated life of asset}} \\
 &= \frac{(\text{Rs. } 5,30,000 + \text{Rs. } 10,000) - \text{Rs. } 20,000}{10 \text{ years}} \\
 &= \frac{\text{Rs. } 5,20,000}{10 \text{ years}} = \text{Rs. } 52,000
 \end{aligned}$$

The amount of depreciation calculated under this method, if presented on a graph paper, would show a straight line parallel to the X-axis, and hence *this method is also known as Straight Line Method.*

**Suitability:** This method is suitable for those assets in relation to which (i) repair and maintenance charges are less, and (ii) the possibility of obsolescence is less. The method is most suitable for furniture, patents, copyright, trademarks, leasehold lands and buildings etc..

**Finding out Rate of Depreciation:** Generally, the rate of depreciation will be given in the problem itself. But sometimes, the rate of depreciation may not be given in the problem. In such a case, the following formula is to be used to find out the rate of depreciation.

$$\text{Rate of Depreciation} = \frac{\text{Annual Depreciation}}{\text{Cost of the Asset}} \times 100$$

**Purchase, Sale and Use of Assets:**

1. **Purchase of Asset:** If the asset is purchased in the beginning of the year, depreciation is to be calculated for the full year. But if the asset is purchased or additions are made in the middle of the year, depreciation is to be calculated on the new assets or additions from the date of purchase.
2. **Use of Asset:** If the asset is being used not from the date of the purchase but later, depreciation is to be calculated from the date of usage only. For example, if the asset



purchased on 1-4-2012 but started using from 1-7-2012 depreciation is to be calculated for nine months from 1-7-2012 to 31-3-2013.

3. **Sale of Asset:** The firm may sell asset, if it becomes obsolete. It may also sell when it is not in perfect order. Whatever may be the reason for selling the asset, it is to accounted properly. Then only we can arrive at correct depreciation.

**Illu.1:** A trading concern purchased a Plant and Machinery for Rs.58,000 on 1-1-2009. The estimated life of the Machine is 5 years. The scrap value of the machine is Rs.2,000. Prepare plant and Machinery Account on straight line method for the first three years.

**Solution:**

**Working Notes:**

$$\text{Annual Depreciation} = \frac{\text{Cost of the Asset} - \text{Scrap Value}}{\text{Estimated life of asset}}$$

$$= \frac{58,000 - 2,000}{5 \text{ years}} = \frac{56,000}{5} = 11,200$$

Plant and Machinery a/c				Cr.	
Dr.	Particulars	Amount	Date	Particulars	Amount
2009 Jan.1	To <del>Bank</del> <sup>Cash</sup> a/c	58,000	2009 Dec.31	By Depreciation a/c	11,200
				By Balance c/d	46,800
		58,000			58,000
2010 Jan.1	To Balance b/d	46,800	2010 Dec.31	By Depreciation a/c	11,200
				By Balance c/d	35,600
		46,800			46,800
2011 Jan.1	To Balance b/d	35,600	2011 Dec.31	By Depreciation a/c	11,200
				By Balance c/d	24,400
		35,600			35,600
2012 Jan.1	To Balance b/d	24,400			

**Illu.2:** On 1<sup>st</sup> April, 2009 Gangadhar purchased a second hand machine for Rs.28,000 and spent Rs.2,000 on its repairs and installation. It is decided to write off depreciation at 10% on original cost. The machine was found unsuitable and sold for Rs.8,000 on September 30, 2012. Assuming that the accounts were closed on 31<sup>st</sup> December every year prepare Machinery account from 2009 to 2012.



## Financial Accounting

## Solution:

## Working Notes:

## 1. Calculation of Annual Depreciation:

Machinery Value = Rs.30,000

Depreciation Rate = 10%

Annual Depreciation =  $30,000 \times \frac{10}{100} = \text{Rs.}3,000$ 

## 2. During 2009 and 2012 Machinery worked in the business for nine months only. So we have to calculate depreciation for these two years for 9 months only.

 $30,000 \times \frac{10}{100} \times \frac{9}{12} = \text{Rs.}2,250$ 

Machinery Account					
Dr.				Cr.	
Date	Particulars	Amount Rs.	Date	Particulars	Amount Rs.
2009			2009		
Jan. 1	To Cash a/c	30,000	Dec. 31	By Depreciation a/c	2,250
				By Balance c/d	27,750
		30,000			30,000
2010			2010		
Jan. 1	To Balance b/d	27,750	Dec. 31	By Depreciation a/c	3,000
				By Balance c/d	24,750
		27,750			27,750
2011			2011		
Jan. 1	To Balance b/d	24,750	Dec. 31	By Depreciation a/c	3,000
				By Balance c/d	21,750
		24,750			24,750
2012			2012		
Jan. 1	To Balance b/d	21,750	Dec. 31	By Depreciation a/c	2,250
				By Cash a/c	8,000
				By P & L a/c	11,500
		21,750			21,750

## 3.2 Diminishing Balance Method

This method is an improvement over the Straight Line Method. It is also known as Reducing Balance Method or Written Down Value Method. Under this method the amount of depreciation is a fixed percentage calculated on reducing value of the asset. As such, the amount of depreciation goes on decreasing every year.

For example, a machinery is purchased for Rs.10,000. Depreciation is to be written off @ 10% p.a. on Reducing Balance Method. In the first year the amount of depreciation will be ₹ 1,000. In the second year it will be ₹ 900 i.e., 10% of ₹ 9,000 (10,000 – 1,000) and in the third year ₹ 810 i.e., 10% of ₹ 8,100 (₹ 9,000 – 900). Thus, it goes on reducing every after year.



**Suitability:** This method is suitable for such assets that have a long life. It is also suitable for assets that require considerable repairs in the later years such as plant, machinery, freehold buildings, ships etc. This method is now being increasingly used in practice.

**Illu.3:** On 1<sup>st</sup> July, 2010 Mr. Raghu Ram Kotwal has purchased machine for ₹ 46,000 and spent ₹ 4,000 for its installation.

On 31-12-2012 the machinery was sold out for ₹ 35,000. The books are being closed every year by 31<sup>st</sup> December. The rate of depreciation is 10% p.a. Prepare the Machine A/c for three years on the diminishing balance method.

**Solution:**

WDV

$$50,000 \times \frac{6}{12} \times \frac{10}{100} = 2,500$$

Dr.			Machinery Account			Cr.	
Date	Particulars	Amount ₹	Date	Particulars	Amount ₹		
2010 Jan.1	To Bank a/c To Bank a/c (Installation)	46,000 4,000	2010 Dec.31	By Depreciation a/c By Balance c/d	2,500 47,500		
		50,000			50,000		
2011 Jan.1	To Balance b/d	47,500	2011 Dec.31	By Depreciation a/c By Balance c/d	4,750 42,750		
		47,500			47,500		
2012 Jan.1	To Balance b/d	42,750	2012 Dec.31	By Depreciation a/c By Bank a/c By Profit and Loss a/c	4,275 35,000 3,475		
		42,750			42,750		

### Change of Method of Depreciation:

Sometimes, a change in the method of depreciation may be required. For example, a firm may change the method of charging depreciation from Straight Line Method to Diminishing Balance Method or vice-versa. The following steps are to followed where there is a change in the method of depreciation.

- Change in the method of depreciation may be desired from the current year onwards:** In such a case, depreciation will be charged according to the new method from the current year.
- Change in the method of depreciation may be desired from a back date:** In such a case, adjustments will have to be made in the current year for any extra or less depreciation charged in earlier years. The best course would be to compute the amount of depreciation which has already been charged according to the old method. The amount of depreciation that is to be charged according to the new method. The difference if any, should be credited (or debited) to the Asset Account



### 3.3 Annuity Tables Method

Under the annuity method, the asset purchased is taken as an investment. The interest lost, it taken into account and is debited to asset account. It will be calculated every year on the book value of the asset. Depreciation to be charged under this method depends upon the (i) rate of interest, and (ii) the life of the asset.

Depreciation remains unaltered throughout the life of the asset. The amount of depreciation is calculated with the help of Depreciation Annuity Tables. The depreciation will be different according to the rate of interest and according to the period over which the asset is to be written off. Annuity depreciation is given by –

$$\text{Depreciable Amount} \times \frac{i}{1 - \frac{1}{(1+i)^n}}$$

Where,

i = interest rate;

n = useful life.

This is required to amortise Re.1 and interest element.

**Suitability:** The method is applicable where the life of the asset is quite definite and the amount of investment in asset is large enough having no scrap value e.g., lease. It is not suitable for assets where additions are made off and on.

