PAPER 2

FUNDAMENTALS OF ACCOUNTING (FOA)

FOUNDATION

The Institute of Cost Accountants of India
(Statutory body under an Act of Parliament)
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FOUNDATION : PAPER - 2

FUNDAMENTALS OF ACCOUNTING

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STUDY NOTES

The Institute of Cost Accountants of India
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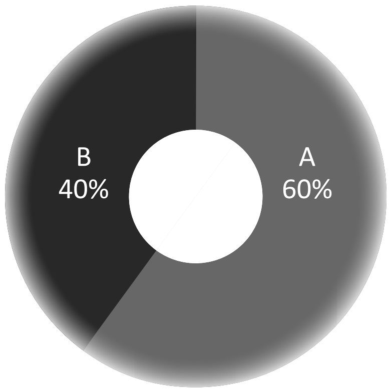
Syllabus

Paper 2: Fundamentals of Accounting (FOA)

Syllabus Structure

A	Fundamentals of Financial Accounting	60%
B	Fundamentals of Cost & Management Accounting	40%



ASSESSMENT STRATEGY

There will be written examination paper of three hours

OBJECTIVES

To gain comprehensive understanding of all aspects relating to financial statements, principles, procedures of accounting and their application to different practical situations

Learning Aims

The Syllabus aims to test the student's ability to:

- Understand and explain the conceptual framework of Accounting
- Prepare Accounts for various entities under different situations
- Acquire basic concepts of Cost & Management Accounting relevant for managerial decision making

Skill sets required

Level A: Requiring the skill levels of knowledge and comprehension

Section A : Fundamentals of Financial Accounting 60%

1. Accounting Process
2. Reconciliation Statement
3. Accounting for Depreciation
4. Preparation of Final Accounts
5. Accounting for Special Transactions

Section B: Fundamentals of Cost & Management Accounting 40%

6. Fundamentals of Cost Accounting
7. Preparation of Cost Statements
8. Fundamentals of Management Accounting – basic knowledge and its application

Section A : Fundamentals of Financial Accounting [60 marks]

1. Accounting Process

(a) Theoretical Framework (meaning, scope and usefulness of Accounting; Generally Accepted Accounting Principles, Concepts and Conventions)

(b) Capital and Revenue transactions- capital and revenue expenditures, capital and revenue receipts

(c) Measurement, Valuation and Accounting estimates

(d) Double entry system, Books of prime entry, Subsidiary Books

(e) Recording of Cash and Bank transactions

(f) Preparation of Ledger Accounts

(g) Preparation of Trial Balance- interpretation and usefulness

(h) Rectification of Errors

(i) Opening entries, Transfer entries, Adjustment entries, Closing entries

2. Reconciliation Statements

(a) Bank Reconciliation Statement

(b) Receivables / Payables Reconciliation Statement

(c) Stock Reconciliation Statement

3. Accounting for Depreciation

(a) Depreciation Policy

(b) Methods, computation and Accounting treatment

4. Preparation of Final Accounts:

(a) Of a Profit making concern (for sole proprietorship concern and partnership firm only)

(i) Preparation of Trading Account, Profit & Loss Account and Balance Sheet

(ii) Accounting treatment of bad debts, reserve for bad and doubtful debts, provision for discount on debtors and provision for discount on creditors

(b) Of a Not-for-Profit making concern

(i) Preparation of Receipts and Payments Account;

(ii) Preparation of Income and Expenditure Account

(iii) Preparation of Balance Sheet

(c) Under Single Entry System including conversion of single entry into double entry system (basic level)

(i) Concept of Single Entry System and preparation of Statement showing Profit and Loss , Statement of Affairs

(ii) Conversion of Single Entry System into Double Entry System of Accounting

5. Accounting for Special Transactions

(a) Bills of Exchange

(b) Consignment

(c) Joint Venture

(d) Sale of goods on approval or return basis

Section B: Fundamentals of Cost & Management Accounting[40 marks]

6. Fundamentals of Cost Accounting

(a) Cost and Management Accounting – Generally Accepted Cost Accounting Principles

(b) Accounting for Material cost (including Accounting of Inventory – LIFO, FIFO, Weighted Average Cost)

(c) Accounting for Labour costs, Direct Expenses and Overheads

7. Preparation of Cost Statements

(a) Cost Data collection, Cost Sheet formats,

(b) Preparation of Cost Sheets (historical cost sheets and estimated cost sheets)

8. Fundamentals of Management Accounting

(a) Marginal Costing and Break-even analysis – basic knowledge

(b) Application of Marginal Costing for decision-making

Content

FUNDAMENTALS OF ACCOUNTING

Study Note 4 : Preparation of Final Accounts

Study Note 5 : Accounting for Special Transactions

Study Note 6 : Fundamentals of Cost Accounting

Study Note 7 : Preparation of Cost Statements

Study Note 8 : Fundamentals of Management Accounting

Study Note - 1

ACCOUNTING PROCESS

This Study Note includes

1.1 INTRODUCTION

Business is an economic activity undertaken with the motive of earning profits and to maximize the wealth for the owners. Business cannot run in isolation. Largely, the business activity is carried out by people coming together with a purpose to serve a common cause. This team is often referred to as an organization, which could be in different forms such as sole proprietorship, partnership, body corporate etc. The rules of business are based on general principles of trade, social values, and statutory framework encompassing national or international boundaries. While these variables could be different for different businesses, different countries etc., the basic purpose is to add value to a product or service to satisfy customer demand.

The business activities require resources (which are limited & have multiple uses) primarily in terms of material, labour, machineries, factories and other services. The success of business depends on how efficiently and effectively these resources are managed. Therefore, there is a need to ensure the businessman tracks the use of these resources. The resources are not free and thus one must be careful to keep an eye on cost of acquiring them as well.

As the basic purpose of business is to make profit, one must keep an ongoing track of the activities undertaken in course of business. Two basic questions would have to be answered:

(a) What is the result of business operations? This will be answered by finding out whether it has made profit or loss.

(b) What is the position of the resources acquired and used for business purpose? How are these resources financed? Where the funds come from?

The answers to these questions are to be found continuously and the best way to find them is to record all the business activities. Recording of business activities has to be done in a scientific manner so that they reveal correct outcome. The science of book-keeping and accounting provides an effective solution. It is a branch of social science. This study material aims at giving a platform to the students to understand basic principles and concepts, which can be applied to accurately measure performance of business. After studying the various chapters included herein, the student should be able to apply the principles, rules, conventions and practices to different business situations like trading, manufacturing or service.

1.2 DEFINITIONS

Definition of Accounting

Definition by the American Institute of Certified Public Accountants (Year 1961):

"Accounting is 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 result thereof".

Definition by the American Accounting Association (Year 1966):

"The process of identifying, measuring and communicating economic information to permit informed judgments and decisions by the users of accounting".

(a) Objectives of Accounting

(i) Providing Information to the Users for Rational Decision-making

The primary objective of accounting is to provide useful information for decision-making to stakeholders such as owners, management, creditors, investors, etc. Various outcomes of business activities such as costs, prices, sales volume, value under ownership, return of investment, etc. are measured in the accounting process. All these accounting measurements are used by stakeholders (owners, investors, creditors/bankers, etc.) in course of business operation. Hence, accounting is identified as 'language of business'.

(ii) Systematic Recording of Transactions

To ensure reliability and precision for the accounting measurements, it is necessary to keep a systematic record of all financial transactions of a business enterprise which is ensured by book-keeping. These financial records are classified, summarized and reposted in the form of accounting measurements to the users of accounting information i.e., stakeholder.

(iii) Ascertainment of Results of above Transactions

'Profit/loss' is a core accounting measurement. It is measured by preparing profit and loss account for a particular period. Various other accounting measurements such as different types of revenue expenses and revenue incomes are considered for preparing this profit and loss account. Difference between these revenue incomes and revenue expenses is known as result of business transactions identified as profit/loss. As this measure is used very frequently by stockholders for rational decision-making, it has become the objective of accounting.

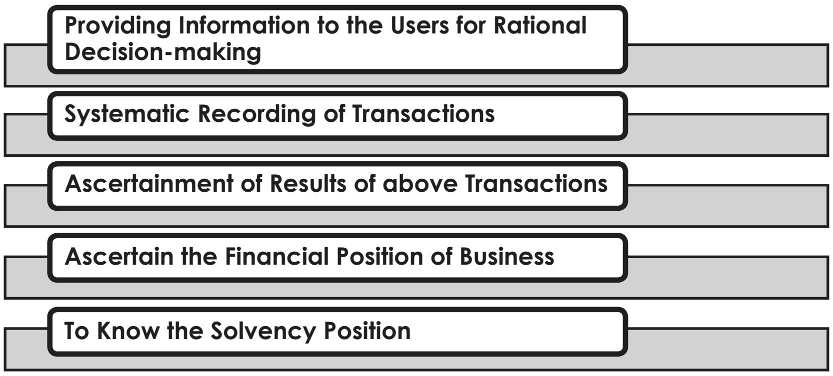
For example, Income Tax Act requires that every business should have an accounting system that can measure taxable income of business and also explain nature and source of every item reported in Income Tax Return.

(iv) Ascertain the Financial Position of Business

'Financial position' is another core accounting measurement. Financial position is identified by preparing a statement of ownership i.e., Assets and Owings i.e., liabilities of the business as on a certain date. This statement is popularly known as balance sheet. Various other accounting measurements such as different types of assets and different types of liabilities as existed at a particular date are considered for preparing the balance sheet. This statement may be used by various stakeholders for financing and investment decision.

(v) To Know the Solvency Position

Balance sheet and profit and loss account prepared as above give useful information to stockholders regarding concerns potential to meet its obligations in the short run as well as in the long run.



Function of Accounting

The main functions of accounting are as follows:

(a) **Measurement**: Accounting measures past performance of the business entity and depicts its current financial position.

(b) **Forecasting**: Accounting helps in forecasting future performance and financial position of the enterprise using past data.

(c) **Decision-making**: Accounting provides relevant information to the users of accounts to aid rational decision-making.

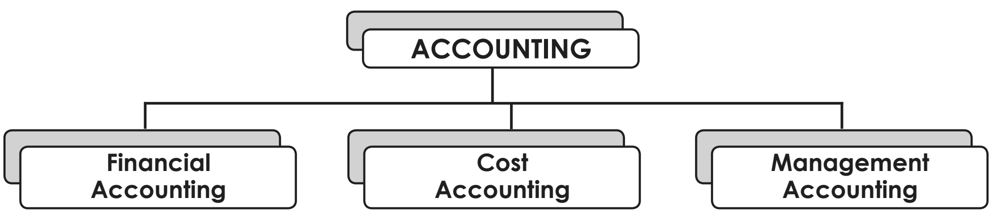
(d) **Comparison & Evaluation**: Accounting assesses performance achieved in relation to targets and discloses information regarding accounting policies and contingent liabilities which play an important role in predicting, comparing and evaluating the financial results.

(e) **Contro**l: Accounting also identifies weaknesses of the operational system and provides feedbacks regarding effectiveness of measures adopted to check such weaknesses.

(f) **Government Regulation and Taxation**: Accounting provides necessary information to the government to exercise control on die entity as well as in collection of tax revenues.

Accounting – Classification

The various sub-fields of the accounting are:



1.	Financial Accounting	Determining the financial results for the period and the state of affairs on the last day the accounting period.	Stewardship Accounting
2.	Cost Accounting	Information generation for Controlling operations with a view to maximizing efficiency and profit.	Control Accounting
3.	Management Accounting	Accounting to assist management in planning and decision making.	Decision Accounting

(a) Financial Accounting

It is commonly termed as Accounting. The American Institute of Certified Public Accountants defines Accounting as "an art of recoding, 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."

(b) Cost Accounting

According to the Chartered Institute of Management Accountants (CIMA), Cost Accountancy is defined as "application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability as well as the presentation of information for the purpose of managerial decision-making."

(c) Management Accounting

Management Accounting is concerned with the use of Financial and Cost Accounting information to managers within organizations, to provide them with the basis in making informed business decisions that would allow them to be better equipped in their management and control functions.

Difference between Management Accounting and Financial Accounting

The significant difference between Management Accounting and Financial Accounting are :

Management Accounting	Financial Accounting
1. Management Accounting is primarily based on the data available from Financial Accounting.	1. Financial Accounting is based on the monetary transactions of the enterprise.
2. It provides necessary information to the management to assist them in the process of planning, controlling, performance evaluation and decision making.	2. Its main focus is on recording and classifying monetary transactions in the books of accounts and preparation of financial statements at the end of every accounting period.
3. Reports prepared in Management Accounting are meant for management and as per management requirement.	3. Reports as per Financial Accounting are meant for the management as well as for shareholders and creditors of the concern.
4. Reports may contain both subjective and objective figures.	4. Reports should always be supported by relevant figures and it emphasizes on the objectivity of data.
5. Reports are not subject to statutory audit.	5. Reports are always subject to statutory audit.
6. It evaluates the sectional as well as the entire performance of the business.	6. It ascertains , evaluates and exhibits the financial strength of the whole business.

1.3 BOOK-KEEPING

As defined by Carter, 'Book-keeping is a science and art of correctly recording in books-of accounts all those business transactions that result in transfer of money or money's worth'.

Book-keeping is an activity concerned with recording and classifying financial data related to business operation in order of its occurrence.

Book-keeping is a mechanical task which involves:

- Collection of basic financial information.
- Identification of events and transactions with financial character i.e., economic transactions.
- Measurement of economic transactions in terms of money.

- Recording financial effects of economic transactions in order of its occurrence.
- Classifying effects of economic transactions.
- Preparing organized statement known as trial balance.

The distinction between book-keeping and accounting is given below:

Distinction between Book-keeping and Accounting

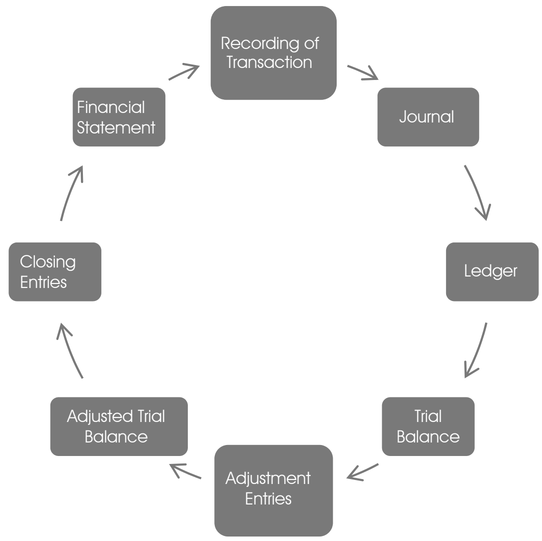
	Book-Keeping		Accounting
1.	Output of book-keeping is an input for accounting.	1.	Output of accounting permit informed judgments and decisions by the user of accounting information.
2.	Purpose of book-keeping is to keep systematic record of transactions and events of financial character in order of its occurrence.	2.	Purpose of accounting is to find results of operating activity of business and to report financial strength of business.
3.	Book-keeping is a foundation of accounting.	3.	Accounting is considered as a language of business.
4.	Book-keeping is carried out by junior staff.	4.	Accounting is done by senior staff with skill of analysis and interpretation.
5.	Objects of book-keeping is to summarize the cumulative effect of all economic transactions of business for a given period by maintaining permanent record of each business transaction with its evidence and financial effects on accounting variable.	5.	Object of accounting is not only bookkeeping but also analyzing and interpreting reported financial information for informed decisions.

1.4 ACCOUNTING CYCLE

When complete sequence of accounting procedure is done which happens frequently and repeated in same directions during an accounting period, the same is called an accounting cycle.

Steps/Phases of Accounting Cycle

The steps or phases of accounting cycle can be developed as under:



ACCOUNTING CYCLE

(a) Recording of Transaction : As soon as a transaction happens it is at first recorded in subsidiary book.

(b) Journal : The transactions are recorded in Journal chronologically.

(c) Ledger : All journals are posted into ledger chronologically and in a classified manner.

(d) Trial Balance : After taking all the ledger account closing balances, a Trial Balance is prepared at the end of the period for the preparations of financial statements.

(e) Adjustment Entries : All the adjustments entries are to be recorded properly and adjusted accordingly before preparing financial statements.

(f) Adjusted Trial Balance : An adjusted Trail Balance may also be prepared.

(g) Closing Entries : All the nominal accounts are to be closed by the transferring to Trading Account and Profit and Loss Account.

(h) Financial Statements : Financial statement can now be easily prepared which will exhibit the true financial position and operating results.

1.5 BASIC ACCOUNTING TERMS

In order to understand the subject matter clearly, one must grasp the following common expressions always used in business accounting. The aim here is to enable the student to understand with these often used concepts before we embark on accounting procedures and rules. You may note that these terms can be applied to any business activity with the same connotation.

(i) **Transaction:** It means an event or a business activity which involves exchange of money or money's worth between parties. The event can be measured in terms of money and changes the financial position of a person e.g. purchase of goods would involve receiving material and making payment or creating an obligation to pay to the supplier at a future date. Transaction could be a cash transaction or credit transaction. When the parties settle the transaction immediately by making payment in cash or by cheque, it is called a cash transaction. In credit transaction, the payment is settled at a future date as per agreement between the parties.

(ii) **Goods/Services :** These are tangible article or commodity in which a business deals. These articles or commodities are either bought and sold or produced and sold. At times, what may be classified as 'goods' to one business firm may not be 'goods' to the other firm. e.g. for a machine manufacturing company, the machines are 'goods' as they are frequently made and sold. But for the buying firm, it is not 'goods' as the intention is to use it as a long term resource and not sell it. Services are intangible in nature which are rendered with or without the object of earning profits.

(iii) **Profit:** The excess of Revenue Income over expense is called profit. It could be calculated for each transaction or for business as a whole.

(iv) **Loss:** The excess of expense over income is called loss. It could be calculated for each transaction or for business as a whole.

(v) **Asset:** Asset is a resource owned by the business with the purpose of using it for generating future profits. Assets can be Tangible and Intangible. Tangible Assets are the Capital assets which have some physical existence. They can, therefore, be seen, touched and felt, e.g. Plant and Machinery, Furniture and Fittings, Land and Buildings, Books, Computers, Vehicles, etc. The capital assets which have no physical existence and whose value is limited by the rights and anticipated benefits that possession confers upon the owner are known as Intangible Assets. They cannot be seen or felt although they help to generate revenue in future, e.g. Goodwill, Patents, Trade-marks, Copyrights, Brand Equity, Designs, Intellectual Property, etc.

Assets can also be classified into Current Assets and Non-Current Assets.

Current Assets – An asset shall be classified as Current when it satisfies any of the following :

(a) It is expected to be realised in, or is intended for sale or consumption in the Company's normal Operating Cycle,

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

(c) It is due to be realised within 12 months after the Reporting Date, or

(d) It is Cash or Cash Equivalent unless it is restricted from being exchanged or used to settle a Liability for at least 12 months after the Reporting Date.

Non-Current Assets – All other Assets shall be classified as Non-Current Assets. e.g. Machinery held for long term etc.

(vi) **Liability:** It is an obligation of financial nature to be settled at a future date. It represents amount of money that the business owes to the other parties. E.g. when goods are bought on credit, the firm will create an obligation to pay to the supplier the price of goods on an agreed future date or when a loan is taken from bank, an obligation to pay interest and principal amount is created. Depending upon the period of holding, these obligations could be further classified into Long Term on non-current liabilities and Short Term or current liabilities.

Current Liabilities – A liability shall be classified as Current when it satisfies any of the following :

(a) It is expected to be settled in the Company's normal Operating Cycle,

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

(c) It is due to be settled within 12 months after the Reporting Date, or

(d) The Company does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date (Terms of a Liability that could, at the option of the counterparty, result in its settlement by the issue of Equity Instruments do not affect its classification)

Non-Current Liabilities – All other Liabilities shall be classified as Non-Current Liabilities. E.g. Loan taken for 5 years, Debentures issued etc.

(vii) **Internal Liability :** These represent proprietor's equity, i.e. all those amount which are entitled to the proprietor, e.g., Capital, Reserves, Undistributed Profits, etc.

(viii) **Working Capital :** In order to maintain flows of revenue from operation, every firm needs certain amount of current assets. For example, cash is required either to pay for expenses or to meet obligation for service received or goods purchased, etc. by a firm. On identical reason, inventories are required to provide the link between production and sale. Similarly, Accounts Receivable generate when goods are sold on credit. Cash, Bank, Debtors, Bills Receivable, Closing Stock, Prepayments etc. represent current assets of firm. The whole of these current assets form the working capital of a firm which is termed as Gross Working Capital.

Gross Working capital = Total Current Assets

= Long term internal liabilities plus long term debts plus the current liabilities minus the amount blocked in the fixed assets.

There is another concept of working capital. Working capital is the excess of current assets over current liabilities. That is the amount of current assets that remain in a firm if all its current liabilities are paid. This concept of working capital is known as Net Working Capital which is a more realistic concept.

Working Capital (Net) = Current Assets – Currents Liabilities.

(ix) **Contingent Liability :** It represents a potential obligation that could be created depending on the outcome of an event. E.g. if supplier of the business files a legal suit, it will not be treated as a liability because no obligation is created immediately. If the verdict of the case is given in favour of the supplier then only the obligation is created. Till that it is treated as a contingent liability. Please note that contingent liability is not recorded in books of account, but disclosed by way of a note to the financial statements.

(x) **Capital :** It is amount invested in the business by its owners. It may be in the form of cash, goods, or any other asset which the proprietor or partners of business invest in the business activity. From business point of view, capital of owners is a liability which is to be settled only in the event of closure or transfer of the business. Hence, it is not classified as a normal liability. For corporate bodies, capital is normally represented as share capital.

(xi) **Drawings :** It represents an amount of cash, goods or any other assets which the owner withdraws from business for his or her personal use. e.g. if the life insurance premium of proprietor or a partner of business is paid from the business cash, it is called drawings. Drawings will result in reduction in the owners' capital. The concept of drawing is not applicable to the corporate bodies like limited companies.

(xii) **Net worth :** It represents excess of total assets over total liabilities of the business. Technically, this amount is available to be distributed to owners in the event of closure of the business after payment of all liabilities. That is why it is also termed as Owner's equity. A profit making business will result in increase in the owner's equity whereas losses will reduce it.

(xiii) **Non-current Investments :** Non-current Investments are investments which are held beyond the current period as to sale or disposal. e. g. Fixed Deposit for 5 years.

(xiv) **Current Investments :** Current investments are investments that are by their nature readily realizable and are intended to be held for not more than one year from the date on which such investment is made. e. g. 11 months Commercial Paper.

(xv) **Debtor :** The sum total or aggregate of the amounts which the customer owe to the business for purchasing goods on credit or services rendered or in respect of other contractual obligations, is known as Sundry Debtors or Trade Debtors, or Trade Payable, or Book-Debts or Debtors. In other words, Debtors are those persons from whom a business has to recover money on account of goods sold or service rendered on credit. These debtors may again be classified as under:

(i) Good debts : The debts which are sure to be realized are called good debts.

(ii) Doubtful Debts : The debts which may or may not be realized are called doubtful debts.

(iii) Bad debts : The debts which cannot be realized at all are called bad debts.

It must be remembered that while ascertaining the debtors balance at the end of the period certain adjustments may have to be made e.g. Bad Debts, Discount Allowed, Returns Inwards, etc.

(xvi) **Creditor :** A creditor is a person to whom the business owes money or money's worth. e.g. money payable to supplier of goods or provider of service. Creditors are generally classified as Current Liabilities.

(xvii) **Capital Expenditure :** This represents expenditure incurred for the purpose of acquiring a fixed asset which is intended to be used over long term for earning profits there from. e. g. amount paid to buy a computer for office use is a capital expenditure. At times expenditure may be incurred for enhancing the production capacity of the machine. This also will be a capital expenditure. Capital expenditure forms part of the Balance Sheet.

(xviii) **Revenue expenditure :** This represents expenditure incurred to earn revenue of the current period. The benefits of revenue expenses get exhausted in the year of the incurrence. e.g. repairs, insurance, salary & wages to employees, travel etc. The revenue expenditure results in reduction in profit or surplus. It forms part of the Income statement.

(xix) **Balance Sheet :** It is the statement of financial position of the business entity on a particular date. It lists all assets, liabilities and capital. It is important to note that this statement exhibits the state of affairs of the business as on a particular date only. It describes what the business owns and what the business owes to outsiders (this denotes liabilities) and to the owners (this denotes capital). It is prepared after incorporating the resulting profit/losses of Income statement.

(xx) **Profit and Loss Account or Income Statement :** This account shows the revenue earned by the business and the expenses incurred by the business to earn that revenue. This is prepared usually for a particular accounting period, which could be a month, quarter, a half year or a year. The net result of the Profit and Loss Account will show profit earned or loss suffered by the business entity.

(xxi) **Trade Discount :** It is the discount usually allowed by the wholesaler to the retailer computed on the list price or invoice price. e.g. the list price of a TV set could be ₹ 15000. The wholesaler may allow 20% discount thereof to the retailer. This means the retailer will get it for ₹ 12000 and is expected to sale it to final customer at the list price. Thus the trade discount enables the retailer to make profit by selling at the list price. Trade discount is not recorded in the books of accounts. The transactions are recorded at net values only. In above example, the transaction will be recorded at ₹12000 only.

(xxii) **Cash Discount :** This is allowed to encourage prompt payment by the debtor. This has to be recorded in the books of accounts. This is calculated after deducting the trade discount. e.g. if list price is ₹ 15000 on which a trade discount of 20% and cash discount of 2% apply, then first trade discount of ₹ 3000 (20% of ₹ 15000) will be deducted and the cash discount of 2% will be calculated on ₹12000 (₹15000 – ₹ 3000). Hence the cash discount will be ₹ 240 (2% of ₹ 12000) and net payment will be ₹ 11,760 (₹12,000 - ₹ 240)

Illustration 1.

Fill in the blanks:

(a) The cash discount is allowed by ——— to the ———.

(b) Profit means excess of ——— over ———.

(c) Debtor is a person who ——— to others.

(d) In a credit transaction, the buyer is given a ——— facility.

(e) The fixed asset is generally held for ———.

(f) The current liabilities are obligations to be settled in ——— period.

(g) The withdrawal of money by the owner of business is called ———

(h) The amount invested by owners into business is called ———.

(i) Transaction means exchange of money or money's worth for ———.

(j) The net result of an income statement is ——— or ———.

(k) The ——— shows financial position of the business as on a particular date.

(l) The ——— discount is never entered in the books of accounts.

(m) Vehicles represent ——— expenditure while repairs to vehicle would mean ——— expenditure.

(n) Net worth is excess of —— ——— over ——— ———.

Solution:

(a) creditor, debtor

(b) income, expenditure

(c) Owes

(d) Credit

(e) Longer period

(f) Short

(g) Drawings

(h) Capital

(i) Value

(j) Profit, loss

(k) Balance sheet

(l) Trade

(m) Capital, revenue

(n) Total assets, total liabilities

Illustration 2.

Give one word or a term used to describe the following:-

(a) An exchange of benefit for value

(b) A transaction without immediate cash settlement.

(c) Commodities in which a business deals.

(d) Excess of expenditure over income.

(e) Things of value owned by business to earn future profits.

(f) Amount owed by business to others.

(g) An obligation which may or may not materialise.

(h) An allowance by a creditor to debtor for prompt payment.

(i) Assets like brand value, copy rights, goodwill

Solution:

(a) Transaction, (b) credit transaction, (c) goods, (d) loss, (e) Assets, (f) liability, (g) contingent liability, (h) cash discount, (i) intangible assets

1.6. GENERALLY ACCEPTED ACCOUNTING PRINCIPLES

A widely accepted set of rules, conventions, standards, and procedures for reporting financial information, as established by the Financial Accounting Standards Board are called Generally Accepted Accounting Principles (GAAP). These are the common set of accounting principles, standards and procedures that companies use to compile their financial statements. GAAP are a combination of standards (set by policy boards) and simply the commonly accepted ways of recording and reporting accounting information.

GAAP is to be followed by companies so that investors have a optimum level of consistency in the financial statements they use when analyzing companies for investment purposes. GAAP cover such aspects like revenue recognition, balance sheet item classification and outstanding share measurements.

1.7 ACCOUNTING CONCEPTS AND CONVENTIONS

As seen earlier, the accounting information is published in the form of financial statements. The three basic financial statements are

(i) The Profit & Loss Account that shows net business result i.e. profit or loss for a certain periods

(ii) The Balance Sheet that exhibits the financial strength of the business as on a particular dates

(iii) The Cash Flow Statement that describes the movement of cash from one date to the other.

As these statements are meant to be used by different stakeholders, it is necessary that the information contained therein is based on definite principles, concrete concepts and well accepted convention.

Accounting principles are basic guidelines that provide standards for scientific accounting practices and procedures. They guide as to how the transactions are to be recorded and reported. They assure uniformity and understandability. Accounting concepts lay down the foundation for accounting principles. They are ideas essentially at mental level and are self-evident. These concepts ensure recording of financial facts on sound bases and logical considerations. Accounting conventions are methods or procedures that are widely accepted. When transactions are recorded or interpreted, they follow the conventions. Many times, however, the terms-principles, concepts and conventions are used interchangeably.

Professional Accounting Bodies have published statements of these concepts. Over years, many of these concepts are being challenged as outlived. Yet, no major deviations have been made as yet. Path breaking ideas have emerged and the accounting standards of modern days do require companies to record and report transactions which may not be necessarily based on concepts that are in vogue for long. It is essential to study accounting from the basic levels and understand these concepts in entirety.

Theory Base of Accounting

Basic Assumptions

(a) Basic Principles
(b) Going Concern Concept
(c) Money Measurement Concept
(d) Accounting Period Concept
(e) Accrual Concept

Basic Principles

(a) Revenue Realization Concept
(b) Matching Concept
(c) Full Disclosure Concept
(d) Dual Aspect Concept
(e) Verifiable Objective Evidence Concept
(f) Historical Cost Concept
(g) Balance Sheet Equation Concept

Modifying Principles

(a) Materiality Concept
(b) Consistency Concept
(c) Conservatism Concept
(d) Timeliness Concept
(e) Industry Practice Concept

A. BASIC ASSUMPTIONS

(a) Business Entity Concept

This concept explains that the business is distinct from the proprietor. Thus, the transactions of business only are to be recorded in the books of business.

(b) Going Concern Concept

This concept assumes that the business has a perpetual succession or continued existence.

(c) Money Measurement Concept

According to this concept only those transactions which are expressed in money terms are to be recorded in accounting books.

(d) The Accounting Period Concept

Businesses are living, continuous organisms. The splitting of the continuous stream of business events into time periods is thus somewhat arbitrary. There is no significant change just because one accounting period ends and a new one begins. This results into the most difficult problem of accounting of how to measure the net income for an accounting period. One has to be careful in recognizing revenue and expenses for a particular accounting period. Subsequent section on accounting procedures will explain how one goes about it in practice.

(e) The Accrual Concept

The accrual concept is based on recognition of both cash and credit transactions. In case of a cash transaction, owner's equity is instantly affected as cash either is received or paid. In a credit transaction, however, a mere obligation towards or by the business is created. When credit transactions exist (which is generally the case), revenues are not the same as cash receipts and expenses are not same as cash paid during the period.

Today's accounting systems based on accrual concept are called as Accrual system or mercantile system of accounting.

B. BASIC PRINCIPLES

(a) Realization Concept

This concept speaks about recording of only those transactions which are actually realized. For example Sale or Profit on sales will be taken into account only when money is realized i.e. either cash is received or legal ownership is transferred.

(b) Matching Concept

It is referred to as matching of expenses against incomes. It means that all incomes and expenses relating to the financial period to which the accounts relate should be taken in to account without regard to the date of receipts or payment.

(c) Full Disclosure Concept

As per this concept, all significant information must be disclosed. Accounting data should properly be clarified, summarized, aggregated and explained for the purpose of presenting the financial statements which are useful for the users of accounting information. Practically, this principle emphasizes on the materiality, objectivity and consistency of accounting data which should disclose the true and fair view of the state of affairs of a firm.

(d) Duality Concept

According to this concept every transaction has two aspects i.e. the benefit receiving aspect and benefit giving aspect. These two aspects are to be recorded in the books of accounts.

(e) Verifiable Objective Evidence Concept

Under this principle, accounting data must be verified. In other words, documentary evidence of transactions must be made which are capable of verification by an independent respect. In the absence of such verification, the data which will be available will neither be reliable nor be dependable, i.e., these should be biased data. Verifiability and objectivity express dependability, reliability and trustworthiness that are very useful for the purpose of displaying the accounting data and information to the users.

(f) Historical Cost Concept

Business transactions are always recorded at the actual cost at which they are actually undertaken. The basic advantage is that it avoids an arbitrary value being attached to the transactions. Whenever an asset is bought, it is recorded at its actual cost and the same is used as the basis for all subsequent accounting purposes such as charging depreciation on the use of asset, e.g. if a production equipment is bought for ₹ 1.50 crores, the asset will be shown at the same value in all future periods when disclosing the original cost. It will obviously be reduced by the amount of depreciation, which will be calculated with reference to the actual cost. The actual value of the equipment may rise or fall subsequent to the purchase, but that is considered irrelevant for accounting purpose as per the historical cost concept.

The limitation of this concept is that the balance sheet does not show the market value of the assets owned by the business and accordingly the owner's equity will not reflect the real value. However, on an ongoing basis, the assets are shown at their historical costs as reduced by depreciation.

(g) Balance Sheet Equation Concept

Under this principle, all which has been received by us must be equal to that has been given by us and needless to say that receipts are clarified as debits and giving is clarified as credits. The basic equation, appears as :-

Debit = Credit

Naturally every debit must have a corresponding credit and vice-e-versa. So, we can write the above in the following form –

Expenses + Losses + Assets = Revenues + Gains + Liabilities

And if expenses and losses, and incomes and gains are set off, the equation takes the following form – Asset = Liabilities

or, Asset = Equity + External Liabilities

i.e., the Accounting Equation.

C. MODIFYING PRINCIPLES

(a) The Concept of Materiality

The materiality could be related to information, amount, procedure and nature. Error in description of an asset or wrong classification between capital and revenue would lead to materiality of information. Say, If postal stamps of ₹ 500 remain unused at the end of accounting period, the same may not be considered for recognizing as inventory on account of materiality of amount. Certain accounting treatments depend upon procedures laid down by accounting standards. Some transactions are by nature material irrespective of the amount involved. e.g. audit fees, loan to directors.

(b) Consistency Concept

This Concept says that the Accounting practices should not change or must remain unchanged over a period of several years.

(c) Conservatism Concept

Conservatism concept states that when alternative valuations are possible, One should select the alternative which fairly represents economic substance of transactions but when such choice is not clear select the alternative that is least likely to overstate net assets and net income.

It provides for all known expenses and losses by best estimates if amount is not known with certainty, but does not recognizes revenues and gains on the basis of anticipation.

(d) Timeliness Concept

Under this principle, every transaction must be recorded in proper time. Normally, when the transaction is made, the same must be recorded in the proper books of accounts. In short, transaction should be recorded date-wise in the books. Delay in recording such transaction may lead to manipulation, misplacement of vouchers, misappropriation etc. of cash and goods. This principle is followed particularly while verifying day to day cash balance. Principle of timeliness is also followed by banks, i.e. every bank verifies the cash balance with their cash book and within the day, the same must be completed.

(e) Industry Practice

As that are different types of industries, each industry has its own characteristics and features. There may be seasonal industries also. Every industry follows the principles and assumption of accounting to perform their own activities. Some of them follow the principles, concepts and conventions in a modified way. The accounting practice which has always prevailed in the industry is followed by it. e.g Electric supply companies, Insurance companies maintain their accounts in a specific manner. Insurance companies prepare Revenue Account just to ascertain the profit/loss of the company and not Profit and Loss Account. Similarly, non trading organizations prepare Income and Expenditure Account to find out Surplus or Deficit.

1.8 EVENTS AND TRANSACTIONS

Transaction:

Transaction is exchange of an asset and discharge of liabilities with consideration of monetary value.

Events:

While event is anything in general purpose which occur at specific time and particular place.

We can also say that all transactions are events and but all events are not transactions. This is because in order events to be called transaction an event must involve exchange of values.

1.9 VOUCHER

Voucher:

- It is a written instrument that serves to confirm or witness (vouch) for some fact such as a transaction.
- A voucher is a document that shows goods have bought or services have been rendered, authorizes payment, and indicates the ledger account(s) in which these transactions have to be recorded.

Types of Voucher			
Receipt Voucher	Payment Voucher	Non-Cash or Transfer Voucher	Supporting Voucher

(i) Receipt Voucher

Receipt voucher is used to record cash or bank receipt. Receipt vouchers are of two types. i-e.

(a) Cash receipt voucher – it denotes receipt of cash

(b) Bank receipt voucher – it indicates receipt of cheque or demand draft

(ii) Payment Voucher

Payment voucher is used to record a payment of cash or cheque. Payment vouchers are of two types. i.e.

(a) Cash Payment voucher – it denotes payment of cash

(b) Bank Payment voucher – it indicates payment by cheque or demand draft.

(iii) Non Cash Or Transfer Voucher

These vouchers are used for non-cash transactions as documentary evidence. e.g., Goods sent on credit.

(iv) Supporting Vouchers

These vouchers are the documentary evidence of transactions that have happened.

1.10 DOUBLE ENTRY SYSTEM

Double Entry System

It was in 1494 that Luca Pacioli the Italian mathematician, first published his comprehensive treatise on the principles of Double Entry System. The use of principles of double entry system made it possible to record not only cash but also all sorts of Mercantile transactions. It had created a profound impact on auditing too, because it enhanced the duties of an auditor to a considerable extent.

Features of Double Entry System

(i) Every transaction has two fold aspects, i.e., one party giving the benefit and the other receiving the benefit.

(ii) Every transaction is divided into two aspects, Debit and Credit.

One account is to be debited and the other account is to be credited.

(iii) Every debit must have its corresponding and equal credit.

Advantages of Double Entry System

(i) Since personal and impersonal accounts are maintained under the double entry system, both the effects of the transactions are recorded.

(ii) It ensures arithmetical accuracy of the books of accounts, for every debit, there is a corresponding and equal credit. This is ascertained by preparing a trial balance periodically or at the end of the financial year.

(iii) It prevents and minimizes frauds. Moreover frauds can be detected early.

(iv) Errors can be checked and rectified easily.

(v) The balances of receivables and payables are determined easily, since the personal accounts are maintained.

(vi) The businessman can compare the financial position of the current year with that of the past year/s.

(vii) The businessman can justify the standing of his business in comparison with the previous years purchase, sales, and stocks, incomes and expenses with that of the current year figures.

(viii) Helps in decision making.

(ix) The net operating results can be calculated by preparing the Trading and Profit and Loss A/c for the year ended and the financial position can be ascertained by the preparation of the Balance Sheet.

(x) It becomes easy for the Government to decide the tax.

(xi) It helps the Government to decide sickness of business units and extend help accordingly.

(xii) The other stakeholders like suppliers, banks, etc take a proper decision regarding grant of credit or loans.

Limitations of Double Entry System

(i) The system does not disclose all the errors committed in the books accounts.

(ii) The trial balance prepared under this system does not disclose certain types of errors.

(ii) It is costly as it involves maintenance of numbers of books of accounts.

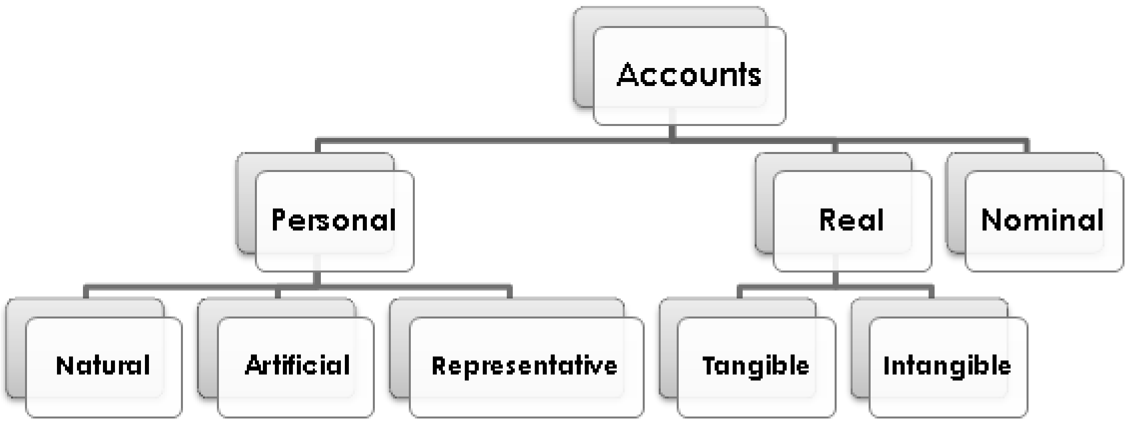
1.11 THE CONCEPTS OF 'ACCOUNT', 'DEBIT' AND 'CREDIT'

The concept of Account

- An account is defined as a summarized record of transactions related to a person or a thing e.g. when the business deals with customers and suppliers, each of the customers and supplier will be a separate account.
- The account is also related to things – both tangible and intangible. e.g. land, building, equipment, brand value, trademarks etc are some of the things. When a business transaction happens, one has to identify the 'account' that will be affected by it and then apply the rules to decide the accounting treatment.
- Typically, an account is expressed as a statement in form of English letter 'T'. It has two sides. The left hand side is called as "Debit' side and the right hand side is called as "Credit' side. The debit is denoted as 'Dr' and the credit by 'Cr'. The convention is to write the Dr and Cr labels on both sides as shown below. Please see the following example:

Dr.	**Cash Account**	**Cr.**
Debit side		**Credit side**

1.12 TYPES OF ACCOUNTS



Let us see what each type of account means.

(1) Personal Account : As the name suggests these are accounts related to persons.

(a) These persons could be natural persons like Suresh's A/c, Anil's a/c, Rani's A/c etc.

(b) The persons could also be artificial persons like companies, bodies corporate or association of persons or partnerships etc. Accordingly, we could have Videocon Industries A/c, Infosys Technologies A/c, Charitable Trust A/c, Ali and Sons trading A/c, ABC Bank A/c, etc.

(c) There could be representative personal accounts as well. Although the individual identity of persons related to these is known, the convention is to reflect them as collective accounts. e.g. when salary is payable to employees, we know how much is payable to each of them, but collectively the account is called as 'Salary Payable A/c'. Similar examples are rent payable, Insurance prepaid, commission pre-received etc. The students should be careful to have clarity on this type and the chances of error are more here.

(2) Real Accounts : These are accounts related to assets or properties or possessions. Depending on their physical existence or otherwise, they are further classified as follows:-

(a) Tangible Real Account – Assets that have physical existence and can be seen, and touched. e.g. Machinery A/c, Stock A/c, Cash A/c, Vehicle A/c, and the like.

(b) Intangible Real Account – These represent possession of properties that have no physical existence but can be measured in terms of money and have value attached to them. e.g. Goodwill A/c, Trade mark A/c, Patents & Copy Rights A/c, Intellectual Property Rights A/c and the like.

(3) Nominal Account : These accounts are related to expenses or losses and incomes or gains e.g. Salary and Wages A/c, Rent of Rates A/c, Travelling Expenses A/c, Commission received A/c, Loss by fire A/c etc.

The concept of Debit and Credit

- In double entry book-keeping, debits and credits (abbreviated Dr and Cr, respectively) are entries made in account ledgers to record changes in value due to business transactions.
- Debit is derived from the latin word **"debitum"**, which means 'what we will receive'. It is the destination, who enjoys the benefit.
- Credit is derived from the latin word **"credre"** which means 'what we will have to pay'. It is the source, who sacrifices for the benefit.
- The source account for the transaction is credited (an entry is made on the right side of the account's ledger) and the destination account is debited (an entry is made on the left).

- Each transaction's debit entries must equal its credit entries.
- The difference between the total debits and total credits in a single account is the account's balance. If debits exceed credits, the account has a debit balance; if credits exceed debits, the account has a credit balance.

1.13 THE ACCOUNITNG PROCESS

There are two approaches for deciding an account is debited or credit.

1. American Approach or Modern Approach

Accounting Proces

2. British Approach or Traditional Approach

Mostly followed the British Rule.

A. American approach : In order to understand the rules of debit and credit according to this approach transactions are divided into the following five categories:

(i) Transactions relating to owner, e.g., Capital – These are personal accounts

(ii) Transactions relating to other liabilities, e.g., suppliers of goods – These are mostly personal accounts

(iii) Transactions relating to assets, e.g., land, building, cash, bank, stock-in-trade, bills receivable – These are basically all real accounts

(iv) Transactions relating to expenses, e.g., rent, salary, commission, wages, cartage – These are nominal accounts

(v) Transactions relating to revenues, e.g., interest received, dividend received, sale of goods – These are nominal accounts

To Sum Up

For Assets	Increase in Assets Decrease in Assets	Dr. Cr.
For Liabilities	Decrease in Liabilities Increase in Liabilities	Dr. Cr.
For Capital	Decrease in Capital Increase in Capital	Dr. Cr.
For Incomes	Decrease in Income Increase in Income	Dr. Cr.
For Expense	Increase in Expense Decrease in Expense	Dr. Cr.
For Stock	Increase in Stock Decrease in Stock	Dr. Cr.

B. British Approach or Double Entry System :

When one identifies the account that is getting affected by a transaction and type of that account, the next step is to apply the rules to decide whether the accounting treatment is to debit or credit that account. The Golden Rules will guide us whether the account is to be debited or credited.

These rules are shown below:

Personal Account →	Debit the receiver or who owes to business Credit the giver or to whom business owes
Real Account →	Debit what comes into business Credit what goes out of business
Nominal Account →	Debit all expenses or losses Credit all income or gains

Illustration 3.

Ascertain the debit and credit from the following particulars under Modern Approach.

(a) Started business with capital.

(b) Bought goods for cash.

(c) Sold goods for cash.