### 3.4 Sinking Fund Method

This method is also known as Depreciation Fund Method. Under this method, the asset account is kept in the books at its original cost. Every year during the estimated life of the asset, an equal amount of depreciation is charged to profit and loss account are credited to a Depreciation Fund or Sinking Fund Account. At the same time a provision for replacement of the asset is made by investing an amount equal to the depreciation charges, in securities outside the business by debiting depreciation Fund Investment or Sinking Fund Investment Account and crediting Bank. Interest received on the investments is credited to the Depreciation Fund Account and is also reinvested likewise. The amount that is annually provided as depreciation is such that this, with compound interest, will be sufficient to provide a sum equal to the cost of asset, less residual value (if any), by the time the asset is expected to become useless. This amount can be ascertained by reference to the Sinking Fund Tables.

#### Calculation of Amount to be invested:

How much amount is to be invested every year so that a given sum is available at the end of a given period depends on the rate of interest. The following specimen table – known as the Sinking Fund Table – shows how much is to be invested every year together with the interest earned so that at the end of the period one gets Re.1. Sinking fund depreciation is given by –



$$\text{Depreciable Amount} \times \frac{i}{(1+i)^{n-1}}$$

Where,

$i$  = rate of interest,

$n$  = useful life.

### 3.5 Insurance Policy Method

Under Insurance Policy Method, the amount equal to annual depreciation of an asset is invested with an Insurance Company by taking an endowment policy. This method does not consider interest on investments. Therefore, there are no problems of realising and re-investing such interest. The specialty of this method is that it not only provides funds for replacement but also provide security to the asset. Once the policy is taken, any loss to the fully secured.

**Suitability:** This method is suitable to those assets which are costly and which are of wasting nature.

### 3.6 Depletion Method:

This method is mostly used in case of mines, quarries, etc., from which a certain quantity of output is expected to be obtained. The value of mine depends only upon the quantity of minerals that can be obtained. When the whole quantity is taken, the mine losses its value. The rate of depreciation is obtained by dividing the cost of the mine by the total quantity of the minerals expected to be available.

$$\text{Rate of depreciation} = \frac{\text{Cost of Mine}}{\text{Estimated quantity to be raised}}$$

**Suitability:** Mines, quarries, oil wells etc.

### 3.7 Revaluation Method

Under this method, the assets are valued at the end off every year at the time of preparing final accounts. The difference between two successive valuation with a time interval of one year is charged as depreciation.

**Suitability:** This method is most appropriate in case of assets like Loose Tools, Jigs, Live Stock, Patterns etc.

There is no need to provide depreciation on 'goodwill'. However, some firms try to write off goodwill over a number of years. The amount written off should be shown separately in the profit and loss a/c.

### 3.8 Machine Hour Rate Method

Under this method, it is assessed as to how many hours the machine shall be able to work. That becomes the life of the machine. After deducting the value of the scrap from the total value



of the machine, this value is divided by the hours of machine life. This gives the depreciation per hour.

$$\text{Depreciation per hour} = \frac{\text{Cost of machine} - \text{Scrap value}}{\text{Estimated life of the machine hours}}$$

### 3.9 Mileage Method

This method is more useful to transport undertakings. The undertakings which make use of means of conveyance to a large extent can also depreciate their fleet (transport) under this method.

This method considers the depreciation of a particular vehicle not on the basis of its estimated life but on the basis of the probable mileage that can be covered by such an asset. For example, a bus costing Rs.1,00,000 can cover only 2,00,000 miles. After which it becomes worthless. Then its depreciation is 50 paise per mile on an average. Therefore, the bus can be depreciated at 50 paise a mile.

This method is similar to a Machine Hour Rate Method or Depletion Method.

## 4. ACCOUNTING STANDARDS – DEPRECIATION ACCOUNTING

The Council of the Institute of Chartered Accounts in India issued Accounting Standard 6 (AS-6) on Depreciation Accounting. This standard deals with the accounting for depreciation and the disclosure requirements in connection therewith. In the initial years, this accounting standard will be recommendatory in character. During this period, this standard is recommended for use by companies listed on a recognised stock exchange and other large commercial, industrial and business enterprises in the public and private sector.

## 5. ACCOUNTING FOR RESERVES

A business may like to provide for contingencies as per the concept of conservatism. These contingencies can broadly be classified into two categories.

- i. **Unforeseen Contingencies:** Contingencies of which the business is neither sure of their nature nor of their amounts. Examples are: amounts set apart for preventing reduction in dividend rate due to possible fall in products.
- ii. **Expected Contingencies:** Contingencies known to the business but whose amounts cannot be ascertained with reasonable accuracy. Examples are amounts set apart for meeting possible loss on account of bad debts, discounts to debtors etc.

The amount set apart for the first type of contingencies are known as '**Reserves**' while for the other they are known as **Provisions**.

### 5.1 Reserves – Meaning :

The term 'reserve' has not been defined in the Companies Act, 1956 except negatively that any part of profits retained in the business except 'provisions' are taken as reserve. Any provision in excess of the actual loss is also taken as reserve.



amount set aside for this purpose will be debited to profit and loss account. It will also be shown at the liability side of the current year because the amount is still payable.

During the next year, taxes of the current year will be paid. For making payment of taxes, we have to debit provision for taxes account and credit Bank account. The balance of provision for taxation account will be shown at the liabilities.

Provision for taxation may be treated as both, the current or non-current liability. If it is assumed to be non-current liability previous year's provision for taxation will be paid during the current year. Taxes payable on the profits of the current year will be charged out of the profit and loss account of the current year.

### 6.3 Accounting Treatment of Provisions

Provisions are charge against profit. Provision are created by debiting profit and loss account for specific and known contingency or expected loss. Examples are, Provision for doubtful debts, provision for discount on debtors and provision for taxation etc. A definite sum is charged every year out of profit and loss account to meet the known contingency. Provision account should be compulsorily posted at the debit side of profit and loss account whether the company earns profit or suffers loss.

The provisions are generally shown at the assets side of Balance Sheet by way of deducting it from concerned asset. Provision for doubtful debts and provision for discount on debtors are shown by way of deducting from debtors on the assets side of the Balance Sheet. It may sometimes be shown at the liabilities side also. i.e., provision for taxation.

Making of provision is must but making reserves is discretionary as a matter of financial prudence and subject to profit. Provision for doubtful debts generally has old balance. The old provision is deducted from the total of the bad debts and new provision at the debit side of profit and loss account. In case of old provision exceeds the total of bad debts and new provision, the treatment should preferably be made at the credit side of profit and loss account, where the total of bad debts and new provision should be deducted from old provision.

## 7. INVENTORY VALUATION

Inventories generally constitute the second largest item after fixed assets in the financial statements, particularly of manufacturing organizations. The value attached to inventories can materially affect the operating results and the financial position. However, different bases of valuing inventories are used by different business and even by different undertakings within the same trade or industry.

The term inventory is wide enough generally to include the three components i.e., raw materials, semi-finished goods (work in progress) and finished or completed goods. Inventory (these three components) comprises a significant portion of the current asset of many enterprises. It is for this reason the inventory valuation has assumed a great significance in recent years. The general impression is that the figures of inventory valuation as shown in the trading account, the most accurate and as such financial statements based on accounting are also very accurate.



Inventory valuation is very significant as it affects both the results of the operation of the enterprise as well as the Balance sheet which presents the financial position of the business on a particular date. Manipulations may be expected in valuing this particular item and working results and financial position may be shown much better than what they should be.

### 7.1 Meaning of inventory valuation:

According to "International Accounting Standard" (IAS-2) "Inventories are tangible property.

- (a) held for sale in the ordinary course of business
- (b) in the process of production for such sale, or
- (c) to be consumed in the production of goods or services for sale.

These three types of inventories are usually referred to as (a) finished goods; (b) work-in-progress or semi-finished goods and (c) raw materials and components respectively. The term Stores is used for materials required for consumption by machines such as lubricants, clearing materials, spare parts of machinery, Coal, liquid fuel and other forms of energy (other than electricity).

### 7.2 Objective of Inventory Valuation:

The following are the objectives of inventory valuation.

1. **Determination of Correct Income:** The major objectives of accounting for inventories is the proper determination of income through the process of matching appropriate cost against revenues. As we know that Gross Profit is determined by deducting cost of goods sold from sales revenue. Cost of goods sold does not mean purchase price, it takes opening and closing stocks of goods. Cost of goods sold is equal to opening stock + purchases – closing stock. Therefore, closing stock is valued and is taken into account. The value of closing stock is credited to Trading Account. The closing stock becomes the opening stock of the next year.

Thus, valuation of closing stock affects the profits for the current year as well as for the next year. When we credit the Trading Account with the closing stock and debit the Trading Account with the opening stock the valuation of stock will affect the Gross Profit. Overvaluation of closing stock means inflating the current year's profit and deflating the profit of the succeeding year. Likewise undervaluation of Stock will decrease the volume of current profit and increase the succeeding year profit. When Gross profit is affected the net profit will automatically be affected in the same direction.

2. **Determination of Financial Position:** In a concern, Balance Sheet is a statement, which shows the financial position of the business on a particular date. Inventory is an important item of current assets which is shown on the asset side of the Balance Sheet. If this figure is not shown correctly, the balance sheet, to that extent, will be misleading.



3. **Decision-making by Management:** Inventory is an important asset of the business. The figure of inventory is very useful to the management for decision-making. Management calculate inventory turn over ratio to know whether inventory has been efficiently used or not.
4. **External Reporting:** Various external groups particularly the investors are interested in the figure of inventory to forecast the future cash inflows of the enterprise.

### 7.3 Systems of Inventory Valuation:

There are two systems of inventory valuation.

- i. Periodic Inventory System
- ii. Perpetual Inventory System.

**(i) Periodic Inventory System:** Under this method of stock taking, the value of stock is ascertained physically. All the items of inventory are weighted, measured or counted, then liked and priced so as to get the valuation of inventory on that date. In big business houses, the business operations will be suspended for the period until the stock taking is completed. It is necessary, as there is no other way of ascertaining the value of the closing stock. The purchases and sales are recorded at different prices and the mark-up price is not the same in all the cases. Purchases are recorded at cost whereas sales are recorded at selling price. Moreover, these two prices are fluctuating from time to time. Therefore, stock is valued by means of annual stock taking.

The following steps are necessary in ascertaining the value of stock –

- i. The individual items are taken one by one and weighted, measured or counted. This depends upon the nature of the item and the usual market quotations for the item.
- ii. All the items are then listed, priced, extended and added so as to get the figure of inventory. This is done through a stock Sheet.

**Evaluation:** The method is quite simple and dispenses with the various records to be undertaken under perpetual inventory system. However, this system suffers from serious drawbacks, the most important of which is that discrepancies and losses never come to light even in future. Moreover, the business operations are suspended for a few days till stock taking is complete.

**(ii) Perpetual Inventory System:** Under perpetual inventory system, stock taking is not undertaken at the end of the year, rather, it is done regularly throughout the accounting period. Under this method, stock registers are regularly maintained which give the inventory balance at any time. Stores ledger gives the balance of raw materials, work-in-progress, and finished stock respectively. The system ledgers give the balances of work-in-progress and finished stock respectively. The system maintains a running record of inventories on hand. A number of items are verified with accounting records at short intervals. It is arranged in such a way that each and every item of inventory gets checked up at least a certain number of times in an accounting period. The physical counting is tallied with the inventory record and any discrepancy is investigated to determine the causes of such discrepancies. The discrepancies are then reconciled and corrected at frequent intervals.



The system is an integral part of costing system and is adopted mainly by the manufacturing concerns. It has now been adopted by the trading concerns because of numerous advantages offers.

**Evaluation:** As stated above, stock taking is possible under this method through the process of continuous stock taking. The closing inventory figures are readily available and they enable a quick compilation of Profit and Loss Account and Balance Sheet immediately after the accounting year is over. The suspension of operations is not necessary under this method. Inventory control can also be exercised by fixing maximum, minimum and ordering levels. This helps in avoiding over-investment in inventories and also the risk of running out stock thereby causing interruption to production. The business can prepare interim P & L Account at any time. The main drawback of the system is to make elaborate organization and record.

#### 7.4 Methods of Inventory Valuation: ✓

Basically there are three methods of valuation of inventories.

- i. Cost-based method
- ii. Market-price method
- iii. Cost or Market price, whichever is less.

Let us now discuss the all these methods briefly.

##### A. Cost Price Methods :

##### (a) Methods based on Actual Cost :

##### 1. First in First out Method (FIFO):

In this method, materials are issued in the order in which they are received in the store. The material received first will be issued first. First Come First Served is the basis of issuing materials. In other words, old stocks are issued first and new stocks are issued next. Thus, the closing stock of materials will be valued under this method at the latest prices.

##### Advantages:

The following are the advantages of this method.

1. It is simple and easy to operate.
2. It appeals logical as the materials bought earlier are used for earlier jobs.
3. Stock is valued at recent purchase prices, and hence it closely represents current market price.
4. During price decline, material cost charged to products or jobs keep in line with the price trend. When prices are falling, this method gives better results.
5. When prices rise, material cost charged to production being at lower prices, profit is inflated to the advantage of the management and shareholders.
6. This method is suitable where the items are bulky, slow moving and costly, because it is easy to identify, units belonging to a particular purchase lot.



**Demerits:**

1. When prices fluctuate, calculation becomes complicated.
2. Complicated calculation leads to clerical errors.
3. Under fluctuating prices, materials charged to different but similar jobs vary, leading to non-comparison.
4. When prices fall, jobs are charged with higher price of earlier materials; the quotations are less competitive.
5. When materials are returned to the store, they are treated as new purchases, for the purposes of next issue.

**2. Last in First Out Method (LIFO):**

This method is based on the assumption that the last items purchased are the first to be used. In other words, the lot that is received last is placed on top and issues should be made only from this lot. It means materials received last should be issued first. Though materials are not issued in the chronological order under this method, the principle that cost should reflect current market conditions is recognised.

**Merits:** The advantages of this method are:

1. Since materials are charged at recent prices, cost of production reflects current market trend, and the quotation prices are competitive.
2. Being an actual cost method it ensures complete recovery of material cost from production.
3. It is more useful during the period of rising prices, because it does not inflate profits nor overstate the stock.
4. Unlike FIFO method, this method does not show unrealised profit due to inflationary trends.

**Demerits:**

1. When prices are erratic, calculation is difficult and therefore demands more clerical work. Moreover, owing to quick variations in material cost, comparison between the jobs becomes complicated.
2. Stock values are determined by the prices of the oldest lots in hand, prices which may be entirely out of line with the current replacement prices. A false position about stock is thus shown in the balance sheet.
3. Stock-taking on the LIFO basis is not acceptable for income-tax purposes.
4. Under the LIFO method of valuation, stock at the end is shown, at cost.. When prices are falling, it may be necessary to write off substantial amounts to reduce the value of stock shown at the current market value.
5. Like FIFO, a substantial difference is likely to be shown in the cost of two jobs solely because the stocks for one happened to be drawn a few minutes before the other.



**(b) Average Price Methods :**

This method of pricing is based on the assumption that all of the materials on hand is so intermingled that an issue cannot be made from any specific lot, but represents an average of the entire supply. An average method can be put to good use when market prices are subject to constant changes and when the materials consist largely of small items issued in small quantities. The following methods based on the above principles are currently in use:

**1. Simple Average Price Method:**

Under this method the price is calculated by dividing the total of price of materials in the stock from which materials are issued by the number of prices entering in the calculations. For the purpose of calculations, the issues are presumed to have been done in chronological order and quantities of purchases are ignored.

$$\text{Issue Price} = \frac{\text{Total of different prices in stock}}{\text{Total No. of Purchases}}$$

This method is simple to operate and give satisfactory results when prices are stable. It can also be conveniently applied when purchases are numerous and the quantities purchased are uniform.

However, this method suffers from several drawbacks. Since the issue price does not relate to the cost of any consignment, the method gives rise to a profit or loss on materials. The method fails to take note of the quantities purchased. If the quantities purchased differ from lot to lot, and the lots are purchased at widely different rates, this method does not yield correct results. If the prices fluctuate too much, the clerical work also may increase substantially.

**2. Weighted Average Price Method:**

In this method weightage is given to the price as well as quantity. Weighted average price is obtained by dividing the total cost of materials in the stock by the total quantity of material in the stock. The average price to be charged to issues will continue to be the same unless a new purchase is made necessitating the calculation of a new average.

$$\text{Weighted Average Price} = \frac{\text{Value of Materials in Stock}}{\text{Quantity in Stock}}$$

**Merits:**

1. This is an important method for removing the wide fluctuations in the prices.
2. It is advantageous that with every new issue, a new rate is not calculated.
3. The total value of the material issued does not show up and downward trend to the total value of the material received, as is in the case of Simple Average Method.
4. It is suitable in case of materials subject to wide price fluctuations.

**Demerits:**

1. The main defect under this method is that fresh calculations will have to be made every time when fresh purchases are made.