(d) Paid salary.

(e) Received Interest on Investment.

(f) Bought goods on credit from Mr. Y

(g) Paid Rent out of Personal cash.

Solution:

	Effect of Transaction	Account	To be debited/Credited
(a)	Increase in Cash Increase in Capital	Cash A/c Capital A/c	Debit Credit
(b)	Increase in Stock Decrease in Cash	Purchase A/c Cash A/c	Debit Credit
(c)	Increase in Cash Decrease in Stock	Cash A/c Sale A/c	Debit Credit
(d)	Increase in Expense Decrease in Cash	Salary A/c Cash A/c	Debit Credit
(e)	Increase in Cash Increase in Income	Cash A/c Interest A/c	Debit Credit
(f)	Increase in Stock Increase in Liability	Purchase A/c Y A/c	Debit Credit
(g)	Increase in Expense Increase in Liability	Rent A/c Capital A/c	Debit Credit

Illustration 4.

Ascertain the Debit Credit under British Approach or Double Entry System. Take Previous illustration.

Solution:

	Step-I	**Step-II**	**Step-III**	**Step-IV**
(a)	Cash A/c Capital A/c	Real Personal	Comes in Giver	Debit Credit
(b)	Purchase A/c Cash A/c	Nominal Real	Expenses Goes out	Debit Credit
(c)	Cash A/c Sales A/c	Real Nominal	Comes in Incomes	Debit Credit
(d)	Salary A/c Cash A/c	Nominal Real	Expenses Goes out	Debit Credit
(e)	Cash A/c Interest A/c	Real Nominal	Comes in Incomes	Debit Credit
(f)	Purchase A/c Y' A/c	Nominal Personal	Expenses Giver	Debit Credit
(g)	Rent A/c Capital A/c	Nominal Personal	Expenses Giver	Debit Credit

1.14 ACCOUNTING EQUATION

The whole Financial Accounting dependes on Accounting Equation which is also known as Balance Sheet Equation. The basic Accounting Equation is:

Assets = Liabilities + Owner's equity

$$\left.\begin{array}{l}\text{or } A = L + P \\ \text{or } P = A - L \\ \text{or } L = A - P\end{array}\right\} \text{Where A = Assets, L = Liabilities, P = Capital}$$

While trying to do this correlation, please note that incomes or gains will increase owner's equity and expenses or losses will reduce it.

Students are advised to go through the following illustration to understand this equation properly.

Illustration 5.

Prepare an Accounting Equation from the following transactions in the books of Mr. X for January, 2012 :-

1 Invested Capital in the firm ₹ 20,000

2 Purchased goods on credit from Das & Co. for ₹ 2,000

4 Bought plant for cash ₹ 8,000

8 Purchased goods for cash ₹ 4,000

12 Sold goods for cash (cost ₹ 4,000 + Profit ₹ 2,000) ₹ 6,000.

18 Paid to Das & Co. in cash ₹ 1,000

22 Received from B. Banerjee ₹ 300

25 Paid salary ₹ 6,000

30 Received interest ₹ 5,000

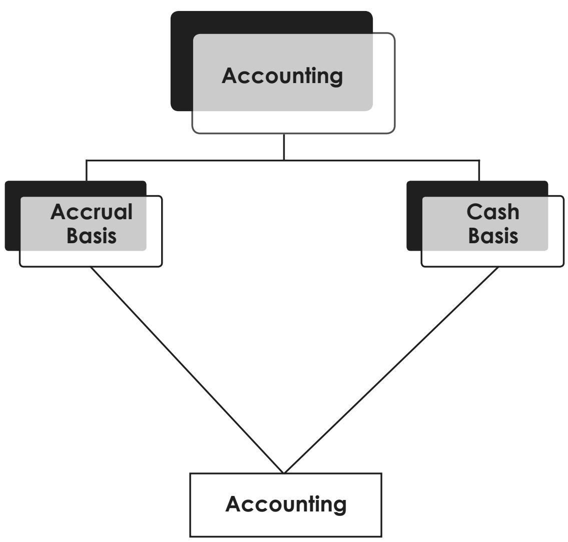
31 Paid wages ₹ 3,000

Solution:

Effect of transaction on Assets, Liabilities and Capital

Date	Transaction	Assets =	Liabilities +	Capital
January, 2013 1	Invested Capital in the firm ₹ 20,000	20,000	-	20,000
2	Purchased goods on credit from Das & Co. ₹ 2,000	+2,000	+2,000	-
	Revised Equation	**22,000=**	**2,000+**	**20,000**
4	Bought Plant for cash ₹ 8,000	+8,000 -8,000	-	-
	Revised Equation	**22,000 =**	**2,000+**	**20,000**
8	Purchased goods for cash ₹ 4,000	+4,000 -4,000	- -	- -
	Revised Equation	**22,000=**	**2,000+**	**20,000**
12	Sold Goods for cash (Cost ₹ 4,000 + Profit ₹ 2,000)	+6,000 -4,000		+2,000
	Revised Equation	**24,000**	**2,000+**	**22,000**
18	Paid to Das & Co. for ₹ 1,000	-1,000	-1,000	
	Revised Equation	**23,000=**	**1,000+**	**22,000**
22	Received from B.Banerjee for ₹ 300	+300 -300		
	Revised Equation	**23,000 =**	**1,000+**	**22,000**
25	Paid salary for ₹ 6,000	- 6,000		-6,000
	Revised Equation	**17,000 =**	**1,000+**	**16,000**
30	Received Interest for ₹ 5,000	+5,000		+5,000
	Revised Equation	**22,000=**	**1,000+**	**21,000**
31	Paid Wages for ₹3,000	-3,000		-3,000
	Revised Equation	**19,000=**	**1,000+**	**18,000**

1.15 ACCRUAL BASIS AND CASH BASIS OF ACCOUNTING



(i) Accrual Basis of Accounting

Accrual Basis of Accounting is a method of recording transactions by which revenue, costs, assets and liabilities are reflected in the accounts for the period in which they accrue. This basis includes consideration relating to deferrals, allocations, depreciation and amortization. This basis is also referred to as mercantile basis of accounting.

(ii) Cash Basis of Accounting

Cash Basis of Accounting is a method of recording transactions by which revenues, costs, assets and liabilities are reflected in the accounts for the period in which actual receipts or actual payments are made.

Distinction between Accrual Basis of Accounting and Cash Basis of Accounting

Basis of Distinction	Accrual Basis of Accounting	Cash Basis of Accounting
1. Prepaid/Outstanding Expenses/ accrued/unaccrued Income in Balance Sheet.	Under this, there may be prepaid/outstanding expenses and accrued/unaccrued incomes in the Balance Sheet.	Under this, there is no prepaid/outstanding expenses or accrued/ unaccrued incomes.
2. Higher/lower Income in case of prepaid expenses and accrued income	Income Statement will show a relatively higher income	Income Statement will show lower income.
3. Higher/lower income incase of outstanding expenses and unaccrued income	Income Statement will show a relatively lower income.	Income Statement will show higher income.
4. Availability of options to an accountant to manipulate the accounts by way of choosing the most suitable method out of several alternative methods of accounting e.g. FIFO/LIFO/SLM/WDV	Under this, an accountant has options.	Under this an accountant has no option to make a choice as such.

Hybrid or Mixed Basis

Under the hybrid system of accounting, incomes are recognised as in Cash Basis Accounting i.e. when they are received in cash and expenses are recognised on accrual basis i.e. during the accounting period in which they arise irrespective of when they are paid.

Illustration 6.

Mr. Anil Roy, a junior lawyer, provides the following particulars for the year ended 31st December, 2013:

	₹
Fees received in cash in 2013	60,000
Salary paid to Staff in 2013	8,000
Rent of office in 2013	14,000
Magazine and Journal for 2013	1,000
Travelling and Conveyance paid in 2013	3,000
Membership Fees paid in 2013	1,600
Office Expenses paid in 2013	10,000

Additional Information:-

Fees include ₹ 3,000 in respect of 2012and fees not yet received is ₹ 7,000.

Office rent includes ₹ 4,000 for previous year and rent of ₹ 2,000 not yet paid.

Membership fees is paid for 2 years.

Compute his net income for the year 2013, under – (a) Cash Basis, (b) Accrual Basis and (c) Mixed or Hybrid Basis.

Solution:

(i)

Mr. Anil Roy

Statement of Income (Cash Basis)

For the year ended 31st December, 2013

Particulars	Amount (₹)	Amount (₹)
Fees received		60,000
Less :		
Salary	8,000	
Office Rent	14,000	
Magazine & Journal	1,000	
Travelling & Conveyance	3,000	
Membership Fees	1,600	
Office Expenses	10,000	37,600
Net Income		22,400

(ii)

Mr. Anil Roy

Statement of Income (Accrual Basis)

For the year ended 31st December, 2013

Particulars		Amount (₹)	Amount (₹)
Fees received		60,000	
Add: Accrued fees for 2013		7,000	
		67,000	
Less: Fees for 2012 received in 2013		3,000	64,000
Less :			
Salary		8,000	
Office Rent	14,000		
Add: Outstanding rent	2,000		
	16,000		
Less: Rent for 2012 paid in 2013	4,000	12,000	
Magazine & Journal		1,000	
Travelling & Conveyance		3,000	
Membership Fees	1,600		
Less: Advance fee paid for 2014 (½ x 1600)	800	800	
Office Expenses		10,000	34,800
Net Income			29,200

(iii)

Mr. Anil Roy
Statement of Income (Mixed or Hybrid Basis)
For the year ended 31st December, 2013

Particulars	Amount (₹)	Amount (₹)	Amount (₹)
Fees received			60,000
Less :			
Salary		8,000	
Office Rent	14,000		
Add: Outstanding rent	2,000		
	16,000		
Less: Fees for 2012	4,000	12,000	
Magazine & Journal		1,000	
Travelling & Conveyance		3,000	
Membership Fees	1,600		
Less: Advance	800	800	
Office Expenses		10,000	34,800
Net Income			25,200

1.16 CAPITAL AND REVENUE TRANSACTIONS

There are 2 types of Transaction

1. Capital

2. Revenue

The concepts of capital and revenue are of fundamental importance to the correct determination of accounting profit for a period and recognition of business assets at the end of that period.

- **Capital Transactions:**

  Transactions having long-term effect are known as capital transactions.

- **Revenue Transactions:**

  Transactions having short-term effect are known as revenue transactions.

- **Capital Expenditure**

  Capital expenditure can be defined as expenditure incurred on the purchase, alteration or improvement of fixed assets. For example, the purchase of a car to be use to deliver goods is capital expenditure. Included in capital expenditure are such costs as:

  - Delivery of fixed assets;
  - Installation of fixed assets;
  - Improvement (but not repair) of fixed assets;
  - Legal costs of buying property;
  - Demolition costs;
  - Architects fees;

- **Revenue Expenditures**

  Revenue expenditure is expenditure incurred in the running / management of the business. For example, the cost of petrol or diesel for cars is revenue expenditure. Other revenue expenditure:

  - Maintenance of Fixed Assets;
  - Administration of the business;
  - Selling and distribution expenses.

Capitalized Expenditure

Expenditure connected with the purchase of fixed asset are called capitalized expenditure e.g. wages paid for the installation of machinery.

The Treatments of Capital and Revenue Expenditures

Capital expenditures are shown in the Balance Sheet Assets Side while Revenue Expenditures are shown in the Trading and Profit And Loss Account debit side.

Revenue Receipts

Amount received against revenue income are called revenue receipt.

Capital Receipts

Amount received against capital income are called capital receipts.

Capital Profits

Capital profit which is earned on the sale of the fixed assets.

Revenue Profit

The profit which is earned during the ordinary course of business is called revenue profit.

Capital Loss

The loss suffered by a company on the sale of fixed assets.

Revenue Loss

The loss suffered by the business in the ordinary course of business is called revenue loss.

Rules for Determining Capital Expenditure

An expenditure can be recognised as capital if it is incurred for the following purposes :

- An expenditure incurred for the purpose of acquiring long term assets (useful life is at least more than one accounting period) for use in business to earn profits and not meant for resale, will be treated as a capital expenditure. For example, if a second hand motor car dealer buys a piece of furniture with a view to use it in business; it will be a capital expenditure. But if he buys second hand motor cars, for re-sale, then it will be a revenue expenditure because he deals in second hand motor cars.
- When an expenditure is incurred to improve the present condition of a machine or putting an old asset into working condition, it is recognised as a capital expenditure. The expenditure is capitalised and added to the cost of the asset. Likewise, any expenditure incurred to put an asset into working condition is also a capital expenditure.
- For example, if one buys a machine for ₹ 5,00,000 and pays ₹ 20,000 as transportation charges and ₹ 40,000 as installation charges, the total cost of the machine comes upto ₹ 5,60,000. Similarly, if a building is purchased for ₹ 1,00,000 and ₹ 5,000 is spent on registration and stamp duty, the capital expenditure on the building stands at ₹ 1,05,000.
- If an expenditure is incurred, to increase earning capacity of a business will be considered as of capital nature. For example, expenditure incurred for shifting ‘the ‘factory for easy supply of raw materials. Here, the cost of such shifting will be a capital expenditure.

- Preliminary expenses incurred before the commencement of business is considered capital expenditure. For example, legal charges paid for drafting the memorandum and articles of association of a company or brokerage paid to brokers, or commission paid to underwriters for raising capital.
- Thus, one useful way of recognising an expenditure as capital is to see that the business will own something which qualifies as an asset at the end of the accounting period.

Some examples of capital expenditure:

(i) Purchase of land, building, machinery or furniture; (ii) Cost of leasehold land and building; (iii) Cost of purchased goodwill; (iv) Preliminary expenditures; (v) Cost of additions or extensions to existing assets; (vi) Cost of overhauling second-hand machines; (vii) Expenditure on putting an asset into working condition; and (viii) Cost incurred for increasing the earning capacity of a business.

Rules for Determining Revenue Expenditure

Any expenditure which cannot be recognised as capital expenditure can be termed as revenue expenditure. A revenue expenditure temporarily influences only the profit earning capacity of the business. An expenditure is recognised as revenue when it is incurred for the following purposes :

Expenditure for day-to-day conduct of the business, the benefits of which last less than one year. Examples are wages of workmen, interest on borrowed capital, rent, selling expenses, and so on.

Expenditure on consumable items, on goods and services for resale either in their original or improved form. Examples are purchases of raw materials, office stationery, and the like. At the end of the year, there may be some revenue items (stock, stationery, etc.) still in hand. These are generally passed over to the next year though they were acquired in the previous year.

Expenditures incurred for maintaining fixed assets in working order. For example, repairs, renewals and depreciation.

Some examples of revenue expenditure

(i) Salaries and wages paid to the employees;

(ii) Rent and rates for the factory or office premises;

(iii) Depreciation on plant and machinery;

(iv) Consumable stores;

(v) Inventory of raw materials, work-in-progress and finished goods;

(vi) Insurance premium;

(vii) Taxes and legal expenses; and

(viii) Miscellaneous expenses.

Deferred Revenue Expenditures

Deferred revenue expenditures represent certain types of assets whose usefulness does not expire in the year of their occurrence but generally expires in the near future. These type of expenditures are carried forward and are written off in future accounting periods. Sometimes, we make some revenue expenditure but it eventually becomes a capital asset (generally of an intangible nature). If one undertake substantial repairs to the existing building, the deterioration of the premises may be avoided. We may engage our own employees to do that work and pay them at prevailing wage-rate, which is of a revenue nature. If this expenditure is treated as a revenue expenditure and the current year's-profit is charged with these expenses, we are making the current year to absorb the entire expenses, though the benefit of which will be enjoyed for a number of accounting years. To overcome this difficulty, the entire expenditure is capitalised and is added to the asset account. Another example is an insurance policy. A business can pay insurance premium in advance, say, for a 3 year period. The right does not expire in the accounting period in which it is paid but will expire within a fairly short period of time (3 years). Only a portion of the total premium paid should be treated as a revenue expenditure (portion pertaining to the current period) and the balance should be carried forward as an asset to be written off in subsequent years.

AS 26 - Intangible Asset does not accept this view. Para 56 states, "Expenditure incurred to provide future economic benefit to an enterprise that can be recognized as an expense when it is incurred. e.g. expenditure incurred on Scientific Research is recognized as an expense when it is incurred". In short, the whole amount of expenditure is treated as expense for the current year only and will not proportionately be transferred as deferred charge.

Illustration 8.

State whether the following are capital, revenue or deferred revenue expenditure.

(i) Carriage of ₹ 7,500 spent on machinery purchased and installed.

(ii) Heavy advertising costs of ₹ 20,000 spent on the launching of a company's new product.

(iii) ₹ 200 paid for servicing the company vehicle, including ₹ 50 paid for changing the oil.

(iv) Construction of basement costing ₹ 1,95,000 at the factory premises.

Solution :

(i) Carriage of ₹ 7,500 paid for machinery purchased and installed should be treated as a Capital Expenditure.

(ii) Advertising expenses for launching a new product of the company should be treated as a Revenue Expenditure. (As per AS-26)

(iii) ₹ 200 paid for servicing and oil change should be treated as a Revenue Expenditure.

(iv) Construction cost of basement should be treated as a Capital Expenditure.

Illustration 9.

State whether the following are capital or revenue expenditure.

(i) Paid a bill of ₹ 10,000 of Mr. Kumar, who was engaged as the erection engineer to set up a new automatic machine costing ₹ 20,000 at the new factory site.

(ii) Incurred ₹ 26,000 expenditure on varied advertisement campaigns under taken yearly, on a regular basis, during the peak festival season.

(iii) In accordance with the long-term plan of providing a well- equipped Labour Welfare Centre, spent ₹ 90,000 being the budgeted allocation for the year.

Solution :

(i) Expenses incurred for erecting a new machine should be treated as a Capital Expenditure.

(ii) Advertisement expenses during peak festival season should be treated as a Revenue Expenditure.

(iii) Expenses incurred for Labour Welfare Centre should be treated as a Capital Expenditure.

Illustration 10.

Classify the following items as capital or revenue expenditure :

(i) An extension of railway tracks in the factory area;

(ii) Wages paid to machine operators;

(iii) Installation costs of new production machine;

(iv) Materials for extension to foremen's offices in the factory;

(v) Rent paid for the factory;

(vi) Payment for computer time to operate a new stores control system,

(vii) Wages paid to own employees for building the foremen's offices.

Give reasons for your classification.

Solution :

(i) Expenses incurred for extension of railway tracks in the factory area should be treated as a Capital Expenditure because it will yield benefit for more than one accounting period.

(ii) Wages paid to machine operators should be treated as a Revenue Expenditure as it will yield benefit for the current period only.

(iii) Installation costs of new production machine should be treated as a Capital Expenditure because it will benefit the business for more than one accounting period.

(iv) Materials for extension to foremen's offices in the factory should be treated as a Capital Expenditure because it will benefit the business for more than one accounting period.

(v) Rent paid for the factory should be treated as a Revenue Expenditure because it will benefit only the current period.

(vi) Payment for computer time to operate a new stores control system should be treated as Revenue Expenditure because it has been incurred to carry on the normal business.

(vii) Wages paid for building foremen's offices should be treated as a Capital Expenditure because it will benefit the business for more than one accounting period.

Illustration 11.

For each of the cases numbered below, indicate whether the income/expenditure is capital or revenue.

(i) Payment of wages to one's own employees for building a new office extension.

(ii) Regular hiring of computer time for the preparation of the firm's accounts.

(iii) The purchase of a new computer for use in the business.

(iv) The use of motor vehicle, hired for five years, but paid at every six months.

Solution :

(i) Payment of wages for building a new office extension should be treated as a Capital Expenditure.

(ii) Computer hire charges should be treated as a Revenue Expenditure.

(iii) Purchase of computer for use in the business should be treated as a Capital Expenditure.

(iv) Hire charges of motor vehicle should be treated as a Revenue Expenditure.

Illustration 12.

State with reasons whether the following are capital or revenue expenditure :

(i) Freight and cartage on the new machine ₹ 150, and erection charges ₹ 500.

(ii) Fixtures of the book value of ₹ 2,500 sold off at ₹ 1,600 and new fixtures of the value of ₹ 4,000 were acquired. Cartage on purchase ₹ 100.

(iii) A sum of ₹ 400 was spent on painting the factory.

(iv) ₹ 8,200 spent on repairs before using a second hand car purchased recently, to put it in usable condition.

Solution :

(i) Freight and cartage totaling ₹ 650 should be treated as a Capital Expenditure because it will benefit the business for more than one accounting year.

(ii) Loss on sale of fixtures ₹ (2,500 – 1,600) = ₹ 900 should be treated as a Capital Loss. The cost of new fixtures and carriage thereon should be treated as a Capital Expenditure because the fixture will be used for a long period. So ₹ (4,000+1,000)the cost of new fixture will be ₹ 4,100.

(iii) Painting of the factory should be treated as a Revenue Expenditure because it has been incurred to maintain the factory building.

(iii) Repairing cost of second hand car should be treated as a Capital Expenditure because it will benefit the business for more than one accounting year.

Illustration 13.

State the nature (capital or revenue) of the following expenditure which were incurred by Vedanta & Co. during the year ended 30th June, 2013 :

(i) ₹ 350 was spent on repairing a second hand machine which was purchased on 8th May, 2013 and ₹ 200 was paid on carriage and freight in connection with its acquisition.

(ii) A sum of ₹ 30,000 was paid as compensation to two employees who were retrenched.

(iii) ₹ 150 was paid in connection with carriage on goods purchased.

(iv) ₹ 20,000 customs duty is paid on import of a machinery for modernisation of the factory production during the current year and ₹ 6,000 is paid on import duty for purchase of raw materials.

(v) ₹ 18,000 interest had accrued during the year on term loan obtained and utilised for the construction of factory building and purchase of machineries; however, the production has not commenced till the last date of the accounting year.

Solution :

(i) Repairing and carriage totaling ₹ 550 for second hand machine should be treated as a Capital Expenditure.

(ii) Compensation paid to employees shall be treated as a Revenue Expenditure.

(iii) Carriage paid for goods purchased should be treated as a Revenue Expenditure.

(iv) Customs duty paid on import of machinery to be treated as a Capital Expenditure. However, import duty paid for raw materials should be treated as a Revenue Expenditure.

(v) Interest paid during pre-construction period to be treated as a Capital Expenditure.

Illustration 14.

State with reasons whether the following items relating to Parvati Sugar Mill Ltd. are capital or revenue :

(i) ₹ 50,000 received from issue of shares including ₹ 10,000 by way of premium.

(ii) Purchased agricultural land for the mill for ₹ 60,000 and ₹ 500 was paid for land revenue.

(iii) ₹ 5,000 paid as contribution to PWD for improving roads of sugar producing area.

(iv) ₹ 40,000 paid for excise duty on sugar manufactured.

(v) ₹ 70,000 spent for constructing railway siding.

Solution :

(i) ₹ 40,000 (50,000 – ₹ 10,000) received from issue of shares will be treated as a Capital Receipt. The premium of ₹ 10,000 should be treated as a Capital Profit.

(ii) Cost of land ₹ 60,000 to be treated as Capital Expenditure and land revenue of ₹ 500 to be treated as Revenue Expenditure.

(iii) Contribution paid to PWD should be treated as a Revenue Expenditure.

(iv) Excise duty of ₹ 40,000 should be treated as a Revenue Expenditure.

(v) ₹ 70,000 spent for constructing railway siding to be treated as a Capital Expenditure.

Illustration 15.

State with reasons whether the following are Capital Expenditure or Revenue Expenditure :

(i) Expenses incurred in connection with obtaining a licence for starting the factory were ₹ 10,000.

(ii) ₹ 1,000 paid for removal of stock to a new site.

(iii) Rings and Pistons of an engine were changed at a cost of ₹ 5,000 to get full efficiency.

(iv) ₹ 2,000 spent as lawyer's fee to defend a suit claiming that the firm's factory site belonged to the Plaintiff. The suit was not successful.

(v) ₹ 10,000 were spent on advertising the introduction of a new product in the market, the benefit of which will be effective during four years.

(vi) A factory shed was constructed at a cost of ₹ 1,00,000. A sum of ₹ 5,000 had been incurred for the construction of the temporary huts for storing building materials.

Solution :

(i) ₹ 10,000 incurred in connection with obtaining a license for starting the factory is a Capital Expenditure. It is incurred for acquiring a right to carry on business for a long period.

(ii) ₹ 1,000 incurred for removal of stock to a new site is treated as a Revenue Expenditure because it is not enhancing the value of the asset and it is also required for starting the business on the new site.

(iii) ₹ 5,000 incurred for changing Rings and Pistons of an engine is a Revenue Expenditure because, the change of rings and piston will restore the efficiency of the engine only and it will not add anything to the capacity of the engine.

(iv) ₹ 2,000 incurred for defending the title to the firm's assets is a Revenue Expenditure.

(v) ₹ 10,000 incurred on advertising is to be treated as a Revenue Expenditure (As per AS-26).

(vi) Cost of construction of Factory shed of ₹ 1,00,000 is a Capital Expenditure, similarly cost of construction of small huts for storing building materials is also a Capital Expenditure.

Illustration 16.

State clearly how you would deal with the following in the books of a Company :

(i) The redecoration expenses ₹ 6,000.

(ii) The installation of a new Coffee-making Machine for ₹ 10,000.

(iii) The building of an extension of the club dressing room for ₹ 15,000.

(iv) The purchase of Snacks & food stuff ₹ 2,000.

(v) The purchase of V.C.R. and T.V. for the use in the club lounge for ₹ 15,000.

Solution :

(i) The redecoration expenses of ₹ 6,000 shall be treated as a Deferred Revenue Expenditure.

(ii) The installation of a new Coffee - Making Machine is a Capital Expenditure because it is the acquisition of an asset.

(iii) ₹ 15,000 spent for the extension of club dressing room is a Capital Expenditure because it creates an asset of a permanent nature.

(iv) The purchase of snacks & food stuff of ₹ 2,000 is a Revenue Expenditure.

(v) The purchase of V.C.R. and T.V. for ₹ 15,000 is a Capital Expenditure, because it is the acquisition of assets.

1.17 ACCOUNTING STANDARDS

Comparative Statement of AS & IND AS (Subject- Wise)

SL.No.	Accounting Standards (AS)	IND AS No.	Name of IND AS
			I. **Standards on Presentation**
1	AS 1	Ind AS 1	Presentation of Financial Statements
2	AS 3	Ind AS 7	Statement of Cash Flows
3	AS 5	Ind AS 8	Accounting Policies, Changes in Accounting Estimates and Errors
4	AS 4	Ind AS 10	Events after the Reporting Period
5	AS 25	Ind AS 34	Interim Financial Reporting
6	**No Corresponding Standard**	Ind AS 29	Financial Reporting in Hyperinflationary Economies
			II. **Standards on Consolidation**
7	AS 21	Ind AS 27	Consolidated and Separate Financial Statements
8	AS 23	Ind AS 28	Investments in Associates
9	AS 27	Ind AS 31	Interests in Joint Ventures
10	AS 14	Ind AS 103	Business Combinations
			III. **Standards on Revenue**
11	AS 2	Ind AS 2	Inventories
12	AS 7	Ind AS 11	Construction Contracts
13	AS 9	Ind AS 18	Revenue
14	AS 12	Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance
15	AS 11	Ind AS 21	The Effects of Changes in Foreign Exchange Rates
			IV. **Standards on Liabilities and Provisions**
16	AS 15	Ind AS 19	Employee Benefits
17	AS 29	Ind AS 37	Provisions, Contingent Liabilities and Contingent Assets
18	**Guidance Note**	Ind AS 102	Share-based Payment
19	**No Corresponding Standard**	Ind AS 104	Insurance Contracts
			V. **Standards on Disclosures**
20	AS 18	Ind AS 24	Related Party Disclosures
21	AS 20	Ind AS 33	Earnings Per Shares
22	AS 17	Ind AS 108	Operating Segments
			VI. **Standards on Assets**
23	AS 16	Ind AS 23	Borrowing Costs
24	AS 28	Ind AS 36	Impairments of Assets
25	AS 26	Ind AS 38	Intangible Assets
26	**No Corresponding Standard**	Ind AS 40	Investment Property
27	AS 10 & AS 6	Ind AS 16	Property, Plant and Equipment
28	AS 19	Ind AS 17	Leases
29	AS 24	Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations
30	**Guidance Note**	Ind AS 106	Exploration for and Evaluation of mineral Resources
			VII. **Standards on Taxes**

SL.No.	Accounting Standards (AS)	IND AS No.	Name of IND AS
31	AS 22	Ind AS 12	Income Taxes
			VIII. **Standards on Financial Instruments**
32	AS 31	Ind AS 32	Financial Instruments: Presentation
33	AS 30	Ind AS 39	Financial Instruments: Recognition and Measurement
34	AS 32	Ind AS 107	Financial Instruments: Disclosures
			IX. **Standards on First Time Adoption**
35	**No Corresponding Standard**	Ind AS 101	First Time Adoption of Ind AS

Comparative Statement of AS & IND AS (Ind As – wise)

SL.No.	Accounting Standards (AS)	IND AS No.	Name of IND AS
1	AS 1	Ind AS 1	Presentation of Financial Statements
2	AS 2	Ind AS 2	Inventories
3	AS 3	Ind AS 7	Statement of Cash Flows
4	AS 5	Ind AS 8	Accounting Policies, Changes in Accounting Estimates and Errors
5	AS 4	Ind AS 10	Events after the Reporting Period
6	AS 7	Ind AS 11	Construction Contracts
7	AS 22	Ind AS 12	Income Taxes
8	AS 10 & AS 6	Ind AS 16	Property, Plant and Equipment
9	AS 19	Ind AS 17	Leases
10	AS 9	Ind AS 18	Revenue
11	AS 15	Ind AS 19	Employee Benefits
12	AS 12	Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance
13	AS 11	Ind AS 21	The Effects of Changes in Foreign Exchange Rates
14	AS 16	Ind AS 23	Borrowing Costs
15	AS 18	Ind AS 24	Related Party Disclosures
16	AS 21	Ind AS 27	Consolidated and Separate Financial Statements
17	AS 23	Ind AS 28	Investments in Associates
18	**No Corresponding Standard**	Ind AS 29	Financial Reporting in Hyperinflationary Economies
19	AS 27	Ind AS 31	Interests in Joint Ventures
20	AS 31	Ind AS 32	Financial Instruments: Presentation
21	AS 20	Ind AS 33	Earnings Per Shares
22	AS 25	Ind AS 34	Interim Financial Reporting
23	AS 28	Ind AS 36	Impairments of Assets
24	AS 29	Ind AS 37	Provisions, Contingent Liabilities and Contingent Assets
25	AS 26	Ind AS 38	Intangible Assets
26	AS 30	Ind AS 39	Financial Instruments: Recognition and Measurement
27	**No Corresponding Standard**	Ind AS 40	Investment Property
28	No Corresponding Standard	Ind AS 101	First Time Adoption of Ind AS
29	**Guidance Note**	Ind AS 102	Share-based Payment
30	AS 14	Ind AS 103	Business Combinations

31	**No Corresponding Standard**	Ind AS 104	Insurance Contracts
32	AS 24	Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations
33	**Guidance Note**	Ind AS 106	Exploration for and Evaluation of mineral Resources
34	AS 32	Ind AS 107	Financial Instruments: Disclosures
35	AS 17	Ind AS 108	Operating Segments

Comparative Statement of AS & IND AS (AS- Wise)

SL.No.	Accounting Standards (AS)	IND AS No.	Name of IND AS
1	AS 1	Ind AS 1	Presentation of Financial Statements
2	AS 2	Ind AS 2	Inventories
3	AS 3	Ind AS 7	Statement of Cash Flows
4	AS 4	Ind AS 10	Events after the Reporting Period
5	AS 5	Ind AS 8	Accounting Policies, Changes in Accounting Estimates and Errors
6	AS 7	Ind AS 11	Construction Contracts
7	AS 9	Ind AS 18	Revenue
8	AS 10 & AS 6	Ind AS 16	Property, Plant and Equipment
9	AS 11	Ind AS 21	The Effects of Changes in Foreign Exchange Rates
10	AS 12	Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance
11	AS 14	Ind AS 103	Business Combinations
12	AS 15	Ind AS 19	Employee Benefits
13	AS 16	Ind AS 23	Borrowing Costs
14	AS 17	Ind AS 108	Operating Segments
15	AS 18	Ind AS 24	Related Party Disclosures
16	AS 19	Ind AS 17	Leases
17	AS 20	Ind AS 33	Earnings Per Shares
18	AS 21	Ind AS 27	Consolidated and Separate Financial Statements
19	AS 22	Ind AS 12	Income Taxes
20	AS 23	Ind AS 28	Investments in Associates
21	AS 24	Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations
22	AS 25	Ind AS 34	Interim Financial Reporting
23	AS 26	Ind AS 38	Intangible Assets
24	AS 27	Ind AS 31	Interests in Joint Ventures
25	AS 28	Ind AS 36	Impairments of Assets
26	AS 29	Ind AS 37	Provisions, Contingent Liabilities and Contingent Assets
27	AS 30	Ind AS 39	Financial Instruments: Recognition and Measurement
28	AS 31	Ind AS 32	Financial Instruments: Presentation
29	AS 32	Ind AS 107	Financial Instruments: Disclosures
30	**Guidance Note**	Ind AS 102	Share-based Payment
31	**Guidance Note**	Ind AS 106	Exploration for and Evaluation of mineral Resources
32	**No Corresponding Standard**	Ind AS 29	Financial Reporting in Hyperinflationary Economies

33	**No Corresponding Standard**	Ind AS 40	Investment Property
34	**No Corresponding Standard**	Ind AS 101	First Time Adoption of Ind AS
35	**No Corresponding Standard**	Ind AS 104	Insurance Contracts

Need for Accounting Standards

1. It helps in dissemination of timely and useful financial information to all Stakeholders and users.
2. It helps to provide a set of standard accounting policies, valuation norms and disclosure requirement.
3. It ensures disclosures of accounting principles and treatments, where important information is not otherwise statutorily required to be disclosed.
4. It helps to reduce or totally eliminate, accounting alternatives, thereby it leads to better inter-firm and intra-firm comparison of Financial Statements.
5. It reduces scope of creative accounting, i.e. twisting of accounting policies to produce Financial Statement favourable to a particular interest group.

1.18 DOUBLE ENTRY SYSTEM, BOOKS OF PRIME ENTRY, SUBSIDIARY BOOKS

Double Entry System - This part we have already explained in 1.10

Books of Prime Entry

A journal is often referred to as Book of Prime Entry or the book of original entry. In this book transactions are recorded in their chronological order. The process of recording transaction in a journal is called as 'Journalisation'. The entry made in this book is called a 'journal entry'.

Functions of Journal

(i) **Analytical Function :** Each transaction is analysed into the debit aspect and the credit aspect. This helps to find out how each transaction will financially affect the business.

(ii) **Recording Function :** Accountancy is a business language which helps to record the transactions based on the principles. Each such recording entry is supported by a narration, which explain, the transaction in simple language. Narration means to narrate – i.e. to explain. It starts with the word – Being …

(iii) **Historical Function :** It contains a chronological record of the transactions for future references.

Advantages of Journal

The following are the advantages of a journal :

(i) **Chronological Record :** It records transactions as and when it happens. So it is possible to get a detailed day-to-day information.

(ii) **Minimising the possibility of errors :** The nature of transaction and its effect on the financial position of the business is determined by recording and analyzing into debit and credit aspect.

(iii) **Narration :** It means explanation of the recorded transactions.

(iv) **Helps to finalise the accounts :** Journal is the basis of ledger posting and the ultimate Trial Balance. The Trial balance helps to prepare the final accounts.

The specimen of a journal book is shown below.

Date	Particulars	Voucher number	Ledger folio	Debit amount (₹)	Credit amount (₹)
dd-mm-yy	Name of A/c to be debited Name of A/c to be credited (narration describing the transaction)	-----------	Reference of page number of the A/c in ledger	-----------	-----------

Explanation of Journal

(i) **Date Column :** This column contains the date of the transaction.

(ii) **Particulars :** This column contains which account is to be debited and which account is to be credited. It is also supported by an explanation called narration.

(iii) **Voucher Number :** This Column contains the number written on the voucher of the respective transaction.

(iv) **Ledger Folio (L.F.) :** This column contains the folio (i.e. page no.) of the ledger, where the transaction is posted.

(v) **Dr. Amount and Cr. Amount :** This column shows the financial value of each transaction. The amount is recorded in both the columns, since for every debit there is a corresponding and equal credit.

All the columns are filled in at the time of entering the transaction except for the column of ledger folio. This is filled at the time of posting of the transaction to 'ledger'. This process is explained later in this chapter.

Example:

As per voucher no. 31 of Roy Brothers, on 10.05.2013 goods of ₹ 50000 were purchased. Cash was paid immediately. Ledger Folios of the Purchase A/c and Cash A/c are 5 and 17 respectively. Journal entry of the above transaction is given bellow:

In the books of Roy Brothers

Journal Entries

Date	Particulars		Voucher No.	Ledger Folio	Dr. Amount (₹)	Cr. Amount (₹)
10.05.2013	Purchase A/c	Dr.	31	5	50,000	
	To, Cash A/c			17		50,000
	(Being goods purchased for Cash)					

Illustration 17.

Let us illustrate the journal entries for the following transactions:

2013

April

1 Mr. Vikas and Mrs. Vaibhavi who are husband and wife start consulting business by bringing in their personal cash of ₹ 5,00,000 and ₹ 2,50,000 respectively.

10 Bought office furniture of ₹ 25,000 for cash. Bill No. - 2013/F/3

11 Opened a current account with Punjab National Bank by depositing ₹ 1,00,000

15 Paid office rent of ₹ 15,000 for the month by cheque to M/s Realtors Properties. Voucher No. 3

20 Bought a motor car worth ₹ 4,50,000 from Millennium Motors by making a down payment of ₹ 50,000 by cheque and the balance by taking a loan from HDFC Bank. Voucher No. M/13/7

25 Vikas and Vaibhavi carried out a consulting assignment for Avon Pharmaceuticals and raise a bill for ₹ 10,00,000 as consultancy fees. Bill No. B13/4/1 raised. Avon Pharmaceuticals have immediately settled ₹ 2,50,000 by way of cheque and the balance will be paid after 30 days. The cheque received is deposited into Bank.

30 Salary of one receptionist @ ₹ 5,000 per month and one officer @ ₹ 10,000 per month. The salary for the current month is payable to them.

Solution:

The entries for these transactions in a journal will look like:

In the Books of Vikash & Vaibhavi

Journal Entries **Journal Folio-1**

Date	Particulars	Voucher number	L.F	Dr. Amount (₹)	Cr. Amount (₹)
01-04-2013	Cash A/c Dr. To Vikas's Capital A/c To Vaibhavi's capital A/c (Being capital brought in by the partners)		1 2 3	7,50,000	 5,00,000 2,50,000
10-04-2013	Furniture A/c Dr. To Cash A/c (Being furniture purchased in cash)	2013/F/3	4 1	25,000	 25,000
11-04-2013	Punjab National Bank A/c Dr. To Cash A/c (Being current account opened with Punjab National Bank by depositing cash)		5 1	1,00,000	 1,00,000
15-04-2013	Rent A/c Dr. To Punjab National Bank A/c (being rent paid to Realtors Properties for the month)	3	6 5	15,000	 15,000
20-04-2013	Motor Car A/c Dr. To Punjab National Bank A/c To Loan from HDFC Bank A/c (Being car purchased from Millennium Motors by paying down payment and loan arrangement)	M/13/7	7 5 8	4,50,000	 50,000 4,00,000
25-04-2013	Punjab National Bank A/c Dr. Avon Pharma A/c Dr. To Consultancy Fees A/c (Being amount received and revenue recognized for fees charged)	B13/4/1	5 9 10	2,50,000 7,50,000	 10,00,000
30-04-2013	Salary A/c Dr. To Salary payable A/c (Being the entry to record salary obligation for the month)		11 12	15,000	 15,000

Illustration 18.

Journalise the following transactions in the books of Mr. Roy

2013

April

1 He started business with a capital of – Plant ₹ 10,000, Bank ₹ 8,000, Stock ₹ 12,000

2 Bought furniture for resale ₹ 5,000

Bought furniture for Office decoration ₹ 3,000

3 Paid rent out of personal cash for ₹ 2,000

8 Sold furniture out of those for resale ₹ 6,000

12 Paid Salary to Mr. X for ₹ 1,200

15 Purchased goods from Mr. Mukherjee for cash ₹ 3,000

18 Sold goods to Mr. Sen on credit for ₹ 8,000

20 Mr. Sen returned goods valued ₹ 1,000

22 Received cash from Mr. Sen of ₹ 6,500 in full settlement

28 Bought goods from Mr. Bose on credit for ₹ 5,000

30 Returned goods to Mr. Bose of ₹ 500 and paid to Mr. Bose ₹ 4,000 in full settlement.

Solution:

In the Books of Mr. Roy
Journal Entries

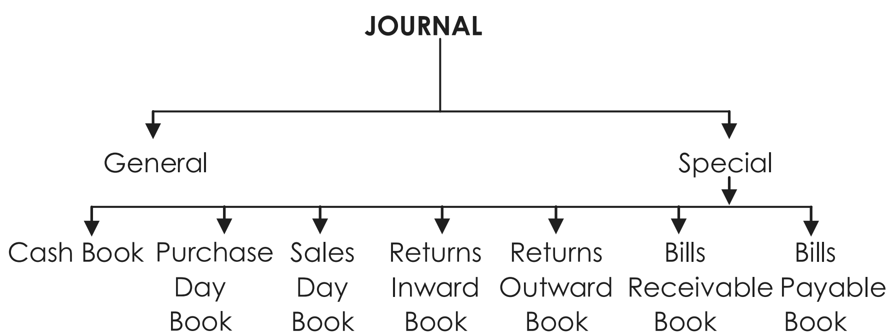
Date	Particulars		L. F.	Debit (₹)	Credit (₹)
April, 2013					
1	Plant A/c	Dr.		10,000	
	Bank A/c	Dr.		8,000	
	Stock A/c	Dr.		12,000	
	To, Capital A/c				30,000
	[Being Plant, Bank, Stock introduced to the business]				
2	Purchase A/c	Dr.		5,000	
	To, Bank A/c				5,000
	[Being furniture purchased for resale]				
	Furniture A/c	Dr.		3,000	
	To, Bank A/c				3,000
	[Being furniture purchased for office decoration]				
3	Rent A/c	Dr.		2,000	
	To, Capital A/c				2,000
	[Being rent paid out of personal cash]				
8	Cash A/c	Dr.		6,000	
	To, Sales A/c				6,000
	[Being furniture out of those meant for resale are sold]				
12	Salary A/c	Dr.		1,200	
	To, Bank A/c				1,200
	[Being salary paid to Mr. X]				

Date	Particulars	L. F.	Debit (₹)	Credit (₹)
April, 2013				
15	Purchase A/c Dr. To, Cash A/c [Being goods purchased]		3,000	 3,000
18	Mr. Sen A/c Dr. To, Sales A/c [Being goods sold on credit to Mr. Sen]		8,000	 8,000
20	Returns Inward A/c Dr. To, Mr. Sen A/c [Being goods returned from Mr. Sen]		1,000	 1,000
22	Cash A/c Dr. Discount Allowed A/c Dr. To, Mr. Sen A/c [Being cash received from Mr. Sen in full settlement]		6,500 500	 7,000
28	Purchase A/c Dr. To, Mr. Bose A/c [Being goods purchased from Mr. Bose on credit]		5,000	 5,000
30	Mr. Bose A/c Dr. To, Cash A/c To, Returns Outward A/c To, Discount Received A/c [Being goods returned to Mr. Bose and paid cash in full settlement]		5,000	 4,000 500 500

Please observe the convention of entry. Accounts to be debited are written first with 'Dr' as a suffix, and accounts to be credited are written subsequently with a prefix 'To'.

Sub-division of Journals

Journal is divided into two types -(i) General Journal and (ii) Special Journal.



(i) General Journal

- This is a book of chronological record of transactions.
- This book records those transactions which occur so infrequently that they do not warrant the setting up of special journals.

Examples of such entries : (i) opening entries (ii) closing entries (iii) rectification of errors.

The form of this general journal, is as under :

JOURNAL

Date	Particulars	L.F.	Dr. Amount	Cr. Amount

L.F. : Ledger Folio

Dr : Debit

Cr : Credit

Recording of transactions in this book is called journalising and the record of transactions is known as journal entry.

(ii) Special Journal

It is subdivided into Cash Book, Purchase Day Book, Sales Day Book, Returns Inward Book, Returns Outward Book, Bills Receivable Book and Bills Payable Book. These books are called subsidiary books.

Importance of Sub-division of journals

When the number of transactions is large, it is practically not possible to record all the transactions through one journal because of the following limitations of Journal:

(i) The system of recording all transactions in a journal requires (a) writing down the name of the account involved as many times as the transaction occurs; and (b) an individual posting of each account debited and credited and hence, involves the repetitive journalizing and posting labour.

(ii) Such a system can not provide the information on a prompt basis.

(iii) Such a system does not facilitate the installation of an internal check system because the journal can be handled by only one person.

(iv) The journal becomes huge and voluminous.

(v) To overcome the shortcomings of the use of the journal only as a book of original entry, the journal is sub-divided into special journal.

The journal is sub-divided in such a way that a separate book is used for each category of transactions which are repetitive in nature and are sufficiently large in number.

Compound Journal

If for a single transaction, only one account is debited and one account is credited, it is known as simple journal.

If the transaction requires more than one account which is to be debited or more than one account is to be credited, it is known as Compound Journal.

The following illustration will make it clear :

Illustration 19.