# FUNDS FLOW STATEMENT

## Synopsis:

1. Introduction
2. Significance of Funds Flow Statement
3. Financial Statements and Funds Flow Statement
4. Preparation of Funds Flow Statement
  - (i) Calculation of Funds from operations
  - (ii) Schedule of Changes in Working Capital
  - (iii) Sources and Uses of Funds

## 1. INTRODUCTION

Funds Flow Analysis is the significant technique of financial analysis. It is designed to highlight changes in the financial condition of a business concern between two points of time which generally conform to beginning and ending financial statement dates. Funds Flow Statement is also termed as a 'Statement of Sources and Applications of Funds', 'Statement of Changes in Working Capital', 'Statement of Changes in Financial Position,' 'Statement of Funds Supplied and Applied,' 'Statement of Funds Generated and Expended,' 'Where Got and Where Gone Statement'.

Although financial statements supply useful information to the management and describe the nature of changes in ownership as a result of the period's productive and commercial activities, these statements fail to mirror the funds changes that have taken place over a given time span. They do not spell out the movement of funds. It is more important to describe the sources from which additional funds were derived and the uses to which these funds were put, because the ultimate success of a business enterprise depends on where got and where gone situations. The funds flow statement is, therefore, prepared to uncover the information which the financial statements fail to describe clearly.

### 1.1 Funds Flow Statement:

The following are the definitions of Funds Flow Statement.

**R.N. Anthony:** "The Funds Flow Statement describes the sources from which additional funds were derived and the uses to which these funds were put.

**R.A. Foulk:** "A Statement of Sources and Applications of Funds is a technical device designed to analyse the changes in the financial condition of a business between two dates."

**Bierman:** "It is a statement which highlights the underlying financial movements and explains the changes of working capital from one point of time to another."



Thus, funds flow statement is a report which summarises the events taking place between the two accounting periods. It spells out the sources from which funds were derived and the uses to which these funds were put. This statement is essentially derived from an analysis of the changes that have occurred in assets and liabilities between two balance sheet dates.

## 1.2 Concept of Fund:

The term 'Funds' has a variety of meanings. Some people take funds synonymous to cash, and to them there is no difference between a Cash Flow Statement prepared on this basis and a Funds Flow Statement. While others include marketable securities and cash to constitute business funds. However, the most common definition of the term 'funds' is 'Working Capital' or 'Net Current Assets'. Thus the difference between Current Assets and Current Liabilities is called 'Funds'.

## 2. SIGNIFICANCE OF FUNDS FLOW STATEMENT

Funds Flow Statement is an important tool of financial analysis. The utility of the funds flow statement is that it enables management, shareholders, investors, creditors and other interested in the enterprise to evaluate the uses of funds by the enterprise and to determine how these uses are financed.

### 2.1 Useful in Decision Making to the Management:

The Funds Flow Statement serves as valuable tool of financial analysis to the finance manager. It helps in understanding the financial stability and efficiency of financial policies of the management.

- i. **Decisions relating to Financing:** With the help of the funds flow statement, the analyst can evaluate the financing pattern of the enterprise. An analysis of the major sources of funds in the past reveals what portion of the growth was financed internally and what portion externally. The statement is also meaningful in judging whether the company has grown at too fast resulting in the growth of current assets and sales beyond the expectations. If trade credit has increased at relatively higher rate, one would wish to evaluate the consequences of slowness in trade payments on the credit standing of the company and its ability of securing finance in future.
- ii. **Decisions on Capitalisation:** The funds flow statement serves as handmaid to the finance manager in deciding the make-up of capitalisation. Estimated uses of funds for new fixed assets, working capital, dividends and repayment of debt are made for each of several future years. Estimates are made of the funds to be provided by operations, and the balance must be obtained by borrowing or issuance of new securities. If the indicated amount of new funds required is greater than what the finance manager thinks possible to raise, then plans for new fixed asset acquisition and the dividend policies are re-examined so that the uses of funds can be brought into balance with the anticipated sources of financing them. In particular, funds statements are very useful in planning intermediate and long-term financing.
- iii. **Reveals the reasons for financial difficulties:** The funds flow statement reveals clearly the causes for the financial difficulties of the company. The difficulties may be due to improper



mix of short and long term sources, unnecessary accumulation of inventory of fixed assets etc. These can be found out by a careful study of the funds flow statement.

- iv. **Other uses:** Funds Flow Statement is useful to the management in the following cases.
- (a) estimating the amount of funds needed for growth;
  - (b) improving the rate of income on assets;
  - (c) planning the temporary investment of idle funds;
  - (d) securing additional working capital when needed;
  - (e) securing economies in the centralised management of cash in organization whose management is decentralised;
  - (f) planning the payment of dividend to shareholders and interest to creditors; and
  - (g) estimating the effects of insufficient cash balance.

## 2.2 Useful as a control device:

The funds flow statement also serves as a control device in that the statement compared with the budgeted figures will show to what extent the funds were put to use according to plan. This enables the finance manager to find out deviation from the planned course of action and take remedial steps to correct the deviations.

## 2.3 Useful to the external parties:

The outside parties can have a clear knowledge about the financial policies that the company has pursued. In the light of the information so supplied by the statement, the outsiders can decide whether or not to invest in the enterprise and on what terms funds have to be invested. The funds statement provides an insight into the financial operations of a business enterprise – an insight immensely valuable to the finance manager in analysing the past and future expansion plans of the enterprise and the impact of these plans on its liquidity. He can detect imbalances in the uses of funds and undertake remedial actions.

Thus, the funds statement draws the attention of the finance manager to problems which call for detailed analysis and immediate action. In view of these, funds flow statement is becoming more popular with management. Even some bank managers make it obligatory for the borrowers to furnish a funds statement along with their annual balance sheet. Now a days many Indian companies are publishing this statement in their annual reports although they are not obliged to do so under the Companies Act.

## 3. FINANCIAL STATEMENTS AND FUNDS FLOW STATEMENT

Financial Statement means the profit and loss account and the balance sheet. All the organizations more particularly, the company form of organisations is required to present the annual financial statements every year. The financial statements differ with the funds flow statement in many ways.

A Funds Flow Statement is a statement measuring the inflows and outflows of net working capital that result from any type of business activity between two dates. An Income Statement is a statement measuring the inflows and outflows of net assets of revenue nature that result from rendering goods or services to customers between two dates.



A Funds Flow Statement has become a useful tool in the hands of financial analyst. That is because the financial statements, i.e., Income Statement measures the flows restricted to transaction relating to rendering of goods and services to customers. It is not capable of any accurate information of the resources from operating unless the income data is converted into funds data. The Balance Sheet is merely a static statement of assets and liabilities as on a particular date. It does not depict the major financial transactions which have resulted in changes in Balance Sheet.

#### 4. PREPARATION OF FUNDS FLOW STATEMENT

In order to prepare a Funds Statement, it is necessary to find out the "sources" and "applications" of funds.

##### 4.1 Sources of funds:

- (A) **Funds from Operations:** Funds from operations is the only internal source of funds. Some adjustments are to be made in calculating funds from operations to the net profit given in the financial statement.

**Calculation of Funds from Operations:** The following procedure is to be followed in the calculation of funds from operations.

1. Start with the Net Profit given in the profit and loss account.
2. Add the following items to the Net Profit as they do not result in outflow of funds.
  - (i) Depreciation on fixed assets.
  - (ii) Preliminary expenses or goodwill etc., written off.
  - (iii) Contribution to debenture redemption fund, transfer to general reserve etc., if they have been deducted before arriving at the figure of net profit.
  - (iv) Provision for taxation and proposed dividend. These may be taken as appropriations of profits or current liabilities for the purposes of Funds Flow Statement. Tax or dividends actually paid are taken as applications of funds. Similarly, interim dividend paid is shown as an application of funds. All these items will be added back to net profit if already deducted, to find funds from operations.
  - (v) Loss on sale of fixed assets.
3. Deduct the following items from Net Profit as they do not increase the funds.
  - (i) Profit on sale of fixed assets, since the full sale proceeds are taken as a separate source of funds and inclusion here will result in duplication.
  - (ii) Profit on revaluation of fixed assets.
  - (iii) Non-operating incomes such as dividend received or accrued rent. These items increase funds but they are non-operating incomes. They will be shown under separate heads as "sources of funds" in the Funds Flow Statement.

In case the Profit and Loss account shows 'Net Loss' this should be taken as an item which decreases the funds.

The following profit and loss accounts for



## 4.2 Applications of funds: ✓

The uses to which funds are put to are called 'applications of funds'. Following are some of the purposes for which funds may be used:

- i **Purchase of fixed assets:** Purchase of fixed assets such as land, buildings, plant, machinery, long-term investments, etc., result in decrease of current assets without any decrease in current liabilities. Hence, there will be an outflow of funds. But in case shares or debentures are issued for acquisition of these fixed assets, there will be no outflow of funds.
- ii **Payment of dividend:** Payment of dividends results in decrease of a fixed liability and therefore, it affects funds. Generally, recommendation of directors regarding declaration of dividend (i.e., proposed dividends) is simply taken as an appropriation of profits and not as an item affecting the working capital.
- iii **Payment of fixed liabilities:** Payment or redemption of redeemable preference shares results in reduction of working capital and hence it is taken as an application of funds.
- iv **Payment of tax liability:** Provision for taxation is generally taken as an appropriation of profits and not as an application of funds. But if the tax has been paid, it will be taken as an application of funds.
- v **Increase in Working Capital:** Working capital is increased, if current assets increase and current liabilities decrease. Funds are required in both the cases i.e., in order to acquire more current assets or paying current liabilities and thus funds are said to have been applied or used.

## 4.3 Statement of Changes in Working Capital:

The increase or decrease in working can be calculated by preparing the schedule of changes in working capital.

'Working capital represents the excess of current assets over current liabilities. Several items of all current assets and current liabilities are the components of working capital. In order to ascertain the working capital at the beginning and at the end of the period and to measure the increase or decrease therein it is necessary to prepare a Statement or Schedule of Changes in Working Capital'.



## Statement of Changes in Working Capital

Particulars	Previous Year	Current Year	Effect on Working Capital	
			Increase	Decrease
	₹	₹	₹	₹
<b>Current Assets:</b> (A)				
Stock				
Debtors				
Cash				
Bank				
Bills Receivable				
Prepaid expenses				
Total (A)				
<b>Current Liabilities</b> (B)				
Creditors				
Bills payable				
Outstanding expenses				
Total (B)				
Working Capital: (A-B)				
Increase/Decrease in Working Capital				
Total				

- While preparing a schedule of changes in working capital it should be noted that:
- (a) an increase in current assets increases working capital;
    - (b) a decrease in current assets decreases working capital;
    - (c) an increase in current liabilities decreases working capital;
    - (d) a decrease in current liabilities increases working capital;
    - (e) an increase in current asset and increase in current liability does not affect working capital.
    - (f) a decrease in current asset and decrease in current liability does not affect working capital.
    - (g) changes in fixed (non-current) assets and fixed (non-current) liabilities affects working capital.
  - The changes in all current assets and current liabilities are merged into one figure only - either an increase or decrease in working capital over the period for which funds statements has been prepared. If the working capital at the end of the period is more than the working capital at the beginning thereof, the difference is expressed as 'increase in working capital'. On the other hand, if the working capital at the end of the period is less than at the commencement, the difference is called 'decrease in working capital'.

**Current Assets:**

The expression 'current assets' denotes those assets which are continually on the move. Since they are constantly in motion, they are also known as the circulating capital of the



business. These assets can or will be converted into cash during a complete operating cycle of the business. Current assets include:

## Funds Flow Statement

- Stock-in-trade or inventories;
- Debtors;
- Payments in advance or prepaid expenses;
- Stores;
- Bills receivable;
- Cash at bank;
- Cash in hand;
- Work-in-progress, etc.

### Current Liabilities:

'Current liabilities' are those liabilities which are to be paid in the near future, i.e., during a complete operating cycle of the business. Such liabilities include:

- Trade creditors.
- Accrued or outstanding expenses. ✓
- Bills payable. ✓
- Income-tax payable. ✓
- Dividends declared; ✓
- Bank overdraft. ✓

Note: Some experts are of the opinion that as bank overdraft has a tendency to become more or less a permanent source of financing, and hence it need not be included among current liabilities.

**Illu.2: Find out changes in working capital from the particulars of Amararaj Batteries Ltd., given below.**

Capital and Liabilities	31-12-11	31-12-12	Assets	31-12-11	31-12-12
Share capital	3,00,000	3,75,000	Machinery	70,000	1,00,000
Trade Creditors	1,06,000	70,000	Stock	1,21,000	1,36,000
Profit & loss a/c	14,000	31,000	Debtors	1,81,000	1,70,000
			Cash	48,000	70,000
	4,20,000	4,76,000		4,20,000	4,76,000

(Nagarjuna, March, 2005)

Solution:

### Schedule of changes in Working Capital

Particulars	2011 ₹	2012 ₹	Changes in the Working Capital	
			Increase ₹	Decrease ₹
Current Assets:				
Cash	48,000	70,000	22,000 ✓	
Debtors	1,81,000	1,70,000		11,000 ✓
	1,21,000	1,36,000	15,000 ✓	
	2,50,000	3,76,000		



#### 4.4 Statement of Sources and Applications of Funds:

- Funds from Operations:** It is an internal sources of funds. Funds from operations are to be calculated as per the method stated above.
- Funds from long-term loans:** Long-term loans such as debentures, borrowings from financial institutions will increase the working capital and therefore, there will be inflow of funds. However, if the debentures have been issued in consideration of some fixed assets, there will be no inflow of funds.
- Sale of fixed assets:** Sale of land, buildings, and long-term investments will result in generation of funds.
- Funds from increase in share capital:** Issue of shares for cash or for any other current asset or in discharge of a current liability is another source of funds. However, shares allotted in consideration of some fixed assets will not result in funds. However, it is recommended that such purchase of fixed assets as well as issue of securities to pay for them be revealed in Funds Flow Statement.
- Decrease in Working Capital:** Decrease in working capital is the result of decrease in current asset or increase in current liabilities. In both the cases inflow of funds takes place. Suppose stock, a current asset reduces from ₹ 15,000 to ₹ 12,000 the decrease of ₹ 3,000 is assumed to be due to the disposal of stock which undoubtedly brings funds into the business. In the same way increase in current liabilities means lesser payment, so retaining funds is also a source.

#### Funds Flow Statement

	₹
<b>Sources of Funds:</b>	
Issue of shares	XXXXX
Issue of debentures	XXXXX
Long-term borrowings	XXXXX
Sale of Fixed assets	XXXXX
Operating profit	XXXXX
Decrease in Working capital*	XXXXX
<b>Total Sources</b>	XXXXX
<b>Applications of Funds:</b>	
Redemption of redeemable Preference shares	XXXXX
Redemption of debentures	XXXXX
Payment of other long-term loans	XXXXX
Purchase of fixed assets	XXXXX
Payment of dividends, taxes, etc.	XXXXX
Increase in working capital	XXXXX
<b>Total Uses</b>	XXXXX

\*Only one will be there.



The Funds Flow Statement can also be prepared in 'T' shape as shown below:

Sources of Funds		Funds Flow Statement	
		Applications of Funds	
Issue of Shares	₹	Redemption of Redeemable Preference Shares	₹
Issue of Debentures	xxx	Redemption of Debentures	Xxx
Long-term Borrowings	xxx	Payment of other Long-term loans	Xxx
Sale of Fixed Assets	xxx	Purchase of Fixed Assets	Xxx
Operating Profit	xxx	Operating loss	Xxx
Decrease in Working Capital*	xxx	Payment of Dividends taxes, etc.	Xxx
	xxx	Increase in Working Capital*	Xxx
			Xxx

\*Only one will be there.

3,06,000  
2,44,000  
62,000

### Treatment of Adjustments:

Sometimes the factors affecting the funds from operations may not be given in the problems directly and there may be some hidden information. As such, some of the transactions have to be dug out using the additional information provided as adjustments to the balance sheet. These items include:

- Provision for tax;
- Proposed dividends;
- Sale or Purchase of fixed assets.

a) **Provision for Tax:** There are two ways of dealing with provision for taxation.

- As a current liability
- As an appropriation of profits.

(i) **As a current liability :** Provision for taxation may be treated as a current liability as it, generally represents an immediate obligation of the company to pay tax to the Government. When it is treated as a current liability, provision for taxation will appear in the schedule of changes in working capital like all other current liabilities and no further treatment required while preparing the funds flow statement. In this case, there is no need to prepare the provision for taxation account and the payment of tax made during the year shall not be shown as an application of funds because in that case both the account involved for the payment of tax, shall be current accounts.

(ii) **Appropriation of profit :** Provision for tax may be taken only as an appropriation of profit. It means that there will no change in working capital position when provision for tax is made since it will involve two fixed liabilities, i.e., Profit and Loss Appropriation Account and Provision for Tax Account. However, when tax is paid, it will be taken as application of funds.



# CASH FLOW ANALYSIS

## SYNOPSIS:

1. Introduction
2. Distinction between Funds Flow and Cash Flow
3. Uses of Cash Flow Statement
4. Preparation of Cash Flow Statement
5. Classification of Cash Flows
6. Presentation of Cash Flow Statement
7. Steps in the preparation of Cash Flow Statement

## 1. INTRODUCTION

An analysis of cash flow of a concern during a specified period presented in the form of a statement is known as cash flow analysis. The cash flow statement can be for the past or can be projection for the future. The cash flow of the concern in the near future, say for a period of six months or one year, can be prepared based on the past trends and expectations of the concern. Such an estimate of future cash flows is better termed 'cash budget'. Cash flow statement generally refers to the statement showing the receipts (inflows) and payments (outflows) of cash during the period covered by two consecutive balance sheets.