(i) Started business with Cash ₹50,000; Plant ₹24,000; Stock ₹4,000

(ii) Sold Goods for Cash ₹8,000 and to Ms. Agarwal for ₹10,000

(iii) Ms. Agarwal settled her account less discount ₹ 600

Solution:

In the Books of ………

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
(i)	Cash A/c	Dr.		50,000	
	Plant A/c	Dr.		24,000	
	Stock A/c	Dr.		4,000	
	To Capital A/c (Being business started with cash, plant and stock as capital)				78,000
(ii)	Cash A/c	Dr.		8,000	
	Ms. Agarwal's A/c	Dr.		10,000	
	To Sales A/c (Being goods sold for cash ₹ 8,000 and on credit ₹ 10,000)				18,000
(iii)	Cash A/c	Dr.		9,400	
	Discount Allowed A/c	Dr.		600	
	To Ms. Agarwal's A/c (Being cash received as final settlement and discount allowaed)				10,000

Subsidiary Books

Subsidiary Books refers to books meant for specific transactions of similar nature. Subsidiary Books are also known as Special journals or day books. To overcome shortcoming of the use of the journal only as a book of original entry, the journal is subdivided into specific journals or subsidiary books.

The sub-division of journal is done as follows:

Transaction	Subsidiary Book
All cash and bank transactions	Cash Book - has columns for cash, bank and cash discount
All credit purchase of goods – only those Goods that are purchased for resale are covered here.	Purchase Day Book or Purchase register
All credit sale of goods	Sales Day Book or sales register
All purchase returns – i.e. return of goods back to suppliers due to defects	Purchase Return Book or Return Outward Book
All sales returns – i.e. return of goods back from customers	Sales Return Book or Return Inward Book
All bill receivables – these are bills accepted by customers to be honoured at an agreed date. This is dealt with in depth later in the study note	Bills Receivable Book
All bills payable - these are bills accepted by the business to be honoured by paying to suppliers at an agreed date.	Bills Payable Book
For all other transactions not covered in any of the above categories – i.e. purchase or sale of assets, expense accruals, rectification entries, adjusting entries, opening entries and closing entries.	Journal Proper

Recording of cash and Bank Transactions

Cash Book

A Cash Book is a special journal which is used for recording all cash receipts and all cash payments. Cash Book is a book of original entry since transactions are recorded for the first time from the source documents. The Cash Book is larger in the sense that it is designed in the form of a Cash Account and records cash receipts on the debit side and cash payments on the credit side. Thus, the Cash Book is both a journal and a ledger.

Illustration 20:

Write up a Cash Book of Mr. Y for the month of April 2013, which serves as the only book of original entry

April 2013	
1.	Balance in hand ₹5,000
4.	Sold goods to Mr. Z on credit ₹3,000
6.	Sold goods for Cash ₹1,000
8.	Purchased goods on credit from Mr. P for ₹3,000
12.	Paid to Mr. P for ₹2,000 and Received Discount ₹200
15.	Returned goods to Mr. P for ₹800
20.	Goods Returned by Mr. Z for ₹300
25.	Z settled his account for ₹2,500
26.	Paid salary by cheque for ₹1,000
30.	Received interest for ₹1,000

Solution:

In the books of Mr. Y Cash Book (as the only Book of Single Entry)

Date	Particulars	L/F	Amount ₹	Date	Particulars	L/F	Amount ₹
2013				2013			
Apr.1	To Balance b/d		5,000	Apr. 4	By Z A/c (Goods sold on credit)		3,000
4	,, Sales A/c (Goods sold to Mr. Z)		3,000	8	,, Purchase A/c (Goods purchased on credit)		3,000
6	,, Sales A/c (Goods sold for cash)		1,000	12	,, P A/c (Paid to P)		2,000
8	,, P A/c (Goods purchased on credit)		3,000		,, P A/c (Discount Received)		200
12	,, Discount Received A/c		200	15	P A/c (Goods returned)		800
15	,, Returns Outwards A/c (Goods Returned)		800	20	,, Returns Inwards A/c (Goods returned by Mr. Z)		300
20	,, Z A/c (Goods returned by Z)		300		,, Discount Allowed A/c		200
25	,, Z A/c (Received from Z)		2,500	26	,, Salary A/c (Paid Salary)		1,000
	,, Z A/c (Discount Allowed)		200		,, Balance c/d		7,500
26	,, Bank A/c (Withdrawn by cheque)		1,000				
30	`` Interest A/c (Interest Received)		1,000				
			18,000				18,000
May. 1	To Balance b/d		7,500				

Types of Cash Book

There are different types of Cash Book as follows:

(i) **Single Column Cash Book-** Single Column Cash book has one amount column on each side. All cash receipts are recorded on the debit side and all cash payments on the payment side, this book is nothing but a Cash Account and there is no need to open separate cash account in the ledger.

(ii) **Double Column Cash Book-** The Double Column Cash Book having two amounts. Columns on each side as under:

(a) Cash and discount columns

(b) Cash and bank columns

(c) Bank and discount columns

(iii) **Triple Coulmn Cash Book-** Triple Column Cash Book has three amount columns ,one for cash, one for Bank and one for discount , on each side. All cash receipts, deposits into book and discount allowed are recorded on debit side and all cash payments, withdrawals from bank and discount received are recorded on the credit side. In fact, a triple-column cash book serves the purpose of Cash Account and Bank Account both . Thus, there is no need to create these two accounts in the ledger.

(iv) The multi-column cash book having multiple columns on both the sides of the cash book.

(v) The petty Cash Book.

Dr. **Specimen of Single Column Cash Book** **Cr.**

Receipts				Payments			
Date	Particulars	L.F.	Cash	Date	Particulars	L.F.	Cash

Dr. **Specimen of Double Column Cash Book** **Cr.**

Receipts					Payments				
Date	Particulars	L.F.	Cash	Disc. Allowed	Date	Particulars	L.F.	Cash	Disc. Received

Dr. **Specimen of Triple Column Cash Book** **Cr.**

Receipts						Payments					
Date	Particulars	L.F.	Cash	Bank	Discount Allowed	Date	Particulars	L.F.	Cash	Bank	Discount Received

Is the Cash Book Journal or Ledger?

- Cash Book is a book of original entry since transactions are recorded for the first time from the source documents.
- The cash book is ledger in the sense that it is designed in the form of a Cash Account and records cash receipts on the debit side and cash payments on the credit side.

Thus the cash Book is both a journal and a ledger.

(I) Contra Transactions

Transactions which relates to allowing discount or receiving discount in cash after the settlement of the dues are known as Contra Transactions.

Example:

1. Received ₹ 500 as discount from Mr. Ghosh whose account was previously settle in full.

Cash A/c	Dr.	500	
To Discount Received A/c			500

(Being cash received as discount from Mr. Ghosh whose account was previous settled in full)

2. Paid ₹ 400 as discount to Mr. Ghosh Dastidar who settled his account in full previously.

Discount Allowed A/c	Dr.	400	
To Cash A/c			400

(Being discount allowed in cash to Mr. Ghosh Dastidar who settled his account in full)

(II) Cheque Transactions

When a cheque is received and no any other information at a later date about the same is given, it will be assumed that the said cheque has already been deposited into bank on the same day when it was received. Then the entry should be as under:

Bank A/c Dr.

To Debtors/Party A/c

But if it is found that the said cheque has been deposited into the bank at a later date, then the entry will be:

(i) When the cheque is received

Cash A/c Dr.

To Debtors/Party A/c

(ii) When the same was deposited into bank at a later date

Bank A/c Dr.

To Cash A/c

(iii) When the said cheque is dishonoured by the bank

Debtors/Party A/c Dr.

To Bank A/c

Illustratio 21.

Let us see an illustration for the following cash and bank transactions in the books of Mr. Abhishek

January 1	Opening cash balance was ₹ 3,800 and bank balance was ₹ 27,500
January 4	Wages paid in cash ₹ 1,500
January 5	received cheque of ₹ 19,800 from KBK enterprises after allowing discount of ₹ 200
January 7	Paid to consultancy charges by cheque for ₹ 7,500
January 10	Cash of ₹ 2,500 withdrawn from bank
January 12	Received a cheque for ₹ 4,500 in full settlement of the account of Mr. X at a discount of 10% and deposited the same into the Bank.
January 15	X's cheque returned dishonoured by the Bank

Solution:

In the Books of Mr. Abhishek

Dr. **Cash Book** **Cr.**

Receipts						Payments					
Date	**Particulars**	**L.F.**	**Cash (₹)**	**Bank (₹)**	**Discount Allowed (₹)**	**Date**	**Particulars**	**L.F.**	**Cash (₹)**	**Bank (₹)**	**Discount received (₹)**
1-Jan	Opening Balance		3,800	27,500		4-Jan	Wages paid		1,500		
5-Jan	Recd from KBK			19,800	200	7-Jan	Consultancy fees			7,500	
10-Jan	Cash withdrawn		2,500			10-Jan	Cash withdrawn			2,500	
12-Jan	Mr. X			4,500	500	15-Jan	Mr. X			4,500	500
							Closing balance		4,800	37,300	
			6,300	51,800	700				6,300	51,800	500

Please note that the balance of discount columns is not taken and these are posted directly to the respective ledger account separately. The balance of cash and bank columns are posted into cash and bank accounts periodically. The posting into ledger is explained later in this chapter.

Purchase Day Book

The purchase day book records the transactions related to credit purchase of goods only. It follows that any cash purchase or purchase of things other than goods is not recorded in the purchase day book. Periodically, the totals of Purchase day book are posted to Purchase account in the ledger. The specimen Purchase day book is given below:

In the Books of ....

Purchase Day Book

Date	Name of the Suppliers and details of Goods purchased	Invoice reference	L. F.	Amount (₹)	Remarks

The format for Purchase Return is exactly the same; hence separate illustration is not given.

Let us see an illustration for following transactions for a furniture shop:

Illustration 22.

1. Bought 20 tables @ ₹ 500 per table from Majestic Appliances on credit @ 12% trade discount as per invoice number 22,334 on 2nd March.
2. Purchased three dozen chairs @ ₹ 250 each from Metro chairs as per invoice number 1112 on 4th March.
3. Second hand furniture bought from Modern Furnitures on credit as per invoice number 375 for ₹ 1200 on 7th March.
4. Purchased seven book racks from Mayur Furnitures for ₹ 4,900 paid for in cash on 6th March.
5. Purchased Machinery for ₹ 30,000 from Kirloskar Ltd on 9th March as per invoice number 37.

Solution:

In the Books of Furniture Shop

Purchase Day Book

Date	Name of the Suppliers and Details of goods purchased	Invoice reference	L. F.	Amount (₹)
2nd March	Majestic Appliances			8,800
	20 tables@ 500 and 12% trade discount	22334		
	(20 * 500) = 10000 less 12% discount			
4th March	Metro Chairs			9,000
	3 dozen chairs @ 250 per chair	1112		
7th March	Modern Furnitures	375		1,200
	Total			19,000

Please note that the transaction for purchase of book rack will not be entered in the purchase book as it is not purchased on credit. (Where will it go then? it will go to the cash book!). Similarly purchase of machinery will not form part of purchase book. It will be entered in Journal Proper.

Sales Day Book

The sales day book records transaction of credit sale of goods to customers. Sale of other things, even on credit, will not be entered in the sales day book but will be entered in Journal Proper. If goods are sold for cash, it will be entered in cash book. Total of sales day book is periodically posted to sales account in the ledger. The specimen of a sales day book is given below.

In the books of ....

Sales Day Book

Date	Particulars	Invoice reference	L. F.	Amount	Remarks

The format of sales return book is exactly the same; hence a separate illustration is not given.

Let us see how will be the following transaction recorded in the books of a Cloth Merchant.

Illustration 23.

1st July — Sold Tip Top clothing 50 suits of ₹ 2,200 each on two months credit on invoice number -2

11th July — Sold to New India Woolen 100 sweaters @ ₹ 250 each on invoice number 55

13th July — Received an order from Modern clothing for 100 trousers @ ₹ 500 at trade discount of 10%

17th July — Sold 50 sarees to Lunkad brothers @ ₹ 750 each

25th July — Sold T-shirts at exhibition hall for cash for ₹ 7,500

Solution:

In the books of Cloth Marchant

Sales Day Book

Date	Particulars	Invoice reference	L. F.	Amount
1st July	Tip Top Clothing			
	50 suits @ ₹ 2,200	2		1,10,000
11th July	New India Woolen			
	100 sweaters @ ₹ 250	55		25,000
17th July	Lunkad brother 50 sarees @ ₹ 750			37,500
	Total			1,72,500

Here again, cash sales at exhibition hall are not recorded. Also, merely getting an order for goods is not a transaction to be entered in sales book.

Other Subsidiary Books – Returns Inward, Return Outward, Biils Receivable, Bills Payable.

(i) Return Inward Book- The transactions relating to goods which are returned by the customers for various reasons, such as not according to sample, or not up to the mark etc contain in this book. It is also known as Sales Return Book.

Generally when a customer returns good to suppliers he issues a Debit Note for the value of the goods returned by him. Similarly the supplier who receives those goods issues a Credit Note.

Returns Inward Day Book

Date	Particulars	Outward Invoice	L.F.	Details	Totals	Remarks

(ii) Return Outward Book- This book contains the transactions relating to goods that are returned by us to our creditors e.g. goods broken in transit, not according to the sample etc.It's also known as Purchase Return Book.

Return Outward Day Book

Date	Particulars	Debit Note	L.F.	Details	Totals	Remarks

(iii) Bills Receivable Book- It is such a book where all bills received are recorded and therefrom posted directly to the credit of the respective customer's account. The total amounts of the bills so received during the period (either at the end of the week or month) is to be posted in one sum to the debit of Bills Receivable A/c.

Bills Receivable Day Book

No. of Bills	Date of Receipt of Bill	From whom	Name of the Receiver	Name of Drawer	Name of Acceptor	Date of Bill	Due Date	L.F.	Amount of Bill	How disposed off

(iv) Bills Payable Book- Here all the particulars relating to bills accepted are recorded and therefrom posted directly to the debit of the respective creditor's account. The total amounts of the bills so accepted during the period (either at the end of the week or month) is to be posted in one sum to the credit of Bills Payable Account.

Bills Payable Day Book

No. of Bills	Date of Acceptance	To whom given	Name of Drawer	Name of the Payee	Where Payable	Date of Bill	Term	Due Date	L.F.	Amount of Bill	How disposed off

Journal Proper

Credit transactions that cannot be entered in any other subsidiary book are entered in journal proper. It will cover purchase or sale of assets, expense accruals, rectification entries, adjusting entries, opening entries and closing entries. The format of journal proper is exactly the same as given in the section 1.17 of Journal entries. The entries here recorded in the same way as shown in that illustration.

Ledger Accounts

The book which contains accounts is known as the ledger. Since finding information pertaining to the financial position of a business emerges only from the accounts, the ledger is also called the Principal Book. As a result, all the necessary information relating to any account is available from the ledger. This is the most important book of the business and hence is rightly called the "King of All Books". Also Known as **Book of Final Entry.**

The specimen of a typical ledger account is given below:

Dr				**Ledger-Account**			**Cr**
Date	**Particulars**	**J. F.**	**Amount (₹)**	**Date**	**Particulars**	**J. F.**	**Amount (₹)**

Ledger Posting

As and when the transaction takes place, it is recorded in the journal in the form of journal entry. This entry is posted again in the respective ledger accounts under double entry principle from the journal. This is called ledger posting.

The rules for writing up accounts of various types are as follows :

Assets	:	Increases on the left hand side or the debit side and decreases on the credit side or the right hand side.
Liabilities	:	Increases on the credit side and decreases on the debit side.
Capitals	:	The same as liabilities.
Expenses	:	Increases on the debit side and decreases on the credit side.
Incomes or gain	:	Increases on the credit side and decrease on the debit side.

To summarise

Dr.	***Assets***	***Cr.***
Increase		Decrease

Dr.	***Liabilities & Capital***	***Cr.***
Decrease		Increase

Dr.	***Expenses or Loses***	***Cr.***
Increase		Decrease

Dr.	***Income or Gains***	***Cr.***
Decrease		Increase

The student should clearly understand the nature of debit and credit.

A debit denotes :

(a) In the case of a person that he has received some benefit against which he has already rendered some service or will render service in future. When a person becomes liable to do something in favour of the firm, the fact is recorded by debiting that person's account : (relating to Personal Account)

(b) In case of goods or properties, that the value and the stock of such goods or properties has increased, (relating to Real Accounts)

(c) In case of other accounts like losses or expenses, that the firm has incurred certain expenses or has lost money. (relating to Nominal Account)

A credit denotes :

(a) In case of a person, that some benefit has been received from him, entitling him to claim from the firm a return benefit in the form of cash or goods or service. When a person becomes entitled to money or money's worth for any reason. The fact is recorded by crediting him (relating to Personal Account)

(b) In the case of goods or properties, that the stock and value of such goods or properties has decreased. (relating to Real Accounts)

(c) In case of other accounts like interest or dividend or commission received, or discount received, that the firm has made a gain (relating to Nominal Account)

At a glance :

Dr. (Debit side)	**Cr. (Credit side)**
DESTINATION Where the economic benefit reaches / is received.	SOURCE of each economic benefits
Receiver	Given
What comes in	What goes out
All expense and losses	All income and gains

Let us now understand the mechanism of posting transaction into the ledger account. Consider the transaction: Rent paid in cash for ₹ 10000. The journal entry for this transaction would be:

Jan 15	Rent A/c	Dr	10,000	
	To Cash A/c			10,000

We will open two ledger accounts namely Rent A/c and Cash A/c. Let us see how the posting is made

Rent Account

Dr. **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
Jan15	To Cash A/c		10,000				

Cash Account

Dr. **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
				Jan 15	By Rent A/c		10,000

Please observe the following conventions while posting a transaction into ledger accounts. Note that both the effects of an entry must be recorded in the ledger accounts simultaneously.

1) The posting in the account which is debited, is done on the debit side by writing the name of the account or accounts that are credited with the prefix 'To'.

2) The posting in the account which is credited, is done on the credit side by writing the name of the account or accounts that are debited with the prefix "By'.

Illustration 24.

Let us now see how we can create ledger account for the seven journal entries that we passed for Illustration 17.

Folio No. 1

Dr. **Cash Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1.4.2013	To Vikas's capital	1	500,000	10.4.2013	By Furniture	1	25,000
1.4.2013	To Vaibhavi's capital	1	250,000	11.4.2013	By Punjab National Bank	1	1,00,000
				30.4.2013	By Balance c/d		6,25,000
			750,000				7,50,000
1.5.2013	To Balance b/d		625,000				

Folio No. 2

Dr. **Mr. Vikas's Capital Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
30.4.2013	To Balance c/d		5,00,000	1.4.2013	By Cash	1	5,00,000
			5,00,000				5,00,000
				1.5.2013	By Balance b/d		5,00,000

Folio No. 3

Dr. **Mrs. Vaibhavi's Capital Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
30.4.2013	To Balance c/d		2,50,000	1.4.2013	By Cash	1	2,50,000
			2,50,000				2,50,000
				1.5.2013	By Balance b/d		2,50,000

Folio No. 4

Dr. **Furniture Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
10.04.2013	To Cash		25,000	30.4.2013	By Balance c/d		25,000
			25,000				25,000
1.05.2013	To Balance b/d		25,000				

Folio No. 5

Dr. **Punjab National Bank Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
11.4.2013	To Cash	1	1,00,000	15.4.2013	By Rent	1	15,000
25.4.2013	To Consultancy Fees	1	2,50,000	20.4.2013	By Motor Car	1	50,000
					By Balance c/d		2,85,000
			3,50,000				3,50,000
1.05.2013	To Balance b/d		2,85,000				

Folio No. 6

Dr. Rent Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
15.4.2013	To Punjab National Bank	1	15,000				

Folio No. 7

Dr. Motor Car Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
20.4.2013	To Punjab National Bank	1	50,000				
"	To Loan from HDFC Bank	1	4,00,000				

Folio No. 8

Dr. Loan from HDFC Bank Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
				20.4.2013	By Motor Car	1	4,00,000

Folio No. 9

Dr. Avon Pharmaceuticals Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
25.4.2013	To Consultancy Fees	1	7,50,000				

Folio No. 10

Dr. Consultancy Fees Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
				25.4.2013	By Punjab National Bank	1	2,50,000
				25.4.2013	By Avon Pharma	1	7,50,000

Folio No. 11

Dr. Salary Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
30.4.2013	To Salary payable	1	15,000				

Folio No. 12

Dr. Salary Payable Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
				30.4.2013	By Salary	1	15,000

Please carefully observe the posting of journal entries into various ledger accounts. Do you see some further calculation in the cash A/c and Mr. Vikas's Capital A/c? What is done is that after posting all transactions to these accounts, the difference between the debit and credit sides is calculated. This difference is put on the side with smaller amount in order to tally grand totals of both sides. The convention is to write "To Balance c/d" or "By balance c /d" as the case may be. This procedure is normally done at the end of an accounting period. This process is called as "balancing of ledger accounts'.

Once the ledgers are balanced for one accounting period, the balance needs to be carried forward to the next accounting period as a running balance. This is done by writing "To Balance b/d" or "By balance b/d" as the case may be after the grand totals. This is also shown in the Cash A/c and Mr. Vikas's Capital Account.

Could you now attempt to balance the other ledger accounts and carry the balances to the next accounting period?

Important note: Please remember the balances of personal and real accounts only are carried down to the next accounting period as they represent resources and obligations of the business which will continue to be used and settled respectively in future. Balances of nominal accounts (which represent incomes or gains and expenses or losses) are not carried down to the next period. These balances are taken to the Profit and Loss account (or Income statement) prepared for the period. The net result of the P & L Account will show either net income or net loss which will increase or decrease the owner's equity.

In the above example, please note that the balances of Rent Account, Consultancy Fees Account and Salary Account will not be carried down to the next period, but to the P & L Account of that period. As illustration, we have shown it for Rent Account.

Posting to Ledger Accounts from Subsidiary books

In the above section, we explained posting to ledger accounts directly on the basis of journal entries. In practice, however, we know that use of subsidiary books is in vogue. Let us see how the posting to ledger accounts is done based on these records.

For each of the subsidiary books, there is a ledger account e.g. for purchase book, there is Purchase Account, for sales book there's Sales A/c, for cash book there will be Cash A/c as well as Bank A/c and so on.

Illustration 25.

Let us continue with illustration seen in the section Illustration 21above and post the totals into respective ledger accounts.

Solution:

Dr. Cash Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
1st Jan	To Balance b/d		3,800		By sundries as per cash book		1,500
	To Miscellaneous Receipts		2,500		By Balance c/d		4,800
			6,300				6,300

Dr. Purchases Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
	To sundries as per purchase book		19,000		By transfer to P & L A/c		19,000

Dr. Sales Account Cr.

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
	To transfer to P & L A/c		1,72,500		By sundries as per sales book		1,72,500

Typical Ledger Account Balances

We have seen how to balance various ledger accounts. It can be seen that while some accounts will show debit balance, while the other will show credit balance. Is there any relationship between the type of account (whether it is the account of asset, liability, capital, owner's equity, incomes or gain, expenses or losses) and the kind of balance (debit or credit) it should show?

The answer is generally 'Yes'. You may test to find the following are typical relationships.

Type of Account	Type of balance
All asset accounts	Debit balance
All liability accounts	Credit balance
Capital & Owner's equity account	Credit balance
Expenses or loss accounts	Debit balance
Incomes or gain accounts	Credit balance

Let us test these possibilities for confirmation. How does one go about testing this? Consider 'Cash A/c'. Whenever business receives cash we debit it, and whenever it is paid we credit it. Is it possible to see a situation that credits to cash are more than debits? In other words could we have negative cash in hand? No. Cash account will therefore always show a debit balance. So is true for all real asset accounts. After solving problems, if the contrary is observed, there is every chance that an error has been made while passing the accounting entries.

Closing Balance and Opening Balance

The debit or credit balance of an account what we get at the end of the accounting period is known as closing balance of that account.

The "balance of the nominal accounts" is closed by transferring to trading account and the profit and loss account which shows the net operating results – net profit or net loss.

The "balance of the personal accounts and real accounts" representing assets, liabilities, owners equity are reflected in the Balance sheet, which shows the financial position of a business on a particular date. These balances are transported as opening balance in the succeeding accounting period.

Some terms used:

Casting — totaling

Balancing — to find the difference between debit side total and credit side total of an account.

C/d -Carried down   B/d -Brought down

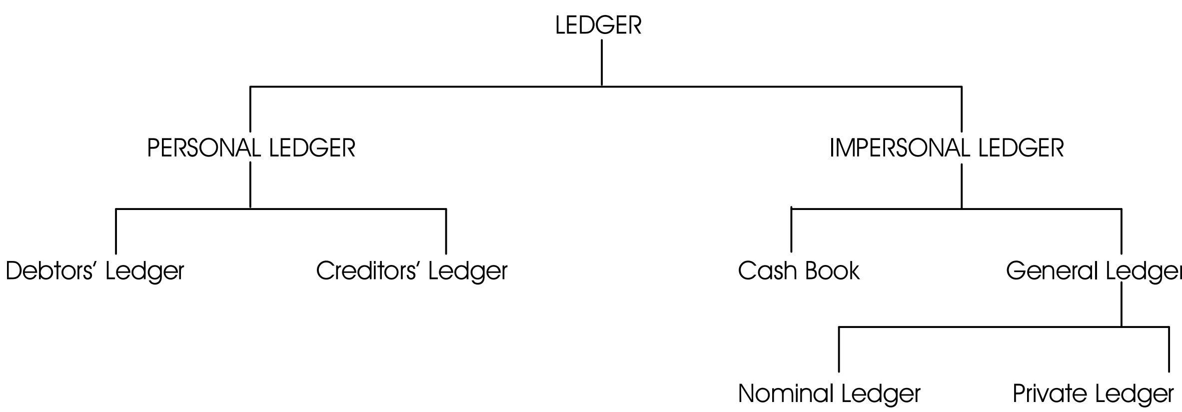
C/o - Carried over   B/o - Brought over

C/f - Carried forward   B/f - Brought forward

Subdivisions of Ledger

Practically, the Ledger may be divided into two groups -

(a) Personal Ledger & (b) Impersonal Ledger. They are again sub-divided as :



Personal Ledger: The ledger where the details of all transactions about the persons who are related to the accounting unit, are recorded, is called the Personal Ledger.

Impersonal Ledger: The Ledger where details of all transactions about assets, incomes & expenses etc. are recorded, is called Impersonal Ledger.

Again, Personal Ledger may be divided into two groups:

Viz. (a) Debtors' Ledger, & (b) Creditors' Ledger.

(a) **Debtors' Ledger:** The ledger where the details of transactions about the persons to whom goods are sold, cash is received, etc. are recorded, is called Debtors' Ledger.

(b) **Creditors' Ledger:** The ledger where the details of transactions about the persons from whom are purchase goods on credit, pay to them etc. are recorded, is called Creditors' Ledger.

Impersonal Ledger may, again be divided into two group, viz, (a) Cash Book; and (b) General Ledger.

(a) **Cash Book:** The Book where all cash & bank transactions are recorded, is called Cash Book.

(b) **General Ledger:** The ledger where all transactions relating to real accounts, nominal accounts, details of Debtors' Ledger and Creditors' Ledger are recorded, is called General Ledger.

General Ledger may, again, be divided into two groups. Viz, Nominal Ledger; & Private Ledger.

(a) **Nominal Ledger:** The ledger where all transactions relating to incomes and expenses are recorded, is called Nominal Ledger.

(b) **Private Ledger:** The Ledger where all transactions relating to assets and liabilities are recorded, is called Private Ledger.

Advantages of sub-division of Ledger.

The advantages of sub-division of ledger are:

(a) **Easy to Divide work :** As a result of sub-division, the division of work is possible and records can be maintained efficiently by the concerned employee.

(b) **Easy to handle :** As a result of sub-division, the size and volume of ledger is reduced.

(c) **Easy to collect information:** From the different classes of Ledger a particular type of transactions can easily be found out.

(d) **Minimizations of mistakes :** As a result of sub-division chances of mistakes are minimized.

(e) **Easy to compute :** As a result of sub-division, the accounting work may be computed quickly which is very helpful to the management.

(f) **Fixation of responsibility:** Due to sub-division, allotment of different types of work to different employees is done for which concerned employee will be responsible.

1.19 TRIAL BALANCE

Trial balance may be defined as a statement or a list of all ledger account balances taken from various ledger books on a particular date to check the arithmetical accuracy.

According to the Dictionary for Accountants by Eric. L. Kohler, Trial Balance is defined as "a list or abstract of the balances or of total debits and total credits of the accounts in a ledger, the purpose being to determine the equality of posted debits and credits and to establish a basic summary for financial statements". According to Rolland, Trial Balance is defined as "The final list of balances, totaled and combined, is called Trial Balance".

As this is merely a listing of balances, this will always be as on a particular date. Further it must be understood that Trial Balance does not form part of books of account, but it is a report prepared by extracting balances of accounts maintained in the books of accounts.

When this list with tallied debit and credit balances is drawn up, the arithmetical accuracy of basic entries, ledger posting and balancing is ensured. However, it does not guarantee that the entries are correct in all respect. This will be explained later in this chapter.

Although it is supposed to be prepared at the end of accounting period, computerized accounting packages are capable of providing instant Trial Balance reports even on daily basis, as the transactions are recorded almost on line.

Let us prepare the trial balance for the ledger accounts from the illustration 17.

Trial Balance as on...

Account name	Debit (₹)	Credit (₹)
Cash A/c	6,25,000	
Vikas's capital A/c		5,00,000
Vaibhavi's capital A/c		2,50,000
Furniture A/c	25,000	
Punjab National Bank A/c	2,85,000	
Rent A/c	15,000	
Motor Car	4,50,000	
Loan from HDFC A/c		4,00,000
Avon Pharmaceuticals	7,50,000	
Consultancy fees A/c		10,00,000
Salary A/c	15,000	
Salary payable A/c		15,000
Total	21,65,000	21,65,000

It can be seen that the totals of debit and credit balances is exactly matching. This is the result of double entry book-keeping wherein every debit has equal corresponding credit.

Feature's of a Trial Balance

1. It is a list of debit and credit balances which are extracted from various ledger accounts.
2. It is a statement of debit and credit balances.
3. The purpose is to establish arithmetical accuracy of the transactions recorded in the Books of Accounts.
4. It does not prove arithmetical accuracy which can be determined by audit.
5. It is not an account. It is only a statement of account.
6. It is not a part of the final statements.
7. It is usually prepared at the end of the accounting year but it can also be prepared anytime as and when required like weekly, monthly, quarterly or half-yearly.
8. It is a link between books of accounts and the Profit and Loss Account and Balance sheet.

Preparation of Trial Balance:

1. It may be prepared on a loose sheet of paper.
2. The ledger accounts are balanced at first. They will have either "debit-balance" or "credit balance" or "nil-balance".
3. The accounts having debit-balance is written on the debit column and those having credit-balance are written on the credit column.

The sum total of both the balances must be equal, for "Every debit has its corresponding and equal credit".

Purpose of a Trial Balance

It serves the following purposes :

1. To check the arithmetical accuracy of the recorded transactions.
2. To ascertain the balance of any ledger Account.
3. To serve as an evidence of fact that the double entry has been completed in respect of every transaction.
4. To facilitate the preparation of final accounts promptly.

Is Trial Balance indispensable?

It is a mere statement prepared by the accountants for his own convenience and if it agrees, it is assumed that at least arithmetical accuracy has been done although there may be a lot of errors.

Trial Balance is not a process of accounts, but its preparation helps us to finalise the accounts. Since it is prepared on a particular date, as at .... / as on .... is stated.

Forms of a Trial Balance

A trial balance may be prepared in two forms, they are –

1. Journal Form
2. Ledger Form

The trial balance must tally irrespective of the form of a trial balance.

1. **Journal Form :** This form of a Trial balance will have a format of Journal Folio. It will have a column for serial number, name of the account, ledger folio, debit amount and credit amount columns in this journal form.

The ledger folio will show the page number on which such account appears in the ledger.

Specimen of Journal Form of Trial Balance :

Trial Balance as on …………

Sl. No.	Name of the Account	L.F.	Debit Balance ₹	Credit Balance ₹

2. **Ledger Form :** This form of a trial balance have two sides i.e. debit side and credit side. In fact, the ledger form of a trial balance is prepared in the form of an account. Each side of the trial balance will have particulars (name of the account) column, folio column and the amount column.

Specimen of ledger form of Trial Balance

Dr. **Trial Balance as on ……** **Cr.**

Date	Name of the Account	L.F.	Amount ₹	Date	Name of the Account	L.F.	Amount ₹

Method of Preparation

1. Total Method or Gross Trial Balance.
2. Balance Method or Net Trial Balance.
3. Compound Method.

These are explained as under :-

1. **Total Method or Gross Trial Balance :** Under this method, two sides of the accounts are totaled. The total of the debit side is called the "debit total" and the total of the credit side is called the "credit total". Debit totals are entered on the debit side of the Trial Balance while the credit total is entered on the credit side of the Trial Balance.

   If a particular account has total in one side, it will be entered either in the debit column or the credit column as the case may be.

   Advantages : (a) It facilitates arithmetical accuracy of the accounts.

   (b) Extraction of ledger balances is not required at the time of preparation of Trial Balance.

Disadvantages : Preparation of final accounts is not possible.

2. **Balance Method or Net Trial Balance :** Under this method, all the ledger accounts are balanced. The balances may be either "debit-balance" or "credit balance".

   Advantages : (a) It helps in the easy preparation of final accounts.

   (b) It saves time and labour in constructing a Trial Balance.

   Disadvantages : Errors may remain undisclosed irrespective of the agreement of Trial Balance.

3. **Compound Method :** Under this method, totals of both the sides of the accounts are written in the separate columns. Along with this, the balances are also written in the separate columns. Debit balances are written in the debit column and credit balances are written in the credit column of the Trial Balance.

   Advantages : It offers the advantage of both the methods.

   Disadvantages : Lengthy process and more time consumed in the preparation of a Trial Balance.

Summary of Rules

Debit Balance — All Assets, Drawings, Debtors, Expenses and losses.

Credit Balance — All liabilities, Capital, Creditors, Gains and Incomes.

Trial Balance – Utility and Interpretation

The utility of Trial balance could be found in the following:

(1) It forms the basis for preparation of Financial statements i.e. Profit and Loss Account and Balance sheet.

(2) A tallied trial balance ensures the arithmetical accuracy of the entries made. If the trial balance does not tally, the errors can be found out, rectified and then financial statements can be prepared.

(3) It acts as a quick reference. One can easily find out the balance in any ledger account without actually referring to the ledger.

(4) If the listing of ledger accounts is systematically done in the trial balance, one can do quick time analysis. Hence, listing is usually done in the sequence of Asset accounts, Liability accounts, Capital accounts, Owner's equity accounts, Income or gain accounts and Expenses or losses accounts in that order.

One can draw some quick inferences from trial balance by interpreting the same. If one plots monthly trial balances side by side, one can analyse the movement of balances in various accounts e.g. one can see how expenses are increasing or decreasing or showing a trend of movements. By comparing the owner's equity balances as on two dates, one can interpret the business result e.g. if the equity has gone up, one can interpret that business has earned net profit and vice versa.

Trial Balance and Errors

We have seen that a tallied Trial Balance (T. B.) ensures arithmetical accuracy. What does it mean? It means entries have been passed as per double entry, that every debit has equal corresponding credit. If the T.B. does not tally, there could be errors in transaction entry. Such errors are called 'Errors affecting trial balance'. These can be:

(a) Only one effect of a transaction is posted to ledger e.g. for rent paid in cash, if entry is posted to cash but not to rent account, then obviously the T.B. will not match.

(b) Posting of wrong amount in one of the ledger accounts e.g. rent of ₹ 1,000 is paid in cash. The posting to Rent A/c is done for ₹ 1,000, Cash A/c is recorded at ₹ 10,000. The T.B. will not tally.

(c) If one of the posting is entered twice, T.B. will not match.

(d) If the balance in a ledger is not correctly taken to the T.B. e.g. the Rent A/c has a balance of ₹1,000, but while taking it to the T.B. it is taken as ₹ 100, the T.B. will through up difference.

(e) Taking balance to the wrong side in the T.B. e.g. a debit balance of ₹ 5,00,000 in Debtors A/c is taken as credit balance in the TB, then there will be a mismatch.

(f) Wrong carry forwards also will result in the T.B. mismatch.

No financial statements can be prepared if the T.B. does not tally. Hence, the errors will have to be rectified before proceeding further. The accountants therefore endeavour to minimize errors by being more careful and by doing periodical scrutiny of the entries.

There are certain type of errors that will not affect tallying of the T.B. i.e. it will tally but still there will be errors. These are as follows:

(a) **Error of omission:** if any entry is totally missed, the T.B. will tally but will be incorrect and incomplete.

(b) **Compensating error:** if there are two errors that are compensating each other, still the T.B. will tally but not accurate.

(c) **Wrong Account head:** if entry for insurance paid is wrongly debited to Commission A/c, tallying of T.B. will not be affected.

(d) **Error of duplication:** if a transaction is recorded twice, again the T.B. will match.

(e) **Error of principle:** if interest received is wrongly entered as debit to interest and credit to cash, there won't be any mismatch in the T.B.

For the above type of errors, the identification process is very time consuming. Only strict vigil and ongoing audit of entries could minimize such errors. Of course, the computerised accounting packages do provide built mechanisms to avoid occurrence of these mistakes.

After preparation of TB, if the difference not major, it is temporarily transferred to "Suspense A/c' until the errors are located and corrected.

Errors which are not disclosed by a Trial Balance

The following errors cannot be detected by a Trial Balance :

(a) **Errors of Omission :** When the transaction is not at all recorded in the books of accounts, i.e. neither in the debit sider nor in the credit side of the account – trial balance will agree.

(b) **Errors of Commission :** Where there is any variation in figure/amount, e.g. instead of ₹ 800 either ₹ 80 or ₹8,000 is recorded, in both sides of ledger accounts – trial balance will agree.

(c) **Errors of Principal :** When accounts are prepared not according to double entry principle e.g. Purchase of a Plant wrongly debited to Purchase Account – Trial balance will agree.

(d) **Errors of Misposting :** When wrong posting is made to a wrong account instead of a correct one although amount is correctly recorded, e.g., sold goods to B but wrongly debited to D's Account – trial balance will agree.

(e) **Compensating Errors :** When one error is compensated by another error e.g. Discount Allowed ₹100 not debited to Discount Allowed Account, whereas interest received ₹100, but not credit to Interest Account – trial balance will agree.

Procedure to locate Errors:

If the Trial Balance does not agree, the following procedure should carefully be followed :

(i) At first, check all ledger account balance one by one.

(ii) Addition of both the columns (Debit and Credit) should be checked.

(iii) If any difference comes divide the same by 2 and see whether the said figure appear on the correct side or not.

(iv) Additions of the subsidiary books, and ledger accounts to be checked up.

(vi) Posting from subsidiary books to the ledger to be checked up.

(vii) Opening balance of all account whether brought forward correctly or not to be checked up.

(viii) Even if the trial balance does not agree upto this level checking should be started again from the journal and book of original entry using tick mark (<).

Suspense Account / Difference in Books of Account

If there arises a difference in the trial balance, it is transferred to 'Suspense Account' or 'Difference in Books Account' to make the Trial Balance agree. After detection of error or errors, they are rectified and the suspense account is closed.

AT A GLANCE

Trial Balance
as at / as on .....

Heads of Accounts	Side of Trial Balance	Reasons
Cash in hand	Debit	Assets
Cash at Bank	Debit	Assets
Cash at Bank (overdrawn)	Credit	Liability
Bank Overdraft	Credit	Liability
Capital	Credit	Liability
Opening stock	Debit	Assets
Wages	Debit	Expenses
Purchase	Debit	Expense/Increase in stock
Carriage Inwards	Debit	Expenses
Freight	Debit	Expenses
Royalty on production	Debit	Expenses
Gas, Water, Fuel	Debit	Expenses
Motive Power	Debit	Expenses
Import Duty	Debit	Expenses
Sales	Credit	Income/Decrease in stock
Discount Allowed	Debit	Losses
Discount Received	Credit	Gains
Bad Debts	Debit	Losses
Reserve /Provision for Bad & Doubtful Debt (Opening)	Credit	Gains
Commission Received	Credit	Incomes
Salaries	Debit	Expenses
Commission paid	Debit	Expenses
Rent, rates, and taxes	Debit	Expenses
Repairs and maintenance	Debit	Expenses
Insurance	Debit	Expenses
Carriage outward	Debit	Expenses
Trade charges	Debit	Expenses
Royalty on sales	Debit	Expenses
Interest paid	Debit	Expenses
Interest received	Credit	Income
Advertisement	Debit	Expenses
Sundry expenses	Debit	Expenses
Miscellaneous expenses	Debit	Expenses
Miscellaneous receipts	Credit	Incomes

Income tax	Debit	Drawings/Assets
L.I.C. Premium	Debit	Drawings/Assets
Office expenses	Debit	Expenses
Export duty	Debit	Expenses
Allowances	Debit	Losses
Rebates	Debit	Losses
Sales tax	Debit	Expenses
Horses and Carts	Debit	Assets
Watch Dag Squad	Debit	Assets
Loan Secured	Credit	Liability
Loans Advanced	Debit	Assets
Reserve Funds	Credit	Liability
Sinking Fund	Credit	Liability
Sinking Fund Investments	Debit	Assets
Ecology Fund	Credit	Liability
Ecology Fund Investments	Debit	Assets
Building Fund	Credit	Liability
Building	Debit	Assets
Land	Debit	Assets
Plant	Debit	Assets
Machinery	Debit	Assets
Furniture & fittings	Debit	Assets
Motor vehicles	Debit	Assets
Computer	Debit	Assets
Office equipments	Debit	Assets
Goodwill	Debit	Assets
Patent rights	Debit	Assets
Copyrights	Debit	Assets
Trade marks	Debit	Assets
Investments	Debit	Assets
Shares & Securities	Debit	Assets
G. P. Notes	Debit	Assets
Sundry debtors	Debit	Assets
Sundry creditors	Credit	Liability
General Reserve	Credit	Liability
Bill Receivable	Debit	Assets
Bills Payable	Credit	Liability
Provision for Discount on Debtors	Credit	Liability
Provision for Discount on Creditors	Debit	Assets
Lighting and Heating	Debit	Expense
Drawings	Debit	Assets
Contribution to Provident Fund	Debit	Assets
Prize Fund	Credit	Liability
Depreciation	Debit	Losses
Provision for Depreciation	Credit	Liability
Returns Inwards	Debit	Losses
Returns Outwards	Credit	Gains

Freehold Property	Debit	Assets
Premises	Debit	Assets
Leasehold Property	Debit	Assets
Loose Tools	Debit	Assets
Petty Cash	Debit	Assets
Provident Fund	Credit	Liability
Debentures Purchased	Debit	Assets
Debentures (from Public)	Credit	Liability
Loan on Mortgage	Credit	Liability
Prepaid Expenses	Debit	Assets
Outstanding Expenses	Credit	Liability
Bad Debts Recovered	Credit	Gains
Accrued Incomes	Debit	Assets
Apprenticeship Premium received	Credit	Income
Books	Debit	Assets
Newspaper and Magazine	Debit	Expenses
Profit and Loss A/c (Dr.)	Debit	Losses
Profit and Loss A/c (Cr.)	Credit	Gains
Accumulated Depreciation	Credit	Liability
Postage and Telegram	Debit	Expense
Travelling & Conveyance	Debit	Expenses

Illustration 26.

From the following ledger account balances, prepare a Trial Balance of Mr. Sen for the year ended 31st March,2013.

Capital ₹ 80,000 ; Sales ₹10,00,000; Adjusted Purchase ₹ 8,00,000; Current A/c(cr) ₹ 10,000; Petty Cash ₹ 10,000; Sales Ledger Balance ₹ 1,20,000; Purchase Ledger Balance ₹ 60,000; Salaries ₹24,000; Carriage Inwards ₹ 4,000; Carriage Outward ₹ 6,000; Discount Allowed ₹ 10,000; Building ₹ 80,000; Outstanding Expenses ₹ 10,000; Prepaid Insurance ₹ 2,000 ; Depreciation ₹ 4,000 ; Cash at Bank ₹ 80,000 ; Loan A/c (cr) ₹ 66,000; Profit & Loss A/c(cr) ₹ 20,000; Bad Debts Recovered ₹ 2,000 ; Stock at 31.03.2013 ₹ 1,20,000; Interest Received ₹ 10,000; Accrued Interest ₹ 4,000; Investment ₹ 20,000; Provision for Bad Debts (01.04.2012) ₹ 6,000 ; General Reserve ₹ 20,000.

Solution.

Trial Balance of Mr. Sen

Dr. **as on 31st March, 2013** **Cr.**

Heads of Accounts	Amount (₹)	Heads of Accounts	Amount (₹)
Adjusted Purchase	8,00,000	Capital	80,000
Petty Cash	10,000	Sales	10,00,000
Sales Ledger Balance	1,20,000	Current A/c	10,000
Salaries	24,000	Purchase Ledger Balance	60,000
Carriage Inward	4,000	Outstanding Expenses	10,000
Discount Allowed	10,000	Loan A/c	66,000
Building	80,000	Profit & Loss A/c(cr)	20,000
Prepaid Insurance	2,000	Bad Debts Recovered	2,000
Depreciation	4,000	Interest Received	10,000
Cash at Bank	80,000	Provision for Bad debts	6,000

Stock (31.03.2013)	1,20,000	General Reserve	20,000
Accrued Interest	4,000		
Investment	20,000		
Carriage outward	**12,84,000**		**12,84,000**

***Note**: closing Stock will appear in Trial Balance since there is adjusted purchase.*

Adjusted purchase = Opening Stock + Purchase - Closing Stock.

It may be noted that if only adjusted purchase is considered then the matching concept is affected. Hence, to satisfy the matching concept, closing stock is also considered in Trial Balance.

1.20 MEASUREMENT, VALUATION AND ACCOUNTING ESTIMATES

At the end of the last section, it was stated that Trial Balance forms the basis for preparing financial statements. However, there are certain other tasks that have to be completed before these final accounts are prepared. You know that accounting entries are made on the basis of actual transactions carried out during an accounting period. These are all included in the trial balance. However, there could be certain other business realities which are to be recognized as either asset, liability, income, gain, expense, loss or a combination thereof. As we know the matching concept necessitates the consideration of all aspects which may affect the financial result of the business. Technically these are called as adjustments for which entries need to be passed, without which the financial statements will not give a true and fair view of business activity. We discuss some of these entries and adjustments in the following sections.

Before discussing these, let us understand the meaning of Income Statement and Balance Sheet.

Trial Balance based on ledger balances

Income Statement shows income & gains and expenses & losses for an accounting period. The net result is profit or loss.

Balance Sheet shows assets and Liabilities & owner's equity. Profit or loss from income statement is added or deducted from owner's capital or equity.

Depending on the nature of business, the income statement is prepared in different forms like:

(a) In case of manufacturing concern, a manufacturing, trading and P & L A/c is prepared

(b) In case of a trading or service organization, a trading and P & L A/c is prepared

The manufacturing or trading accounts show Gross margins (or gross losses) and the P & L A/c shows Net Profit or net loss.

The Balance Sheet exhibits the list of assets (which indicate resources owned) and the liabilities & owners' capital and equity (which shows how the resources are funded).

For company type of organizations, standard formats for P & L and Balance Sheet are given in the Companies Act that is to be adhered to. The accounting should be as per the prescribed Accounting Standards.

Closing Stock

We know when goods are purchased for resale we include them in Purchases A/c, while goods sold are shown in Sales A/c. At the end of accounting period, some of these goods may remain unsold. If we show the entire cost of purchases in income statement, it will not be as per the matching concept.

We should only show the cost of those goods that are sold during the period. The balance cost should be carried forward to the next accounting period through the balance sheet. How should the closing stock be valued? According to the conservative principle, the stock is valued at lower of cost or market price. If cost of stock is ₹ 125000 and its realizable market price is only ₹ 115000, then the value considered is ₹ 115000 only. What it means is the difference of ₹ 10000 is charged off to the current periods profits.

Students are advised to refer to Accounting Standard 2 - 'Valuation of Inventories' to get thorough knowledge.

Please remember the closing stock figure does not appear in the trial balance, but is valued and directly taken to the P & L A/c. The entry passed for this is:

Closing Stock A/c Dr

To Trading and P & L A/c

In solving the examination problem, this entry is not actually passed, but the effect of its outcome is given. Here, one effect is "show closing stock as asset in balance sheet" and second effect is "show it on the credit side of trading a/c".

Note : But, if the closing stock appears in the debit side of Trial Balance, it means it has already been adjusted against purchases. In that case, the closing stock will appear only in the asset side of the Balance Sheet.

Depreciation

When the business uses its assets to earn income, there is wear and tear of the asset life. Assets will have limited life and as we go on using it, the value diminishes. Again the question to be asked is – at what value should the asset be shown in the balance sheet? Consider a machine was bought on 1st April 2011 for ₹ 200000. It's used for production activity throughout the year. When the final accounts are being prepared, at what value should it be shown in balance sheet as on 31st March 2012?

Well, according to cost principle initial entry for purchase of machine is shown at cost paid for it e.g. ₹200000 in this case. But the fact that the machine is used must be recognized in financials. Hence the value in the balance sheet must be brought down to the extent of its use. This is called as Depreciation. How is it calculated? While there are different methods of calculating depreciation (explained in subsequently), the simple idea is to spread it over the useful life of the asset, so that at the end of its life the value is zero. In our example, if useful life of the machine is taken as 10 years, the depreciation will be simply ₹ 200000 ÷ 10 i.e. ₹ 20000 every year. So a depreciation of ₹ 20000 will be charged to the profit of every year and value of asset will be brought down by the same value.

Students are advised to refer to Accounting Standard 6 issued by ICAI to get thorough knowledge on Depreciation accounting.

The entry passed for this is:

Depreciation A/c Dr

To Fixed Asset A/c

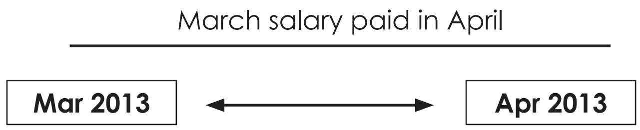
The effect given is one – include in the P & L A/c as expense for the period and two – reduce from asset value in the balance sheet.

Please refer study Note 3 for further explanation.

Accrued Expenses or Outstanding Expenses

There may be expenses incurred for the current accounting period, but not actually paid for. The matching concept, however, necessitates that this expense must be recognized as expense for the current year and should not be deferred till its actual payment. Typically, we know salary for the month is normally paid in the 1st week of the next month. Imagine the accounting period close on 31st March.

The salary for the month of March is not paid till 31st March. But is it is related to this month, it must be booked as expense for the current month and also as a liability payable in the next month (which is in next accounting period). This can be shown as follows:



The entry for this is:

Expense A/c Dr

To Outstanding Expense A/c or Expense payable A/c

The two effects when preparing the final accounts are:

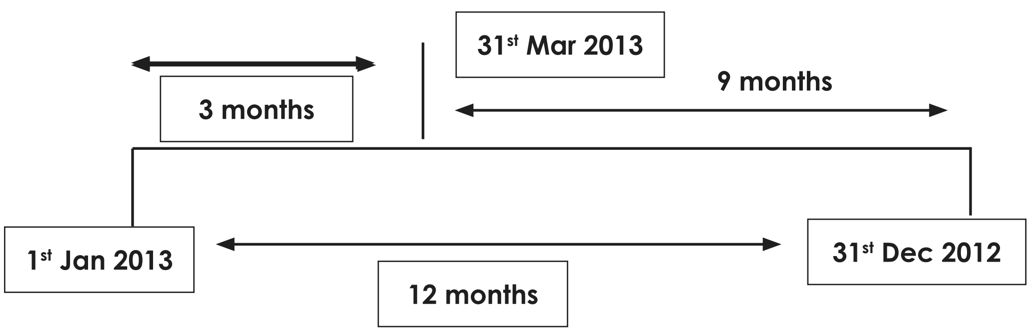
One – add in respective expense in P & L A/c and two – show as a liability in the balance sheet.

Prepaid Expenses

At times we may pay for certain expenses which are period related. For example, the business has taken an insurance policy against fire on which the annual premium payable is ₹ 75000. The policy is taken on 1st January 2013 valid till 31st December 2013. But the company's accounting period ends on 31st March 2013. When considering the insurance expense for the accounting year, what amount should be considered? See the following.

As can be seen, out of the total premium period of 12 months, only 3 months are related to the current accounting period and the remaining 9 months' premium is related to the next accounting period. Hence only 3 months' premium is to be considered as expense for the current year i.e. ₹ 18750 (75000 ÷ 4).

The entry for this is:



Prepaid Insurance A/c Dr.

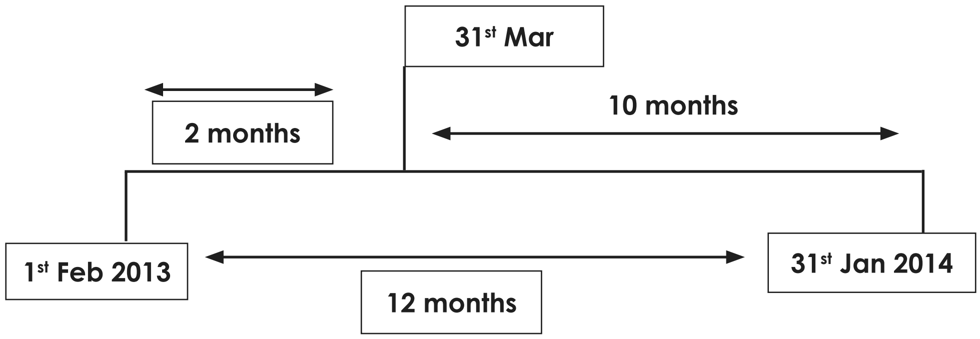
To Insurance A/c

The two effects while preparing final accounts are:

One – Reduce from respective expense in P & L A/c and two – show as an asset in the balance sheet

Accrued Incomes

Just as expenses accrue, there are instances of income getting accrued at the end of accounting period. The extent to which it accrues, it must be booked as income for the current accounting period. Consider, the business has put a One year fixed deposit of ₹ 100000 with Citi Bank at a fixed interest of 9 % p.a. on 1st February 2013 and the interest is credited by the bank on a semi-annual basis. Also, consider that the accounting period ends on 31st March 2013. The Citi bank will credit the 1st semi-annual interest on 31st July 2013 and the next on 31st January 2014. Now, consider the following :



It can be noticed that interest for the 2 months will be considered as accrued as on 31st of March 2012 and must be taken as income for the current accounting year.

The entry for this is:

Accrued Interest A/c Dr
To Interest A/c

The two effects while preparing final accounts are:

One – Show as income in the P & L A/c and two – show as an asset in the balance sheet

Income Received in Advance

If an income is received which is not related to the current accounting period, it cannot be included in the current year's P & L A/c. So, if it's already included as income it must be reduced. The entry for this is:

Respective Income A/c Dr
To Income received in advance A/c

The effects while preparing final account are:
One – Reduce from respective income and two – show it as liability in balance sheet

Accounting In Practice

These are days of computerised accounting. Even smaller firms like sole proprietors use accounting packages like Tally 9.0 which are very strong. At this stage it is necessary to understand the practical aspects of how accounting is actually done by these packages. Based on years of experience, they come with a standard chart of account. The chart of account is nothing but master ledger accounts and they are numerically coded for quick and easy identification and reporting. There are customized screens made to enter different transactions. Hence, the user can not by mistake put a purchase transaction into sales book. The customers and vendors are also alpha-numerically coded for ease of identification. Once the basic documents are entered, the job of posting, balancing and trial balance is all automated. So actually, most of the potential errors can be avoided.

There is an increased feeling among students that when there are automated systems available, why should one go through the study of manual processes. This is absolutely essential for grasping basic concepts. Once, you thoroughly understand them, it will be easy to operate any computerised accounting package in practice.

Illustration 27.

Journalize the following transactions in the books of Gaurav, post them into ledger and prepare trial balance for June 2013 :

June 1: Gaurav started business with ₹ 10,00,000 of which 25% amount was borrowed from wife.

June 4: Purchased goods from Aniket worth ₹ 40,000 at 20% TD and 1/5th amount paid in cash.

June 7: Cash purchases ₹ 25,000.

June 10: Sold goods to Vishakha ₹ 30,000 at 30% TD and received 30% amount in cash.

June 12: Deposited cash into bank ₹ 20,000.

June 15: Uninsured goods destroyed by fire ₹ 5,500.

June 19: Received commission ₹ 3,500.

June 22: Paid to Aniket ₹ 25,500 in full settlement of A/c.

June 25: Cash stolen from cash box ₹ 1,000.

June 27: Received from Vishakha ₹ 14,500 and discount allowed ₹ 200.

June 30: Interest received ₹ 2,400 directly added in our bank account.

Solution:

In the books of Gaurav
Journal

Date 2013	Particulars		L.F.	Dr. Amount (₹)	Cr. Amount (₹)
1-Jun	Cash A/c	Dr		1,000,000	
	To Capital A/c				750,000
	To Loan from Wife A/c				250,000
	(Being capital brought into business)				
4-Jun	Purchases A/c	Dr		32,000	
	To Cash A/c				6,400
	To Aniket's A/c				25,600
	(Being goods purchased at 20% TD & 1/5th amount paid in cash)				
7-Jun	Purchases A/c	Dr		25,000	
	To Cash A/c				25,000
	(Being cash purchases)				
10-Jun	Cash A/c	Dr		6,300	
	Vishakha's A/c	Dr		14,700	
	To Sales A/c				21,000
	(Being goods sold at 30% TD & 30% amount received in cash)				
12-Jun	Bank A/c	Dr		20,000	
	To Cash A/c				20,000
	(Being cash deposited in bank)				
15-Jun	Loss by Fire A/c	Dr		5,500	
	To Purchases A/c				5,500
	(Being uninsured goods lost by fire)				
19-Jun	Cash A/c	Dr		3,500	
	To Commission A/c				3,500
	(Being commission received)				

22-Jun	Aniket's A/c	Dr		25,600	
	To Cash A/c				25,500
	To Discount A/c				100
	(Being paid to Aniket in full settlement & discount received)				
25-Jun	Loss by Theft A/c	Dr		1,000	
	To Cash A/c				1,000
	(Being cash stolen)				
27-Jun	Cash A/c	Dr		14,500	
	Discount A/c			200	
	To Vishakha's A/c				
	(Being amount received from Vishakha & discount allowed)				14,700
30-Jun	Bank A/c			2,400	
	To Interest A/c				2,400
	(Being interest received directly added into bank account)				
				1,150,700	1,150,700

Dr. Cash Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amont (₹)
1/6/13	To Capital A/c		7,50,000	4/6/13	By PurchasesA/c		6,400
1/6/13	To Loan from Wife A/c		2,50,000	7/6/13	By Purchases A/c		25,000
10/6/13	To Sales A/c		6,300	12/6/13	By Bank A/c		20,000
19/6/13	To Commission A/c		3,500	22/6/13	By Aniket's A/c		25,500
27/6/13	To Vishakha's A/c		14,500	25/6/13	By Loss by Theft A/c		1,000
				30/6/13	By Balance c/d		9,46,400
			10,24,300				10,24,300
1/7/13	To Balance b/d		9,46,400				

Dr. Capital Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
30/6/13	To Balance c/d		7,50,000	1/6/13	By Cash A/c		7,50,000
			7,50,000				7,50,000
				1/7/13	By Balance b/d		7,50,000

Dr. Loan from Wife Account Cr.

Date	Particulars	J.F.	Amount (₹)	Date	Particulars	J.F.	Amtoun (₹)
30/6/13	To Balance c/d		2,50,000	1/6/13	By Cash A/c		2,50,000
			2,50,000				2,50,000
				1/7/13	By Balance b/d		2,50,000

Dr. Purchases Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
4/6/13	To Cash A/c		6,400	15/6/13	By loss by fire		5,500
4/6/13	To Aniket's A/c		25,600	30/6/13	By Bal c/d		51,500
7/6/13	To Cash A/c		25,000				
			57,000				57,000
1/7/13	To Balance b/d		51,500				

Dr.			Aniket's Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
22/6/13	To Cash A/c		25,500	4/6/13	By PurchasesA/c		25,600
22/6/13	To Discount A/c		100				
			25,600				25,600

Dr.			Vishakha's Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
10/6/13	To Sales A/c		14,700	27/6/13	By Cash A/c		14,500
				27/6/13	By Discount A/c		200
			14,700				14,700

Dr.			Sales Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
30/6/13	To Balance c/d		21,000	10/6/13	By Cash A/c		6,300
				10/6/13	By Vishakha's A/c		14,700
			21,000				21,000
				1/7/13	By Balance b/d		21,000

Dr.			Bank Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
12/6/13	To Cash A/c		20,000	30/6/13	By Balance c/d		22,400
30/6/13	To Interest A/c		2,400				
			22,400				22,400
1/7/13	To Balance b/d		22,400				

Dr.			Loss by Fire Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
15/6/13	To Purchases A/c		5,500	30/6/13	By Balance c/d		5,500
			5,500				5,500
1/7/13	To Balance b/d		5,500				

Dr.			Commission Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
30/6/13	To Balance c/d		3,500	19/6/13	By Cash A/c		3,500
			3,500				3,500
				1/7/13	By Balance b/d		3,500

Dr.			Discount Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
27/6/13	To Vishakha's A/c		200	22/6/13	By Aniket's A/c		100
				30/6/13	By Balance c/d		100
			200				200
1/7/13	To Balance b/d		100				

Dr.			Loss by Theft Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
25/6/13	To Cash A/c		1,000	30/6/13	By Balance c/d		1,000
			1,000				1,000
1/7/13	To Balance b/d		1,000				

Dr.			Interest Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F.	Amt. (₹)
30/6/13	To Balance c/d		2,400	30/6/13	By Bank A/c		2,400
			2,400				2,400
				1/7/13	By Balance b/d		2,400

Trial Balance as on 30.6.13

Name of Account	Dr. (₹)	Cr. (₹)
Cash A/c	9,46,400	-----
Capital A/c	-----	7,50,000
Loan from Wife A/c	-----	2,50,000
Purchases A/c	51,500	-----
Aniket's A/c	-----	-----
Vishakha's A/c	-----	-----
Sales A/c	-----	21000
Bank A/c	22,400	-----
Loss by Fire A/c	5,500	-----
Commission A/c	-----	3500
Discount A/c	100	-----
Loss by Theft A/c	1,000	-----
Interest A/c	-----	2,400
Total	10,26,900	10,26,900

Illustration 28.

Journalize the following transactions in the books of M/s Kothari & Sons, post them into ledger and prepare trial balance for April 2013:

Apr. 1: Commenced business with ₹ 40,000.

Apr. 4: Bought goods for cash ₹ 4,000

Apr. 7: Sold goods ₹ 700

Apr. 10: Bought goods from M/s Bhandari Bros. ₹ 3,000 at 10% trade discount.

Apr. 14: Purchased machinery of ₹ 5,000 from M/s Kirloskar Bros.

Apr. 16: Paid for transportation of machinery ₹ 500 & installation charges ₹ 300 on it.

Apr. 20: Paid quarterly interest on borrowed amount of ₹ 5,000 at 12% p.a.

Apr. 24: Supplied goods to M/s Kunal & Sons ₹ 3,500.

Apr. 27: Paid to M/s Bhandari Bros. ₹ 2600 in full settlement of account.

Apr. 28: M/s Kunal & Sons returned goods worth ₹ 300 & paid for ₹ 1,200 on account.

Apr. 29: Received commission ₹ 250.

Apr. 30: Paid conveyance to manager ₹ 450.

Solution:

In the books of M/s Kothari and Sons

Journal

Date	Particulars		L.F.	Dr. Amt. ₹	Cr. Amt. ₹
2013 1-Apr	Cash A/c	Dr		40,000	
	To Capital A/c				40,000
	(Being cash introduced as capital)				
4-Apr	Purchases A/c	Dr		4,000	
	To Cash A/c				4,000
	(Being bought goods for cash)				
7-Apr	Cash A/c	Dr		700	
	To Sales A/c				700
	(Being sold goods for cash)				
10-Apr	Purchases A/c	Dr		2,700	
	To M/s Bhandari Bros. A/c				2,700
	(Being purchased goods at 10% TD)				
14-Apr	Machinery A/c	Dr		5,000	
	To M/s Kirloskar Bros. A/c				5,000
	(Being purchased machinery on credit)				
16-Apr	Machinery A/c	Dr		800	
	To Cash A/c				800
	(Being transportation & installation charges on machinery paid)				
20-Apr	Interest A/c	Dr		150	
	To Cash A/c				150
	(Being paid quarterly interest on borrowed amt. of ₹ 5000 at 12% p.a.)				
24-Apr	M/s Kunal & Sons A/c	Dr		3,500	
	To Sales A/c				3,500
	(Being goods sold on credit)				
27-Apr	M/s Bhandari Bros. A/c	Dr		2,700	
	To Cash A/c				2,600
	To Discount A/c				100
	(Being paid in full settlement & discount received)				
28-Apr	Return Inwards A/c	Dr		300	
	Cash A/c	Dr		1,200	
	To M/s Kunal & Sons A/c				1,500

Date	Particulars		L.F.	Dr. Amt. ₹	Cr. Amt. ₹
	(Being goods returned & received on account)				
29-Apr	Cash A/c	Dr		250	
	To Commission A/c				250
	(Being commission received)				
30-Apr	Conveyance A/c	Dr		450	
	To Cash A/c				450
	(Being conveyance paid to manager)				
	Total			61,750	61,750

Ledger

Dr. Cash Account Cr.

Date	Particulars	J.F	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
1/4/13	To Capital A/c		40,000	4/4/13	By Purchases A/c		4,000
7/4/13	To Sales A/c		700	16/4/13	By Machinery A/c		800
28/4/13	To M/s Kunal & Sons A/c		1200	20/4/13	By Interest A/c		150
29/4/13	To Commission A/c		250	27/4/13	By M/s Bhandari Bros. A/c		2,600
				30/4/13	By Conveyance A/c		450
				30/4/13	By Balance c/d		34,150
			42,150				42,150
1/5/13	To Balance b/d		34,150				

Dr. Capital Account Cr.

Date	Particulars	J.F	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
30/4/13	To Balance c/d		40,000	1/4/13	By Cash A/c		40,000
			40,000				40,000
				1/5/13	By Balance b/d		40,000

Dr. Purchases Account Cr.

Date	Particulars	J.F	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
4/4/13	To Cash A/c		4,000	30/4/13	By Balance c/d		6700
10/4/13	To M/s Bhandari Bros. A/c		2,700				
			6,700				6,700
1/5/13	To Balance b/d		6,700				

Dr. Sales Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
30/4/13	To Balance c/d		4,200	7/4/13	By Cash A/c		700
				24/4/13	By M/s Kunal & Sons A/c		3,500
			4,200				4,200
				1/5/13	By Balance b/d		4,200

Dr. M/s Bhandari Bros. Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
27/4/13	To Cash A/c		2,600	10/4/13	By Purchases A/c		2,700
27/4/13	To Discount A/c		100				
			2,700				2,700

Dr. Machinery Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
14/4/13	To M/s Kirloskar Bros. A/c		5,000	30/4/13	By Balance c/d		5,800
16/4/13	To Cash A/c		800				
			5,800				5,800
1/5/13	To Balance b/d		5,800				

Dr. M/s Kirloskar Bros. Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
30/4/13	To Balance c/d		5,000	14/4/13	By Machinery A/C		5,000
			5,000				5,000
				1/5/13	By Balance b/d		5,000

Dr. Interest Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
20/4/13	To Cash A/c		150	30/4/13	By Balance c/d		150
			150				150
1/5/13	To Balance b/d		150				

Dr. M/S Kunal & Sons Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
24/4/13	To Sales A/c		3,500	28/4/13	By Return Inwards A/c		300
				28/4/13	By Cash A/c		1,200
				30/4/13	By Balance c/d		2,000
			3,500				3,500
1/5/13	To Balance b/d		2,000				

Dr. Discount Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
30/4/13	To Balance c/d		100	27/4/13	By M/s Bhandari Bros. A/c		100
			100				100
				1/5/13	By Balance b/d		100

Dr. Return Inwards Account Cr.

Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
28/4/13	To M/s Kunal & Sons A/c		300	30/4/13	By Balance c/d		300
			300				300
1/5/13	To Balance b/d		300				

Dr.			Commission Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
30/4/13	To Balance c/d		250	29/4/13	By Cash A/c		250
			250				250
				1/5/13	By Balance b/d		250

Dr.			Conveyance Account				Cr.
Date	Particulars	J.F.	Amt. (₹)	Date	Particulars	J.F	Amt. (₹)
30/4/13	To Cash A/c		450	30/4/13	By Balance c/d		450
			450				450
1/5/13	To Balance b/d		450				

Trial Balance as on 30.4.13

Name of Account	Dr. (₹)	Cr. (₹)
Cash A/c	34,150	-----
Capital A/c	-----	40,000
Purchases A/c	6700	-----
Sales A/c	-----	4,200
M/s Bhandari Bros. A/c	-----	-----
Machinery A/c	5,800	-----
M/s Kirloskar Bros. A/c	-----	5,000
Interest A/c	150	-----
M/s Kunal & Sons A/c	2,000	-----
Discount A/c	-----	100
Return Inwards A/c	300	-----
Commission A/c	-----	250
Conveyance A/c	450	-----
Total	49,550	49,550

Illustration 29.

Enter the following transactions in the proper subsidiary books and post them to ledger accounts. Also prepare Trial Balance:

2013

Jan. 1: Purchased goods worth ₹ 6,000 from M/s Akshaykumar & Sons.

Jan. 5: Sold goods to M/s Vinaykumar ₹ 2,000.

Jan. 7: Purchased goods from M/s Vinod Bros. ₹ 4,000 at 5% TD.

Jan. 9: Sold goods to Pravinkumar on cash ₹ 500.

Jan. 12: Bought goods from Jayant Kumar ₹ 3,500 at 10% TD.

Jan. 17: Supplied goods to M/s Rajnikant ₹ 2,500 at 5% TD.

Jan. 20: Sold furniture to M/s Narendrakumar worth ₹ 1,200.

Jan. 22: Returned goods to M/s Vinod Bros. ₹ 500 gross.

Jan. 25: M/s Vinaykumar returned goods worth ₹ 500.

Jan. 27: Sent debit note to M/s Akshaykumar for ₹ 200.

Jan. 30: Sold goods to Narendrakumar worth ₹ 9,000 and received half amount on the spot.

Solution:

Purchases Book

Date	Name of Supplier	Inward Invoice No.	L.F	Amt (₹)
1/1/13	M/s Akshaykumar			6,000
7/1/13	M/s Vinod Bros. (4000 - 5% TD)			3,800
12/1/13	Jayant Kumar (3500 - 10% TD)			3,150
				12,950

Sales Book

Date	Name of Customer	Outward Invoice No.	L.F	Amt (₹)
5/1/13	M/s Vinaykumar			2,000
17/1/13	M/s Rajnikant (2500 - 5% TD)			2,375
30/1/13	M/s Narendrakumar			4,500
				8,875

Return Inwards Book

Date	Name of Customer	Credit Note No.	L.F	Amt (₹)
25/1/13	M/s Vinaykumar			500
				500

Return Outwards Book

Date	Name of Supplier	Debit Note No.	L.F	Amt (₹)
22/1/13	M/s Vinod Bros. (500 - 5% TD)			475
27/1/13	M/s Akshaykumar			200
				675

Dr. **Cash Book** **Cr.**

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
9/1/13	To Sales A/c (Being cash sales)		500	31/1/13	By Balance c/d		5,000
30/1/13	To Sales A/c (Being cash sales)		4,500				
			5,000				5,000
1/2/13	To Balance b/d		5,000				

Dr. **Purchases Account** **Cr.**

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
31/1/13	To Sundries as per purchases book		12,950	31/1/13	By Balance c/d		12,950
1/2/13	To Balance b/d		12,950				12,950

Dr. **Sales Account** **Cr.**

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
31/1/13	To Balance c/d		13,875	9/1/13	By Cash A/c		500
				30/1/13	By Cash A/c		4,500
				31/1/13	By Sundries as per Sales Book		8,875
			13,875				13,875
				1/2/13	By Balance b/d		13,875

Dr. **Return Inwards Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
31/1/13	To Sundries as per return inwards book		500	31/1/13	By Balance c/d		500
1/2/13	To Balance b/d		500				500

Dr. **Return Outwards Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
31/1/13	To Balance c/d		675	31/1/13	By Sundries as per return outwards book		675
			675	1/2/13	By Balance b/d		675

Dr. **M/s Akshaykumar Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
27/1/13	To Return Outwards A/c		200	1/1/13	By Purchases A/c		6000
31/1/13	To Balance c/d		5,800				
			6,000				6,000
				1/2/13	By Balance b/d		5,800

Dr. **M/s Vinod Bros Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
22/1/13	To Return Outwards A/c		475	7/1/13	By Purchases A/c		3800
31/1/13	To Balance c/d		3,325				
			3,800				3800
				1/2/13	By Balance b/d		3325

Dr. **Jayant Kumar Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
31/1/13	To Balance c/d		3,150	12/1/13	By Purchases A/c		3,150
				1/2/13	By Balance b/d		3,150

Dr. **M/s Vinaykumar Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
5/1/13	To Sales A/c		2,000	25/1/13	By Return Inwards A/c		500
				31/1/13	By Balance c/d		1,500
			2,000				2,000
1/2/13	To Balance b/d		1,500				

Dr. **M/s Rajnikant Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
17/1/13	To Sales A/c		2,375	31/1/13	By Balance c/d		2,375
1/2/13	To Balance b/d		2,375				

Dr. **M/s Narendrakumar Account** Cr.

Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Amt (₹)
20/1/13	To Furniture A/c		1,200	31/1/13	By Balance c/d		5,700
30/1/13	To Sales A/c		4,500				
			5,700				5,700
1/2/13	To Balance b/d		5,700				

Furniture Account

Dr. Date	Particulars	J.F.	Amt (₹)	Date	Particulars	J.F.	Cr. Amt (₹)
31/1/13	To Balance c/d		1,200	20/1/13	By M/s Narendra kumar A/c		1,200
				1/2/13	By Balance b/d		1,200

Trial Balance as on 31.1.13

Name of Account	Dr. (₹)	Cr. (₹)
Cash A/c	5,000	-----
Purchases A/c	12,950	-----
Sales A/c	-----	13,875
Return Inwards A/c	500	-----
Return Outwards A/c	-----	675
M/s Akshaykumar A/c	-----	5,800
M/s Vinod Bros. A/c	-----	3,325
Jayant Kumar A/c	-----	3,150
M/s Vinaykumar A/c	1,500	-----
M/s Rajnikant A/c	2,375	-----
M/s Narendrakumar A/c	5,700	-----
Furniture A/c	-----	1,200
Total	28,025	28,025

Illustration 30.

The total of debit side of Trial Balance of a larger boot and shoe repairing firm as on 31.12.2013 is ₹ 1,66,590 and that of the credit side is ₹ 42,470. After several checking and re-checking the mistakes are discovered :

Items of Account	Correct Figure (as it would be)	Figures as it appear in the Trial Balance
Opening Stock	₹ 14,900	₹ 14,800
Repairs	₹ 61,780	₹ 61,780 (appear in the Debit side)
Rent & Taxes	₹ 2,160	₹ 2,400
Sundry Creditors	₹ 6,070	₹ 5,900
Sundry Debtors	₹ 8,060	₹ 8,310

Ascertain the correct total of the Trial Balance.

Solution:

Particulars	**Debit** (₹)	**Credit** (₹)
Total as per Trail Balance	1,66,590	42,470
Opening Stock understated (14,900-14,800)	+100	-
Repairs being credit balance, but shown as debit balance	-61,780	+61,780
Rent & Taxes overstated (2,400-2,160)	-240	-
Sundry Creditors understated (6,070-5,900)	-	+170
Sundry Debtors overstated (8,310-8,060)	-250	-
Total	1,04,420	1,04,420

1.21 OPENING ENTRIES, CLOSING ENTRIES, TRANSFER ENTRIES AND RECTIFICATION ENTRIES

(i) Opening Entries: The opening entry is an item which is passed in the Journal proper or General Ledger. The purpose of passing this entry is to record the opening balances of the accounts transferred from the previous year to the new year. The accounts which are appearing on the assets side of balance sheet are debited in the opening entry while which accounts are appearing in the liabilities side are credited.

At the end of each accounting period, the books of accounts need to be closed for preparation of final accounts. Also, in the beginning of the new accounting period, new books of accounts are to be opened. For this purpose, opening and closing entries need to be passed. These entries are passed in journal proper.

The entry can be given as:

All Asset A/cs Dr

To All Liabilities A/c

To Owners' Capital A/cs

Illustration 31.

Consider the following balances in the Balance Sheet as on 31st March 2012. Pass the opening entry on 1st April 2013.

Subodh's Capital A/c	2,75,000
Loan from HDFC bank	4,25,000
Plant and machinery	3,30,000
Cash in hand	20,000
Balance at Citi bank	1,75,000
Trade Debtors	3,55,000
Closing stock	1,35,000
Trade Payables	2,95,000
Outstanding Expenses	40,000
Prepaid Insurance	20,000

Solution:

The opening entry will be as follows:

Plant and machinery A/c	Dr	3,30,000	
Cash in hand A/c	Dr	20,000	
Balance at Citi bank A/c	Dr	1,75,000	
Trade Debtors A/c	Dr	3,55,000	
Closing stock A/c	Dr	1,35,000	
Prepaid Insurance	Dr	20,000	
To Subodh's Capital A/c			2,75,000
To Loan from HDFC bank A/c			4,25,000
To Trade Payables A/c			2,95,000
To Outstanding Expenses A/c			40,000

(ii) Closing Entries: All the expenses and gains or income related nominal accounts must be closed at the end of the year. In order to close them, they are transferred to either Trading A/c or Profit and Loss A/c. Journal entries required for transferring them to such account is called a 'closing entry'.

The Closing Entries are passed on the basis of trial balance for transferring the balances to Trading and profit and loss A/c. These entries are mainly for:

a) For transferring purchases and direct expenses (goods related) to Trading A/c

Trading A/c	Dr
To Opening stock A/c	
To Purchases A/c	
To Factory expenses A/c	
To Freight & carriage inward A/c	

b) For transferring sales and closing stocks

Sales A/c	Dr
Closing Stock A/c	Dr
To Trading A/c	

c) For transferring gross profit or gross loss to P & L A/c

For Gross Profit

Trading A/c	Dr
To P & L A/c	

For Gross Loss

P & L A/c	Dr
To Trading A/c	

d) For transferring expenses

P & L A/c	Dr
To Respective expense A/c	

e) For transferring Incomes

Respective income A/cs	Dr
To P & L A/c	

f) For transferring Net profit or Net loss

For Net Profit

P & L A/c	Dr
To Capital A/c	

For Net Loss

Capital A/c	Dr
To P & L A/c	

Illustration 32.

Pass closing entries for the following particulars as on 31st March 2013 presented by X Ltd.

Particulars	**Amount (₹)**
Opening stock	10,000
Purchases	50,000
Wages	5,000
Returns outward	5,000
Sales	1,00,000
Returns inward	10,000
Salaries	8,000
Insurance	1,000

Particulars	Amount (₹)
Bad debts	3,000
Interest received	3,000
Discount allowed	4,000
Discount received	3,000
Closing stock	15,000

Solution:

In the Books of X Ltd.
Journal

Date 2013	Particulars		LF	Dr. Amount (₹)	Cr. Amount (₹)
March 31st	Trading A/c	Dr.		75,000	
	To, Opening Stock A/c				10,000
	To, Purchases A/c				50,000
	To, Wages A/c				5,000
	Returns inward A/c				10,000
	(Transfer to balances for closing the latter accounts)				
	Sales A/c	Dr.		1,00,000	
	Returns outward A/c	Dr.		5,000	
	Closing Stock A/c	Dr.		15,000	
	To, Trading A/c				1,20,000
	(Transfer of balances for closing the former accounts)				
	Trading A/c	Dr.		45,000	
	To, Profit and Loss A/c				45,000
	(Gross profit transferred)				
	Profit and Loss A/c	Dr.		16,000	
	To, Salaries A/c				8,000
	To, Insurance A/c				1,000
	To, Bad Debts A/c				3,000
	To, Discount allowed A/c				4,000
	(Transfer of balances for closing the latter accounts)				
	Interest received A/c	Dr.		3,000	
	Discount received A/c	Dr.		3,000	
	To, Profit and Loss A/c				6,000
	(Transfer of balances for closing the former accounts)				
	Profit and Loss A/c	Dr.		35,000	
	To, Capital A/c				35,000
	(Net profit transferred to Capital A/c)				

(iii) Transfer Entries: When it is necessary for an amount or balance of one account to be transferred to some other account, it is done by means of a transfer journal entry in the Journal Proper.

i.e. Amount withdrawn from Capital

Capital A/c Dr.

To, Drawings A/c

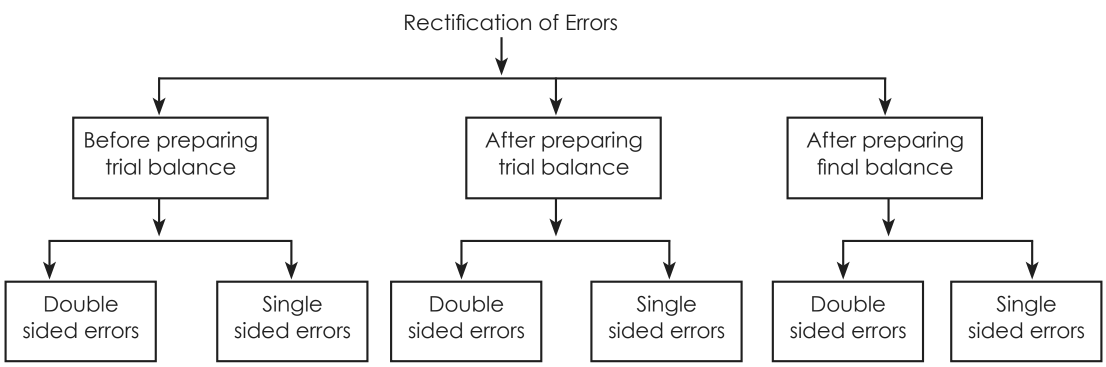
(iv) Rectification Entries (Rectification of errors): These entries are passed when errors or mistakes are discovered in accounting records. These entries are also known as Correction Entries. These entries are also passed in Journal Proper.

In this study note, you were introduced to the reasons why errors could occur and to the fact that while some errors affect trial balance and some errors do not affect it. In this section, we will see in depth how the corrections are made to the wrong entries.

When the errors affecting the T.B. are made, the normal practice is to put the difference to an A/c called as 'Suspense A/c' till the time errors are located. On identification of errors, the one effect goes to the correct A/c and the other effect to the Suspense A/c. This is done for one sided errors e.g. if sales book total is wrongly taken, but individual customers are correctly debited. Such error will cause difference in trial balance as only Sales A/c is wrongly credited. In such cases the rectification entry will be passed through Suspense A/c. In all other cases the rectification is done by debiting or crediting the correct A/c head and by crediting or debiting the wrong A/c head.

Let us recapitulate the types of errors and the ways to rectify them in the following table.

Type of error	**Rectification**
a) Error of principle – entering revenue expense as capital expense or vice versa or entering revenue receipt as capital receipt or vice versa.	A journal entry is passed to give correct effect.
b) Error of Omission – transaction forgotten to be entered in books of accounts.	Simply, the correct entry is passed.
c) Errors of commission – entering to wrong head of account.	Debit or credit wrong A/c head and post it to correct head.
d) Compensating errors – more than one error that could compensate effect of each other.	Pass correcting entry
e) Wrong totaling of subsidiary books	As it affects T.B., pass through Suspense A/c
f) Posting on wrong side of an A/c	Pass an entry with double effect – one to cancel wrong side and other to give effect on correct side
g) Posting of wrong amount	Pass entry with differential amount



A. **Before Preparation of Trail Balance**

If errors are detected before the preparation of Trail Balance, the effect of each error should be known.

The errors are of two types: viz

(a) Double Sided Error; (b) Single Sided Error

(a) Double Sided Error:

The following principles should be followed for the purpose.

(i) What was the correct entry?

(ii) What entry had been done?

(iii) Rectifying entry.

Example: Purchased a Building for ₹ 3,00,000 wrongly passed through purchase account.

Solutions:

(i)	Building A/c	Dr. 3,00,000	
	To Cash A/c		3,00,000
(ii)	Purchase A/c	Dr. 3,00,000	
	To Cash A/c		3,00,000
(iii)	Building A/c	Dr. 3,00,000	
	To Purchase A/c		3,00,000

(b) Single Sided Error

Under the circumstances, no separate entry is required but the affected account should be rectified by appropriate posting.

Example: Purchase account was overcast by ₹ 10,000.

Answer:

The correction to be made in Purchase Account in the following manner.

Dr. Purchase Account Cr.

Particulars	₹	Particulars	₹
To		By Error - Wrong posting	10,000

So, purchase account should be credited by ₹ 10,000.

B. **After Preparation of Trial Balance**

If the errors are detected after the preparations of trial balance, the following procedure should be followed:

(a) Double Sided Errors; and (b) Single Sided Errors.

(a) Double Sided Errors:

- Same as method (a) above i.e., before preparation of Trial Balance.

(b) Single Sided Errors:

- In case of Single side errors, relevant account to be rectified by applying Suspense Account.

Suspense Account

If the Trial Balance does not agree we cannot prepare final accounts. In order to prepare final account, the difference so appeared in trial balance is to be passed through Suspense Account. When the errors will be located and rectified suspense account will automatically be Nil or closed. The suspense account will appear in the Balance Sheet. When it appears in the debit side of trial balance, the same will appear in the assets side of the Balance Sheet and vice-versa.

Example: Sales Day Book was overcast by ₹ 1,000.

	₹	₹
Sales A/c	Dr. 1,000	
To Suspense A/c		1,000

C. **After Preparation of Final Accounts**

If the errors are detected after the preparation of final accounts the following steps should carefully be followed.

(a) For Double Sided Errors

(i) Same as (A) before preparation of Trial Balance or (B) after preparation of Trail Balance. But all the nominal accounts are to be replaced by Profit and Loss Adjustment Account. And the rest one will be same as (A) or (B) stated earlier.

(ii) Suspense Account will be carried forward to the next year; and

(iii) Real and Personal Accounts are to be carried forward to the next year.

Example: Purchase a Plant wrongly debited to Purchase Account for ₹ 10,000

Solution:

(i) **If after Trial Balance**

Plant A/c Dr.

To Purchase A/c

(ii) **If after Final Account**

Plant A/c Dr.

To Profit and Loss Adjustment A/c

(b) for Single Sided Errors:

Same principle is to be followed like (B) after preparation of Trial Balance and all the nominal account are to be preplaced by Profit and Loss Adjustment Account.

Example – Discount allowed was not posted to discount Account for ₹ 500.

Solution:

(i) **If after Trial Balance**

Discount Allowed A/c Dr.

To Suspense A/c

(ii) **If after Final Account**

Profit and Loss Adjustment A/c Dr.

To Suspense A/c

Illustration 33.

Rectify the following errors assuming that the errors were detected (a) Before the Preparation of Trial Balance; (b) After the preparation of Trial Balance and (c) After the preparation of Final Accounts.

(i) Purchase Plant for ₹ 10,000 wrongly passed through Purchase Account.

(ii) Sales Day Book was cast short by ₹ 1,000.

(iii) Cash paid to Mr. X for ₹ 1,000 was posted to his account as ₹ 100.

(iv) Purchase goods from Mr. T for ₹ 3,500 was entered in the Purchase Day Book as ₹ 500.

(v) Paid salary for ₹ 3,000 wrongly passed through wages account.

Solution:

In the Books of ……………………

Journal (without narration)

Date	Before preparation of Trial Balance	After preparation of Trial Balance	After preparation of Final Accounts
	Dr. Cr.	Dr. Cr.	Dr. Cr.
(i)	Plant A/c 10,000 To Purchase A/c. 10,000	Plant A/c 10,000 To Purchase A/c. 10,000	Plant A/c 10,000 To P&L Adjustment A/c10,000
(ii)	Sales account will be credited with ₹ 1,000	Suspense A/c Dr. 1,000 To Sales A/c. 1,000	Suspense A/c Dr. 1,000 To P&L Adjustment A/c 1,000
(iii)	X Account will be debited when ₹ 900	X A/c Dr. 900 To Suspense A/c. 900	X A/c Dr. 900 To Suspense A/c 900
(iv)	Purchase A/c Dr. 3,000 To T A/c 3,000	Purchase A/c Dr. 3,000 To T A/c 3,000	P&L Adjustment A/c Dr. 3,000 To T's A/c. 3,000
(v)	Salary A/c Dr. 3,000 To Wages A/c 3,000	Salary A/c Dr. 3,000 To wages A/c. 3,000	P&L Adjustment A/c. Dr. 3,000 To P&L Adjustment A/c 3,000

Illustration 34.

A merchant, while balancing his books of accounts notices that the T.B. did not tally. It showed excess credit of ₹ 1,700. He placed the difference to Suspense A/c. Subsequently he noticed the following errors:

(a) Goods brought from Narayan for ₹ 5,000 were posted to the credit of Narayan's A/c as ₹ 5,500

(b) An item of ₹ 750 entered in Purchase returns book was posted to the credit of Pandey to whom the goods had been returned.

(c) Sundry items of furniture sold for ₹ 26,000 were entered in the sales book.

(d) Discount of ₹ 300 from creditors had been duly entered in creditor's A/c but was not posted to discount A/c.

Pass necessary journal entries to rectify these errors. Also show the Suspense A/c.

Solution:

(a) Goods bought from Narayan are posted to credit of his A/c as ₹ 5,500 instead of ₹ 5,000. Here, it is correct to credit Narayan's A/c. But the mistake is extra credit of ₹ 500. This is one sided error, as posting to purchases A/c is correctly made. So the rectification entry will affect the suspense A/c. This needs to be reversed by the rectification entry:

Narayan's A/c	Dr.	500	
To Suspense A/c			500

(b) Goods bought from Pandey were returned back to him. It should have appeared on the debit side of his A/c. For rectifying we will need to debit his A/c with double the amount i.e. ₹ 1500 (₹ 750 to cancel the wrong credit and another ₹ 750 to give effect for correct debit) and the effect will go to Suspense A/c. The correction entry is:

Pandey A/c	Dr.	1,500	
To Suspense A/c			1,500

(c) Sale of furniture was recorded in sales book. What's wrong here? Remember that sales book records sale of goods only and nothing else. Sale of furniture will appear in either cash book (if sold for cash) or journal proper (if sold on credit). Hence, wrong credit to Sales A/c must be removed and credit should be given to Furniture A/c. It's important to note that this rectification entry will not affect the Suspense A/c. The correction entry is:

Sales A/c	Dr	26,000	
To Furniture A/c			26,000

(d) The discount received from creditor is not entered in discount A/c but was correctly recorded in creditors' A/c. This is one sided error and will therefore be routed through suspense for correction. A discount is received; it must be credited being an income.

Suspense A/c	Dr	300	
To Discount received A/c			300

Let us now see how suspense A/c will Look like. Excess credit of ₹ 1,700 in Trial Balance will be shown on the debit side of suspense A/c. This will bring in total debit equal to total credit.

Dr **Suspense Account** **Cr**

Date	Particulars	J. F.	Amount ₹	Date	Particulars	J. F.	Amount ₹
	To Balance b/d		1,700		By Narayan		500
	To Discount received		300		By Pandey		1,500
			2,000				2,000

Please observe that after correcting passing all rectification entries, the Suspense A/c tallies automatically.

Illustration 35.