George Phillipatos is of the view that, a cash flow is the receipt and the payment of amount of money and that it implies more than our accrual or a financial obligation, hence cash flow is a movement of cash which is real one. Leon Simons observes that a cash flow is frequently and erroneously assumed to include only current operations.

Cash flow analysis enables the management to plan and co-ordinate the financial operations of the enterprise, and furnish the basis for evaluating financing policies. It provides a barometer for ensuring the profitability of the business, and makes financing problems of the business much more manageable.

## 2. DISTINCTION BETWEEN FUNDS FLOW AND CASH FLOW STATEMENT

A cash flow statement is similar in design to a funds flow statement. Both the statements are prepared from the same data, viz., the balance sheets of the concern and additional information made available. Both the statements focus on the financial position of the concern. A cash flow statement differs from a funds flow statement in that the former confines only to cash flows and does not include non-cash flow of funds. For instance, if assets are acquired by the concern by issue of share capital, the transaction should not enter into cash flow statement as there is neither cash payment nor receipt.



### Distinction between Funds Flow Statement and Cash Flow Statement

Basis for Difference		
	Funds Flow	Cash Flow
1. Basis of accounting	It is based on accrued basis of accounting.	It is based on cash basis of accounting.
2. Subject matter	Funds flow statement is concerned with changes in working capital position between two Balance Sheet dates.	Cash Flow statement is concerned only with the changes in cash position.
3. Concept of Fund	Funds Flow statement is based on a wider concept of funds i.e., working capital	Cash Flow statement is based on the narrow concept of funds i.e., cash only which is only one component of working capital.
4. Schedule of Working Capital Changes	A schedule of working capital changes is prepared in the case of Funds Flow Statement.	No such schedule is prepared in the case of Cash Flow Statement.
5. Showing of Balance	It shows the changes of not only cash but also of other current assets like debtors, stock etc.	It shows the change of the opening cash balance into the closing cash balance.
6. Opening and Closing Balance	The statement does not start with any opening of balance of any account and does not even end with any such closing balance of any account.	The statement starts with the opening cash and bank balances and ends with the closing cash and bank balances in most of the cases.
7. Current Liabilities	It shows the change in the current liabilities like sundry creditors, bills payable etc.	It does not show the changes in the current liabilities of the enterprise.
8. Source	In this case, the profit from operation or the net profit is considered as principal sources of fund.	In this case, the main source of cash inflow is considered to be the sales and not the net profit of the business.
9. Utility	Funds Flow statement is useful for long-term financial analysis and solvency of the firm.	Cash Flow Statement as a tool of financial analysis is more useful to the management in cash planning and short-term analysis.

### 3. USES OF CASH FLOW ANALYSIS

A Cash Flow Statement is an important financial tool for management in short-term financial planning. It enables the management to plan and co-ordinate the financial operation of the concern, and furnish the basis for evaluating financing policies. It helps the management in



making the financing problems of the business much more manageable. The following are the uses of cash flow analysis.

1. **Helpful in efficient cash management:** It is very helpful in understanding the cash position of a firm. Since cash is the basis for carrying on business operations, the cash flow statement is very useful in evaluating the current cash position.
2. **Planning of Programmes:** The repayment of loans and replacement of assets is possible through the preparation of cash flow analysis.
3. **Helpful in short-term financial decisions:** The cash flow statement is helpful in making short-term financial decisions relating to liquidity, and the ways and means position of the firm.
4. **Useful in capital budgeting:** Cash flow statement is also useful for making appraisal of different capital investment projects in order to determine their viability and profitability.
5. **Useful as a control device:** It helps the management to understand the past behaviour of the cash cycle, and to control the uses of cash in future. A comparison of the projected cash flow statement helps the management in appraising the inflows and outflows of cash according to the plan and taking the necessary remedial measures.
6. **Useful to outsiders:** Cash flow statement is also very useful to external analysts like bankers, creditors etc., for assessing the short-term solvency of a business concern as well as its capacity to meet its short-term obligations.

## 4. PREPARATION OF CASH FLOW STATEMENT

The Cash Flow Statement is to be presented as per the Accounting Standard – 3 (AS-3) of the Institute of Chartered Accountants of India (ICAI). The ICAI issued AS-3 in June, 1981 for the first time. Later in March, 1997 it revised the standard. The model stipulated in AS-3 is the widely accepted model for presentation of Cash Flow Statements.

All the listed companies/entities whose financial year ends on March, 1996 and thereafter will be required to give Cash Flow Statement along with Balance Sheet and Profit and Loss Account.

### 4.1 Accounting Standard – 3

The standard prescribes two alternative formats for presentation of Cash Flow. The first one is known as Direct Method and the second one is the Indirect Method. The key difference in these two methods lies in their presentation of '**Cash flows from operating activities**'. In the direct method, operating cash receipts and payments are reported directly. In the indirect method, cash flows from operating activities are reported by way of adjustments of the reporting period's net profit reported in the profit and loss account. Users prefer the indirect method because it establishes linkage between the cash flow statement, the balance sheet and the profit



and loss account. SEBI requires listed companies to use the indirect method to present the cash flow statement.

## Cash Flow Analysis

### 4.2 Definitions:

The following are used in this statement with the meaning specified:

- i. **Cash** comprises cash on hand and demand deposits with banks
- ii. **Cash equivalents** are short-term highly liquid investments, that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.
- iii. **Cash flows** are inflows and outflows of cash and cash equivalents.
- iv. **Operating activities** are the principal revenue-producing activities of the enterprise and other activities and are not investing or financing activities.
- v. **Investing activities** are the acquisition and disposal of long-term assets and other investments not included in cash equivalents.
- vi. **Financing activities** are activities that result in changes in the size and composition of the owner's capital (including preference share capital in the case of a company) and borrowings of the enterprise.

### 4.3 Cash and Cash Equivalents:

Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. For an investment to qualify as a cash equivalent, it must be readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition. Investments in shares are excluded from cash equivalents unless they are, in substance, cash equivalents, for example, preference shares of a company acquired shortly before their specified redemption date (provided there is only an insignificant risk of failure of the company to repay the amount at maturity).

Cash flows exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an enterprise rather than part of its operating, investing and financing activities. Cash management includes the investment of excess cash in cash equivalents.

## 5. CLASSIFICATION OF CASH FLOWS

The model prescribed in AS-3, 'Cash Flow Statement, classifies cash flows into three categories: Cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities.



### 5.1 Operating Activities:

Operating activities are those transactions which are considered in the determination of net income. Examples of cash inflows in this category are cash received from debtors for goods and services, interest and dividend received on loan and investment. Examples of cash outflows in this category are cash payments for goods and services; merchandise; wages; interest; taxes; supplies and others.

### 5.2 Investing Activities:

Investing activities include acquisition of long-term or fixed assets; disposal debentures and other securities; lending of money and its subsequent collection. Cash inflows from investing activities generally include cash sales of property, plant, equipment and intangible assets, cash sales of investments in shares, debentures and other securities, cash collection (loan repayments) from borrowers. Cash outflows are purchase of shares, debentures and securities other enterprises, purchase of property, plant, equipment and other long-term assets, loan given to other firms.

### 5.3 Financing Activities:

Financing activities relate to long-term liability and equity capital. A firm engages in financing activities when it obtains resources from owners, returns to owners, borrows resources from creditors and repays amounts borrowed. Cash inflows include proceeds from issue of shares and short-term and long-term borrowings. Cash outflows include repayment of loan and payments to owners, including cash dividends. Repayments of accounts payable or accrued liabilities are not considered under financing activities but are classified as cash outflows under operating activities.

## 6. PRESENTATION OF CASH FLOW STATEMENT

While preparing the cash flow statement, cash flows from operating activities are presented first, followed by investing activities and then financing activities. The individual inflows and outflows relating to investing and financing activities are presented separately in their respective categories. The operating activities section can be presented using the direct method or indirect method. In the direct method cash flow statement is presented primarily on a cash receipts and cash payments basis, instead of on accrual basis. In the indirect method, net income is adjusted for items that affected net income but did not affect cash.



The P/E ratio is used as a going concern method of valuing stock. As long as the company is a viable business entity, its real value is reflected in its profits. A low P/E multiple of a stock is indicative of under-valuation of the stock and vice versa.