Pass necessary journal entries to rectify the following errors:

(a) An amount of ₹ 200 withdrawn by owner for personal use was debited to trade expenses.
(b) Purchase of goods of ₹ 300 from Nathan was wrongly entered in sales book.
(c) A credit sale of ₹ 100 to Santhanam was wrongly passed through purchase book.
(d) ₹ 150 received from Malhotra was credited to Mehrotra.
(e) ₹ 375 paid as salary to cashier Dhawan was debited to his personal A/c.
(f) A bill of ₹ 2,750 for extension of building was debited to building repairs A/c
(g) Goods of ₹ 500 returned by Akashdeep were taken into stock, but returns were not posted.
(h) Old furniture sold for ₹ 200 to Sethi was recorded in sales book.
(i) The period end total of sales book was under cast by ₹ 100
(j) Amount of ₹ 80 received as interest was credited to commission.

Solution:

Sl No.		Particulars		Debit (₹)	Credit (₹)
(a)	**Wrong Entry**	Trade Expenses	Dr	200	
		To Cash			200
	Correct entry	Drawings	Dr	200	
		To cash			200
	Rectification entry	Drawings	Dr	200	
		To Trade Expenses			200
(b)	**Wrong Entry**	Nathan	Dr	300	
		To Sales			300
	Correct entry	Purchases	Dr	300	
		To Nathan			300
	Rectification entry	Purchases	Dr	300	
		Sales	Dr	300	
		To Nathan			600
(c)	**Wrong Entry**	Purchases	Dr	100	
		To Santhanam			100
	Correct entry	Santhanam	Dr	100	
		To Sales			100
	Rectification entry	Santhanam	Dr	200	

Sl No.		Particulars		Debit (₹)	Credit (₹)
		To Sales			100
		To Purchases			100
(d)	**Wrong Entry**	Cash	Dr	150	
		To Mehrotra			150
	Correct entry	Cash	Dr	150	
		To Malhotra			150
	Rectification entry	Mehrotra	Dr	150	
		To Malhotra			150
(e)	**Wrong Entry**	Dhawan	Dr	375	
		To cash			375
	Correct entry	Salary	Dr	375	
		To cash			375
	Rectification entry	Salary	Dr	375	
		To Dhawan			375
(f)	**Wrong Entry**	Building Repairs	Dr	2,750	
		To Cash			2,750
	Correct entry	Buildings	Dr	2,750	
		To Cash			2,750
	Rectification entry	Buildings	Dr	2,750	
		To Building Repairs			2,750
(g)	**Wrong Entry**	No entry passed			
	Correct entry	Sales Returns	Dr	500	
		To Akashdeep			500
	Rectification entry	Sales Returns	Dr	500	
		To Asashdeep			500
(h)	**Wrong Entry**	Sethi	Dr	200	
		To Sales			200
	Correct entry	Sethi	Dr	200	
		To Furniture			200
	Rectification entry	Sales	Dr	200	
		To Furniture			200
(i)	**Wrong Entry**	No entry passed			
	Correct entry	Suspense	Dr	100	
		To Sales			100
	Rectification entry	Suspense	Dr	100	
		To Sales			100
(j)	**Wrong Entry**	Cash	Dr	80	
		To Commission			80
	Correct entry	Cash	Dr	80	
		To Interest			80
	Rectification entry	Commission	Dr	80	
		To Interest			80

EFFECT OF ERRORS ON PROFIT OR LOSS

Some errors may affect the profit or loss for the period while other won't. How to find it out? Remember, the P & L A/c reflects items of incomes, gains, expenses and losses. All these accounts are nominal accounts. When an error occurs which affects a nominal account, it will affect profit or loss otherwise not. So, errors that affect real and personal accounts will not affect profit or loss.

Illustration 36.

Rectifying the following errors by way of journal entries and work out their effect on profit or loss of the concern:

a. Return inward book was cast short by ₹ 500.
b. ₹ 300 received from Ram has been debited to Mr. Shyam.
c. Wages paid for the installation of a machine debited to wages account for ₹ 1,000.
d. A purchase made for ₹ 1,000 was posted to purchase account as ₹ 100.
e. Purchase of furniture amounting to ₹ 3,000 debited to purchase account.
f. Goods purchased for proprietor's use for ₹ 1,000 debited to purchase account.

Solution:

In the Books of …………

Journal

Date	Particulars	L.F	Dr. (₹)	Cr. (₹)
(a)	Return Inward A/c Dr. To, Suspense A/c (Return Inward Book was cast short, now rectified.)		500	 500
(b)	Suspense A/c Dr. To, Ram A/c To Shyam A/c (Received from Mr. Ram has been debited to Mr. Shyam A/c, now rectified.)		600	 300 300
(c)	Machinery A/c Dr. To, Wages/c (Wages paid for maintenance of machinery debited to Wages A/c, now rectified.)		1,000	 1,000
(d)	Purchase A/c Dr. To, Suspense A/c (Purchase account was short by ₹ 900, now rectified.)		900	 900
(e)	Furniture A/c Dr. To, Purchase A/c (Furniture purchased wrongly debited to purchase account, now rectified)		3,000	 3,000
(f)	Drawings A/c Dr. To, Purchase A/c (Goods purchased for proprietor's use, debited to purchase account, now rectified.)		1,000	 1,000

Effect on Profit

Items	Particulars	Increase (₹)	Decrease (₹)
(a)	Decrease in Profit		500
(b)	No Effect in Profit	-	-
(c)	Increase in Profit	1,000	-
(d)	Decrease in Profit		900
(e)	Increase in Profit	3,000	-
(f)	Increase in Profit	1,000	-
	Total	5,000	1,400
	Increase in Profit	-	**3,600**
		5,000	**5,000**

Illustration 37.

The books of M/s Shakti trading for the year ended 31st march 2013 were closed with a difference that was posted to Suspense A/c. The following errors were found subsequently:

(a) Goods of ₹ 12,500 returned to Thick & Fast Corporation were recorded in Return Inward book as ₹21,500 and from there it was posted to the debit of Thick & Fast Corporation.

(b) A credit sale of ₹ 7,600 was wrongly posted as ₹ 6,700 to customer's A/c in sales ledger.

(c) Closing stock was overstated by ₹ 5,000 being totaling error in the schedule of inventory.

(d) ₹ 8900 paid to Bala was posted to the debit of Sethu as ₹ 9,800

(e) Goods purchased from Evan Traders for ₹ 3,250 was entered in sales book as ₹ 3,520

(f) ₹ 1,500, being the total of discount column on the payment side of the cash book was not posted.

Rectify the errors and pass necessary entries giving effects to Suspense A/c and P & L Adjustment A/c.

Solution:

a) There are 2 errors: one – return outward is wrongly recorded as return inward and two – amount is also recorded wrongly. First, we need to remove extra debit to Thick & Fast corporation i.e. ₹ 9,000 (21,500-12,500) by crediting it. Also we need to remove wrong credit of ₹ 21500 in sales return by debiting it and credit ₹ 12,500 to Purchase returns A/c.

The rectification entry will be:

Suspense A/c	Dr	21,500	
To Thick & Fast Corp			9,000
To P & L Adjustment A/c			12,500

b) In this case, error has occurred only in customer's A/c. hence, profit or loss won't be affected and the P & L Adjustment A/c will not be in picture. As customer's A/c is debited for ₹ 6,700 instead of ₹ 7,600, it needs to be corrected.

The rectification entry will be:

Sundry Debtors A/c	Dr	900	
To Suspense A/c			900

c) Over casting of closing stock had affected profit which must be reduced through P & L Adjustment A/c.

The rectification entry is:

P & L Adjustment A/c	Dr	5,000	
To Suspense A/c			5,000

d) As only personal accounts are affected, there won't be an effect on Profits. So rectification will be done through Suspense A/c only. The rectification entry is:

Bala A/c	Dr	8,900	
Suspense A/c	Dr	900	
To Sethu A/c			9,800

e) This transaction involves correction of purchase as well as sales, and hence will affect profit. As the purchases were booked as sales, we will need to cancel sales by debiting and freshly debit purchase. So overall effect on profit will be 3,250 + 3,520 i.e. 6,770. The rectification enry will be:

P & L Adjustment A/c	Dr	6,770	
To Evan Traders			6,770

f) If discount is appearing on payment side of cash book, it indicates discount received while making payment and is an item of income. Hence, it will affect profit. The accounting entry will be:

Suspense A/c	Dr	1,500	
To P & L Adjustment A/c			1,500

Illustration 38.

You are presented with a trial balance of S Ltd as on 30.06.2013 showing the credit is in exces by ₹ 415 which was been carried to Suspense Account. On a close scrutiny of the books, the following errors were revealed:

a. A cheque of ₹ 3,456 received from Sankar after allowing him a discount of ₹ 46 was endorsed to Sharma in full settlement for ₹ 3,500. The cheque was finally dishonored but no entries are passed in the books.

b. Goods of the value of ₹ 230 returned by Sen were entered in the Purchase Day Book and posted therefrom to Das as ₹ 320.

c. Bad debts aggregating ₹ 505 written off during the year in the Sales Ledger but were not recorded in the general ledger.

d. Bill for ₹ 750 received from Mukherjee for repairs to Machinery was entered in the Inward Invoice Book as ₹ 650.

e. Goods worth ₹ 1,234 Purchased from Mr. Y on 28.6.2012 had been entered in Day Book and credited to him but was not delivered till 5 th June 2012. Stock being taken by the purchase on 30.06.12. The title of the goods was, however, passed on 28.06.2012.

f. ₹ 79 paid for freight on Machinery was debited to freight account as ₹ 97.

You are required to pass the necessary journal entries for correcting the books.

Solution.

In the books of S Ltd.
Journal

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
(a)	Sankar A/c Dr. Discount Received A/c Dr. To, Sharma A/c To Discount Allowed A/c (Cheque received from Sankar was endorsed to Sharma after allowing discount ₹46 , it was dishonored, now rectified)		3,502 44	 3500 46
(b)	Return Inward A/c Dr. Das A/c Dr. To, Purchase A/c To, Sen A/c To Suspense A/c (Goods returned by sen for ₹ 230 wrongly recorded in Purchase Day Book as an credit to Das as ₹ 320, now rectified.)		230 320	 230 230 90
(c)	Bad debts A/c Dr. To Suspense A/c (Bad debts written off but not recorded, now rectified)		505	 505
(d)	Repairs A/c Dr. To, Purchase A/c To, Mukherjee A/c (Repairs of machinery for ₹ 750, wrongly recorded as ₹ 650 on Purchase A/c, now rectified.)		750	 650 100
(e)	Goods- in- Transit A/c Dr. To Trading A/c (Goods were in Transit which were not considered, now rectified)		1,234	 1,234
(f)	Machinery A/c Dr Suspense A/c To Freight A/c (amount paid for freight on machinery was wrongly debited to freight account, now rectified)		79 18	 97

Illustration 39.

The books of accounts of A Co. Ltd. for the year ending 31.3.2013 were closed with a difference in books carried forward. The following errors were detected subsequently:

(a) Return outward book was under cast by ₹ 100.

(b) ₹ 1,500 being the total of discount column on the credit side of the cash book was not posted.

(c) ₹ 6,000 being the cost of purchase of office furniture was debited to Purchase A/c.

(d) A credit sale of ₹ 760 was wrongly posted as ₹ 670 to the customers A/c. in the sales ledger.

(e) The Sales A/c. was under casted by ₹ 10,000 being the carry over mistakes in the sales day book.

(f) Closing stock was over casted by ₹ 10,000 being casting error in the schedule or inventory.

Pass rectification entries in the next year.

Prepare suspense account and state effect of the errors in determination of net profit of last year.

Solution:

In the Books of A Co. Ltd.

Journal

Date	Particulars	L/F	Dr. Amount (₹)	Cr. Amount (₹)
(a) 2013 April 1	Suspense A/c Dr. To Profit & Loss Adjustment A/c (Returns outward book was under cast now rectified).		100	100
(b)	Suspense A/c Dr. To Profit & Loss Adjustment A/c (Discount received was not recorded, now rectified).		1,500	1,500
(c)	Office Furniture A/c Dr. To Profit & Loss Adjustment A/c (Office furniture purchased wrongly debited to Purchase A/c. not rectified.)		6,000	6,000
(d)	Debtors' A/c Dr. To Suspense A/c. (Debtors account was posted ₹ 670 in place of ₹ 760, now rectified.)		90	90
(e)	Suspense A/c. Dr. To Profit & Loss Adjustment A/c. (Sales account was under casted, now rectified)		10,000	10,000
(f)	Profit & Loss Adjustment A/c. Dr. To Opening Stock A/c. Closing Stock was overcastted, now rectified.)		10,000	10,000

Dr. **Suspense Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 April 1	To Profit & Loss Adjustment A/c `` `` `` `` `` ``	100 1,500 10,000 10,000	2013 April 1	By Difference in Trial Balance `` Debtors A/c.	21,510 90
		21,600			21,600

Effect on Profit

	Increase (+) ₹	Decrease (-) ₹
Item (a)………………………………..	-	100
(b)………………………………..	-	1,500
(c)………………………………..	-	6,000
(d) No effect	-	-
e)………………………………..	-	10,000
(f)………………………………..	10,000	-
	10,000	17,600
Profit will be decreased by	7,600	-
	17,600	17,600

Illustration 40.

The Trial Balance of a concern has agreed but the following mistakes were discovered after the preparation of final Accounts.

(a) No adjustment entry was passed for an amount of ₹ 2,000 relating to outstanding rent.

(b) Purchase book was overcast by ₹ 1,000.

(c) ₹ 4,000 depreciation of Machinery has been omitted to be recorded in the book.

(d) ₹ 600 paid for purchase of stationary has been debited to Purchase A/c.

(e) Sales books was overcast by ₹ 1,000.

(f) ₹ 5,000 received in respect of in respect of Book Debt had been credited to Sales A/c.

Show the effect of the above errors in Profit and Loss Account & Balance Sheet.

Solution:

Effects of the errors in profit and loss Account and Balance Sheet

Profit & Loss Account	Balance Sheet
(a) Profit was overcastted by ₹ 2,000	(a) Capital was also overstates by ₹ 2,000 & outstanding Liability was understated by 2,000.
(b) Gross profit was under casted by ₹ 1,000 & also the Net Profit.	(b) Capital was understates by ₹ 1,000.
(c) Net Profit was overstated by ₹ 4,000.	(c) Machinery was overstates by ₹ 4,000 & so the Capital A/c. was also overstated by ₹ 4,000.
(d) No effect on Net Profit.	(d) No effect in Balance Sheet.
(e) Gross Profit and Net Profit were overstates by ₹ 1,000.	(e) Capital was overstates by ₹ 1,000.
(f) Gross Profit & Net Profit were overstated by ₹ 5,000.	(f) Capital & Sundry Debtors were overstates by ₹ 5,000.

Thus,

Effect in Profit			Effect in Balance Sheet		
Item	Increase (+) ₹	Decrease (-) ₹		Assets ₹	Liabilities ₹
(a)……………….	2,000	-	(a)……………….	-	(+) 2,000
(b)……………….	-	1,000			(-) 2,000
(c)…………….	4,000	-	(b)……………….	-	(-) 1,000
(d) No effect	-	-	(c)…………….	(+) 4,000	(+) 4,000
(e)…………….	1,000	-	(d) No effect	-	-
(f)…………….	5,000	-	(e)…………….	-	(+) 1,000
	12,000	1,000	(fi)…………….	(+) 5,000	(+) 5,000
Profit will be increased by				9,000	9,000
	-	11,000			
	12,000	12,000			

Adjusting Entry

Adjusting Entries are passed in the journal to bring into the books of accounts certain unrecorded items like closing stock, depreciation on fixed assets, etc. These are needed at the time of preparing the final accounts.

E.g. Depreciation A/c Dr.

To, Fixed Assets A/c

Study Note - 2

RECONCILIATION STATEMENTS

This Study Note includes

2.1 BANK RECONCILIATION

When an individual or a firm deposits any money into a bank or withdraw money by issuing a cheque from a bank, he/it records the transaction in the debit-side of the bank columns of the Cash Book for such deposits and credit side of the bank column of the Cash book for such withdrawals.

On the other hand, bank also records such transactions in its book i.e. credit such account for deposits and debit such account for any withdrawals. The Bank issues a book to the account holder after recording such transactions. The book which is prepared by the bank for accountholder is known as Pass Book.

In case of Current Account, the bank issues Statements and not a Pass Book. The statement is known as Bank Statement.

A Specimen of a Pass Book is presented below:

UNION BANK OF INDIA

NEW ALIPORE

A/c No. :104922

Name: Mrs. Mathew

SAVINGS BANK ACCOUNT

PASS BOOK

Date	Particulars	Cheque No.	Withdrawals	Deposits	Balance	Initials
20.03.13	Balance b/f	—	—	—	14,078.00	
22.03.13	To CLG	210850	2,000.00	—	12,078.00	
23.03.13	To Self	210853	11,500.00	—	578.00	
24.03.13	By CLG	—	—	1,000.00	1,578.00	
28.03.13	To CLG	210854	700.00	—	878.00	
29.03.13	By Cash	—	—	1,000.00	1,878.00	
30.03.13	To CLG	210855	600.00	—	1,278.00	

Definition

A statement which is prepared to reconcile the causes of difference between Bank Balance as per Cash Book and Bank Balance as per Pass Book/ Bank Statement is known as a Bank Reconciliation Statement.

Features of a Bank Reconciliation statement

1. It is a statement.
2. It is not a part of the process of Accounts.
3. It is prepared to reconcile the causes of difference between the Bank balance as per Cash Book and the Bank balance as per Pass Book.
4. It can be prepared at any time during the financial year, as and when it is required.
5. Since it is prepared on a particular date, it is written as Bank Reconciliation statement as at/as on……………………

It is necessary for a beginner to understand the mechanism of how to prepare the Bank Reconciliation statement. The first milestone on this journey is to understand the various reasons for differences between the two records.

Reasons for Differences between Cash Book and Pass Book

The differences are basically of two types:

(A) Items appear in Cash Book but not appearing in Pass Book and

(B) Items appear in Pass Book but not appearing in the Cash Book

Let us understand these reasons:

(A) Items not appearing in Bank Pass Book

(1) Cheques issued by business entity not debited by the Bank – This may be because they might not have been Banked by the payee or it may still be under clearance. The entry in Cash Book will be made immediately when the cheque is issued thereby reducing the Bank balance in the books of entity's books of A/cs. Here, Bank balance as per Cash Book will be less, but as per Bank Pass Book it will be more. This is also termed as unpresented cheques.

(2) Cheques deposited but not credited by the Bank – The business entity may receive cheques or draft which is deposited into the Bank for collecting the payment. Again entry in Cash Book will be instant thereby increasing the balance. Here, Bank balance as per Cash Book will be more than the balance as per Bank passbook. This is also called as outstanding cheques.

(3) Errors – The Bank may by mistake miss out entering the debit or credit which results in the difference.

(4) Standing Instructions – The entity may give standing instruction to the Bank for certain regular payments like loan repayment installment, transfer of funds etc. This may get entered in the Cash Book immediately, but Pass Book entry may be delayed.

(B) Items not appearing in the Cash Book

(1) Bank interest, Bank charges etc. – The Bank will charge interest on overdraft or also charges for services, issue of demand draft, pay orders etc. Here, being the source of transaction, the Bank will record in the Pass Book immediately and send the debit advice slips to the business entity. The entry in the Cash Book may be delayed. Similarly the Bank could credit interest on fixed deposits, which may get entered in business books at a later date.

(2) Direct deposits in Bank account – Sometimes customers or others may directly deposit an amount in the Bank for goods or services rendered. The Bank will enter it immediately, but entry in Cash Book will appear later.

(3) Bills for collection – The Business Entity may send bills of exchange for collection. The Bank will collect the payment and credit the same in the passbook. The entry in Cash Book will be made only after receipt of information from the Bank.

(4) Errors – The records may be missed out by the book-keeper of the Business Entity.

Need of Bank Reconciliation Statement

1. It helps to understand the actual Bank balance.
2. It helps to identify the mistakes in the Cash Book and the Pass Book.
3. It helps to detect and prevent frauds and errors in recording the Banking transactions.
4. It helps to incorporate certain expenditures/income debited/credited by Bank in the books of accounts.

Methods of preparation of Bank Reconciliation Statement

1. Rules of Addition and Subtraction.
2. Debit and Credit Method.

Steps in Preparing Bank Reconciliation Statement

One has to have a systematic approach towards preparation of the reconciliation. To avoid a lengthy reconciliation, one must ensure that the entries in the Cash Book are absolutely online. One also must obtain the Bank statements at regular intervals. Once this checking is done, Bank reconciliation could be done by following these steps:

(a) Identify the balances and the character thereof. Remember, a debit balance in Cash Book means asset where as a credit balance means a Bank overdraft. In Bank passbook, it's reverse. A debit balance in Pass Book means overdraft and a credit balance is a favourable balance. This must be carefully understood.

(b) Based on the above, start with the balance (or overdraft) as per one book and arrive at the balance (or overdraft) as per the other book. The items of differences will be added to or deducted from the balance (or overdraft) with which the reconciliation is started.

(c) The end result should be the balance (or overdraft) as per the other book e. g. if you start with balance as per Cash Book, then after adding or deducting items of differences, you should arrive at the balance (or overdraft) as per the Pass Book.

(d) One has to make sure that all the items of differences from Cash Book as well as Bank book are taken into account in the reconciliation statement.

(e) Whether the items of differences should be added or deducted will depend on the sequence you follow. This is shown in following table:

When reconciliation is started with →	**Bal. as per CB**	**OD as per CB**	**Bal. as per CB**	**OD as per CB**
Cheques deposited in Bank, but not cleared	Less	Add	Add	Less
Cheques issued, but not presented in Bank	Add	Less	Less	Add
Bank charges debited in PB only	Less	Add	Add	Less
Interest debited in PB only	Less	Add	Add	Less
Payments by Bank debited in PB only	Less	Add	Add	Less
Direct payment by customer in PB only	Add	Less	Less	Add
Bills discounted & dishonoured in PB only	Less	Add	Add	Less
Cheques deposited, dishonoured in PB only	Less	Add	Add	Less
Interest, Dividend, Commission collected by Bank not recorded in the Cash Book	Add	Less	Less	Add
Overcasting of payment side of Cash Book or Undercasting of Receipt side of Cash Book	Add	Less	Less	Add
Undercasting of Payment side of Cash Book or overcasting of Receipts side of Cash Book	Less	Add	Add	Less

Deposits recorded twice in the Cash Book or excess amount recorded in the Cash Book	Less	Add	Add	Less
Undercasting of credit side of the Pass Book or overcasting of the debit side of the Pass Book	Less	Add	Add	Less
Cheques deposited into Bank and credited without recording in the Cash Book	Add	Less	Less	Add
Wrong debit in the Pass Book for issue of cheque, Bank charges, etc.	Less	Add	Add	Less
Wrong credit in the Pass Book for deposit of cheque, interest, etc.	Add	Less	Less	Add
Cheques drawn but not actually issued to the suppliers/ creditors	Add	Less	Less	Add
Bank charges recorded twice in the Cash Book	Add	Less	Less	Add
Amount withdrawn from Bank not recorded in the Cash Book	Less	Add	Add	Less

Please note the abbreviations CB – Cash Book, PB – Pass Book, OD – Overdraft

Illustration 1.

On 31.12.13, P. Roy's Bank Balance as shown by the Cash Book was ₹ 75,000. On receipt of Bank Statement it was found that :-

(i) Three cheques of ₹3,000, ₹4,000 and ₹1,500 drawn in favour of suppliers respectively on 28th, 29th and 30th December, 2013 had been debited in the Bank Statement on 2nd January 2014.

(ii) The Bank had credited ₹8,000 on 30th December, 2013, in respect of collection made by Bank directly from a customer, the intimation not having yet been received.

(iii) Two cheques of ₹5,000 and ₹6,000 were deposited into Bank on 30th December, 2013 had been credited in the Bank statement on 4th January, 2014.

(iv) The Bank had debited ₹30 as incidental charges on 30th December, 2013 but not entered in the Cash Book.

Show the reconciliation of the Bank Balance as per Cash Book with the Bank Balance as per Bank Statement as on 31st December, 2013.

Solutions:

Bank Reconciliation Statement of Mr. P. Roy as on 31st December, 2013.

Particulars	Amount (₹)	Amount (₹)
Bank Balance as per Cash Book (Dr.)		75,000
Add: (i) Cheques issued but not presented for payment ₹3,000, ₹4,000 & ₹1500 respectively.	8,500	
(ii) Collection by Bank from a Customer not recorded in the Cash Book	8,000	16,500
		91,500
Less: (i) Cheques deposited but not credited in the Pass Book on 31.12.13 ₹5,000 + ₹6,000 respectively.	11,000	
(ii) Bank charges not recorded in the C.B.	30	11,030
Balance as per Pass Book (Cr.)		80,470

Illustration 2.

The Bank statement of Mr. J. White dated 31.12.2013 showed a balance with his Bank of ₹ 924, when checked with his Cash Book the following were noted :

(a) During December, the Bank had paid ₹200 for a yearly contribution of Mr. White, made to a local charity, as per his standing order. This amount appeared in the Bank statement but not in the Cash Book.

(b) The Bank had credited his account with ₹28 interest and had collected on his behalf ₹ 230 as dividends. No corresponding entries were made in the Cash Book.

(c) A cheque of ₹ 65 deposited into the Bank on 28.12.2013 was not cleared by the Bank till after 31.12.2013.

(d) A cheque of ₹150 deposited into and cleared by the Bank before 31.12.2013 was not entered in the Cash Book, through an oversight.

(e) Cheques drawn by and posted to parties by Mr. White on 31.12.2013 for ₹73, ₹119 and ₹ 46 were presented for payment to the Bank only on 3.1.2014.

Solution:

Bank Reconciliation Statement as on 31st December, 2013

Particulars	Amount (₹)	Amount (₹)
Bank balance as per Pass Book (Cr.)		924
Add: (i) Payment of contribution by the Bank not entered in the Cash Book	200	
(ii) Cheque deposited but not cleared	65	265
		1,189
Less: (i) Interest and dividend collected by the Bank not entered in the		
Cash Book - Interest	28	
- Dividend	230	
(ii) Cheque deposited and cleared but not entered in the Cash Book	150	
(iii) Cheques issued but not presented ₹ (73+119+46)	238	646
Bank balance as per Cash Book (Dr.)		543

Illustration 3.

Mr. Suresh request you to ascertain the Bank balance as per the Pass Book for January 2013, as his cash clerk reported a figure of ₹11,515 (credit) as on 31.1.2013. Scrutiny revealed the following discrepancies :

(i) Cheques issued and deposited by the cash clerk in January 2013, were ₹ 15,000 and ₹ 7,000 respectively. However, against the above, the Bank had paid out and debited cheques worth ₹9,000 only and cleared and credited cheques worth ₹ 4,000 only, by 31.1.2013.

(ii) A customer had paid in ₹ 6,400 directly into Suresh's Bank account, the effect of which was missing in the Cash Book.

(iii) Bank commission of ₹ 45 charged and interest earned ₹ 1,400 on investments of Mr. Suresh, where only recorded in the Pass Book.

(iv) Total cash withdrawals of ₹ 3,000 by self and bearer cheques for office use, were recorded erroneously as ₹ 5,000 in the Cash Book.

Solution:

Mr. Suresh

Bank Reconciliation Statement as on 31st January, 2013

Particulars	Amount (₹)	Amount (₹)
Overdraft as per Cash Book		11,515
Add: (i) Cheques deposited but not cleared (7,000 - 4,000)	3,000	
(ii) Bank commission charged by the Bank	45	3,045
		14,560
Less: (i) Cheques issued but not presented for payment (15,000 - 9,000)	6,000	
(ii) Direct deposit by a customer	6,400	
(iii) Interest on investment credited in the Pass Book only	1,400	
(iv) Withdrawals of ₹ 3,000 recorded in the Cash Book as ₹ 5,000	2,000	15,800
Bank balance as per Pass Book (Cr.)		1,240

Illustration 4.

The Bank Pass Book of Mr. Anil showed an overdraft of ₹ 6,000 on 31.12.2013. Prepare the Bank Reconciliation Statement based on the following details:

(a) Cheques issued but not presented upto 31.12.2013, ₹ 5,500

(b) Cheques deposited but not credited upto 31.12.2013, ₹ 9,000

(c) Bank commission ₹ 30 was entered only in the Pass Book.

(d) A cheque for ₹ 6,500 issued in settlement of a debt was encashed on 28.12.2013 but entered in the Cash Book as ₹ 8,500.

Solution:

Mr. Anil

Bank Reconcilliation Statement as on 31st December, 2013

Particulars	Amount (₹)	Amount (₹)
Overdraft as per Pass Book		6,000
Add: (i) Cheques issued but not presented for payment	5,500	
(ii) Cheque for ₹ 6,500 issued and encashed but entered in the Cash Book at ₹ 8,500 (8,500 - 6,500)	2,000	7,500
		13,500
Less: (i) Cheques deposited but not credited	9,000	
(ii) Bank commission entered in the Pass Book only	30	9,030
Overdraft as per Cash Book		4,470

Illustration 5.

From the following particulars of M/s Suresh enterprises, prepare a Bank reconciliation statement:

(1) Bank overdraft as per Pass Book as on 31st March 2013 was ₹ 8,800

(2) Cheques deposited in Bank for ₹ 5,800 but only ₹ 2,000 were cleared till 31st March

(3) Cheques issued were ₹ 2,500, ₹ 3,800 and ₹ 2,000 during the month. The cheque of ₹ 5,800 is still with supplier.

(4) Dividend collected by Bank ₹ 1,250 was wrongly entered as ₹ 1,520 in Cash Book.

(5) Amount transferred from fixed deposit A/c into the current A/c ₹ 2,000 appeared only in Pass Book

(6) Interest on overdraft ₹ 930 was debited by Bank in Pass Book and the information was received only on 3rd April 2013.

(7) Direct deposit by M/s Rajesh Traders ₹ 400 not entered in Cash Book.

(8) Corporation tax ₹ 1,200 paid by Bank as per standing instruction appears in PB only.

Solution:

Bank Reconciliation Statement as on 31st March, 2013

Particulars	**Amount (₹)**	**Amount (₹)**
Overdraft as per Pass Book		8,800
Add: (i) Cheques issued but not presented till 31st March	5,800	
(ii) Transfer from fixed deposit	2,000	
(iii) Direct deposit by M/s Rajesh Traders	400	8,200
		17,000
Less: (i) Cheques deposited but not cleared (5,800 - 2,000)	3,800	
(ii) Dividend collected excess recorded in CB (1,520 - 1,250)	270	
(iii) Interest on overdraft debited in PB only	930	
(iv) Corporation tax paid appeared in PB only	1,200	6,200
Overdraft as per Cash Book		10,800

Amendment in Cash Book

Sometimes, in order to find out the correct balance at Bank or cash to amend the Cash Book before the preparation of Bank Reconciliation statement. In short, Bank Reconciliation Statement should be prepared by taking the balance shown by the amended Cash Book. The students should remember that usually two types of transactions are recorded in amended Cash Book i.e., (i) Items which were not at all recorded in Cash Book. (ii) Any error made by Cash Book. The transactions which are already recorded in Cash Book i.e., the rest of the transactions will go Bank reconciliation statement.

But it must be remembered that preparation of amended Cash Book is possible only when the balance as per Cash Book is given.

Step to be followed for preparation:

(a) Open the cash with the Balance as per Cash Book, whether favourable or unfavourable,

(b) Against the items (i.e., which are not recorded in Cash Book as any other error made by Cash Book.)

(c) Close the Cash Book and find out the balance,

(d) Prepare Bank Reconciliation Statement by taking the Cash Book balance and rest of the transaction which are not adjusted against amended Cash Book.

Illustration 6.

The Bank column of the Cash Book showed an overdraft of ₹ 5,000 on 31-03-2013, whereas as per Bank statement the overdraft is ₹ 4,200. The following differences were noticed between the two records:

(a) Cheques of ₹ 2,400 issued but not encashed by customers

(b) Cheques deposited but not cleared ₹ 1,200

(c) Collection charges debited by Bank not recorded in CB ₹ 100

(d) Bank interest charged by the Bank not recorded in CB ₹ 300

(e) Cheques dishonoured debited by Bank not in CB ₹ 400

(f) Interest directly received by Bank not entered in CB ₹ 400

Prepare Bank reconciliation statement after amending the CB.

Solution:

Here, please note that amended CB is asked. What it actually means is to record all revenue (expense or income) items of differences and those items that are recorded in PB only must first be recorded in the CB and then the reconciliation statement should be prepared by taking the revised balance as per CB. Here is the amended CB.

Dr. **Cash Book (Bank column only)** **Cr.**

Particulars	Amount ₹	Particulars	Amount ₹
To Interest received	400	By Balance b/d (OD)	5,000
		By collection charges	100
		By Bank interest	300
To Balance c/d (OD)	5,400	By customer (chq dishonoured)	400
	5,800		5,800

Bank reconciliation statement as on 31-03-2013

	₹
Bank OD as per CB	5,400
Add: Cheques deposited, but not cleared	1,200
Less: cheques issued but not encashed	(2,400)
Bank OD as per PB	4,200

Illustration 7.

The following is a summary from Cash Book of M/s Adarsh Trading for the month of Sept 2013

	₹		₹
Balance b/d	1,407	Payments	15,520
Receipts	15,073	Balance c/d	960
	16,480		16,480

On investigation it was found that

(a) Bank charges of ₹ 35 were not entered in the Cash Book

(b) A cheque of ₹ 47 issued to supplier was entered by mistake as a receipt in the Cash Book.

(c) A cheque of ₹ 18 was returned by the Bank marked as 'refer to drawer' but it's not entered in Cash Book.

(d) The balance brought forward in Sept 2013 should have been ₹ 1,470.

(e) Cheques paid to suppliers ₹ 214, ₹ 370 and ₹ 30 have not been presented for payment.

(f) Deposits of ₹ 1542 on 30th Sept were cleared by the Bank on 2nd October.

(g) The Bank charged a cheque wrongly to Adarsh trading ₹ 72.

(h) Bank statement shows overdraft of ₹ 124 as on 30th Sept 2013.

Show what adjustments will you make in the Cash Book and prepare a Bank reconciliation statement as on 30-09-2013.

Solution:

As we know, the errors in the Cash Book must first be corrected and entries that have been missed out in the CB should be recorded.

Dr. **Cash Book for Sept 2013** **Cr.**

Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To Original balance b/d	960	By Bank charges not recorded earlier	35
To Error in balance carried (1,470 - 1,407)	63	By Cheques issued recorded as receipt Now corrected (2×47)	94
		By Cheque returned	18
		By Revised balance c/d	876
	1,023		1,023

Now we can prepare the Bank reconciliation statement.

Bank Reconciliation from member as on 30.9.2012

Particulars	**Amount (₹)**	**Amount (₹)**
Balance as per Cash Book		876
Add: Cheques issued but not presented (214 + 370 + 30)	614	614
		1,490
Less: (i) Deposits not cleared	1542	
(ii) Cheques charged by mistake	72	1,614
Overdraft as per Pass Book		(124)

Illustration 8.

D's Cash Book shows an overdrawn position of ₹ 3,630 on 31.3.2013, though the Bank Statement shows only ₹ 3,378 overdrawn. Detailed examination of two records reviled the following:

(a) A cheque for ₹ 1,560 in favour of Rath Associates has been omitted by the Bank from its statement, thus, cheque having been debited to another customer's account.

(b) The debit side of owned book has been under caste by ₹ 300.

(c) A cheque for ₹ 182 drawn in payment of electricity amount had been entered in the Cash Book on ₹ 128 & was shown correctly in the Bank statement.

(d) A cheque for ₹ 210 from S. Gupta having been paid into Bank, was dishonoured & shown as such on Bank statement, although no entry relating to dishonoured had been made in Cash Book.

(e) The Bank had debited a cheque for ₹ 126 to D's Account in error. It should have been debited to Sukhal's Account.

(f) A dividend of ₹ 90 on D's holding of equity shares has been duly shown by Bank, no entry has been made in Cash Book.

(g) A lodgement of ₹ 1,080 on 31.3.2013 had not been credited by Bank.

(h) Interest on ₹ 228 had been directly debited by Bank not recorded in Cash Book.

(i) You are required to prepare a Bank Reconciliation Statement after necessary amendment in Cash Book as on 31.3.2013.

Solution:

In the Books of Mr. D

Dr **Cash Book (Bank Column only)** **Cr**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013	To Dividend A/c	90	2013	By Balance b/d	3,630
March	" Error	300	March	" Electric Charges A/c	54
31	—(under casting in debited side)		31	Cheque drawn for [₹ 182 wrongly recorded as ₹ 128 (₹ 182 – ₹ 128)	
	" Balance c/d	3,732		" S. Gupta's A/c -Cheque dishonoured	210
				`` Bank Interest	228
		4,122			4,122
				By Balance b/d	3,732

Bank Reconciliation Statement as at 31st March 2013

Particulars	Amount (₹)	Amount (₹)
Overdraft as per Cash Book		3,732
Add: (i) A cheque for ₹ 126 wrongly debited by Bank.	126	
(ii) A lodgement not credited by Bank	1,080	
		1,206
Less: (i) A cheque was issued in favour of Rath Associates not debited by Bank		4,938
		1,560
Overdraft as per Pass Book.		3,378

Illustration 9.

Perfect Pvt. Ltd. has two accounts with Ever Bank Ltd. The accounts were known as 'Account-I' and Account-II'. As at Dec. 31, 2013, the balance as per Account books reflected the following:

Account-I ₹ 1,25,000 Regular balance.

Account-II ₹ 1,11,250 Overdraft balance.

The accountant failed to tally the balance with the Pass Book and the following information was available :

(a) The Bank has charged Interest on Account-II ₹ 11,375 and credited Interest on Account-I ₹ 1,250. These were not recorded by the accountant.

(b) ₹ 12,500 drawn on Dec.10, 2013, from Account-I was recorded in the books of Account-II.

(c) Bank charges of ₹ 150 and ₹ 1,125 for Account-1 and Account-II were not recorded in the books.

(d) A deposit of ₹ 17,500 in Account-I was wrongly entered in Account-II in the books.

(e) Two cheques of ₹ 12,500 and ₹ 13,750 deposited in Account-I, but entered in Account-II in the books, were dishonoured. The entries for dishonoured cheques were entered in Account-II.

(f) Cheques issued for ₹ 1,50,000 and ₹ 15,000. from Account-I and Account-II, respectively, were not presented until Jan. 5, 2014.

(g) Cheques deposited ₹ 1,25,000 and ₹ 1,17,500 in Account-I and II, respectively, were credited by Bank on Feb. 2, 2014.

You are required to prepare the Bank Reconciliation Statement for Account-I and II.

Solution:

In the books of Perfect Pvt. Ltd.,
Bank Reconciliation Statement, Account-I
as at 31st December 2013

Particulars	Amount (₹)	Amount (₹)
Bank Balance as per account book		1,25,000
Add : (i) Interest earned but not recorded in Cash Book	1,250	
(ii) Deposits not entered in Cash Book	17,500	
(iii) Cheques deposited but not entered (₹ 12,500 + ₹13,750)	26,250	
(iv) Cheques issued but not presented for payment	1,50,000	1,95,000
		3,20,000
Less : (i) Withdrawals not entered in Cash Book	12,500	
(ii) Bank charges debited in Pass Book but not entered in Cash Book	150	
(iii) Cheques dishonoured but not recorded in Cash Book (₹ 12,500 + ₹ 13,750)	26,250	
(iv) Cheques deposited but not credited by the Bank	1,25,000	
		1,63,900
Bank Balance as per Pass Book		1,56,100

Bank Reconciliation Statement, Account-II
as at 31st December 2013

Particulars	Amount (₹)	Amount (₹)
Overdraft Balance as per Account Book		1,11,250
Add : (i) Interest charges on overdraft but not entered in Cash Book	11,375	
(ii) Bank charges debited by Bank but not entered in Cash Book	1,125	
(iii) Deposits wrongly entered	17,500	
(iv) Cheques deposited but not credited by the Bank	1,17,500	1,47,500
		2,58,750
Less : (i) Withdrawals wrongly recorded	12,500	
(ii) Cheques issued but not presented	15,000	
		27,500
Overdraft balance as per Pass Book		2,31,250

Where both Cash Book and Pass Book are given

(a) The book relates to the same period

When Cash Book and Pass Book of the identical period are given the following steps are needed.

1st step- Deposits sides of the Pass Book (Credit Side) and Cash Book (Debit side) should be checked thoroughly and put an asterisk mark on all the matching items. All the items without any signs in the Cash Book is an indication that it is required to be entered by the Bank. Separate the items under the heading" Cash / Cheques deposited but yet to be credited by the Bank" and in the same way , items without any sign in the Pass Book is indicating that deposits are yet to be entered in the Cash Book. Separate the items under the heading "Cheques/ Cash credited by the Bank are needed to be included in the Cash Book."

2nd Step- All the matching withdrawals on the Pass Book (Debit side) with the payments of the Cash Book (Credit side) should be marked with an asterisk one by one. All the items without any signs in the Cash Book indicate payments are needed to be included by the Bank. Separate the items under the heading" Cheques issued/ drawn and required to be presented in the Bank for payment" and in the same way, Items without any sign in the Pass Book is an indication that withdrawals yet to be entered in the Cash Book. Separate the items under the heading "Cheques/ Cash debited by the Bank yet to be entered in the Cash Book".

3rd Step- Separate list should be maintained for any other item under appropriate heading , e.g , errors in Cash Book, or, Pass Book, etc, which may cause any difference.

4th Step - after considering the separate listed items and closing balances of Pass Book and Cash Book Bank Reconciliation Statement should be prepared.

Procedure for Preparation of Bank Reconciliation Statement

1. Selection of a date : The last date of the month or accounting period is selected to reconcile the balances of Cash Book and Pass Book.
2. Comparison of entries : The transactions recorded in the Pass Book and Cash Book (Bank column) are compared. In most cases, the pay-in-slips (i.e. for deposits) and the counterpart of cheques are considered to find out the causes of discrepancies.
3. Selection of base : To select the starting point. To decide what balance to start with, Cash Book balance or Pass Book balance.

Illustration 10.

The following are the Cash Book and Bank Pass Book of Sri N for the month of April, 2012.

Dr. **Cash Book *(Bank Column only)*** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
April, 1	To Balance b/d	12,500	April, 1	By Salaries A/c (Cheque No. 183)	4,000
4	" Sales A/c"	8,000			
8	P A/c	1,500	6	" Purchase A/c (Cheque No. 184)	3,200
13	" M A/c	3,400			
18	" Kamal A/c	4,600	11	" Machinery A/c (Cheque No. 185)	6,000
21	" Furniture A/c	1,200			
25	" Sales A/c	3,800	15	" Omprakash A/c (Cheque No. 186)	1,000
30	" F A/c	3,000			
			19	" Drawings A/c (Cheque No. 187)	800
			23	" K A/c (Cheque No. 188)	2,000
			-	" S A/c (Cheque No. 189)	1,000
			27	" Printing A/c (Cheque No. 190)	500
			30	" Balance c/d	19,500
		38,000			38,000

Pass Book

Date	Particulars	Cheque No.	Debit (Withdrawals)	Credit (Deposits)	Dr. or Cr.	Balance
2013			₹	₹		₹
April, 1	By Balance b/d				Cr.	12,500
2	To Cheque	183	4,000		Dr.	8,500
6	By Cheque			8,000	Cr.	16,500
6	To Cheque	184	3,200		Dr.	13,300
10	By Cheque			1,500	Cr.	14,800
16	" Cheque			3,400	Cr.	18,200
17	To Cheque	187	800		Dr.	17,400
20	By Cheque			4,600	Cr.	22,000
24	.. Cheque			3,800	Cr.	25,800
28	To Cheque	185	6,000		Dr.	19 800
28	" Cheque	189	1,000		Dr.	18,800
30	By Interest			100	Cr.	18,900
30	.. Deposit (K.Sen)			3,000	Cr.	21,900
30	.. Charges		10		Dr.	21,890

Yes are required to prepare a Bank Reconciliation Statement as at 30th April 2013.

Solution:

Bank Reconciliation Statement of Sri N
as at 30th April, 2013

Particulars	Amount (₹)	Amount (₹)
Bank Balance as per Cash Book		19,500
Add : Cheques issued but not presented	3,500	
(₹ 1,000 + ₹ 2,000 + ₹ 500)		
Direct deposit made by the customer, Sri K. Sen	3,000	
Interest credited by Bank, but not entered in Cash Book	100	
		6,600
		26,100
Less : Cheques deposited but not credited	4,200	
(₹ 1,200 + ₹ 3,000)		
Bank charges debited by Bank but not entered in Cash Book	10	
		4,210
Bank Balance as per Pass Book		21,890

Illustration 11.

Following are the extracts of Cash Book and Pass Book of Mr. Sunil. Prepare a Bank reconciliation statement.

Dr. Cash Book (Bank column only) Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
1-Jan-13	To Balance b/d	1,080	2-Jan-13	By Wages A/c	850
2-Jan-13	To Interest A/c	52	6-Jan-13	By Investments A/c	1,000
5-Jan-13	To Kamdar A/c	900	8-Jan-13	By Purchases A/c	306
8-Jan-13	To Sales A/c	609	9-Jan-13	By Self A/c	160
10-Jan-13	To Rent A/c	56	10-Jan-13	By Bapat A/c	210
12-Jan-13	To Ganpat A/c	1,252	10-Jan-13	By Drawings A/c	80
13-Jan-13	To Ram A/c	888	14-Jan-13	By Fakir A/c	1,822
			15-Jan-13	By Mustafa A/c	810
15-Jan-13	To Balance c/d (OD)	401			
		5,238			5,238

Dr. Pass Book Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2-Jan-13	To Wages A/c	850	1-Jan-13	By Balance b/d	1,132
6-Jan-13	To Investments A/c	1,000	6-Jan-13	By Kamdar A/c	900
7-Jan-13	To Purchases A/c	306	8-Jan-13	By Sales A/c	609
9-Jan-13	To Self A/c	160	10-Jan-13	By Rent A/c	56
10-Jan-13	To Self A/c	80	10-Jan-13	By Jamdar A/c	200
13-Jan-13	To Bills Payable A/c	100			
15-Jan-13	To Balance c/d	401			
		2,897			2,897

Solution:

The reconciliation period is 1st Jan to 15th Jan 2013. From comparison of both the extracts it can be found that:

(a) Cheques issued to Bapat, Fakir and Mustafa are not encashed till 15th Jan 2013 and will appear in reconciliation.

(b) Direct deposit by Jamdar is not appearing in Cash Book is also a reconciliation item

(c) Interest received of ₹ 52 is appearing in Cash Book only. This has to be dealt with carefully. Interest is normally credited by Bank first and then on the basis of credit advice an entry is made in Cash Book. Hence, it's probable that the interest must have been credited by Bank before 1st Jan and it would have appeared in the reconciliation statement of December. This item is thus not considered.

(d) Cheques received from Ganpat and Ram not cleared till 15th Jan and hence will appear in the reconciliation statement.

(e) Bills payable cleared by Bank not recorded in Cash Book will appear as item of reconciliation.

Bank Reconcilation Statement as on 15-1-13

Particulars	Amount (₹)	Amount (₹)
Overdraft as per Cash Book		401
Less: Cheques issued not presented till 15th Jan		
(210+1822+810)	2,842	
Less: Direct deposit by Jamdar	200	3,042
		2,641
Add: Cheques deposited but not cleared (1252+888)	2,140	
Add: Bills payable not recorded in CB	100	2,240
Balance as per Pass Book		401

Under this method, we are to see that the transactions which appear in both the Cash Book and the Bank Statement but not in the same month. Thus, put a tick mark (✓) on the transactions which appeared on the debit side of Cash Book and debit side of the Pass Book or Bank Statement and vice-versa which need reconciliation.

Illustration 12.

In the books of Mr. P. Mukherjee

Dr **Cash Book (Bank Column only)** **Cr**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 March 1	To Balance b/d.	5,000	2013 March 2	By Salaries A/c	3,000
3	`` A. Bose A/c	500	4	`` Drawings A/c	3,000
5	`` B. Banerjee A/c	1,000	8	`` P. Sen A/c	1,000
7	`` C. Sur A/c	4,000	12	`` S. Kumar A/c	2,000
9	`` D. Sen A/c	2,000	15	`` D. Saha A/c	1,000
20	`` P. Pal A/c	3,000	18	`` Wages A/c	3,000
			24	`` Rent A/c	500
			30	`` T. Koley A/c	1,500
			31	`` Balance c/d.	500
		15,500			15,500

Bank Pass Book

Dr **Mr. P Mukherjee in --------------- with Bank** **Cr**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 April	To Balance b/d.	1,500	2013 April		
3	`` P. Sen A/c	1,000	1	By A. Bose A/c	500
5	`` S. Kumar A/c	2,000	3	`` C. Sur A/c	4,000
	`` T. Koley A/c	1,500	5	`` D. Sen A/c	2,000
6	`` D. Saha A/c	1,000	8	`` P. Paul A/c	3,000
	`` B. Saha A/c	3,000			

Prepare a Bank Reconciliation Statement as on 31st March, 2013.

Solution:

Bank Reconciliation Statement
as at 31st March, 2013

Particulars	Amount (₹)	Amount (₹)
Balance as per Cash Book		500
Add: Cheque issued but not passed:		
P. Sen	1,000	
S. Kumar	2,000	
D. Saha	3,000	
T. Koley	1,500	7,500
		8,000
Less: Chequed deposited but not credited:		
A. Bose	500	
C. Sur	4,000	
D. Sen	2,000	
P.Paul	3,000	9,500
Overdraft as per Pass Book		1,500

2.2 RECEIVABLE RECONCILIATION

A business enterprise apart from cash sales, also provides/offers credit to its customers. During the number of transactions taking place on a daily basis, there is a need to reconcile the balance receivable from the customers/debtors.

Process of Receivable Reconciliation

Step	Particulars
1	Ascertain total credit sales to customer.
2	Ascertain total collections – in cash, cheque or any other mode received.
3	Identify whether there is any Bills Receivable (B/R) accepted by the customer.
4	Identify any cheque return/ goods returned/ bills dishonoured during the accounting period.
5	Check whether any credit note is raised against the customer for short-supply of goods or for excess payment or allowing special discount.

Illustration 13.

Mr.B sold goods on credit to various customers. Details related to one of the customer, Mr.Z, is as under:

(i) Goods sold on credit ₹ 5,00,000

(ii) Goods returned by the customer ₹30,000 due to defective quality, credit note raised but not recorded.

(iii) Payment received from customer in cash ₹1,00,000 and by cheques ₹ 2,30,000. Out of cheques received, a cheque of ₹ 38,000 was dishonoured by bank.

(iv) Customer accepted two Bills of ₹19,000 and ₹ 56,000 for 2 months and 3 months respectively.

(v) Credit note raised against the customer ₹ 3,400 for excess payment charged against one of the consignment.

Mr.Z, the customer is in need to ascertain the actual balance due to Mr.B. Prepare a Reconciliation Statement.

Solution:

Receivable from Mr.Z - Reconciliation Statement

Particulars	Amount (₹)
Credit Sales during the period	5,00,000
Less: Goods returned by the Customer, adjustment of credit note	30,000
Less: Payment received in cash	1,00,000
Less: Payment received by cheque less dishonored cheque (2,30,000 -38,000)	1,92,000
Less: Bills Receivable accepted by Customer, yet to be matured (19,000 +53,000)	72,000
Less : Adjustment of Credit Note raised	3,400
Net Receivable from Customer	**1,02,600**

Note: This reconciliation statement can be made against gross block of customers/debtors. However, it is advisable to ascertain individual reconciliation statements.

2.3 PAYABLE RECONCILIATION

A business enterprise apart from cash purchases also makes credit purchases from its vendors/suppliers. During the number of transactions taking place on a daily basis, there is a need to reconcile the balance payable to the vendors/suppliers.

Process of Receivable Reconciliation

Step	Particulars
1	Ascertain total credit purchases made from different vendors/suppliers.
2	Ascertain total payments – in cash, cheque or any other mode remitted.
3	Identify whether there is any Bills Payable (B/P) accepted.
4	Identify any cheque return/ goods returned/ bills payable accepted but dishonorued during the accounting period.
5	Check whether any debit note is raised against the vendor/supplier for short-supply of goods or for excess payment or claiming special discount.

Illustration 14.

Amaranth purchases goods on credit from various suppliers. However, there is a difference of opinion which has arised with one of its suppliers. While the Supplier claims that the amount receivable from Amarnath is ₹ 2,53,000, on the other hand, Amarnath claims that the amount payable is ₹ 2,35,000. On evaluation of records the following were identified:

(i) A purchase of ₹ 71,000 was recorded by the supplier as ₹ 78,000.

(ii) Goods returned by Amarnath amounting to ₹ 5,000, but the stock is in transit and has not reached the supplier/vendor.

(iii) Cheques issued to vendor for ₹ 28,000, in transit.

(iv) Bills raised for goods purchased from the supplier, amounting ₹ 22,000, but goods are yet to reach the warehouse/godown of Amarnath

Prepare a suitable Reconciliation statement.

Solution:

Amount due to Supplier – Payable Reconciliation Statement

Particulars	Amount (₹)
Amount due to supplier (as per books of the Supplier)	2,53,000
Less: Overstatement of sales figure in the books of supplier (i.e. goods sold by supplier to Amarnath for ₹ 71,000 but recorded as ₹ 78,000)	7,000
Less: Goods returned to supplier, now in transit	5,000
Less: Cheques issued to vendor, now in transit	28,000
Add: Bills raised against goods purchased, not stock-in-transit, i.e. not yet reached the warehouse of the supplier	22,000
Amount due to supplier (as per books of Amarnath)	2,35,000

Note: This reconciliation statement can be made against gross block of vendors/suppliers. However, it is advisable to ascertain individual reconciliation statements.

2.4 STOCK RECONCILIATION STATEMENT

It is the usual practice of all business houses that their stocks are valued at the closing date of the financial statement. But this not always happened. Sometimes stocks are valued either before the closing date of the financial year or after the closing date of the financial year. However, in all the cases we are to prepare a reconciliation statement in order to ascertain the actual cost of stock at the closing date of the financial year. Otherwise, the financial statement which will be prepared will not show the true and fair view of statement of affairs of the concern. For example, if stocks are valued at after the closing date of the financial year, in that case , the goods which are purchased, now returned are to be adjusted, i.e., in case of purchase, the same is to be deducted and in case of sales the same in to be added to the value of stock.

(A) Where stocks are valued before the closing date of the Financial Year

If stocks are valued after the closing date of the financial year, in that case the method of preparing of Stock Reconciliation Statement will be:

Stock Reconciliation Statement as on .....

Value of Stock at the date of physical stock taking		XXX
Add: Goods Sold (i.e., adjusted sales)	XXX	
Return outward	XXX	
Goods-in-transit etc.	XXX	
		XXX
		XXX
Less: Goods purchased (i.e., adjusted purchase)	XXX	
Return inward	XXX	
Goods sent on consignment basis etc.	XXX	
		XXX
Value of stock at the closing date of the financial year		XXX

Illustration 15.

Determine the value of stock on 31st March, 2013 from the following particulars:

Stock was valued on 15th April 2013 and the amount came to ₹ 1,00,000.

(a) Sales ₹ 82,000 (including cash sales ₹ 20,000)

(b) Purchase ₹ 10,068 (including cash purchase ₹ 3,980)

(c) Returns inward ₹ 2,000

(d) On 15th March, goods of the sale value of ₹ 20,000 were sent on sale or return basis to a customer, the period of approval being four weeks. He returned 40% of the goods on 10th April approving the rest, the customer was received on 16th April.

(e) Goods received value ₹ 16,000 in March for sale on consignment basis 20% of the goods has been sold by 31st March, and another 50% by 15th April. These sales are not included in above sales.

Goods are sold at a profit of 20% on sales.

Solution:

Stock Reconciliation Statement as on 31st March 2013

Particulars	**Amount** (₹)	**Amount** (₹)
Value of Stock as on 15th April 2013		1,00,000
Add: Cost of Goods Sold from 31st March to 15th April		
Net Sales (₹ 82,000 – ₹ 2,000)	80,000	
Less: Gross Profit @ 20%	16,000	64,000
Add: Cost of goods sent on approval basis (80% of ₹ 20,000)		16,000
		1,80,000
Less: Purchase from 31st March 2013 to 15th April 2013	10,068	
Less: Stock of Consigned goods (30% of ₹ 16,000)	4,800	14,868
Value of stock as on 31st March 2013		1,65,132

Illustration 16.

Mr. Sen closes his account on 30th June every year. Due to some unavoidable reasons he could not take his stock on 30th June 2013, and physical stock was taken on 7th July 2013 which was valued at ₹ 22,500.

Determined the value of stock on 30th June 2013. The following transactions took place from 1st July to 7th July 2013.

(a) Sales amounting to ₹ 1,250 made on 6th July has been delivered on 9th July.

(b) Sales during the period amounted to ₹ 5,100. These goods were sold a profit of 25% on cost with the exceptions of one sale of ₹ 600 which has been sold at a profit of 20% on cost.

(c) Purchase during the period were ₹ 4,000 of which goods costing ₹ 3,500 were delivered on or before 7th July.

(d) Return Inwards during the period amounted to ₹ 400 including ₹ 300 out of sales period to 30th June 2013 at a profit of 25% on cost.

(e) Goods sold on sale or return basis for ₹ 2,250 on 7th July were not included in the sales stated above.

(f) Mr. Sen received goods on consignment basis which was invoiced at ₹ 2,500 for Mr. Dey to be sold on his behalf on 6th July.

Solution:

Stock Reconciliation Statement as on 30th June 2013

Particulars	**Amount (₹)**	**Amount (₹)**
Value of Stock as on 7th July 2013		22,500
Add: Cost of sales from 1.7.2013 to 7.7.2013:		
Sales	5,100	
Less: Goods sold on 6th July but delivered on 9th July	1,250	
	3,850	
Less: Sales at differential Profit rate @20% on cost	600	
	3250	
Less: G.P. @ 25% on C.P. or 20% on S.P.	650	2,600
		25,100
Add: Cost of goods sold at differential profit rate (₹ $600 \times \frac{100}{120}$)	500	
Add: Cost of Goods sent on sale or Return basis (₹$2,250 \times \frac{100}{125}$)	1,800	2,300
		27,400
Less: Goods purchased from 1.7.2013 to 7.7.2013:		3,500
Less: Returns inward (₹ $300 \times \frac{100}{125}$)		240
Less: Goods received on consignment basis		2,500
Value of stock as on 30th June 2013		21,160

(B) Where Stocks are valued before the closing date of the financial year

Under the circumstances the treatment will be reversed. Besides, in case any error appears, the same also must be rectified.

Illustration 17.

Determine the value of stock to be taken for Balance Sheet as at 31.03.2013 for the following information –

The stock was periodically verified on 23rd March 2013, and was valued at ₹ 6,00,000 between 23rd March and 31st March 2013, the following transactions had taken place.

(a) Purchase ₹ 50,000 worth of goods of which ₹ 20,000 was delivered on 5th April, 2013.

(b) Out of goods sent on consignment, goods worth ₹ 30,000 (at cost) were unsold.

(c) Sales amounted to ₹ 1,70,000. This includes goods worth ₹ 40,000 sent on approval, half of this were returned before 31st March. As regards, remaining no intimation is received.

(d) Normally firm sells goods on cost plus 25%. However, at cost of goods costing ₹ 30,000 were sold for ₹ 15,000.

Solution:

Statement Showing the Value of Physical Stock as on 31st March, 2013

Particulars	Amount (₹)	Amount (₹)	Amount (₹)
Stock as on 23rd March 2013			6,00,000
Add: Purchase between 23rd March to 31st March			
(₹ 50,000 – ₹ 20,000)	30,000		
Add: Stock-In-Transit	20,000	50,000	
Add: Goods in the hands of Consignee at cost		30,000	
Add: Goods sent on Approval basis (at cost)			
Goods sent	40,000		
Less: $\frac{1}{2}$ Returned	20,000		
	20,000		
Less: G.P. @ 20% on sales or 25% of cost $\left(\frac{25}{125} \times 20{,}000\right)$	4,000	16,000	96,000
			6,96,000
Less: Cost of goods sold between 23.03.13 – 31.03.13			
Goods sold	1,70,000		
Less: Sent on approval	20,000		
	1,50,000		
Less: Abnormal Sales	15,000		
	1,35,000		
Less: G. P. @ 20% on sales	27,000	1,08,000	
Less: Cost of goods sold at a loss		30,000	1,38,000
Value of stock as on 31st March 2013			5,58,000

Study Note - 3

ACCOUNTING FOR DEPRECIATION

This Study Note includes

3.1 INTRODUCTION

Depreciation is derived from the Latin word "Depretium", where "De" – decline "Pretium" – Price. This decline in price is due to constant use, wear and tear.

"Depreciation is the gradual and permanent decrease in the value of an asset from any cause."

Indian Accounting Standard (AS 6) states that "Depreciation is allocated so as to charge a fair proportion of the depreciable amount in each accounting period during the expected useful life of the asset."

3.2 CERTAIN USEFUL TERMS

Amortization

- Intangible assets such as goodwill, trademarks and patents are written off over a number of accounting periods covering their estimated useful lives.
- This periodic write off is known as *Amortization* and that is quite similar to depreciation of tangible assets.
- The term amortization is also used for writing off leasehold premises.
- Amortization is normally recorded as a credit to the asset account directly or to a distinct provision for depreciation account.
- Though the write off of intangibles that have no limited life is not approved by some Accountants.
- Some concerns do amortize such assets on the ground of conservatism.

Depletion

- This method is specially suited to mines, oil wells, quarries, sandpits and similar assets of a wasting character.
- In this method, the cost of the asset is divided by the total workable deposits of the mine etc. And by following the above manner rate of depreciation can be ascertained.

- Depletion can be distinguishable from depreciation in physical shrinkage or lessening of an estimated available quantity and the latter implying a reduction in the service capacity of an asset.

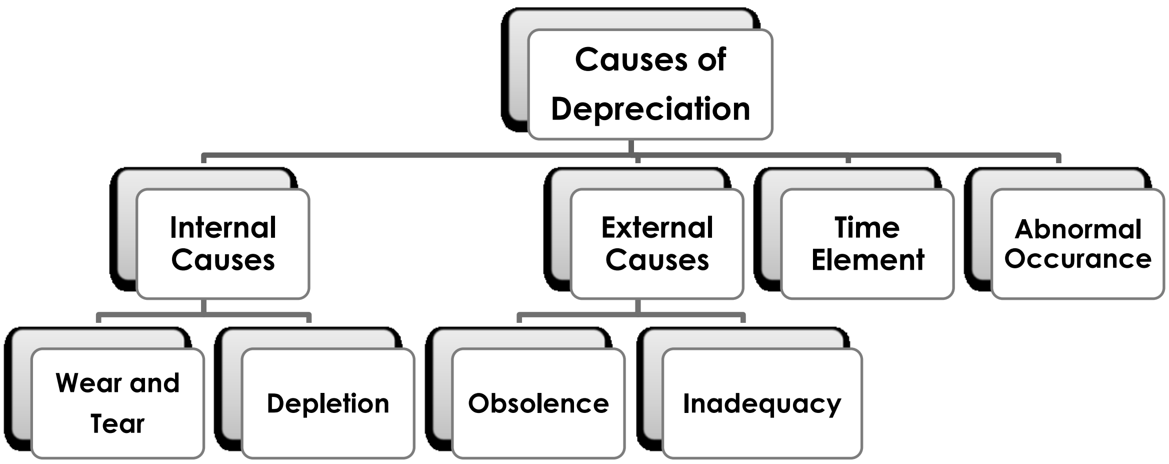
Obsolescence

- The term 'Obsolescence' refers to loss of usefulness arising from such factors as technological changes, improvement in production methods, change in market demand for the product output of the asset or service or legal or medical or other restrictions.
- It is different from depreciation or exhaustion, wear and tear and deterioration in that these terms refer to functional loss arising out of a change in physical condition.

Dilapidation

- In one sentence Dilapidation means a state of deterioration due to old age or long use. This term refers to damage done to a building or other property during tenancy.

3.3 CAUSES OF DEPRECIATION



A. Internal Causes

(i) **Wear and tear :** Plant & machinery, furniture, motor vehicles etc suffer from loss of utility due to vibration, chemical reaction, negligent handling, rusting etc.

(ii) **Depletion (or exhaustion)** : The utility or resources of wasting assets (like mines etc.) decreases with regular extractions.

B. External or Economic Causes

(i) **Obsolescence** : Innovation of better substitutes, change in market demand, imposition of legal restrictions may result into discarding an asset.

(ii) **Inadequacy :** Changes in the scale of production or volume of activities may lead to discarding an asset.

C. Time element : With the passage of time some intangible fixed assets like lease, patents. copy-rights etc., lose their value or effectiveness, whether used or not. The word "amortization" is a better term to speak for the gradual fall in their values.

D. Abnormal occurrences : An accident, fire or natural calamity can damage the service potential of an asset partly or fully. As a result the effectiveness of the asset is affected and reduced.

3.4 CHARACTERISTICS OF DEPRECIATION

The Characteristics of Depreciation are :

(i) It is a **charge against profit**.

(ii) It indicates **diminution in service potential**.

(iii) It is an **estimated loss** of the value of an asset. It is not an **actual loss**.

(iv) It depends upon different **assumptions**, like effective life and residual value of an asset.

(v) It is a process of allocation and not of valuation.

(vi) It arises mainly from an **internal cause** like wear and tear or depletion of an asset. But it is treated as any expense charged against profit like rent, salary, etc., which arise due to an **external transaction**.

(vii) Depreciation on any particular asset is **restricted** to the working life of the asset.

(viii) It is charged on **tangible fixed assets**. It is not charged on any current asset. For allocating the costs of intangible fixed assets like goodwill. etc, a certain amount of their total costs may be charged against periodic revenues. This is known as **amortization**.

3.5 OBJECTIVE OF AND NECESSITY FOR PROVIDING DEPRECIATION

Eric Kohler defined depreciation as "the lost usefulness, expired utility, the diminution in service yield." Its measurement and charging are necessary for cost recovery. It is treated as a part of the expired cost for an asset. For determination of revenue, that part or cost should be matched against revenue. The objects or necessities of charging depreciation are :

Objective and Necessity for Providing Depreciation

- Correct calculation of Cost of Production.
- Correct calculation of Profits.
- Correct disclosure of fixed assets at reasonable value.
- Provision of Replacement Cost.
- Maintenance of Capital
- Compliance with Technical and legal requirement

3.6 FACTORS TO BE CONSIDERE FOR CALCULATING THE ACTUAL DEPRECIATION

Measurement of depreciation is quite difficult to calculate the exact amount of depreciation since they depend on a number of factors. Some of the factors are:

(i) The actual cost of asset.

(ii) The additions, if any, made to the assets during the year taking into consideration the date of purchase.

(iii) The expected amount of interest of opportunity loss.

(iv) The estimated life of the asset.

(v) The scrap, break-up or the residual value of asset.

(vi) Obsolescence, i.e. the chance of the asset going out of fashion.

(vii) The renewals and repairment of the asset.

(viii) The legal provisions relating to the depreciation.(Provision of Companies Act , Income Tax Act and others)

All the above said factors should be taken into consideration at the time of determining the amount of depreciation in such a way that a proper and reasonable estimate can be provided against the amount of depreciation.

3.7 METHODS OF CHARGING DEPRECIATION

There are different concepts about the nature of depreciation. Moreover, the nature of all fixed assets cannot be the same. As a result, different methods are found to exist for charging depreciation. A broad classification of the methods may be summarized as follows :

Methods of Charging Depreciation

Capital / Source Fund	Time Base	Use Base	Price Base
Sinking Fund Method	Fixed Installment Method	Working Hours Method	Revaluation Method
Annuity Method	Reducing Balance Method	Mileage Method	Repairs Provision Method
Insurance Policy Method	Sum Years' Digit Method	Depletion Service Hours Method	-
-	Double Declining Method	Unit Method	-

Some important Methods of Charging Depreciation are discussed as below :

I. Fixed/Equal Installment OR Straight Line Method

Features :

(i) A fixed portion of the cost of a fixed asset is allocated and charged as periodic depreciation.

(ii) Such depreciation becomes an equal amount in each period.

(iii) The formula for calculation of depreciation is :

$$\text{Depreciation} = (V-S)/n$$

Where,

V = Cost of the Asset

S = Residual value or the expected scrap value

n = estimated life of the asset

Illustration 1.

Calculate the Rate of Depreciation under Straight Line Method (SLM) in each of the following:-

Machine No.	Cost of Machine (₹)	Expenses incurred at the time of purchase to be capitalized (₹)	Estimated Residual Value (₹)	Expected Useful Life in years
1	90,000	10,000	20,000	8
2	24,000	7,000	3,100	6
3	1,05,000	20,000	12,500	3
4	2,50,000	30,000	56,000	5

Solution:

Machine No	Cost of Machine (₹)	Expenses incurred at the time of purchase to be capitalized (₹)	Total Cost of Asset = (b+c) (₹)	Estimated Residual Value (₹)	Expected Useful Life in years	Depreciation = (d-e)/f (₹)	Rate of Depreciation under SLM = (g/d)×100
a	b	c	d	e	f	g	h
1	90,000	10,000	1,00,000	20,000	8	10,000	10%
2	24,000	7,000	31,000	3,100	6	4,650	15%
3	1,05,000	20,000	1,25,000	12,500	5	22,500	18%
4	2,50,000	30,000	2,80,000	56,000	10	22,400	8%

Illustration 2.

A machine is purchased for ₹ 7,00,000. Expenses incurred on its cartage and installation ₹ 3,00,000. Calculate the amount of depreciation @ 20% p.a. according to Straight Line Method for the first year ending on 31st March, 2013, if this machine is purchased on:

(a) 1st April, 2012

(b) 1st July, 2012

(c) 1st October, 2012

(d) 1st January, 2013

Solution:

Here, Total Cost of Asset = Purchased Price + Cost of Cartage and Installation

= ₹ 7,00,000 + ₹ 3,00,000 = ₹ 10,00,000

Amount of Depreciation :

$$= \text{Total Cost of Asset} \times \text{Rate of Depreciation} \times \frac{\text{Period from the date of purchase to date of closing accounts}}{12}$$

(a) The machine was purchased on 1st April, 2012:

Amount of Depreciation = ₹ 10,00,000 × 20% × $\frac{12}{12}$ = ₹ 2,00,000

(b) 1st July, 2012

Amount of Depreciation = ₹ 10,00,000 × 20% × $\frac{9}{12}$ = ₹ 1,50,000

(c) 1st October, 2012

Amount of Depreciation = ₹ 10,00,000 × 20% × $\frac{6}{12}$ = ₹ 1,00,000

(d) 1st January, 2013

Amount of Depreciation = ₹ 10,00,000 × 20% × $\frac{3}{12}$ = ₹ 50,000

II. Reducing / Diminishing Balance Method OR Written Down Value Method

Features :

(i) Depreciation is calculated at a fixed percentage on the original cost in the first year. But in subsequent years it is calculated at the same percentage on the written down values gradually reducing during the expected working life of the asset.

(ii) The rate of allocation is constant (usually a fixed percentage) but the amount allocated for every year gradually decreases.

Illustration 3.

On 1.1.2011 a machine was purchased for ₹ 1,00,000 and ₹ 50,000 was paid for installation. Assuming that the rate of depreciation was 10% on Reducing Balance Method, calculate amount of depreciation upto 31.12.2013.

Solution:

Year	Opening Book Value (₹)	Rate	Depreciation (₹)	Closing Book Value (₹)
2011	1,50,000	10%	15,000	1,35,000
2012	1,35,000	10%	13,500	1,21,500
2013	1,21,500	10%	12,150	1,09,350

Note: Cost of the machine (i.e. Opening Book Value for the year 2011)

= Cost of Purchase + Cost of Installation

= ₹ 1,00,000 + ₹ 50,000 = ₹ 1,50,000

Illustration 4.

On 1.1.2011 machinery was purchased for ₹ 80,000. On 1.7.2012 additions were made to the amount of ₹ 40,000. On 31.3.2013, machinery purchased on 1.7.2012, costing ₹ 12,000 was sold for ₹ 11,000 and on 30.06.2013 machinery purchased on 1.1.2011 costing ₹ 32,000 was sold for ₹ 26,700. On 1.10.2013, additions were made to the amount of ₹ 20,000. Depreciation was provided at 10% p.a. on the Diminishing Balance Method.

Show the Machinery Accounts for three years from 2011-2013. (year ended 31st December)

Solution:

Statement of Depreciation

Particulars	Machines – I Cost = ₹ 80,000		Machines – II Cost = ₹ 40,000		Machines – III Cost = ₹ 20,000	Total Depreciation
	₹	₹	₹	₹	₹	₹
1.1.2011 Book Value	48,000	32,000				
31.12.2011 Depreciation	4,800	3,200				8,000
01.01.2012 W.D.V.	43,200	28,800				
01.07.2012			28,000	12,000		
31.12.2012 Depreciation	4,320	2,880	1,400	600		9,200
01.01.2013 W.D.V.	38,880	25,920	26,600	11,400		
31.03.2013 Depreciation				285		
W.D.V.				11,115		
Sold For				11,000		
Loss on sale				115		
30.06.2013 Depreciation		1,296				
W.D.V.		24,624				
Sold for		26,700				
Profit on Sale		2,076				
01.10.2013 Purchase					20,000	
31.12.2013 Depreciation	3,888		2,660		500	8,629
01.01.2014 W.D.V.	34,992		23,940		19,500	

Dr. **Machinery Account** **Cr.**

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
01.01.11	To, Bank A/c	80,000	31.12.11	By, Depreciation A/c ,, Balance c/d	8,000 72,000
		80,000			80,000
01.01.12 01.07.12	To, Balance b/d ,, Bank A/c	72,000 40,000	31.12.12	By, Depreciation A/c ,, Balance c/d	9,200 1,02,800
		1,12,000			1,12,000
01.01.13 30.06.13	To, Balance b/d ,, P & L A/c (Profit on Sale) ,, Bank A/c	1,02,800 2,076 20,000	31.3.13 30.6.13 31.12.13	By, Bank (Sale) A/c ,, Depreciation A/c ,, P & L A/c (Loss on Sale) ,, Bank A/c (Sale) ,, Depreciation A/c ,, Depreciation A/c ,, Balance c/d	11,000 285 115 26,700 1,296 7,048 78,432
		1,24,876			1,24,876

III. Sinking Fund Method

A sinking fund is a fund created with a specific purpose which may be :

(i) To redeem or repay a long term liability, e.g., debenture, long-term loans, etc. or

(ii) To replace a wasting asset, e.g., a mine; or

(iii) To replace an asset of depreciable nature; or

(iv) To renew a lease.

When a sinking fund is created to provide for replacement of wasting assets, it is in effect depreciation; the installments are charged against profits.

Under this method, the asset 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 and 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 charged, in securities outside the business by debiting Depreciation Fund Investment or Sinking Fund Investment Account and crediting Bank. Interest received on the investment 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.

At the end of the working life of the asset, the investment are sold away and the money realised therefrom is utilized for purchasing a new asset. Profit or Loss on such sale, if any, is transferred to the Depreciation Fund Account. The old asset account, standing in the books at original cost, is closed by setting it off against the Depreciation Fund Account.

The formula for calculation of the depreciation amount is as follows :

$$D = \frac{C_i}{(1+i)^n - 1}$$

Where,

D = Depreciation

C = Cost of the asset

i = Rate of Depreciation

n = Life of the asset

Journal Entries under the Sinking Fund method :

At the end of first year

(i) For annual depreciation

Profit & Loss A/c Dr.

To Depreciation Fund A/c (annual contribution)

or To Sinking Fund A/c

(ii) For investment of annual depreciation

Sinking Fund Investment A/c Dr.

To Bank A/c (invested amount)

At the end of second/subsequent years

(i) Profit & Loss A/c Dr.

To Sinking Fund A/c (annual contribution)

(ii) Bank A/c Dr.

To Interest on Investment A/c (annual interest)

(iii) Interest on Investment A/c Dr.

To Sinking Fund A/c (interest transferred)

(iv) Sinking Fund Investment A/c Dr.

To Bank A/c

[amount invested usually = annual contribution + annual interest]

When the working life of the asset ends (i), (ii) & (iii) same as above; (iv) not made in the last year

(v) Bank A/c Dr.

To Sinking Fund Investment A/c

(vi) Sinking Fund Investment A/c Dr.

To Sinking Fund A/c (Profit on Sale)

(Investments sold out)

Or

(vii) Sinking Fund A/c………… Dr.

To Asset A/c [Asset Account closed]

(viii) Sinking Fund A/c Dr.

To Sinking Fund Investment A/c (Loss on Sale)

Notes:

(i) No investment is made in the last year as the investments are to be sold out.

(ii) Sinking Fund Account may be called Depreciation Fund Account also. It is to be shown on the liability side of Balance Sheet.

(iii) Sinking Fund Investments Account may be called Depreciation Fund Investments Account also. It is to be shown on the Asset side of the Balance Sheet.

(iv) Annual Contribution (charged in lieu of annual depreciation) = Original Cost x Present Value of ₹ 1 at given interest rate.

Illustration 5.

On 1.7.2009 W Ltd. purchased a machinery for ₹ 1,10,000 and spent ₹ 6,000 on its installation. The expected life of the machine is 4 years, at the end of which the estimated scrap value will be ₹ 16,000. Desiring to replace the machine on the expiry of its life, the company establishes a Sinking Fund. Investments are expected to realize 5% interest.

On 30.06.2013, the machine was sold off as scrap for ₹ 18,000 and the investments were retained at 5% less than the book value. On 1.7.2013, a new machine is installed at a cost of ₹ 1,25,000.

Sinking Fund table shows that ₹ 0.2320 invested each year will produce ₹ 1 at the end of 4 years at 5%.

Show the necessary ledger accounts in the books of W Ltd.

Solution:

Sum required	Annual contribution
1	0.2320
(₹ 1,10,000 + ₹ 6,000 - ₹ 16,000) = ₹ 1,00,000	= 0.2320 x 1,00,000
	= ₹ 23,200

In the Books of W Ltd.

Dr. Sinking Fund Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
30.6.10	To Balance c/d	23,200	30.6.10	By Profit and Loss A/c	23,200
		23,200			23,200
30.6.11	To Balance c/d	47,560	07.07.10	By, Balance b/d	23,200
			30.6.11	By, Bank (interest @ 5%)A/c	1,160
				By, Profit and Loss A/c	23,200
		47,560			47,560
30.6.12	To Balance c/d	73,138	01.7.11	By, Balance b/d	47,560
			30.6.12	By, Bank (interest @ 5%) A/c	2,378
				By, Profit and Loss A/c	23,200
		73,138			73,138
30.6.12	To, Sinking Fund Investment A/c		01.7.12	By, Balance b/d	73,138
	– Loss on sale	3,657	30.6.13	By, Bank interest @ 5%	3,657
	To, Machinery A/c – Transfer	96,338		By, Profit and Loss A/c	23,200
		99,995			99,995

Dr. Sinking Fund Investment Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
30.6.10	To, Bank A/c	23,200	30.6.10	By, Balance c/d	23,200
		23,200			23,200
01.07.10	To, Balance b/d	23,200	30.6.11	By, Balance c/d	47,560
30.6.11	To, Bank A/c (₹1,160 + ₹ 23,200)	24,360			
		47,560			47,560
01.7.11	To, Balance b/d	47,560	30.6.12	By, Balance c/d	73,138
30.6.12	To, Bank A/c (₹2,378 + ₹ 23,200)	25,578			
		73,138			73,138
01.7.13	To, Balance b/d	73,138	30.6.13	By, Bank A/c - Sales	69,481
				By, Sinking Fund A/c – Loss on sale (balancing figure)	3,657
		73,138			73,138

IV. Annuity Method

The annuity method considers that the business, besides losing the original cost of the asset also loses interest, on the amount used for buying the asset, which he would have earned in case the same amount would have been invested in some other form of investment. Thus, the asset account is debited with interest, which is ultimately credited with amount of depreciation which remains fixed year after year. The annual amount of depreciation is determined with the help of annuity table. The amount of depreciation is determined by adding the cost of the asset (i.e., purchase price) and interest thereon at an expected rate.

The Journal entries are as follows :

(i) Depreciation A/c Dr.
To Asset A/c
(for depreciation as calculated from annuity table)

(ii) Asset A/c Dr.
To Interest A/c
(for charging interest to asset as calculated on diminishing values)

(iii) Profit & Loss A/c Dr.
To Depreciation A/c
(for transfer of depreciation to P/L A/c)

(iv) Interest A/c Dr.
To Profit & Loss A/c
(for transfer of interest to P/L A/c)

Illustration 6.

Sri Tirthankar takes a lease for 5 years for ₹ 10,000. He decides to write off the lease by annuity method charging 5% interest p.a. Show the lease account for 5 years.

The annuity table shows that annual amount necessary to write off ₹1 in 5 years at 5% p.a. is ₹ 0.230975.

Solution:

Present Value	Annual Depreciation
1	0.230975
10,000	0.230975 x 10,000
	= ₹ 2309.75 or Day
	₹ 2310 (approx)

In the books of Sri Tirthankar

Dr. **Lease Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
Year- I			**Year- I**		
Opening	To, Bank A/c	10,000	Closing	By , Depreciation A/c	2,310
Closing	,, Interest A/c	500		,, Balance c/d	8,190
		10,500			10,500
Year- II			**Year-II**		
Opening	To, Balance b/d	8,190	Closing	By , Depreciation A/c	2,310
Closing	,, Interest A/c	410		,, Balance c/d	6,290
		8,600			8,600
Year- III			**Year-III**		
Opening	To, Balance b/d	6,290	Closing	By , Depreciation A/c	2,310
Closing	,, Interest A/c	315		,, Balance c/d	4,295
		6,605			6,605

Year- IV Opening Closing	To, Balance b/d ,, Interest A/c	4,295 215	**Year-IV** Closing	By , Depreciation A/c ,, Balance c/d	2,310 2,200
		4,510			4,510
Year- V Opening Closing	To, Balance b/d ,, Interest A/c	2,200 110	**Year-V** Closing	By , Depreciation A/c	2,310
		2,310			2,310

V. Revaluation Method

This method should be adopted only where the asset is represented by a large number of small and diverse items of small unit cost, e.g., hand tools, live-stock, sacks etc. in such cases it is not possible to attempt to depreciate each individual item. In this method the following steps to be taken :

Sept 1: at the end of financial year, all items, which are in good condition and can serve well, are valued at cost.

Sept 2: the cost, as calculated above, is compared with the opening balance and the difference is charged as depreciation.

Sept 3: purchases of asset are debited to asset account in a normal manner.

It is very important to note that under this method the total amount to be written off as depreciation is directly credited to asset account (not an accumulated depreciation account)

Illustration 7.

On 1.1.2013, A Ltd. has a stock of bottles valued at ₹ 8,000. On 1.7.13, they purchased additional bottles which amounted to ₹ 5,000. On Dec. 31, 2013, the entire stock of bottles was revalued at ₹ 10,500. Show the Bottle Account for the year 2013.

Solution :

In the book of A. Ltd.

Dr. **Bottle Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Jan. 1 July 1	To, Balance b/d " Bank A/c	8,000 5,000	2013 Dec. 31	By Depreciation A/c (bal. fig.) " Balance c/d	2,500 10,500
		13,000			13,000

VI. Depletion Unit Method

This method is specially suited to mines, oil wells, quarries, sandpits and similar assets of a wasting character. The cost of the natural resources is the price paid for its acquisition plus price paid for the development of such asset in order to bring it to a state suitable for production.

The periodic depletion is better not calculated in terms of year. Rather it is better to calculate the cost per unit and then multiply the cost of units produced in that particular year. Depletion for each unit extracted is determined as follows :

$$\text{Depletion per unit (U)} = \frac{\text{Acquisition cost (C) - Residual value (S)}}{\text{Estimated life in terms of production units (n)}}$$

Illustration 8.

In 2011, a company acquired a mine at a cost of ₹ 5,00,000. The estimated reserve of minerals is 50,00,000 tonnes, of which 80% is expected to be realised. The first three years raisings are 1,50,000; 2,00,000 and 2,50,000 tonnes, respectively. Show the Mines Account, charging depreciation under Depletion Method.

Solution :

Total quantity expected to be realized – 80% of 50,00,000, i.e. 40,00,000 tonnes.

Cost of the mine ₹ 5,00,000

Hence, Charge per tonne $\frac{₹\ 5,00,000}{40,00,000}$ = ₹ 0.125 or 1/8.

Therefore, Depreciation for 2011 = 1,50,000 × 1/8 = ₹ 18,750

for 2012 = 2,00,000 × 1/8 = ₹ 25,000

for 2013 = 2,50,000 × 1/8 = ₹ 31,250

Dr. **Mines Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2011			2011		
	To Bank A/c	5,00,000	Dec. 31	By, Depreciation A/c	18,750
				" Balance c/d	4,81,250
		5,00,000			5,00,000
2012			2012		
Jan. 1	To, Balance b/d	4,81,250	Dec. 31	By, Depreciation A/c	25,000
				" Balance c/d	4,56,250
		4,81,250			4,81,250
2013			2013		
Jan. 1	To Balance b/d	4,56,250	Dec. 31	By, Depreciation A/c	31,250
				" Balance c/d	4,25,000
		4,56,250			4,56,250
2014					
Jan. 1	To Balance b/d	4,25,000			

3.8. PROVISION FOR DEPRECIATION ACCOUNT

Provision of depreciation is the collected value of all depreciation. Provision of depreciation account is the account of provision of depreciation. With making of this account we are not credited depreciation in asset account. But transfer every year depreciation to provision of depreciation account. Every year we adopt this procedure and when assets are sold we will transfer sold asset 'total depreciation' to credit side of asset account, for calculating correct profit or loss on fixed asset. This provision uses with any method of calculating depreciation.

There are following features of provision for depreciation account :

- Fixed asset is made on its original cost and every year depreciation is not transfer to fixed asset account.
- Provision of depreciation account is Conglomerated value of all old depreciation.
- This system can be used both in straight line and diminishing method of providing depreciation.

The journal entries will be :

(i) For purchase of asset

Asset's A/c Dr.

To Cash/Bank A/c

(ii) For providing depreciation at end of year

Depreciation A/c Dr.

To Provision for depreciation A/c

(iii) For sale of assets

Cash/Bank A/c Dr.

To Asset Sales A/c

(iv) Cost of assets sold transferred from Assets Account to Sale of Assets Account.

Assets Sales A/c Dr.

To Asset's A/c.

(v) Total depreciation on asset sold transferred from provision for depreciation account.

Provision for depreciation A/c Dr.

To Asset Sales A/c

(vi) Profit or loss on sale of assets will be transferred from asset sale account to Profit or Loss Account.

3.9. DISPOSAL OF AN ASSET

When an asset is sold because of obsolescence or inadequacy or any other reason, the cost of the asset is transferred to a separate account called "Asset Disposal Account". The following entries are to be made:

(i) When the cost of the asset is transferred:

Asset Disposal A/c Dr.

To, Asset A/c (original cost)

(ii) When depreciation provided on the asset is transferred:

Provision for Depreciation A/c Dr.

To, Asset Disposal A/c

(iii) For charging depreciation for the year of sale:

Depreciation A/c Dr.

To, Asset Disposal A/c

(iv) When cash received on sale of asset:

Bank/Cash A/c Dr.

To, Asset Disposal A/c

(v) When loss on disposal is transferred to Profit & Loss A/c:

Profit & Loss A/c Dr.

To, Asset Disposal A/c

(vi) When profit on disposal is transferred to Profit & Loss Account:

Asset Disposal A/c Dr.

To, Profit & Loss A/c

Illustration 9.

S & Co. purchased a machine for ₹ 1,00,000 on 1.1.2011. Another machine costing ₹ 1,50,000 was purchased on 1.7.2012. On 31.12.2013, the machine purchased on 1.1.2011 was sold for ₹ 50,000. The company provides depreciation at 15% on Straight Line Method. The company closes its accounts on 31st December every year. Prepare – (i) Machinery Account, (ii) Machinery Disposal Account and (iii) Provision for Depreciation Account.

Solution:

S & Co.

Dr. Machinery Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
1.1.2011	To, Bank A/c	1,00,000	31.12.2011	By, Balance c/d	1,00,000
		1,00,000			1,00,000
1.1.2012	To, Balance b/d	1,00,000			
1.7.2012	To, Bank A/c	1,50,000	31.12.2012	By, Balance c/d	2,50,000
		2,50,000			2,50,000
1.1.2013	To, Balance b/d	2,50,000	31.12.2013	By, Machinery Disposal A/c	1,00,000
			31.12.2013	By, Balance c/d	1,50,000
		2,50,000			2,50,000
1.1.2014	To, Balance b/d	1,50,000			

Dr. Provision for Depreciation Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31.12.2011	To, Balance c/d	15,000	31.12.2011	By, Depreciation A/c	15,000
		15,000			15,000
31.12.2012	To, Balance c/d	41,250	1.1.2012	By, Balance b/d	15,000
			31.12.2012	By, Depreciation A/c (₹ 15,000 + ₹ 11,250)	26,250
		41,250			41,250
31.12.2013	To, Machinery Disposal A/c	30,000	1.1.2013	By, Balance b/d	41,250
31.12.2013	To, Balance c/d	33,750	31.12.2013	By, Depreciation A/c	22,500
		63,750			63,750
			1.1.2014	By, Balance b/d	33,750

Dr. Machinery Disposal Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31.12.2013	To, Machinery A/c	1,00,000	31.12.2013	By, Provision for Depreciation A/c	30,000
			31.12.2013	By, Depreciation A/c	15,000
			31.12.2013	By, Bank A/c	50,000
			31.12.2013	By, Profit & Loss A/c (Loss on Sale)	5,000
		1,00,000			1,00,000

Working Notes:

1. Depreciation for the machine purchased on 1.7.2012

   For the year 2012 (used for 6 months) = ₹ 1,50,000 × 15% × $\frac{6}{12}$ = ₹ 11,250

   For the year 2012 (used for full year) = ₹ 1,50,000 × 15% = ₹ 22,500

2. Depreciation for the machine purchased on 1.1.2010

   Depreciation = ₹ 1,00,000 × 15% = ₹ 15,000

   So, Depreciation for 2 years = ₹ 15,000 × 2 = ₹ 30,000

3.10. PROFIT OR LOSS ON SALE OF ASSETS – METHOD OF DEPRECIATION CALCULATION

Sometimes an asset is sold before the completion of its useful life for some unavoidable circumstances (due to obsolescence etc.) including a part of the asset which is no longer required in future. If the sale price is less than the WDV, there will be loss, and vice versa. The profit & loss on sale of asset is adjusted in the year of Sale in Profit & Loss Account.

Accounting Treatment

a. Where no provision for depreciation account is maintained:

WDV of the amount sold will be transferred to 'Assets Disposal Account'. The entries will be as follows:

(i) WDV of asset has been transferred to Asset Disposal A/c

Asset Disposal A/c	Dr.
To Asset A/c	

(ii) In case of Sale of an Asset

Cash/Bank A/c	Dr.
To Asset Disposal A/c	

(iii) For depreciation (if any)

Depreciation (P & L A/c)	Dr.
To Asset Disposal A/c	

(iv) In case of Profit on Sale of Asset

Asset Disposal A/c	Dr.
To Profit & Loss A/c	

(v) In case of Loss on Sale of Asset

Profit & Loss A/c	Dr.
To Asset Disposal A/c	

b. Alternative Approach

In this situations, all adjustments are to be prepared through the assets account. The entries are as follows:

(i) In case of Assets sold

Cash/Bank A/c	Dr.
To Assets A/c	

(ii) In case of Depreciation

Depreciation (Profit & Loss) A/c	Dr.
To Assets A/c	

(iii) In case of Profit on Sale

Assets A/c	Dr.
To Profit & Loss	

(iv) In case of Loss on Sale

Profit & Loss A/c	Dr.
To Assets A/c	

Illustration 10.