### (iii) Pay out ratio:

Dividend pay out ratio is calculated to find the extent to which earnings per share have been retained in the business. It is an important ratio because ploughing back of profits enables a company to grow and pay more dividends in future.

$$\text{Dividend pay out ratio} = \frac{\text{Dividends per share}}{\text{Earnings per year}}$$

It is generally observed that new and growing companies have low pay out ratios because the bulk of their earnings are ploughed back into the business. In contrast, mature and stable concerns tend to have relatively high pay out ratios.

### (iv) Dividend Yield:

This is ratio of dividends per share to the market price per share. This is expressed as:

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Price per share}}$$

This ratio gives the current return to the investor as a percentage of his investment. The dividend yield serves as useful guideline to potential investors who are keen to buy the company's shares and who desire to receive regular dividend as a source of income. Dividend yield of a company varies depending upon its profitability, dividend policy and need for funds to support the operations.

### (v) Return on investment – Du Pont Chart:

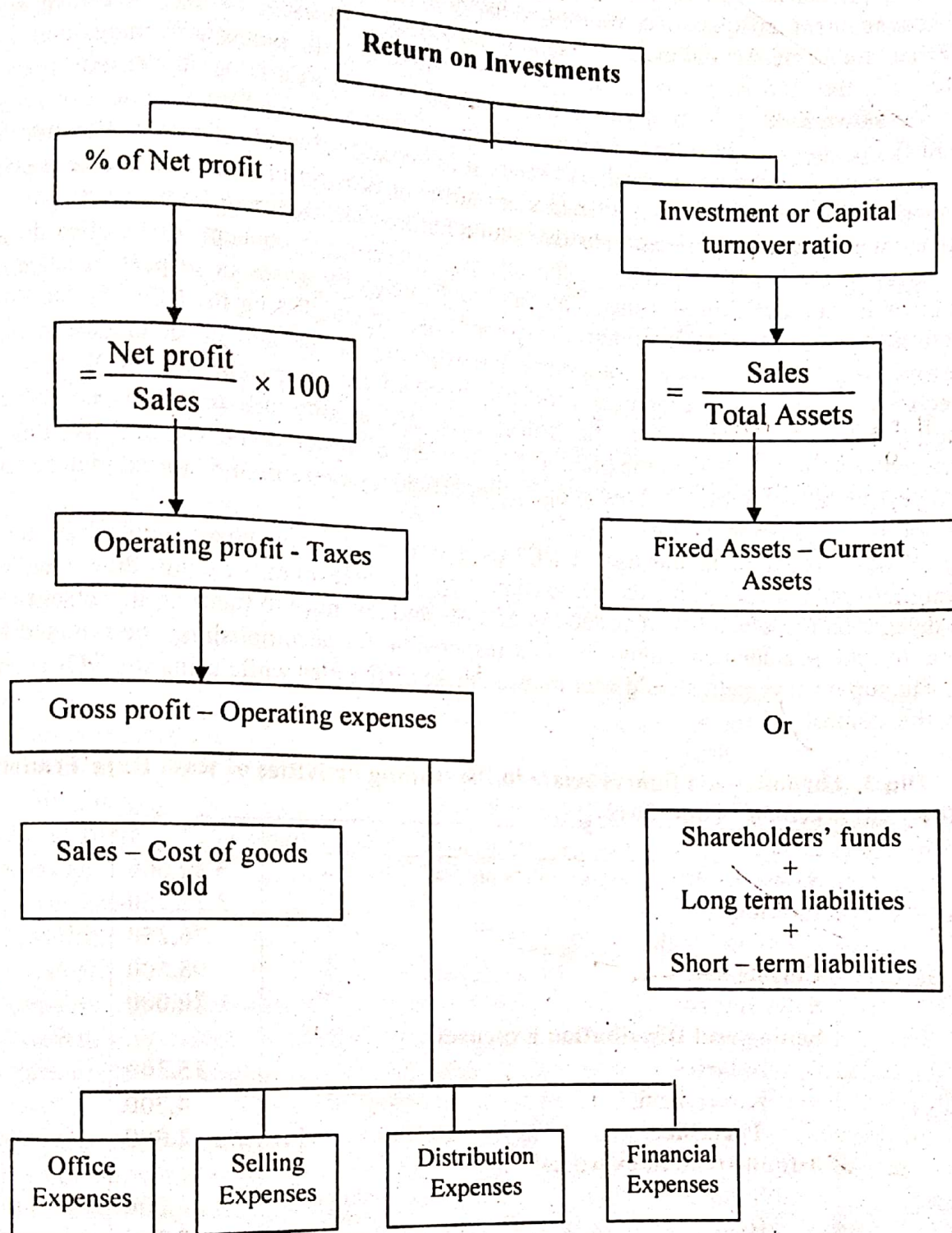
Return-on-investment is one of the most successful yet simple techniques ever conceived to aid both decision making and performance evaluation. This technique was first developed by the Du Pont Company (USA) for analysing ratios and profit margin as sales and shows how these ratios interact to determine profitability of assets. Return on investment can be computed with the help of the following formula:

$$\frac{\text{Sales}}{\text{Total Assets}} \times \frac{\text{Earnings after tax}}{\text{Sales}}$$

Let us go through the chart.



## Du-Pont Chart



The first part of the equation expresses the total-asset turnover. This measures efficiency of asset management. Other things being equal, the greater the index, the more efficiently assets are being managed. The second term of the Du. Pont chart exhibits the return-on-sales ratio. It measures efficiency of expenses control. Since the difference between sales and earnings after taxes represent the expenses and taxes of the company, the smaller these expense, the higher will be the ratio of earnings after taxes to sales. In other words, larger return on sales would mean the management success in controlling expenses.

## UNIT -5 FINANCIAL ANALYSIS THROUGH RATIOS

### Ratio Analysis

Absolute figures are valuable but they standing alone convey no meaning unless compared with another. Accounting ratio show inter-relationships which exist among various accounting data. When relationships among various accounting data supplied by financial statements are worked out, they are known as accounting ratios.

Accounting ratios can be expressed in various ways such as:

1. a pure ratio says ratio of current assets to current liabilities is 2:1 or
2. a rate say current assets are two times of current liabilities or
3. a percentage say current assets are 200% of current liabilities.

Each method of expression has a distinct advantage over the other the analyst will selected that mode which will best suit his convenience and purpose.

### Uses or Advantages or Importance of Ratio Analysis

Ratio Analysis stands for the process of determining and presenting the relationship of items and groups of items in the financial statements. It is an important technique of financial analysis. It is a way by which financial stability and health of a concern can be judged. The following are the main uses of Ratio analysis:

- (a) Useful in financial position analysis: Accounting reveals the financial position of the concern. This helps banks, insurance companies and other financial institution in lending and making investment decisions.
- (ii) Useful in simplifying accounting figures: Accounting ratios simplify, summaries and systematic the accounting figures in order to make them more understandable and in lucid form.
- (iii) Useful in assessing the operational efficiency: Accounting ratios helps to have an idea of the working of a concern. The efficiency of the firm becomes evident when analysis is based on accounting ratio. This helps the management to assess financial requirements and the capabilities of various business units.



(iv) Useful in forecasting purposes: If accounting ratios are calculated for number of years, then a trend is established. This trend helps in setting up future plans and forecasting.

(v) Useful in locating the weak spots of the business: Accounting ratios are of great assistance in locating the weak spots in the business even through the overall performance may be efficient.

(vi) Useful in comparison of performance: Managers are usually interested to know which department performance is good and for that he compare one department with the another department of the same firm. Ratios also help him to make any change in the organisation structure.

**Limitations of Ratio Analysis:** These limitations should be kept in mind while making use of ratio analyses for interpreting the financial statements. The following are the main limitations of ratio analysis.

1. False results if based on incorrect accounting data: Accounting ratios can be correct only if the data (on which they are based) is correct. Sometimes, the information given in the financial statements is affected by window dressing, i. e. showing position better than what actually is.
2. No idea of probable happenings in future: Ratios are an attempt to make an analysis of the past financial statements; so they are historical documents. Now-a-days keeping in view the complexities of the business, it is important to have an idea of the probable happenings in future.
3. Variation in accounting methods: The two firms' results are comparable with the help of accounting ratios only if they follow the some accounting methods or bases. Comparison will become difficult if the two concerns follow the different methods of providing depreciation or valuing stock.
4. Price level change: Change in price levels make comparison for various years difficult.
5. Only one method of analysis: Ratio analysis is only a beginning and gives just a fraction of information needed for decision-making so, to have a comprehensive analysis of financial statements, ratios should be used along with other methods of analysis.
6. No common standards: It is very difficult to by down a common standard for comparison because circumstances differ from concern to concern and the nature of each industry is different.
7. Different meanings assigned to the some term: Different firms, in order to calculate ratio may assign different meanings. This may affect the calculation of ratio in different firms and such ratio when used for comparison may lead to wrong conclusions.
8. Ignores qualitative factors: Accounting ratios are tools of quantitative analysis only. But sometimes qualitative factors may surmount the quantitative aspects. The calculations derived from the ratio analysis under such circumstances may get distorted.
9. No use if ratios are worked out for insignificant and unrelated figure: Accounting ratios should be calculated on the basis of cause and effect relationship. One should be clear as to what cause is and what effect is before calculating a ratio between two figures.