On 1st April, 2011, Som Ltd. purchased a machine for ₹66,000 and spent ₹5,000 on shipping and forwarding charges, ₹7,000 as import duty, ₹1,000 for carriage and installation, ₹500 as brokerage and ₹500 for an iron pad. It was estimated that the machine will have a scrap value of ₹ 5,000 at the end of its useful life which is 15 years. On 1st January, 2012 repairs and renewals of ₹ 3,000 were carried out. On 1st October, 2013 this machine was sold for ₹ 50,000. Prepare Machinery Account for the 3 years.

Solution:

In the books of Som Ltd.

Dr. **Machinery Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
01.04.2011	To, Bank A/c	66,000	31.03.2012	By, Depreciation A/c	5,000
01.04.2011	To, Bank A/c	14,000	31.03.2012	By, Balance c/d	75,000
		80,000			80,000
01.04.2012	To, Balance b/d	75,000	31.03.2013	By, Depreciation A/c	5,000
			31.03.2013	By, Balance c/d	70,000
		75,000			75,000
01.04.2013	To, Balance b/d	70,000	01.10.2013	By, Depreciation A/c	2,500
			01.10.2013	By, Bank A/c (sale)	50,000
			01.10.2013	By, Profit & Loss A/c (Loss)	17,500
		70,000			70,000

Working Note :

1. Total Cost = ₹ 66,000 + ₹ 5,000 + ₹ 7,000 + ₹ 1,000 + ₹ 500 + ₹ 500 = ₹ 80,000

$$\text{Depreciation} = \frac{\text{Total Cost - Scrap Value}}{\text{Expected life}} = \frac{80{,}000 - 5{,}000}{15} = ₹\ 5{,}000$$

The amount spent on repairs and renewals on 1st January, 2012 is of revenue nature and hence, does not form part of the cost of asset.

3.11. CHANGE OF METHOD - PROSPECTIVE AND RETROSPECTIVE

As per AS-6, the depreciation method selected should be applied consistently from period to period. Change in depreciation method should be made only in the following situations :

(i) For compliance of statute.

(ii) For compliance of accounting standards.

(iii) For more appropriate presentation of the financial statement.

The change in method may be made possible in two ways :

(i) With prospective effect, and

(ii) With retrospective effect

(i) With prospective effect – Under this method, the change in method is to be taken into consideration for the rest of the useful life of the asset commencing from the year in which such change is effected and not from the beginning of the year.

Illustration 11.

Rise Ltd. purchased a machinery for ₹1,00,000 on 1.1.2010. The machine was depreciated at 10% p.a. under the Straight Line Method. On 1.1.2013, the company decided to change the method of depreciation from Straight Line Method to Diminishing Balance Method without retrospective effect. Prepare Machinery Account from 2010 to 2013.

Solution:

In the books of Rise Ltd.

Dr. Machinery Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
01.01.10	To, Bank A/c	1,00,000	31.12.10	By, Depreciation A/c	10,000
				By, Balance c/d	90,000
		1,00,000			1,00,000
01.01.11	To, Balance b/d	90,000	31.12.11	By, Depreciation A/c	10,000
				By, Balance c/d	80,000
		90,000			90,000
			31.12.12	By, Depreciation A/c	10,000
01.01.12	To, Balance b/d	80,000		By, Balance c/d	70,000
		80,000			80,000
01.01.13	To, Balance b/d	70,000	31.12.13	By, Depreciation A/c - 10% on ₹ 70,000	7,000
				By, Balance c/d	63,000
		70,000			70,000

Illustration 12.

A second hand machine was purchased on 1.1.2009 for ₹ 4,00,000 overhauling and installation expenses for the same machine amounted to ₹ 1,00,000. Another machine was purchased for ₹ 2,00,000 on 1.7.2009.

On 1.7.2011, the machine installed on 1.1.2009 was sold for ₹ 2,50,000. Dismantling charges for the machine sold on 1.7.2011 was ₹10,000. On the same date, another machine was purchased for ₹ 8,00,000 and was commissioned on 30.9.2011. The company had adopted calendar year as its financial year. Under the existing practice, the company provides depreciation @ 10% p.a. on original cost. In 2012, it has been decided that depreciation will be charged on the overhauling balance @15% p.a.. The change is not to be made with retrospective effect.

Show Plant Account for 2009-2013.

Solution:

Statement of Depreciation

Particulars	Machine-I (₹)	Machine-II (₹)	Machine-III (₹)	Total Depreciation (₹)
1.1.2009 Book Value (including expenses)	5,00,000			
1.7.2009 Book Value		2,00,000		
31.12.2010 Depreciation @10%	50,000	10,000		60,000
1.1.2010 WDV	4,50,000	1,90,000		
31.12.2010 Dep. @ 10%	50,000	20,000		70,000
1.1.2011 W.D.V.	4,00,000	1,70,000	8,00,000	
1.7.2011 Dep.@10%	25,000			
	3,75,000			
Add : Dismantling Charges	10,000			
	3,85,000			
Sold for	2,50,000			
Loss on sale	1,35,000			
31.12.2011 Dep. @ 10%		20,000	40,000	85,000
1.1.2012 WDV		1,50,000	7,60,000	(20,000 + 40,000 + 25,000)
31.12.2012 Dep. @ 15%		22,500	1,14,000	1,36,500
1.1.2013 WDV		1,27,500	6,46,000	
31.12.2013 Dep. @15%		19,125	96,900	1,16,025
1.1.2014 WDV		1,08,375	5,49,100	

Dr. **Machinery Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
01.01.09	To Bank A/c	4,00,000	31.12.09	By Depreciation A/c	60,000
01.01.09	To Bank A/c (Expenses)	1,00,000	31.12.09	By Balance c/d	6,40,000
01.07.09	To Bank A/c	2,00,000			
		7,00,000			7,00,000
01.01.10	To Balance b/d	6,40,000	31.12.10	By Depreciation A/c	70,000
			31.12.10	By Balance c/d	5,70,000
		6,40,000			6,40,000
01.01.11	To Balance b/d	5,70,000	01.07.11	By Bank A/c (Sale)	2,50,000
01.07.11	To Bank A/c	8,00,000		By Depreciation A/c	25,000
01.07.11	To Bank A/c (Expenses)	10,000		By P & L A/c	1,35,000
			31.12.11	By Depreciation A/c	60,000
				By Balance c/d	9,10,000
		13,80,000			13,80,000
01.01.12	To Balance b/d	9,10,000	31.12.12	By Depreciation A/c	1,36,500
				By Balance c/d	7,73,500
		9,10,000			9,10,000
01.01.13	To Balance b/d	7,73,500	31.12.13	By Depreciation A/c	1,16,025
				By Balance c/d	6,57,475
		7,73,500			7,73,500
01.01.14	To Balance b/d	6,57,475			

(ii) With retrospective effect

Procedure to be followed in this case :

(i) Depreciation should be recalculated applying the new method from the date of its acquisition/ installation till the date of change of method.

(ii) Difference between the total depreciation under the new method and the accumulated depreciation under previous method till the date of change may be surplus/ deficiency.

(iii) The said surplus is credited to Profit & Loss account under the head “depreciation written Back”.

(iv) Deficiency is charged to profit & Loss account.

(v) The journal entries will be :

(a) If old value is less

Profit and Loss A/c Dr.

To, Assets A/c

(b) If old value is more

Asset A/c Dr.

To, Profit and Loss A/c.

(vi) The above change of depreciation method should be treated as change in accounting policy and its post effect should be disclosed and quantified.

Illustration 13.

Ram Ltd. which depreciates its machinery at 10% p.a. on Diminishing Balance Method, had on 1st January, 2013 ₹ 9,72,000 on the debit side of Machinery Account.

During the year 2013 machinery purchased on 1st January, 2011 for ₹ 80,000 was sold for ₹ 45,000 on 1st July, 2013 and a new machinery at a cost of ₹ 1,50,000 was purchased and installed on the same date, installation charges being ₹ 8,000.

The company wanted to change the method of depreciation from Diminishing Balance Method to Straight Line Method with effect from 1st January, 2011. Difference of depreciation up to 31st December, 2013 to be adjusted. The rate of depreciation remains the same as before. Show Machinery Account.

Solution :

In the books of Ram Ltd.

Dr. Machinery Account Cr.

Date	Particulars		Amount (₹)	Date	Particulars	Amount (₹)
01.01.13	To, Balance b/d	9,07,200		01.07.13	By, Depreciation A/c [W.N.3]	3,240
		64,800			By, Bank A/c - Sale	45,000
			9,72,000		By, Loss on sale of Machine A/c [W.N.4]	16,560
01.07.13	To, Bank A/c (1,50,000 + 8,000)		1,58,000			
				31.12.13	By, Depreciation A/c	
					- For the year 2013	1,12,000
				31.12.13	- For ½ year	7,900
					By, Profit & Loss A/c Adjustment	11,200
					By, Balance c/d	
					- M_1 (9,07,200 – 1,12,000 – 11,200)	7,84,000
					- M_2	Nil
					- M_3 (1,58,000 – 7,900)	1,50,100
			11,30,000			11,30,000

Working Notes :

	₹
(1) At 10% depreciation on Diminishing Balance Method :	
If balance of machinery in the beginning of the year is	10
Depreciation for the year is	1
Balance of Machinery at the end of the year	9

By using the formula, balance of asset on 1st January 2010 will be calculated as follows :

	₹
Balance as on 1st January, 2013	9,72,000
Balance as on 1st January, 2012 is 9,72,000 × $\frac{10}{9}$ =	10,80,000
Balance as on 1st January, 2011 is 10,80,000 × $\frac{10}{9}$ =	12,00,000

This balance, ₹ 12,00,000 is composed of 2 machines, one of ₹ 11,20,000 and another of ₹ 80,000.

	₹
Depreciation at 10% p.a. on Straight Line Method on ₹ 11,20,000	1,12,000
Total Depreciation for 2011 and 2012 (₹ 1,12,000 x 2)	2,24,000
Total Depreciation charged for 2011 and 2012 on Diminishing Balance Method (1,12,000 + 1,00,800)	2,12,800
Balance to be charged in 2013 to change from Diminishing Balance Method to Straight Line Method	11,200

(2) Machine purchased on 1st January, 2011 for ₹80,000 shows thebalance of ₹64,800 on 1st January 2013 as follows :

	₹
Purchase price	80,000
Less : Depreciation for 2011	8,000
	72,000
Less : Depreciation for 2012	7,200
Balance as on Jan. 1, 2013	64,800

(3) On second machine (original purchase price ₹ 80,000), depreciation at 10% p.a. on ₹ 64,800 for 6 months, *viz.*, ₹ 3,240 has been charged to the machine on July 1 2013 *i.e.*, on date of sale.

(4) Loss on sale of (ii) machine has been computed as under :

	₹
Balance of the machine as on 1.1.2013	
	64,800
Less : Depreciation for 6 months up to date of sale	3,240
Balance on date of sale	61,560
Less : Sale proceeds	45,000
Loss on sale	16,560

Illustration 14.

M/s. Hot and Cold commenced business on 01.07.2008. When they purchased a new machinery at a cost of ₹ 8,00, 000. On 01.01.2010 they purchased another machinery for ₹ 6,00,000 and again on 01.10.2012 machinery costing ₹ 15,00,000 was purchased. They adopted a providing of charging @ 20% p.a. on diminishing balance basis.

On 01.07.2012, they changed the method of providing depreciation and adopted the method of writing off the Machinery Account at 15% p.a. under straight line method with retrospective effect from 01.07.2008, the adjustment being made in the accounts for the year ended 30.06.2013.

The depreciation has been charged on time basis. You are required to calculate the difference in depreciation to be adjusted in the Machinery on 01.07.2012, and show the Machinery Account for the year ended 30.06.2013.

Solution:

In the books of M/s Hot and Cold

Dr. **Machinery Account** **Cr.**

Date	Particulars	Amount ₹	Date	Particulars	Amount ₹
01.07.12	To, Balance b/d	6,73,280	30.6.13	By Depreciation A/c	3,78,750
	To, Profit and Loss A/c (Depreciation Overcharged)	21,720		By Balance c/d	18,16,250
01.10.12	To, Bank A/c (Purchase)	15,00,000			
		21,95,000			21,95,000

Workings:

1. **Statement of Depreciation:**

Date	Particulars	Machine – I ₹	Machine – II ₹	Total Depreciation ₹
01.07.2008	Book Value	8,00,000		
30.06.2009	Depreciation @ 20%	1,60,000		1,60,000
01.07.2009	**W.D.V.**	6,40,000		
01.01.2010	Bank (Purchase)		6,00,000	
30.06.2010	Depreciation @ 20%	1,28,000	60,000	1,88,000
01.07.2010	**W.D.V.**	5,12,000	5,40,000	
30.06.2011	Depreciation @ 20%	1,02,400	1,08,000	2,10,400
01.07.2011	**W.D.V.**	4,09,600	4,32,000	
30.06.2012	Depreciation @ 20%	81,920	86,400	1,68,320
		3,27,680	3,45,600	
		6,73,280		7,26,720

2. **Depreciation Overcharged:**

Now depreciation under Straight Line Method

On ₹ 8,00,000 @ 15% = ₹ 1,20,000 x 4 years (from 01.07.2008 to 30.06.2012) = ₹ 4,80,000

∴ On ₹ 6,00,000 @ 15% = ₹ 90,000 x 2 years (from 01.01.2010 to 30.06.2012) = ₹ 2,25,000

₹ 7,05,000

Depreciation overcharged = Reducing Balance Basis – Straight Line Basis

= ₹ (7,26,720 – 7,05,000)

= ₹ 21,720

3. **Depreciation for the year:**

On ₹ 14,00,000 @ 15% for the year = ₹ 2,10,000

On ₹ 15,00,000 @ 15% for the 9 months = ₹ 1,68,750

₹ 3,78,750

3.12. APPLICATION OF AS 6- DEPRECIATION ACCOUNTING

"Depreciation Accounting" (AS 6) (Revised)

The Accounting Standard regarding depreciation was issued at first in 1982. But it was revised in 1994. The revised standard (AS 6) is now mandatorily applicable to all concerns in India for accounting periods commencing on or after 1.4.1995. The important matters to be noted from (AS 6) are :

What is Depreciation as per AS-6?

Depreciation is a measure of wearing out, consumption or other loss of value of a **depreciable asset** arising from use and passage of time. Depreciation is nothing but distribution of total cost of assets over its useful life.

"**Depreciable Assets**" are the assets which : -

(a) are expected to be used for more than one accounting period;

(b) have limited useful life;

(c) are held by an enterprise for use in production or supply of goods and services, for rental to others or for administrative purposes but not for sale in the ordinary course of business.

AS-6 is not applicable to the following assets:

- Forests, Plantations
- Wasting Assets, Minerals and Natural Gas
- Expenditure on research and development
- Goodwill
- Live stock – Cattle, Animal Husbandry.

How to ascertain the cost of depreciable assets?

Cost of depreciable assets is the total cost spent in connection with the acquisition; installation and commissioning of the assets as well as for add item or improvement of the depreciable assets.

"**Useful Life**" of a depreciable asset is the period over which the assets are expected to be used by the enterprise, which is generally shorter than the physical life.

Useful Life of a Depreciable asset depends on the following factors –

- Predetermined by legal contractual limits
- Depends upon the number of shifts for which the asset is to be used
- Repair and Maintenance policy of enterprise
- The theological obsolescence
- Innovation/improvement in the production method
- Change in demand of output
- Legal or other restrictions.

Estimated residual or scrap value:

This is the estimated value of a depreciable asset at the end of its useful life.

Change in Method of Depreciation:

The method selected for charging depreciation should be consistently followed. However, if situations demand (like change of statute, compliance with Accounting Standard, etc.) a change of method may be made, that would result in change in accounting policy (which may be required by statute or for compliance with an Accounting Standards or for more appropriate presentation of financial statement), In that case -

(i) if the change affects the state of affairs of Balance Sheet and Profit and Loss account of the current period or the Financial Statements of later period, then such change must be disclosed in financial statement. The amount, by which the financial statement is affected, should be disclosed to the extent it is ascertainable.

(ii) the depreciation should be recalculated under the new method with effect from the date of the asset coming into use till the date of change of method, that is, with retrospective effect. Difference between the total depreciation under new method and the accumulated depreciation under the old method till the date of change of method should be computed first. Then the resultant surplus or deficiency is to be charged to credit and debit side of the Profit and Loss A/c respectively.

Change in Useful Life:

If there is a change in useful life of an asset, outstanding depreciable amount on the date of change in estimated useful life of asset is required to be allocated over the revised remaining useful life.

Any addition or extension essential for an existing asset, should be depreciated over the remaining life of the asset.

If the historical cost of an asset changes due to exchange fluctuations, price adjustments, etc. the depreciation on the revised unamortized depreciable amount should be provided prospectively for the rest of the life of the asset.

For any asset revalued, the provision for depreciation should be made on the revalued amount for the remaining useful life of the asset.

In the financial statements, the matters to be disclosed are-

(i) The historical cost or any amount substituting it;

(ii) Total depreciation for the period for each

(iii) The related accumulated depreciation.

The method of charging depreciation should also be disclosed.

3.13. APPLICATION OF AS 10- ACCOUNTING FOR FIXED ASSET

Accounting Standard for Fixed Assets (AS 10)

Accounting Standard 10 is related with accounting of Fixed Assets. The important matters to be noted from (AS 10) are :

Fixed asset is an asset

- which is held with an intention of being used for the purpose of producing and providing goods and services
- which is not held for sale in the normal course of business
- which is expected to be used for more than one accounting period

Examples of Fixed Assets are-

- Land
- Building- Freehold/Leasehold
- Plant and Machinery
- Furniture & Fitting etc.

This accounting standard is applicable to all assets except the following:

- Forest, plantations and similar regenerative natural resource.
- Wasting assets like minerals,oil and natural gas
- Expenditure on real estate development
- Live stock

Fixed assets shall be shown in financial statement either at historical cost or revalued price.

(a) The gross book value of a fixed asset should be either historical cost or a revaluation computed in accordance with the Accounting Standard. [Set out in paragraphs 20 to 26 and 27 to 32 of the Standards]

Historical cost of a Fixed Asset: It consist of the following:

- Purchase price
- Import duties and other taxes which is non-refundable in nature
- Any cost which is directly attributable to bring the asset to the working condition for its intended use.

In case of any self-constructed assets costs attributable to its construction and allocable to it, should be included in its value.

Items fixed assets retired from active use and held for disposal should be shown separately in the financial statements and stated at net book value or realizable value, whichever is lower.

If any subsequent expenditure causes an addition to the already expected future benefits of an asset, such expenditure should be added with the value of the asset.

Cost of assets acquired in exchange of existing assets:

- **Fixed assets exchanged not similar**

  In case a new asset is acquired in part exchange of an old asset the exchange price should be recorded at fair market value of the asset acquired or at fair market value of the asset given up, if it is more clearly evident.

- **Fixed assets exchanged are similar**

  In case a new asset is acquired in part exchange of an old asset the exchange price should be recorded at fair market value of the asset acquired or at fair market value of the asset given up, if it is more clearly evident or net book value of the old asset.

- **Fixed asset acquired in exchange of shares, etc**. should be recorded at its fair market value or the fair market value of the shares, etc. whichever is more clearly available.

Any loss or gain on the retirement or disposal of any fixed asset carried at cost should be recognized in the profit and loss account if the value of any asset increases on revaluation, its accumulated depreciation should not be debited to Profit & Loss Account. The depreciation on such revalued amount should be adjusted against Revaluation Reserves.

Disclosure requirement as per Accounting Standard 10:

- Gross and the net book values of fixed assets at the beginning and at the end of the accounting period showing there in any additions, disposal, acquisition and other movement.
- Expenditure incurred on account of fixed assets in the course of construction or acquisition.
- Revalued amount which is substituted for historical cost of the fixed asset, method adopted to compute the revalued amount, and whether an external valuer has valued the fixed assets, in case where fixed assets are stated at revalued amount.

Study Note - 4

PREPARATION OF FINAL ACCOUNTS

This Study Note includes

4.1 INTRODUCTION

The most important function of an accounting system is to provide information about the profitability of the business. A sole trader furnishes a Trading and Profit and loss Account which depicts the result of the business transactions of the sole trader. Along with the Trading and Profit and Loss Account he also prepares a Balance Sheet which shows the financial position of the business.

Steps in the Process of Finalization of Accounts

A. For Trading Concerns:

1. Trading Account.
2. Profit and Loss Account.
3. Balance Sheet.

B. For Manufacturing and Trading Concerns:

1. Manufacturing Account.
2. Trading Account.
3. Profit and Loss Account.
4. Balance Sheet.

4.2 PREPARATION OF FINANCIAL STATEMENTS

Profitability Statement – This statement is related to a complete accounting period. It shows the outcome of business activities during that period in a summarized form. The activities of any business will include purchase, manufacture, and sell.

Balance Sheet – Business needs some resources which have longer life (say more than a year).

Such resources are, therefore, not related to any particular accounting period, but are to be used over the useful life thereof. The resources do not come free. One requires finance to acquire them. This funding is provided by owners through their investment, bank & other through loans, suppliers by way of credit terms. The Balance Sheet shows the list of resources and the funding of the resources i.e. assets and liabilities (towards owners and outsiders). It is also referred as sources of funds (i.e. liabilities & capital) and application of funds (i.e. assets). Let us discuss these statements in depth.

Trading Account: It is an account which is prepared by a merchandising concern which purchases goods and sells the same during a particular period. The purpose of it to find out the gross profit or gross loss which is an important indicator of business efficiency.

The following items will appear in the debit side of the Trading Account:

(i) Opening Stock: In case of trading concern, the opening stock means the finished goods only. The amount of opening stock should be taken from Trial Balance.

(ii) Purchases: The amount of purchases made during the year. Purchases include cash as well as credit purchase. The deductions can be made from purchases, such as, purchase return, goods withdrawn by the proprietor, goods distributed as free sample etc.

(iii) Direct expenses: it means all those expenses which are incurred from the time of purchases to making the goods in suitable condition. This expenses includes freight inward, octroi, wages etc.

(iv) Gross profit: If the credit side of trading A/c is greater than debit side of trading A/c gross profit will arise.

The following items will appear in the credit side of Trading Account:

(i) Sales Revenue: The sales revenue denotes income earned from the main business activity or activities. The income is earned when goods or services are sold to customers. If there is any return, it should be deducted from the sales value. As per the accrual concept, income should be recognized as soon as it is accrued and not necessarily only when the cash is paid for. The Accounting standard 7 (in case of contracting business) and Accounting standard 9 (in other cases) define the guidelines for revenue recognition. The essence of the provisions of both standards is that revenue should be recognized only when significant risks and rewards (vaguely referred to as ownership in goods) are transferred to the customer. For example, if an invoice is made for sale of goods and the term of sale is door delivery; then sale can be recognized only on getting the proof of delivery of goods at the door of customer. If such proof is pending at the end of accounting period, then this transaction cannot be taken as sales, but will be treated as unearned income.

(ii) Closing Stocks: In case of trading business, there will be closing stocks of finished goods only. According to convention of conservatism, stock is valued at cost or net realizable value whichever is lower.

(iii) Gross Loss: When debit side of trading account is greater than credit side of trading account, gross loss will appear.

Dr. **Trading Account for the year ended** **Cr.**

Particulars	Amount	Particulars	Amount
Opening Stock: Finished goods Purchases Less : Purchase returns Gross Profit (transferred to P & L A/c) Total		Sales Less : Sales return Closing stock Finished goods Gross Loss (transferred to P & L A/c) Total	

Preparation of Trading Account

Illustration 1.

Following are the ledger balances presented by M/s. P. Sen as on 31st March 2013.

Particulars	Amount (₹)	Particulars	Amount (₹)
Stock (1.4.2012)	10,000	Sales	3,00,000
Purchase	1,60,000	Return Inward	16,000
Carriage Inwards	10,000	Return Outward	10,000
Wages	30,000	Royalty on Production	6,000
Freight	8,000	Gas and Fuel	2,000

Additional Information:

(1) Stock on 31.3.2013: (i) Market Price ₹ 24,000; (ii) Cost Price ₹ 20,000;

(2) Stock valued ₹ 10,000 were destroyed by fire and insurance company admitted the claim to the extent of ₹ 6,000.

(3) Goods purchased for ₹ 6,000 on 29th March, 2013, but still lying in-transit, not at all recorded in the books.

(4) Goods taken for the proprietor for his own use for ₹ 3,000.

(5) Outstanding wages amounted to ₹ 4,000.

(6) Freight was paid in advance for ₹ 1,000.

Solution:

In the books of M/s. P. Sen
Trading Account
Dr. **For the year ended 31st March, 2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To Openign Stock		10,000	By, Sales	3,00,000	
To Purchase	1,60,000		Less: Return Inward	16,000	2,84,000
Less: Return Outward	10,000				
	1,50,000		By, Closing Stock	20,000	
Less: Goods taken by Proprietor	3,000		Add: Stock Destroyed	10,000	
	1,47,000			30,000	
Add: Goods-in-transit	6,000	1,53,000	Add: Goods-in-Transit	6,000	36,000
To Wages	30,000				
Add: Outstanding	4,000	34,000			
To, Carriage Inwards		10,000			
To, Freight	8,000				
Less: Prepaid	1,000	7,000			
To, Royalty on production		6,000			
To, Gas & fuel		2,000			
`` Profit & Loss A/c (Gross profit transferred)		98,000			
		3,20,000			3,20,000

Note: (a) Stock should be valued as per cost price or market price whichever is lower.

(b) The claim which was admitted by insurance company and the loss of stock, will not appear in Trading Account.

Profit and Loss Account:

The following items will appear in the debit side of the Profit & Loss A/c:

(i) Cost of Sales: This term refers to the cost of goods sold. The goods could be manufactured and sold or can be directly identified with goods.

(ii) Other Expenses: All expenses which are not directly related to main business activity will be reflected in the P & L component. These are mainly the Administrative, Selling and distribution expenses. Examples are salary to office staff, salesmen commission, insurance, legal charges, audit fees, advertising, free samples, bad debts etc. It will also include items like loss on sale of fixed assets, interest and provisions. Students should be careful to include accrued expenses as well.

(iii) Abnormal Losses: All abnormal losses are charged against Profit & Loss Account. It includes stock destroyed by fire, goods lost in transit etc.

The following items will appear in the credit side of Profit & Loss A/c:

(i) Revenue Incomes: These incomes arise in the ordinary course of business, which includes commission received, discount received etc.

(ii) Other Incomes: The business will generate incomes other than from its main activity. These are purely incidental. It will include items like interest received, dividend received, etc .The end result of one component of the P & L A/c is transferred over to the next component and the net result will be transferred to the balance sheet as addition in owners' equity. The profits actually belong to owners of business. In case of company organizations, where ownership is widely distributed, the profit figure is separately shown in balance sheet.

Dr. **Profit and Loss Account for the year ended** **Cr.**

Particulars	**Amount**	**Particulars**	**Amount**
Gross Loss		Gross Profit	
(transferred from Trading A/c)		(transferred from Trading A/c)	
Administrative expenses		Other Income	
Office salaries		Interest received	
Communication		Commission received	
Travel & Conveyance		Profit on sale of assets	
Office rent		Rent received	
Depreciation of office assets		Net loss	
Audit fees		Total	
Insurance			
Repairs & maintenance			
Selling & Distribution expenses			
Advertising			
Salesmen commission			
Delivery van expenses/Depreciation on delivery vans/Bad debts			
Financial expenses			
Bank charges			
Interest on loans			
Loss on sale of assets			
Net profit			
Total			

Illustration 2.

Indicate where the following items will be shown in various components of Trading Account and P & L A/c :

(1) Wages	(2) Salaries to office staff
(3) Depreciation on office car	(4) Power & fuel
(5) Repairs to machinery	(6) Maintenance of office building
(7) Purchase returns or return outwards	(8) Closing stock of WIP
(9) Opening stock of finished goods	(10) Interest received

(11) Commission paid	(12) Telephone
(13) Travel & conveyance	(14) Insurance
(15) Audit fees	(16) Carriage inward
(17) Freight outward	(18) Bad debts
(19) Provision for outstanding rent	(20) Return inwards or sales returns
(21) Discount earned	(22) Depreciation on delivery van
(23) Printing and stationery	(24) Sales

Solution :

Item	**Treatment**	**Where**
Wages	Trading A/c	Dr
Salaries to office staff	P & L A/c	Dr
Depreciation on office car	P & L A/c	Dr
Power & fuel	Trading A/c	Dr
Repairs to machinery	Trading A/c	Dr
Maintenance of office building	P & L A/c	Dr
Purchase returns or return outwards	Trading A/c	Dr less from purchases
Closing stock of WIP	Trading A/c	Cr
Opening stock of finished goods	Trading A/c	Dr
Interest received	P & L A/c	Cr
Commission paid	P & L A/c	Dr
Telephone	P & L A/c	Dr
Travel & conveyance	P & L A/c	Dr
Insurance	P & L A/c	Dr
Audit fees	P & L A/c	Dr
Carriage inward	Trading A/c	Dr
Freight outward	P & L A/c	Dr
Bad debts	P & L A/c	Dr
Provision for outstanding rent	P & L A/c	Dr
Return inwards or sales returns	Trading A/c	Cr less from sales
Discount earned	P & L A/c	Cr
Depreciation on delivery van	P & L A/c	Dr
Printing and stationery	P & L A/c	Dr
Sales	Trading A/c	Cr

Preparations of Profit & Loss Account

Illustration 3.

From the following particulars presented by Sri Tirlhankar for the year ended 31st March 2013, Prepare Profit and Loss Account.

Gross Profit ₹ 1,00,000, Rent ₹ 22,000; Salaries, ₹ 10,000; Commission (Cr.) ₹ 12,000; Insurance ₹ 8,000; Interest (Cr.) ₹ 6,000; Bad Debts ₹ 2,000; Provision for Bad Debts (1.4.2012) ₹ 4,000; Sundry Debtors ₹ 40,000; Discount Received ₹ 2,000; Plant & Machinery ₹ 80,000.

Adjustments:

(a) Outstanding salaries amounted to ₹ 4,000;

(b) Rent paid for 11 months;

(c) Interest due but not received amounted to ₹ 2,000

(d) Prepaid Insurance amounted to ₹ 2,000;

(e) Depreciate Plant and Machinery by 10% p.a.

(f) Further Bad Debts amounted to ₹ 2,000 and make a provision for Bad Debts @5% on Sundry Debtors.

(g) Commissions received in advance amounted to ₹ 2,000.

Solution:

In the Books of Sri Tirlhankar
Profit and Loss Account
for the year ended 31st March 2013.

Dr. **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Rent	22,000		By, Trading A/c.		1,00,000
Add: Outstanding	2,000	24,000	-Gross Profit		
`` Salaries	10,000		``Commission	12,000	
Add: Outstanding	4,000	14,000	Less: Received in advance	2,000	10,000
`` Insurance	8,000		``Interest	6,000	
Less: Prepaid	2,000	6,000	Add: Accrued Interest	2,000	8,000
`` Bad Debts	2,000				
Add: further Bad Debts	2,000	4,000	``Discount received		2,000
``Depreciation on Plant & Machinery @10% on ₹ 80,000		8,000	``Provisions for Bad Debts	4,000	
``Capital A/c (Net Profit Transferred)		66,100	Less: New Provision @ 5% on ₹ 40,000 – ₹ 2,000)	1,900	2,100
		1,22,100			**1,22,100**

Profit and Loss Appropriation Account:

We know that the net profit or loss is added to or deducted from owner's equity. The net profit may be used by the business to distribute dividends, to create reserves etc. In order to show these adjustments, a P & L Appropriation A/c is maintained. Distribution of profits is only appropriation and does not mean expenses. After passing such distribution entries, the remaining surplus is added in owner's equity.

The format of P & L Appropriation A/c is given below:

Dr. **Profit and Loss Appropriation Account for the year ended ————————-** **Cr.**

Particulars	Amount	Particulars	Amount
To Proposed dividend To Transfer to General Reserve To Surplus carried to Capital A/c		By Net profit transferred from P & L A/c	
Total		Total	

Illustration 4.

X,Y and Z are three Partners sharing profit and Losses equally. Their capital as on 01.04.2012 were: X ₹ 80,000 ; Y ₹ 60,000 and Z ₹ 50,000.

They mutually agreed on the following points (as per partnership deed)

(a) Interest on capital to be allowed @ 5% P.a. (b) X to be received a salary @ ₹ 500 p.m. (c) Y to be received a commission @ 4% on net profit after charging such commission. (d) After charging all other items 10% of the net profit to be transferred General Reserve.

Profit from Profit and Loss Account amounted to ₹ 66,720. Prepare a Profit and Loss Appropriation Account for the year ended 31st March, 2013.

Solution:

In the books of X,Y and Z
Profit and Loss Appropriation Account
Dr. For the year ended 31st March, 2013 Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Interest on Capital:			By, Profit and Loss A/c		66,720
X	4,000				
Y	3,000				
Z	2,500	9,500			
" Salaries X : (₹500 x 12)		6,000			
" Commission Y		1970[1]			
" General Reserve		4,925[2]			
" Net Divisible Profit					
X	14,775				
Y	14,775				
Z	14,775	44,325			
		66,720			66,720

Workings:

1. **Net Profit before charging Y's Commission =** ₹ (66,720 – 15,500) = ₹ 51,220
   Less: Y's Commission @ 4% i.e. ($\frac{4}{104}$ X ₹ 51,220) = ₹ 1,970
   49,250

2. **Transfer to General Reserve =** ₹ 49,250 x 10% = ₹ 4,925

Balance Sheet: Horizontal format of Balance Sheet is also used by the business other than company

A. Liabilities

(a) Capital: This indicates the initial amount the owner or owners of the business contributed. This contribution could be at the time of starting business or even at a later stage to satisfy requirements of funds for expansion, diversification etc. As per business entity concept, owners and business are distinct entities, and thus, any contribution by owners by way of capital is liability.

(b) Reserves and Surplus: The business is a going concern and will keep making profit or loss year by year. The accumulation of these profit or loss figures (called as surpluses) will keep on increasing or decreasing owners' equity. In case of non-corporate forms of business, the profits or losses are added to the capital A/c and not shown separately in the balance sheet of the business.

(c) Long Term or Non-Current Liabilities: These are obligations which are to be settled over a longer period of time say 5-10 years. These funds are raised by way of loans from banks and financial institutions. Such borrowed funds are to be repaid in installments during the tenure of the loan as agreed. Such funds are usually raised to meet financial requirements to procure fixed assets. These funds should not be generally used for day-to-day business activities. Such loan are normally given on the basis of some security from the business e.g. against a charge on the fixed assets. So, long term loan are called as "Secured Loan" also.

(d) Short Term or Current Liabilities: A liability shall be classified as Current when it satisfies any of the following :

- It is expected to be settled in the organisation's normal Operating Cycle,
- It is held primarily for the purpose of being traded,
- It is due to be settled within 12 months after the Reporting Date, or
- The organization does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date (Terms of a Liability that could, at the option of the counterparty, result in its settlement by the issue of Equity Instruments do not affect its classification)

Current liabilities comprise of :

(i) Sundry Creditors - Amounts payable to suppliers against purchase of goods. This is usually settled within 30-180 days.

(ii) Advances from customers – At times customer may pay advance i.e. before they get delivery of goods. Till the business supplies goods to them, it has an obligation to pay back the advance in case of failure to supply. Hence, such advances are treated as liability till the time they get converted to sales.

(iii) Outstanding Expenses: These represent services procured but not paid for. These are usually settled within 30–60 days e.g. phone bill of Sept is normally paid in Oct.

(iv) Bills Payable: There are times when suppliers do not give clean credit. They supply goods against a promissory note to be signed as a promise to pay after or on a particular date. These are called as bills payable or notes payable.

(v) Bank Overdrafts: Banks may give fund facilities like overdraft whereby, business is permitted to issue cheques up to a certain limit. The bank will honour these cheques and will recover this money from business. This is a short term obligation.

B. Assets

In accounting language, all debit balances in personal and real accounts are called as assets. Assets are broadly classified into fixed assets and current assets.

(a) Fixed Assets: These represent the facilities or resources owned by the business for a longer period of time. The basic purpose of these resources is not to buy and sell them, but to use for future earnings. The benefit from use of these assets is spread over a very long period. The fixed assets could be in tangible form such as buildings, machinery, vehicles, computers etc, whereas some could be in intangible form viz. patents, trademarks, goodwill etc. The fixed assets are subject to wear and tear which is called as depreciation. In the balance sheet, fixed assets are always shown as "original cost less depreciation".

(b) Investments: These are funds invested outside the business on a temporary basis. At times, when the business has surplus funds, and they are not immediately required for business purpose, it is prudent to invest it outside business e.g. in mutual funds or fixed deposit. The purpose if to earn a reasonable return on this money instead of keeping them idle. These are assets shown separately in balance sheet.

Investments can be classified into Current Investments and Non-current Investments.

Non-current Investments are investments which are restricted beyond the current period as to sale or disposal.

Whereas, current investments are investments that are by their nature readily realizable and is intended to be held for not more than one year from the date on which such investment is made.

(c) Current Assets: An asset shall be classified as Current when it satisfies any of the following :

- It is expected to be realised in, or is intended for sale or consumption in the organisation's normal Operating Cycle,
- It is held primarily for the purpose of being traded,
- It is due to be realised within 12 months after the Reporting Date, or
- It is Cash or Cash Equivalent unless it is restricted from being exchanged or used to settle a Liability for at least 12 months after the Reporting Date.

Current assets comprise of:

(i) Stocks: This includes stock of raw material, semi-finished goods or WIP, and finished goods.

Stocks are shown at lesser of the cost or market price. Provision for obsolescence, if any, is also reduced. Generally, stocks are physically counted and compared with book stocks to ensure that there are no discrepancies. In case of discrepancies, the same are adjusted to P & L A/c and stock figures are shown as net of this adjustment.

(ii) Debtors: They represent customer balances which are not paid. The bad debts or a provision for bad debt is reduced from debtors and net figure is shown in balance sheet.

(iii) Bills receivables: Credit to customers may be given based on a bill to be signed by them payable to the business at an agreed date in future. At the end of accounting period, the bills accepted but not yet paid are shown as bills receivables.

(iv) Cash in Hand: This represents cash actually held by the business on the balance sheet date. This cash may be held at various offices, locations or sites from where the business activity is carried out. Cash at all locations is physically counted and verified with the book balance. Discrepancies if any are adjusted.

(v) Cash at Bank: Dealing through banks is quite common. Funds held as balances with bank are also treated as current asset, as it is to be applied for paying to suppliers. The balance at bank as per books of accounts is always reconciled with the balance as per bank statement, the reasons for differences are identified and required entries are passed.

(vi) Prepaid Expenses: They represent payments made against which services are expected to be received in a very short period.

(vii) Advances to suppliers: When amounts are paid to suppliers in advance and goods or services are not received till the balance sheet date, they are to be shown as current assets. This is because advances paid are like right to claim the business gets.

Please note that both current assets and current liabilities are used in day-to-day business activities. The current assets minus current liabilities are called as working capital or net current assets. The following report is usual horizontal form of balance sheet. Please note that the assets are normally shown in descending order of their liquidity. Also, capital, long term liabilities and short term liabilities are shown in that order.

In case other than Company :

Capital & Liabilities	Amount	Assets	Amount
Capital (separate figures are shown for each owner) Long term Liabilities: Loans from banks or financial Institutions Current Liabilities: Sundry creditors Bills payable Advances from customers Outstanding expenses		Fixed Assets: Land less depreciation Building less depreciation Plant and Machinery less depreciation Vehicles less depreciation Computer systems less depreciation Office equipments less depreciation Current Assets: Stocks Sundry debtors less provisions Bills receivables Cash in hand Cash at bank Prepaid expenses Advances to suppliers	

Illustration 5.

From the following particulars prepare a Balance Sheet of Mr. X, for the year ended 31st March, 2013.

Capital : ₹ 2,00,000: Drawings : ₹ 40,000 ; Cash In Hand : ₹ 15,000 ; Loan from Bank : ₹ 40,000; Sundry Creditors : ₹ 40,000; Bills Payable : ₹ 20,000; Bank Overdraft : ₹ 20,000; Goodwill : ₹ 60,000; Sundry Debtors : ₹ 80,000; Land and Building : ₹ 50,000; Plant and Machinery : ₹ 80,000; Investment : ₹ 20,000; Bills Receivable : ₹ 10,000. Cash at Bank : ₹ 25,000.

The following adjustments are made at the time of preparing final accounts:

I. Outstanding Liabilities for : Salaries ₹ 10,000; wages ₹ 20,000; Interest on Bank Overdraft ₹ 3,000; and Interest on Bank Loan ₹ 6,000.

II. Provide Interest on Capital @ 10% p.a.

III. Depreciation on Plant and Machinery by 10% p.a.

IV. Bad Debts amounted to ₹ 10,000 and make a provision for Bad Debts @ 10% on Sundry Debtors.

V. Closing stock amounted to ₹ 1,20,000.

Net profit for the year amounted to ₹ 96,000 after considering all the above adjustments.

Solution:

In the books of Mr. X
Balance Sheet as at 31.03.2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital	2,00,000		Goodwill		60,000
Add: Interest on Capital @ 10%	20,000		Land and Building		50,000
Add: Net Profit	96,000		Plant and Machinery	80,000	
	3,16,000		Less: Depreciation@ 10%	8,000	72,000
Less: Drawings	40,000	2,76,000	Investment		20,000
			Closing Stock		1,20,000
Bank Overdraft	20,000				
Add: Out. Interest	3,000	23,000	Sundry Debtors	80,000	
Bank Loan	40,000		Less: Bad Debts	10,000	
Add: Out. Interest	6,000	46,000		70,000	
			Less: Prov. for Bad debts@10%	7,000	63,000
Sundry Creditors		40,000	Bills Receivable		10,000
Bills Payable		20,000	Cash at Bank		25,000
Outstanding Liabilities:			Cash in Hand		15,000
Salaries	10,000				
Wages	20,000	30,000			
		4,35,000			4,35,000

Illustration 6.

Indicate where the following items will be shown in the Balance Sheet.

(1) Credit balance in the bank column of the cash book

(2) Debit balance to the account of A who is a customer

(3) Credit balance in A/c of B who is supplier

(4) Debit balance in A/c of C who is a supplier

(5) Credit balance in A/c of D who is a customer

(6) Outstanding rent

(7) Insurance paid for the next year

(8) Loan from HDFC bank for 7 years

(9) Interest due on loan

(10) Provision for doubtful debtors

(11) Net Profit for the year

(12) Machinery

(13) Accumulated depreciation on vehicle

(14) Cash at Bangalore office

(15) Balance with Citi Bank

Solution:

(1) Credit balance in the bank column of cash book indicates a liability towards bank. This is actually a bank overdraft. Hence, it should be shown as Current Liability.

(2) Debit balance in A's A/c means amount due from him as a customer. To be shown as Sundry Debtors.

(3) Credit balance in supplier's A/c is a liability, hence will be shown under Current Liabilities.

(4) Debit balance in supplier's A/c reflects an advance given to supplier, hence will be shown under Current Asset.

(5) Credit balance in customer's A/c means advance from customer, hence will be shown as Current Liability.

(6) Outstanding rent will be shown under Current Liability.

(7) Insurance paid for next year is 'prepaid' for current year, hence will be taken as Current Asset

(8) Loan from HDFC is for 7 years which is a long term loan, hence will be shown as Long Term Liability.

(9) Interest due on loan is Current Liability.

(10) Provision for doubtful debts will be reduced from the sundry debtor's amount under Current Assets as it denotes chances of not receiving the money from customers.

(11) Net Profit for the year will be added to the Capital or to Reserves and Surplus in Balance Sheet.

(12) Machinery is a Fixed Asset.

(13) Accumulated depreciation on vehicle is reduction in its value, so will be shown as deduction from vehicle under Fixed Assets.

(14) Cash at Bangalore office is a Current Asset.

(15) Balance with Citi Bank is Current Asset.

Illustration 7.

Mahindra Traders operates in an industry that has a high rate of bad debts. On 31st March 2013, the Accounts Receivables showed a balance of ₹ 7,50,000 before any year end adjustment and the balance in the Reserve of doubtful debts was ₹ 37,500. The year end balance in the Reserve for Doubtful Debts Accounts will be based on the following ageing schedule.

Days outstanding	Amount (₹)	Probability of collection
Less than 16	4,50,000	0.99
16 – 30	1,50,000	0.94
31 – 45	75,000	0.80
46 – 60	45,000	0.65
61 – 75	15,000	0.50
Over 75	15,000	0.00

Find out the appropriate balance in the Reserve for Doubtful Debts Account as on 31st March 2013. Show how Debtors balance be shown in the Balance Sheet. Calculate the effect of year end adjustment on Account of Reserve for Doubtful Debts.

Solution:

We need to work out the provision for doubtful debts based on the collection probability given e.g. in the first ageing band, the probability of collection is given as 0.99 which means 1% of the outstanding amount in this band is unlikely to be collected, so a provision of 1% will be needed. The total provision required based on the ageing is shown in the following table.

Days outstanding	Amount (₹)	Probability of collection	Provision required	Provision Amount (₹)
Less than 16	4,50,000	0.99	1%	4,500
16 – 30	1,50,000	0.94	6%	9,000
31 – 45	75,000	0.80	20%	15,000
46 – 60	45,000	0.65	35%	15,750
61 – 75	15,000	0.50	50%	7,500
Over 75	15,000	0.00	100%	15,000
Total	7,50,000			66,750

It will be seen that the existing provision in the books stands at ₹ 37,500, as against the required provision of ₹ 66,750. This means additional provision of ₹ 29,250 will be required to be made as year end adjustment for the year ended 31-03-2013. The answer will be:

(a) Appropriate balance in Reserve for Doubtful Debts A/c as on 31-03-2013 is ₹ 66,750.