Ratio Analysis: Ratio is an expression of one number in relation to another. It is one of the methods of analyzing financial statements. Ratio analysis facilitates the presentation of the information of the financial statements in simplified and summarized form. Ratio is a measuring of two numerical positions. It expresses the relation between two numeric figures. It can be found by dividing one figure by another. Ratios are expressed in three ways.

1. Jones method
2. Ratio Method
3. Percentage Method

Classification of ratios: All the ratios are broadly classified into four types due to the interest of different parties for different purposes. They are:

1. Profitability ratios
2. Turn over ratios
3. Financial ratios
4. Leverage ratios

1. Profitability ratios: These ratios are calculated to understand the profit positions of the business. These ratios measure the profit earning capacity of an enterprise. These ratios can be related to sales or capital to a certain margin on sales or profitability of capital employed. These ratios are of interest to management. Who are responsible for success and growth of enterprise? Owners as well as financiers are interested in profitability ratios as these reflect the ability of enterprises to generate return on capital employed. Important profitability ratios are:

Profitability ratios in relation to sales: Profitability ratios are almost of importance of concern. These ratios are calculated to focus the end results of the business activities which are the sole criterion of overall efficiency of organisation.

$$1. \text{ Gross profit ratio: } x \frac{\text{gross profit}}{\text{Net sales}} \times 100$$

Note: Higher the ratio the better it is

$$2. \text{ Net profit ratio: } X \frac{\text{Net profit after interest \& Tax}}{\text{Net sales}} \times 100$$

Note: Higher the ratio the better it is

3. Operating ratio (Operating expenses ratio)

$$\frac{\text{Cost of goods sold} + \text{operating expenses}}{\text{Net sales}} \times 100$$

Net: Lower the ratio the better it is

4. Operating profit ratio: 
$$\frac{\text{Operating profit}}{\text{Net sales}} \times 100 = 100 \text{ operating ratio}$$

Note: Higher the ratio the better it is cost of goods sold = opening stock + purchase + wages + other direct expenses - closing stock (or) sales – gross profit.

Operating expenses: = administration expenses + selling, distribution expenses  
operating profit = gross profit – operating expense.

$$\text{Expenses ratio} = \frac{\text{concern expense}}{\text{Net sales}} \times 100$$

Note: Lower the ratio the better it is

Profitability ratios in relation to investments:

1. Return on investments: 
$$\frac{\text{Net profit after tax \& latest depreciation}}{\text{share holders funds}} \times 100$$

Share holders funds = equity share capital + preference share capital + reserves & surpluses + undistributed profits.

Note: Higher the ratio the better it is

2. Return on equity capital: 
$$\frac{\text{Net Profit after tax \& interest - preference dividend}}{\text{equity share capital}} \times 100$$

Note: Higher the ratio the better it is

3. Earnings per share = 
$$\frac{\text{Net profit after tax - preference dividend}}{\text{No. of equity shares}}$$

$$4. \text{ Return on capital employed} = \frac{\text{operating profit}}{\text{capital employed}} \times 100$$

$$5. \text{ Return on total assets} = \frac{\text{N.P. after tax and interest}}{\text{Total Assets}}$$

Here, capital employed = equity share capital + preference share capital + reserves & surpluses + undistributed profits + debentures + public deposit + securities + long term loan + other long term liability – fictitious assets (preliminary expressed & profit & loss account debt balance)

## II. Turn over ratios or activity ratios:

These ratios measure how efficiency the enterprise employees the resources of assets at its command. They indicate the performance of the business. The performance if an enterprise is judged with its save. It means ratios are also laced efficiency ratios.

These ratios are used to know the turn over position of various things in the \_\_\_\_\_. The turnover ratios are measured to help the management in taking the decisions regarding the levels maintained in the assets, and raw materials and in the funds. These ratio s are measured in ratio method.

$$1. \text{ Stock turnover ratio} = \frac{\text{cost of goods sold}}{\text{average stock}}$$

Here,

$$\text{Average stock} = \frac{\text{opening stock} + \text{closing stock}}{2}$$

Note: Higher the ratio, the better it is

$$2. \text{ Working capital turnover ratio} = \frac{\text{sales}}{\text{working capital}}$$

Note: Higher the ratio the better it is working capital = current assets – essential liabilities.

$$3. \text{ Fixed assets turnover ratio} = \frac{\text{sales}}{\text{fixed assets}}$$



Note: Higher the ratio the better it is.

$$3 \text{ (i) Total assets turnover ratio is : } \frac{\text{sales}}{\text{total assets}}$$

Note: Higher the ratio the better it is.

$$4. \text{ Capital turnover ratio} = \frac{\text{Sales}}{\text{Capital employed}}$$

Note: Higher the ratio the better it is

$$5. \text{ Debtors turnover ratio} = \frac{\text{credits sales or sales}}{\text{average debtors}}$$

$$\begin{aligned} 5(i) \text{ Debtors collection period} &= \frac{365 \text{ (or) } 12}{\text{Turnover ratio}} \\ \text{Here,} \\ \text{Average debtors} &= \frac{\text{opening debtors} + \text{closing debtors}}{2} \end{aligned}$$

Debtors = debtors + bills receivable

Note: Higher the ratio the better it is.

$$6. \text{ Creditors turnover ratio} = \frac{\text{credit purchasers or purchases}}{\text{average creditors}}$$

$$6 \text{ (i) creditors collection period} = \frac{365 \text{ (or) } 12}{\text{Creditor turnover ratio}}$$

$$\begin{aligned} \text{Here,} \\ \text{Average creditor} &= \frac{\text{opening} + \text{closing creditors}}{2} \end{aligned}$$

Creditors = creditors + bills payable.

Note: lower the ratio the better it is.

### 3. Financial ratios or liquidity ratios:

Liquidity refers to ability of organisation to meet its current obligation. These ratios are used to measure the financial status of an organisation. These ratios help to the management to make the decisions about the maintained level of current assets & current liabilities of the business. The main purpose to calculate these ratios is to know the short terms solvency of the concern. These ratios are useful to various parties having interest in the enterprise over a short period – such parties include banks. Lenders, suppliers, employees and other.

The liquidity ratios assess the capacity of the company to repay its short term liabilities. These ratios are calculated in ratio method.

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

Note: The ideal ratio is 2:1

i. e., current assets should be twice. The current liabilities.

$$\text{Quick ratio or liquid ratio or acid test ratio:} \quad \frac{\text{quick assets}}{\text{current liabilities}}$$

Quick assets = cash in hand + cash at bank + short term investments + debtors + bills receivables short term investments are also known as marketable securities.

Here the ideal ratio is 1:1 is, quick assets should be equal to the current liabilities.

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

Here,

Absolute liquid assets=cash in hand + cash at bank + short term investments + marketable securities.

Here, the ideal ratio is 0,5:1 or 1:2 it, absolute liquid assets must be half of current liabilities.

Leverage ratio of solvency ratios: Solvency refers to the ability of a business to honour long term obligations like interest and installments associated with long term debts. Solvency ratios

indicate long term stability of an enterprise. These ratios are used to understand the yield rate if the organisation.

Lenders like financial institutions, debenture, holders, banks are interested in ascertaining solvency of the enterprise. The important solvency ratios are:

$$1. \text{ Debt – equity ratio} = \frac{\text{outsiders funds}}{\text{share holders funds}} = \frac{\text{Debt}}{\text{Equity}}$$

Here,

Outsiders funds = Debentures, public deposits, securities, long term bank loans + other long term liabilities.

Share holders funds = equity share capital + preference share capital + reserves & surpluses + undistributed projects.

The ideal ratio is 2:1

$$2. \text{ Preprimary ratio or equity ratio} = \frac{\text{share holder funds}}{\text{total assets}}$$

The ideal ratio is 1:3 or 0.33:1

3. Capital – greasing ratio:

$$= \frac{(\text{equity share capital} + \text{reserves \& surpluses} + \text{undistributed projects})}{(\text{Outsiders funds} + \text{preferenceshare capital})}$$

Here,

higher gearing ratio is not good for a new company or the company in which future earnings are uncertain.

$$11. \text{ Debt to total fund ratio} = \frac{\text{outsiders funds}}{\text{capital employed}}$$

Capital employed = outsiders funds + share holders funds = debt + equity. The ideal ratio is 0.67 :1 or 2:3