(b) Debtors amount will be shown in the Balance Sheet as under:

Outstanding debtors		7,50,000
Less: Reserve for doubtful debts	37,500	
Additional provision required	29,250	66,750
Net Debtors		6,83,250

(c) The effect of this additional provision of ₹ 29,250 will reduce the profit for the year by the same amount

Illustration 8.

A property dealer owned many properties which it had acquired by taking bank loans. There were separate loan agreements for different properties. In some cases, interest was paid in advance and in other cases it was payable in arrears. These properties were let out to different tenants on various agreements. Some agreements provided for rentals in advance while the others provided for rent payable in arrears. The dealer has given the following balances:

	31-03-2012	31-03-2013
Interest payable	12,000	14,500
Interest prepaid	8,000	6,400
Rentals due from tenants	15,000	19,000
Rentals received in advance	3,000	2,500

During the year 2012-13, the amount of interest payable transferred to P & L Account was ₹ 56,000 and cash collected from tenants for rentals was ₹ 1,16,000.

You are required to prepare Interest Payable Account and Rental Income Account for the year ended 2012-13

Solution:

Please note although 4 different figures are given, we are asked to prepare only two accounts. This means the opening as well as closing balances will have to be written in these 2 accounts only. Thus, we should find out what these 4 figures represent. This is shown in following table:

	31- 03- 2012 Opening	31- 03- 2013 Closing
Interest payable	Liability	Liability
Interest prepaid	Asset	Asset
Rentals due from tenants	Asset	Asset
Rentals received in advance	Liability	Liability

Please be careful to notice how the opening and closing balances are shown. Now, students should be able to interpret the balancing figures in these accounts.

Dr. **Interest payable Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
	To, Balance b/d (prepaid)		8,000		By, Balance b/d (due)		12,000
	To, Cash paid (balancing figure)		51,900		By P & L A/c		56,000
	To Balance c/d (due)		14,500		By, Balance c/d (prepaid)		6,400
			74,400				74,400
	To, Balance b/d (prepaid)		6,400		By, Balance b/d (due)		14,500

Dr. **Rentals Income Account** **Cr.**

Date	Particulars	J. F.	Amount (₹)	Date	Particulars	J. F.	Amount (₹)
	To, Balance b/d (receivable)		15,000		By, Balance b/d (advance)		3,000
	To, P & L A/c (balancing figure)		1,20,500		By, Cash received		1,16,000
	To, Balance c/d (advance)		2,500		By, Balance c/d (receivable)		19,000
			1,38,000				1,38,000
	To, Balance b/d (receivable)		19,000		By, balance b/d (advance)		2,500

The balancing figure in Interest Payable A/c will reflect interest actually paid during the year, whereas the balancing figure in Rentals Income is the income taken to P & L A/c for the year.

Illustration 9.

The book-keeper of a supermarket prepared a schedule of balances of individual suppliers' accounts in the creditors' ledger as on 31st March 2013 and arrives at the total of ₹ 6,923,062.40. The accountant was in charge of general ledger. He maintained the Sundry Creditors' Account in the general ledger which is given below:

Dr **Sundry Creditors Control Account** **cr**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
30-Apr-12	To, Purchase returns	44,814.40	1-Apr-12	By, Balance b/d	71,41,690.40
30-Apr-12	To, Bank	77,05,016.00	30-Apr-12	By, Purchase	80,38,679.20
30-Apr-12	To, Balance c/d	67,75,064.80	30-Apr-12	By, Discount received	2,12,545.60
			30-Apr-12	By, Debtors control A/c (contra)	2,43,980.00
		1,45,24,895.20			1,56,36,895.20

Subsequently, on investigation, the accountant discovered several mistakes in the Control Account as well as individual Creditors' Accounts as given below:

(i) One supplier was paid ₹ 817.60 out of petty cash. This was correctly recorded to his personal Account, but was omitted to be posted to control Account.

(ii) Credit side of a supplier's Account was under-cast by ₹ 2,400

(iii) A supplier's credit balance of ₹ 43,851.20 was by mistake taken as ₹ 46,752.80 while preparing the schedule of balances of all suppliers Accounts.

(iv) There was an omission of a supplier credit balance of ₹ 53,945.60 from the schedule.

(v) Discounts received of ₹ 1,004.80 and ₹ 650.40 were posted to wrong side of suppliers' Accounts.

(vi) Goods of ₹ 316.80 were returned to a supplier not entered in purchase return book.

(vii) Debtors control contra represents the sale of goods to suppliers.

Prepare a statement rectifying the errors and prepare the Control Account.

Solution:

First of all, there's a totaling error in the control Account. Total of debit side should be ₹ 14,524,895.20 and credit side is ₹ 15,636,895.20. This needs to be corrected. There is a difference of ₹ 1,112,000 due to this. The revised credit balance should be ₹ 7,887,064.80 instead of ₹ 6,775,064.80 as shown in the Control Account.

In addition, the errors that have affected the Control A/c should be corrected. These are:

(a) Discounts received will reduce the balance due to creditors, hence should appear on the debit side in Control Account. Here, it appears on credit side. We must show double the amount on dedit side to rectify this error.

(b) Payment to a supplier of ₹ 817.60 were omitted hence, it must be written on debit side of Control Account.

(c) Purchase return of ₹ 316.80 omitted should be recorded.

The other errors will affect only individual Accounts and not Control Account. The revised Control Account is shown below:

Dr. **Sundry Creditors Control Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
30-Apr-13	To Purchase returns	44,814.40	1-Apr-13	By Balance b/ d	7,141,690.40
30-Apr-13	" Bank	7,705,016.00	30-Apr-13	" Purchases	8,038,679.20
30-Apr-13	" Discount received (rectified)	425,091.20	30-Apr-13	" Discount received	212,545.60
30-Apr-13	" Debtors control A/c (contra) rectified	487,960.00	30-Apr-13	" Debtors control A/c (contra)	243,980.00
30-Apr-13	" Purchase returns (omission rectified)	316.80			
30- Apr-13	" Bank (payment recorded)	817.60			
30-Apr-13	To Balance c/d	6,972,879.20			
		15,636,895.20			15,636,895.20

The effect on individual accounts will be as follows:	**Amount (₹)**
Total of the schedule as given	69,23,062.40
Add: under-casting of credit side	2,400.00
Add: omission of a supplier in schedule	53,945.60
Less: Wrong amount taken (43,851.20 – 46,752.80)	(2,901.60)
Less: Discounts received recorded on wrong side rectified (1,004.80)×2 & (650.4)×2	(3,310.40)
Less: purchase return omitted, now rectified	(316.80)
Revised balance in individual Accounts tallied with Control Account	69,72,879.20

Illustrations 10.

Following is the Trial Balance of M/s Brijesh and Sons. Prepare final accounts for the year ended on 31st March 2013.

Particulars	Debit (₹)	Credit (₹)
Stock as on 01-04-2012	2,00,000	
Purchases and Sales	22,00,000	35,00,000
Bills receivables	50,000	
Returns	100,000	50,000
Carriage Inwards	50,000	
Debtors and Creditors	200,000	4,00,000
Carriage Outwards	40,000	
Discounts	5,000	5,000
Salaries and wages	2,20,000	
Insurance	60,000	
Rent	60,000	
Wages and salaries	80,000	
Bad debts	10,000	
Furniture	4,00,000	
Brijesh's capital		5,00,000
Brijesh's drawing	70,000	
Loose tools	1,00,000	
Printing & stationery	30,000	
Advertising	50,000	
Cash in hand	45,000	
Cash at bank	2,00,000	
Petty Cash	5,000	
Machinery	3,00,000	
Commission	10,000	30,000
Total	**44,85,000**	**44,85,000**

Adjustments: (i) Stock on 31st March was valued at Cost price ₹ 4,20,000 and market price ₹ 400,000. (ii) Depreciate furniture @ 10% p.a. and machinery @ 20% p.a. on reducing balance method. (iii) Rent of ₹ 5,000 was paid in advance. (iv) Salaries & wages due but not paid ₹ 30,000. (v) Make a provision for doubtful debts @ 5% on debtors. (vi) Commission receivable ₹ 5,000.

Solution :

Dr. Trading Account for the year ended 31st March 2013 Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To Opening stock			By Sales	35,00,000	
Finished goods		2,00,000	*Less:* Sales Returns	1,00,000	34,00,000
" Purchases	22,00,000				
Less: Purchases returns	50,000	21,50,000	" Closing stock		
" Carriage inwards		50,000	Finished goods		4,00,000
" Wages & salaries		80,000			
Gross Profit c/d		**13,20,000**			
		38,00,000			38,00,000

Dr. **Profit & Loss Account for the Year Ended 31st March 2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
	-		By Gross Profit b/d		13,20,000
To Salaries & wages	2,20,000		" Discount received		5,000
Add: Not paid	30,000	2,50,000	" Commission received	30,000	
" Depreciation on furniture		40,000	Add : receivable	5,000	35,000
" Depreciation of Machinery		60,000			
" Insurance		60,000			
" Rent	60,000				
Less: Paid in advance	5,000	55,000			
" Printing & Stationery		30,000			
" Advertising		50,000			
" Carriage Outwards		40,000			
" Discounts		5,000			
" Bad debts		10,000			
" Commission		10,000			
" Provision for doubtful debts		10,000			
Net profit		740,000			
		13,60,000			13,60,000

Balance Sheet as on 31st March 2013

Capital & Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Brijesh's Capital	5,00,000		**Fixed Assets:**		
Less : Drawings	(70,000)		Furniture	400,000	
Add : Net Profit for the year	7,40,000	11,70,000	Less: Depreciation	40,000	3,60,000
	-		Machinery	300,000	
Current Liabilities:			Less: Depreciation	60,000	2,40,000
Sundry creditors		4,00,000	Loose tools		1,00,000
Outstanding salaries & wages		30,000			
			Current Assets:		
			Stocks		4,00,000
			Sundry debtors	2,00,000	
			Less: Provision for doubtful debts	10,000	1,90,000
			Bills receivables		50,000
			Cash in hand		45,000
			Cash at bank		2,00,000
			Petty cash		5,000
			Prepaid Rent		5,000
			Commission receivable		5,000
		16,00,000			16,00,000

Notes :

(1) Closing stock is valued at market price here as it is less than cost price (conservatism concept)

(2) Returns in debit column mean sales return, while that in credit column means purchase returns

(3) Discounts in debit column mean allowed (expense) and that in credit means received (income)

(4) Commission in debit column mean allowed (expense) and that in credit means received (income)

(5) There are two peculiar items given in the TB. One is Salaries & wages and the other is Wages and salaries. The interpretation is – where first reference is made to wages, it's assumed to be directly for goods and taken to Trading A/c. If the first reference is to salaries, it's assumed to be related to office and taken to P & L.

Illustrations 11.

Mr. Arvindkumar had a small business enterprise. He has given the trial balance as at 31st March 2013

Particulars	Debit (₹)	Credit (₹)
Mr. Arvinkumar's Capital		1,00,000
Machinery	36,000	
Depreciation on machinery	4,000	
Repairs to machinery	5,200	
Wages	54,000	
Salaries	21,000	
Income tax of Mr. Arvindkumar	1,000	
Cash in hand	4,000	
Land & Building	1,49,000	
Depreciation on building	5,000	
Purchases	2,50,000	
Purchase returns		3,000
Sales		4,98,000
Citi Bank		7,600
Accrued Income	3,000	
Salaries outstanding		4,000
Bills receivables	30,000	
Provision for doubtful debts		10,000
Bills payable		16,000
Bad debts	2,000	
Discount on purchases		7,080
Debtors	70,000	
Creditors		62,520
Opening stock	74,000	
	7,08,200	7,08,200

Additional information:

(1) Stock as on 31st March 2013 was valued at ₹ 60,000

(2) Write off further ₹ 6,000 as bad debt and maintain a provision of 5% on doubtful debt.

(3) Goods costing ₹ 10,000 were sent on approval basis to a customer for ₹ 12,000 on 30th March, 2013. This was recorded as actual sales.

(4) ₹ 2,400 paid as rent for office was debited to Landlord's Account and was included in debtors.

(5) General Manager is to be given commission at 10% of net profits after charging his commission.

(6) Works manager is to be given a commission at 12% of net profit before charging General Manager's commission and his own.

You are required to prepare final accounts in the books of Mr. Arvindkumar.

Solution :

In the books of Mr. Arvindkumar

Dr. **Trading Account for the year ended 31st March 2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To Opening stock:			By Sales	498,000	
Finished goods		74,000	Less: Sent on approval	(12,000)	4,86,000
To Purchases	2,50,000				
Less: Purchases returns	(3,000)	2,47,000	By Closing stock		
			Finished goods	60,000	
To Wages		54,000	Add sent on approval	10,000	70,000
To Gross Profit c/d		1,81,000			
		5,56,000			5,56,000

Dr. **Profit and Loss Account for the year ended 31st March 2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To Salaries		21,000	By Gross Profit b/d		1,81,000
To Repairs to machinery		5,200	By Discount received		7,080
To Depreciation of Machinery		4,000			
To Depreciation of Building		5,000			
To Rent		2,400			
To Bad debts	2,000				
Additional bad debts	6,000				
Provision for doubtful debts	2,480				
Less: Provision opening	(10,000)	480			
To Commission to works manager		18,000			
To Commission to General Manager		12,000			
To Net profit		1,20,000			
		1,88,080			1,88,080

Balance Sheet as on 31st March 2013

Capital & Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Arvind kumar's Capital	1,00,000		Fixed Assets:		
Less: drawings (income tax)	(1,000)		Land & building		1,49,000
Add: Net Profit for the year	1,20,000	2,19,000	Machinery		36,000
			Current Assets:		
Current Liabilities:			Stocks	60,000	
Sundry creditors		62,520	Add: Sent on approval	10,000	70,000
Outstanding salaries		4,000	Sundry debtors	70,000	
Citi Bank Overdraft		7,600	Less: Goods on approval	(12,000)	
Bills payable		16,000	Less: Bad debts	(6,000)	
Commission payable		30,000	Less: Related to landlord	(2,400)	
			Less: Provision for doubtful debts	(2,480)	47,120
			Bills receivable		30,000
			Cash in hand		4,000
			Accrued Income		3,000
		3,39,120			3,39,120

Notes:

(1) The closing entries are passed for the items: depreciation, accrued income, outstanding salary. Hence, they are directly taken to the respective places in Balance sheet and P & L A/c.

(2) Income tax paid for Mr. Arvindkumar will be treated as drawings.

(3) Commission payable to works manager & general manager is computed as below:

	₹
Profit before charging any commission	1,50,000
Commission to works manager @ 12% on 150,000	18,000
Profit after works manager's commission	132,000
Commission to General Manager (132000/110 x 100)	12,000

Illustrations 12.

Abhay runs a small shop and deals in various goods. He has not been able to tally his trial balance and has closed it by taking the difference to Suspense Account. It is given below.

Particulars (as on 31st March 2013)	Debit (₹)	Credit (₹)
Abhay's capital		1,50,000
Drawings	75,000	
Fixed assets	1,35,000	
Opening stock	36,500	
Purchases & returns	6,75,000	13,500
Sales & returns	34,000	8,50,000
Due from customer & to creditors	95,000	3,25,000
Expenses	45,750	
Cash		3,000
Bank deposits & interest earned	55,000	5,750
Suspense A/c		4,000
Advertising	2,00,000	
Total	**13,51,250**	**13,51,250**

Mr. Abhay has requested you to help him in tallying his trial balance and also prepare his final accounts. On investigation of his books you get the following information:

(i) Closing Stock on 31st March 2013 was ₹ 45,000 at cost and could sell over this value.

(ii) Depreciation of ₹ 13,500 needs to be provided for the year.

(iii) A withdrawal slip indicated a cash withdrawal of ₹ 15,000 which was charged as drawing. However, it was noticed that ₹ 11,000 was used for business purpose only and was entered as expenses in cash book.

(iv) Goods worth ₹ 19,000 were purchased on 24th March 2013 and sold on 29th March 2013 for ₹ 23,750. Sales were recorded correctly, but purchase invoice was missed out.

(v) Purchase returns of ₹ 1,500 were routed through sales return. Party's Account was correctly posted.

(vi) Expenses include ₹ 3,750 related to the period after 31st March 2013.

(vii) Purchase book was over-cast by ₹ 1,000. Posting to suppliers' Account is correct.

(viii) Advertising will be useful for generating revenue for 5 years.

Solution:

Rectification of errors:

(a) Cash withdrawn was recorded as

Cash A/c	Dr	15,000		
To Bank			15,000	

But it was charged to drawing and ₹ 11,000 was recorded as expenses as well i.e.

Drawings A/c	Dr	15,000		
Expenses A/c	Dr	11,000		
To Cash			26,000	

This resulted in negative cash of ₹ 11,000. The rectification entry to be passed is

Cash A/c	Dr	11,000		
To Drawings			11,000	

(b) Omitted transaction to be recorded

Purchases A/c	Dr	19,000		
To Suppliers' A/c			19,000	

(c) Incorrect recording of purchase returns corrected by

Suspense A/c	Dr	3,000		
To Purchase return A/c				1,500
To sales return A/c			1,500	

(d) Incorrect expenses rectified by

Prepaid expenses A/c	Dr	3,750		
To Expenses A/c			3,750	

(e) Over-casting of purchase book rectified by

Suspense A/c	Dr	1,000		
To Purchases			1,000	

Based on these rectifications we can now proceed to complete the final accounts.

Dr. Trading Account for the year ended 31st March, 2013 Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To Opening stock	-	36,500	By Sales	8,50,000	
To Purchases	6,75,000		Less: Returns	(34,000)	
Less: Returns	(13,500)		Add: Rectification	1,500	8,17,500
Less: Additional returns	(1,500)		By Closing stock	-	
Add: Purchases missed out	19,000		Finished goods		45,000
Less: Over-casting rectified	(1,000)	6,78,000			
To Gross Profit c/d		1,48,000			
		8,62,500			8,62,500

Dr. Profit and Loss Account for the year ended 31st March, 2013 Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Expenses	45,750		By, Gross Profit b/d		1,48,000
Less : Prepaid	3,750	42,000	By, Interest on Bank deposits		5,750
To. Depreciation		13,500	By, Net Loss		1,01,750
To, Advertising		2,00,000			
		2,55,500			2,55,500

Balance Sheet as on 31st March, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Abhay's Capital	1,50,000		Fixed Assets		
Add: Wrong charge to drawing	11,000		Gross Block	1,35,000	
	1,61,000		Less: Depreciation	13,500	1,21,500
Less: Drawings	75,000	86,000			
			Current Assets:		
Current Liabilities:			Stocks		45,000
Sundry Creditors	3,25,000		Sundry Debtors		95,000
Add: Missed out purchase	19,000	3,44,000	Cash in hand	(3,000)	
			Add: Rectification	11,000	8,000
			Fixed deposit with Bank		55,000
			Prepaid expenses		3,750
			Miscellaneous Expenditure:		
			Profit & Loss (Dr.)		1,01,750
		4,30,000			4,30,000

Note : The expenditure incurred on intangible items after the date AS 26 became/becomes mandatory (1-4-2003 or 1-4-2004, as the case may be) would have to be expensed when incurred since these do not meet the definition of an 'asset' as per AS 26. Hence, full amount of Advertisement expense is charged to Profit & Loss Account.

Illustration 13.

Mr. Oswal maintains his accounts on Mercantile basis. The following Trial Balance has been prepared from his books as at 31st March, 2013 after making necessary adjustments for outstanding and accrued items as well as depreciation:

Trial Balance

as at 31st March, 2013

Particulars	**Dr.** (₹)	**Cr.** (₹)
Plant and Machinery	2,12,500	
Sundry Creditors		2,64,000
Sales		6,50,000
Purchases	4,20,000	
Salaries	40,000	
Prepaid Insurance	370	
Advance Rent	2,000	
Outstanding Salary		6,000
Advance Salary	2,500	
Electricity Charges	2,650	
Furniture and Fixtures	72,000	
Opening Stock	50,000	
Outstanding Electricity Charges		450
Insurance	1,200	
Rent	10,000	
Miscellaneous Expenses	14,000	
Cash in hand	3,000	
Investments	80,000	
Drawings	24,000	
Dividend from Investments		8,000
Accrued Dividend from Investments	1,500	
Depreciation on Plant and Machinery	37,500	
Depreciation on Furniture	8,000	
Capital Account		2,11,970
Telephone Charges	6,000	
Sundry Debtors	1,70,500	
Stationery and Printing	1,200	
Cash at Bank	65,000	
Interest on Loan	8,000	
Interest Due but not paid on loan		1,500
Loan Account		90,000
	12,31,920	12,31,920

Additional Information:

(i) Salaries include ₹ 10,000 towards renovation of Proprietor's residence.

(ii) Closing Stock amounted to ₹ 75,000.

Mr. Oswal, however, request you to prepare a Trading and Profit & Loss Account for the year ended 1st March, 2013 and a Balance Sheet as on that date following cash basis of accounting.

Solution:

In the books of Mr. Oswal
Trading and Profit and Loss Account
Dr. **for the year ended 31st March, 2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Opening Stock		50,000	By, Sales		6,50,000
`` Purchases		4,20,000	`` Closing Stock		75,000
`` Profit & Loss A/c Gross Profit transferred		2,55,000			
		7,25,000			7,25,000
To, Salaries	40,000		By, Trading A/c		
Less: Outstanding	6,000		-Gross Profit transferred		2,55,000
	34,000		`` Dividend from Investment	8,000	
Add: Advance Salary	2,500		Less: Accrued	1,500	6,500
	36,500				
Less: Renovation (Drawings)	10,000	26,500			
``Insurance	1,200				
Add: Prepaid	370	1,570			
``Rent	10,000				
Add: Advance Rent	2,000	12,000			
``Electricity Charges	2,650				
Less: Outstanding	450	2,200			
``Miscellaneous Expenses		14,000			
``Stationery & Printing		1,200			
``Interest on Loan	8,000				
Less: Outstanding	1,500	6,500			
``Telephone Charges		6,000			
``Depreciation:					
Plant & Machinery	37,500				
Furniture & Fixtures	8,000	45,500			
`` Capital Account Net Profit transferred		1,46,030			
		2,61,500			2,61,500

Balance Sheet as at 31st March, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Account	2,11,970		Plant and Machinery (at cost less depreciation)		2,12,500
Add: Net Profit during the year	1,46,030		Furniture & Fixtures (at cost less depreciation)		72,000
	3,58,000		Investments		80,000
Less: Drawings (24,000+10,000)	34,000	3,24,000	Stock-in-Trade		75,000
			Debtors		1,70,500
Loan Account		90,000	Cash in hand		3,000
Sundry Creditors		2,64,000	Cash at Bank		65,000
		6,78,000			6,78,000

Illustration 14.

The following Trial Balance has been prepared from the books of Mr. Sexena as on 31st March, 2013 after making necessary adjustments for depreciation on Fixed Assets, outstanding and accrued items and difference under Suspense Account.

Trial Balance as at 31st March, 2013

Particulars	Dr. (₹)	Particulars	Cr. (₹)
Machineries	1,70,000	Sundry Creditors	82,000
Furniture	49,500	Capital Account	2,45,750
Sundry Debtors	38,000	Outstanding Expenses:	
Drawings	28,000	Salaries	1,500
Travelling Expenses	6,500	Printing	600
Insurance	1,500	Audit Fees	1,000
Audit Fees	1,000	Bank Interest	1,200
Salaries	49,000	Discounts	1,800
Rent	5,000	Sales (Less Return)	6,80,000
Cash in hand	7,800		
Cash at Bank	18,500		
Stock-in-trade (1-4-2012)	80,000		
Prepaid Insurance	250		
Miscellaneous Expenses	21,200		
Discounts	1,200		
Printing & Stationery	1,500		
Purchase (Less Returns)	4,60,000		
Depreciation:			
Machineries	30,000		
Furniture	5,500		
Suspense Account	39,400		
	10,13,850		10,13,850

On the subsequent scrutiny following mistakes were noticed:

(i) A new machinery was purchase for ₹ 50,000 but the amount was wrongly posted to Furniture Account as ₹ 5,000.

(ii) Cash received from Debtors ₹ 5,600 was omitted to be posted in the ledger.

(iii) Goods withdrawn by the proprietor for personal use but no entry was passed ₹ 5,000.

(iv) Sales included ₹ 30,000 as goods sold cash on behalf of Mr. Thakurlal who allowed 15% commission on such sales for which effect is to be given.

You are further told that:-

(a) Closing stock on physical verification amounted to ₹ 47,500.

(b) Depreciation on Machineries and Furniture has been provided @ 15% and 10%, respectively, on reducing balancing system.

Full year's depreciation is provided on addition.

You are requested to prepare a Trading and Profit & Loss Account for the year ended 31st March 2013 and a Balance Sheet as on that date so as to represent a True and Correct picture.

Solution:

In the books of Mr. Sexena
Trading and Profit and Loss Account
Dr. **for the year ended 31st March, 2013** Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Opening Stock		80,000	By, Sales (₹ 6,80,000 - ₹ 30,000)		6,50,000
`` Purchases	4,60,000		`` Closing Stock		47,500
Less: Drawings	5,000	4,55,000			
`` Profit & Loss A/c Gross Profit transferred		1,62,500			
		6,97,500			6,97,500
To, Salaries		49,000	By, Trading A/c (Gross Profit)		1,62,500
`` Rent		5,000	`` Bank Interest		1,200
`` Insurance		1,500	`` Selling Commission		
`` Audit Fees		1,000	(15% on ₹ 30,000)		4,500
`` Printing & Stationery		1,500	`` Discount Received		1,800
`` Miscellaneous Expenses		21,200			
`` Discount Allowed		1,200			
`` Travelling Expenses		6,500			
`` Depreciation:					
– Machinery	37,500				
– Furniture	5,000	42,500			
`` Capital Account Net Profit transferred		40,600			
		1,70,000			1,70,000

Balance Sheet
as at 31st March, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Account	2,45,750		Machinery	2,50,000[1]	
Add: Net Profit	40,600		Less: Depreciation	37,500	2,12,500
	2,86,350				
Less: Drawings (28,000+5,000)	33,000	2,53,350	Furniture	50,000[2]	
			Less: Depreciation	5,000	
					45,000
Sundry Creditors		82,000	Stock		47,500
Outstanding Liabilities:			Debtors (38,000-5,600)		32,400
Salaries	1,500		Cash		7,800
Audit Fees	1,000		Bank		18,500
Printing	600	3,100	Prepaid Insurance		250
Thakurlal's A/c (30,000 – 4,500)		25,500			
		3,63,950			3,63,950

Notes:

		₹
1.	Machinery as per Trial Balance	1,70,000
	Add: Depreciation	30,000
		2,00,000
	Additions	50,000
		2,50,000
2.	Furniture	49,500
	Add: Depreciation	5,500
		55,000
	Less: Wrong Debit	5,000
3.	Suspense A/c is eliminated by item	50,000

(i) ₹ 45,000 (50,000 – 5,000) and item

(ii) by 5,600 (debited), respectively.

Illustration 15.

The following Trail Balance has been extracted from the books of Mr. Agarwal as on 31.3.2013:

Trial Balance as on 31.3.2013

Particulars		Dr. (₹)	Particulars	Cr. (₹)
Purchase		6,80,000	Sales	8,38,200
Sundry Debtors		96,000	Capital Account	1,97,000
Drawings		36,000	Sundry Creditors	1,14,000
Bad Debts		2,000	Outstanding Salary	2,500
Furniture & Fixtures		81,000	Sale of Old Papers	1,500
Office Equipments		54,000	Bank Overdraft (UBI)	60,000
Salaries		24,000		
Advanced Salary		1,500		
Carriage Inward		6,500		
Miscellaneous Expenses		12,000		
Travelling Expenses		6,500		
Stationery & Printing		1,500		
Rent		18,000		
Electricity & Telephone		6,800		
Cash In Hand		5,900		
Cash at Bank (SBI)		53,000		
Stock (1.4.2012)		50,000		
Repairs		7,500		
Motor Car		56,000		
Depreciation:				
Furniture	9,000			
Office Equipment	6,000	15,000		
		12,13,200		12,13,200

Additional Information:

(i) Sales includes ₹ 60,000 towards goods for cash on account of a joint venture with Mr. Reddy who incurred ₹ 800 as forwarding expenses. The joint venture earned a profit of ₹ 15,000 to which Mr. Reddy is entitled to 60%

(ii) Motor car account represents an old motor car which was replaced on 1.4.2012 by a new motor car costing ₹ 1,20,000 with an additional cash payment of ₹ 40,000 laying debited to Purchase Account.

(iii) UBI has allowed an overdraft limit against hypothecation of stocks keeping a margin of 20%. The present balance is the maximum as permitted by the Bank.

(iv) Sundry Debtors include ₹ 4,000 as due from Mr. Trivedi and Sundry Creditors include ₹ 7,000 as payable to him.

(v) On 31.3.2013 outstanding rent amounted to ₹ 6,000 and you are informed that 50% of the total rent is attributable towards Agarwal's resident.

(vi) Depreciation to be provided on motor car @ 20% (excluding sold item).

Mr. Agarwal requests you to prepare a Trading and Profit & Loss Account for the year ended 31.3.2013 and a Balance Sheet as on that date.

Solution:

In the books of Mr. Agarwal
Trading and Profit and Loss Account
for the year ended 31st March, 2013

Dr. Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Opening Stock		50,000	By, Sales	8,38,200	
`` Purchases	6,80,000		Less: Sale on account of Joint Venture	60,000	7,78,200
Less: Motor Car	40,000	6,40,000			
			`` Closing Stock		75,000[3]
`` Carriage Inward		6,500			
`` Profit & Loss A/c -Gross Profit transferred		1,56,700			
		8,53,200			8,53,200
To, Salaries		24,000	By, Trading A/c -Gross Profit transferred		1,56,700
`` Travelling Expenses		6,500	`` Sale of old papers		1,500
`` Printing & Stationery		1,500	`` Profit on Joint Venture (40% of ₹ 15,000)		6,000
`` Electricity & Telephone		6,800	`` Profit on replacement of Motor Car [(1,20,000–(56,000+40,000)]		24,000[2]
`` Rent	18,000				
Add: Outstanding	6,000				
	24,000				
Less: Drawings	12,000	12,000			
`` Bad Debts		2,000			
`` Miscellaneous Expenses		12,000			
`` Repairs		7,500			
`` Depreciation on:					
Furniture	9,000				
Office Equipment	6,000				
Motor Car	24,000[1]	39,000			
`` Capital Account - Net Profit transferred		76,900			
		1,88,200			1,88,200

Balance Sheet
as at 31st March, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Account	1,97,000		Furniture & Fixtures	90,000	
Add: Net Profit	76,900		Less: Depreciation	9,000	
	2,73,900				81,000
Less: Drawings (36,000+12,000)	48,000		Office Equipment	60,000	
		2,25,900	Less: Depreciation	6,000	
Bank Overdraft		60,000			54,000
Creditors	1,14,000		Motor Car	56,000	
Less: Due to Trivedi	4,000		Additions	1,20,000	
		1,10,000		1,76,000	
Amount payable to			Less: Sold	56,000	
Reddy (60,000 - 6,000)		54,000		1,20,000	
			Less: Depreciation	24,000	96,000
Outstanding Liabilities:			Stock		75,000
Salaries	2,500		Debtors	96,000	
Rent	6,000	8,500	Less: Due from Trivedi	4,000	92,000
			Cash		9,500
			Bank		53,000
			Prepaid Salary		1,500
		4,58,400			4,58,400

Workings:

1. **Depreciation on Motor Car**

   on new motor car i.e., @ 20% on ₹ 1,20,000 = ₹ 24,000

2. **Profit on Replacement of Motor Car**

		₹
Cost of new Motor Car		1,20,000
Less: Exchange Value	56,000	
Cash Payment	40,000	96,000
Profit on replacement		**24,000**

3. **Closing Stock**

   Maximum allowable limit of overdraft subject to a margin of 20% of stock.

   Overdraft which is given ₹ 60,000 that is equal to 80%.

   So, value of closing stock $= ₹\ 60,000 \times \frac{100}{80}$

   $= ₹\ 75,000.$

FINAL ACCOUNTS OF PARTNERSHIP FIRM

Illustration 16.

From the following particulars prepare a Final Accounts of M/s. X & Y for the year ended 31st March 2013.

Particulars	Amount (₹)	Particulars	Amount (₹)
Sales	8,20,000	Land	11,000
Opening Stock	3,00,000	Purchase	3,80,000
Loan (Dr.)	20,000	Interest (Cr.)	1,000
Wages	60,000	Salaries	40,000
Carriage Inwards	4,000	Carriage Outward	2,000
Returns inward	4,000	Returns Outwards	3,000
Furniture	10,000	Trade change	8,000
Drawings		Capital	
– X	12,000	– X	24,000
– Y	10,000	– Y	16,000
Cash	3,000		

Additional Information:

(i) Closing Stock amounted to ₹ 1,20,000;

(ii) Provide Interest on drawings (on an average 6 months) and interest on capital @ 6% and 4% respectively.

(iii) Y is to get a salary of ₹ 400 p.m.

(iv) X is to get a commissions @ 2% on gross sales

(v) 50% of the profit is to be transferred to Reserve Fund.

(vi) Depreciations on furniture @ 10% p.a.

The partners share profit and loss equally.

Solution:

In the books of M/s. X & Y
Trading and Profit and Loss Account
Dr. for the year ended 31st March, 2013 Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Opening Stock		3,00,000	By, Sales	8,20,000	
`` Purchases	3,80,000		Less: Return Inwards	4,000	8,16,000
Less: Returns Outwards	3,000	3,77,000	`` Closing Stock		1,20,000
`` Wages		60,000			
`` Carriage Inward		4,000			
`` Profit & Loss A/c					
-Gross Profit transferred		1,95,000			
		9,36,000			9,36,000
To, Salaries		40,000	By, Trading A/c.		
`` Carriage Outward		2,000	- Gross Profit		1,95,000
`` Trade Charge		8,000	`` Interest		1,000
`` Depreciation on:					
To, Furniture		1,000			
P&L Appropriation A/c.					
- Net Profit transferred		1,45,000			
		1,96,000			1,96,000

Profit and Loss Appropriation Account

Dr. **for the year ended 31st March, 2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Interest on Capital			By, Profit and Loss A/c		1,45,000
X:	960		-Net Profit		
Y:	640	1,600	By, Interest on Drawings:		
			X:	360	
To, Salary			Y:	300	660
Y: (₹ 400 ×12 months)		4,800			
To, Commission – X		16,400			
`` Reserve Fund (50%)		61,430			
`` Net Divisible Profit					
X:	30,715				
Y:	30,715				
		61,430			
		1,45,660			1,45,660

Capital Account

Dr. **Cr.**

Particulars	X (₹)	Y (₹)	Particulars	X (₹)	Y (₹)
To, Drawings	12,000	10,000	By, Balance b/d	24,000	16,000
`` Interest on Drawings	360	300	`` Interest on Capital	960	640
`` Balance c/d	59,715	41,855	`` Salary	---	4,800
			`` Commission	16,400	---
			`` Share of Profit	30,715	30,715
	72,075	52,155		72,075	52,155

Balance Sheet

as at 31st March, 2013

Liabilities	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital :		Land		11,000
X	59,715	Furniture	10,000	
Y	41,855	Less: Depreciation	1,000	9,000
Reserve Fund	61,430			
		Loan		20,000
		Closing Stock		1,20,000
		Cash		3,000
	1,63,000			1,63,000

Illustration 17.

A and B are partners sharing profits in proportion to their Capitals. At the close of their financial year on 30th September, 2012, the following balances stood to the credit of the partners:

		₹
Capital Accounts	A	20,000
	B	5,000
Current Accounts	A	1,060
	B	2,800

The Partnership deed provided :-

(a) B shall be credited with a partnership salary of ₹ 1,000 per annum for running business.

(b) B shall be entitled to a commission of 10% of the Divisible Profit before charging such commission.

(c) Interest at 5% per annum to be allowed on Capital and Current Account.

(d) The partners' drawings were:

	₹
A	10,000
B	3,000

The Interest to be charged on such drawings were:

	₹
A	330
B	80

In addition to the entries necessary to record the above particulars the following balances were extracted from the books of the firm as on 30th September, 2013:

Particulars	Amount (₹)
Freehold Premises	15,000
Sundry Creditors	24,150
Advertising	4,339
Office Salaries	2,189
Sundry Debtors	16,020
Office Expenses	622
Insurance	364
Delivery Expenses	2,203
Stock	21,069
Provision for Doubtful Debts – as on 30-9-2012	600
Trading Account Credit Balance	34,628
Machinery and Plant – balance at the beginning	13,280
Machinery – additions	1,560
Motor Vans	900
Factory Expenses paid in advance	70
Cash at bank	2,841
Cash in hand	31
Mortgage on freehold premises at 6% per annum	10,000
Office Furniture	300
Mortgage interest	450
Patents	4,000

You are required to prepare a Profit & Loss Account for the year ended 30th September, 2013 and the Balance Sheet as on that date.

Given below are the additional information towards the preparation of the required Final Accounts.

(i) Depreciation to be provided as follows:

Plant, old balance	10% per annum
Plant – additions (for full year)	25% per annum
Office Furniture	10% per annum
Patents	10% per annum

(ii) Motor Vans are to be taken at ₹ 800 for the purpose of Final Accounts.

(iii) The Provision for Bad Debts is to be made up to 5% on Sundry Debtors.

(iv) Interest on the mortgage has been paid up to 30the June, 2013.

(v) The following amounts are to be carried forward to next year:

Insurance ₹ 62, Advertising ₹ 878.

(vi) Office Salaries ₹ 69 were owing at the end of the year.

Solution.

In the books of A & B
Profit and Loss Account
Dr. for the year ended 30th September, 2013 Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Office Salaries	2,189		By, Gross Profit		34,628
Add: Outstanding	69	2,258	(Trading A/c -		
			Credit Balance)		
`` Office Expenses		622			
`` Insurance	364				
Less: Prepaid	62	302			
`` Delivery Expenses		2,203			
``Advertising	4,339				
		4,339			
`` Provision for Bad Debts					
(5% of ₹ 16,020)	801				
Less: Old Reserve	600	201			
`` Mortgage Interest	450				
Add: Outstanding					
(@ 6% on ₹ 10,000 for 3 months)	150	600			
`` Depreciation on:					
–Plant & Machinery[1]	1,718				
–Office Furniture (10% on ₹ 300)	30				
–Patents (10% on ₹ 4,000)	400				
–Motor Vans (₹ 900 - ₹ 800)	100	2,248			
`` Profit and Loss					
Appropriation Account					
Gross Net Profit transferred		21,855			
		34,628			34,628

Profit and Loss Appropriation Account
Dr. **for the year ended 30th September, 2013** Cr.

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, Salary		1,000	By, Profit and Loss A/c		21,855
`` Interest on Capital[2]			Gross Net Profit transferred		
A:	1,000		Interest on Drawings:		
B:	250	1,250	A: ₹ 330		
To, Interest on Current A/c. (c)			B: ₹ 80		410
A:	53				
B:	140	193			
To, Commission – B[4]		1,982			
`` Divisible Profit[5]					
A:	14,272				
B:	3,568	17,840			
		22,265			22,265

Balance Sheet
as at 30th September, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Account			Fixed Assets:		
A:	20,000		Freehold Premises		15,000
B:	5,000		Patents	4,000	
		25,000	Less: Depreciation	400	3,600
Current Accounts:					
A:	1,060				
Add: Interest on Capital	1,000		Plant and Machinery	13,280	
Interest on Current A/c	53		Addition during the year	1,560	
Profit	14,272			14,840	
	16,385		Less: Depreciation	1,718	13,122
Less: Drawings	10,000				
	6,385		Motor Vans	900	
Less: Interest on Drawings	330	6,055	Less: Depreciation	100	800
B:	2,800		Office Furniture	300	
Add: Interest on Capital	250		Less: Depreciation	30	270
Interest on Current A/c	140				
Salary	1,000		Current Assets:		
Commission	1,982		Stock		21,069
Profit	3,568		Sundry Debtors	16,020	
	9,740		Less: Provision for Bad Debts	801	15,219
Less: Drawings	3,000				
	6,740		Prepaid Factory Expenses		70
Less: Interest on Drawings	80	6,660	Prepaid Insurance		62
Mortgage on Freehold Premises	10,000				
Add: Interest Accrued	150	10,150	Cash in hand		31
Sundry Creditors		24,150	Cash at Bank		2,841
Salaries Accrued		69			
		72,084			72,084

Workings

(1) Depreciation on Plant and Machinery

Old balance:	10% on ₹ 13,280	=	₹ 1,328
Additions:	25% on ₹ 1,560	=	₹ 390
			₹ 1,718

(2) Interest on Capital:

A:	5% on ₹ 20,000	=	₹ 1,000
B:	5% on ₹ 5,000	=	₹ 250
			₹ 1,250

(3) Interest on Current Account:

A:	5% on ₹ 1,060	=	₹ 53
B:	5% on ₹ 2,800	=	₹ 140
			₹ 193

(4) B's Commission:

Divisible Profit before charging commission:

₹ (21,855 + 410) – ₹ (1,000 + 1,250 + 193)

= ₹ 22,265 – ₹ 2,443 = ₹ 19,822

$\therefore$ Commission = 10% of ₹ 19,822 = ₹ 1,982

(5) Apportionment of divisible Profit:

Capital Ration A : B = ₹ 20,000 : ₹ 5,000 = 4: 1

A's share of profit = ₹ 17,840 x $\frac{4}{5}$ = ₹14,272

B's share of profit = ₹ 17,840 x $\frac{1}{5}$ = ₹ 3,568

4.3 BAD DEBTS

Debts : The amount which is receivable from a person or a concern for supplying goods or services is called Debt.

Debts may be classified into :

(i) Bad debts;

(ii) Doubtful debts and

(iii) Good debts

(i) Bad Debts : Bad debts are uncollectable or irrecoverable debt or debts which are impossible to collect is called Bad Debts. If it is definitely known that amount recoverable from a customer can not be realized at all, it should be treated as a business loss and should be adjusted against profit. In short, the amount of bad debt should be transferred to Profit and Loss Account for the current year to confirm the principles of matching.

Accounting Steps :

(a) **When goods are sold on credit**

Debtors A/c Dr.

To Sales A/c

(b) **When cash is realised from debtors**

Cash A/c Dr.

To Debtors A/c

(c) **For actual amount of bad debts (if there is no provision)**

Bad Debt A/c Dr.

To Sundry Debtors A/c

(d) **For transferring Bad debts**

Profit and Loss A/c Dr.

To Bad Debts A/c

Illustration 18.

On 1.4.2012, P sold goods to Z for ₹ 4,000; On 15.4.2012 Z paid ₹ 3,000 to P. On 8.8.2012 Z became insolvent and nothing was realized from his estate. Show the journal entries, ledger accounts, Profit and Loss Account and the Balance Sheet.

Solution:

In the Books of P

Journal

Date	Particulars	L.F	Debit ₹	Credit ₹
1.4.2012	Z A/c Dr. To, Sales A/c (Being goods sold on credit to Z)		4,000	 4,000
15.4.2012	Cash A/c Dr. To, Z A/c (Being cash realized from Z)		3,000	 3,000
8.8.2012	Bad Debts A/c Dr. To, Z A/c (Being the capital expenditure transferred to the Capital Fund)		1,000	 1,000

Dr. **Z Account** **Cr.**

Date 2012	Particulars	Amount (₹)	Date 2012	Particulars	Amount (₹)
Apr. 1	To, Sales A/c.	4,000	Apr 15 Aug 8	By, Cash A/c "Bad Debt A/c	3,000 1,000
		4,000			**4,000**

Dr. **Sales Account** **Cr.**

Date 2013	Particulars	Amount (₹)	Date 2012	Particulars	Amount (₹)
Mar. 31	To, Balance c/d	4,000	Apr 1	By, Z A/c	4,000
		4,000			**4,000**

Dr. **Bad Debts Account** **Cr.**

Date 2012	Particulars	Amount (₹)	Date 2013	Particulars	Amount (₹)
Aug 8	To, Z A/c.	1,000	Mar 31	By, Profit and Loss A/c.	1,000
		1,000			**1,000**

Profit and Loss Account (Extract)
For the year ended 31st March, 2013

Dr. **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Bad Debts A/c.	1,000		

Balance Sheet (Extract)
As at 31st March, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
			Debtors Less : Bad debts	1,000 1,000	Nil

(ii) **Doubtful Debts :** The debts which will be receivable or not cannot be ascertainable at the date of preparing the final accounts (i.e., the debts which are doubtful to realise) is known as doubtful debts. Practically it cannot be treated as a loss on that particular date, as such, it cannot be written off. But, it should be charged against Profit and Loss Account on the basis of past experience of the firm.

(iii) **Good Debts** : The debts which are not bad i.e., there is neither any possibility of bad debts nor any doubts about its realization, is called good debts. As such, no provision is necessary for it.

Provisions for Bad (and Doubtful) Debts

- It has already been stated above that for any unknown/ known part of doubtful debts provisions must be made against Profit and Loss Account on the basis of past experience.
- This is known as Provision for Bad Debts; Reserve for Bad Debts or Provision for Bad and Doubtful Debts.
- It is charged against Profit and Loss Account in the form of Provision.

There are two methods to record the transactions relating to Bad Debts and Provision for Bad Debts.

Accounting Steps

First Method

The 1st year

(a) For Bad Debts

Bad Debts A/c Dr.
    To Sundry Debtors A/c

(b) For managing provision for Bad Debts

Profit and Loss A/c Dr.
    To Provision for Bad Debts A/c

(c) For Transferring Bad Debts

Profit and Loss A/c Dr.
    To Bad Debts A/c

The Second/ subsequent year

(a) (i) For Bad Debts

Bad Debts A/c Dr.
    To Sundry Debtors A/c

(ii) Profit and Loss A/c Dr.

To Bad Debts A/c

(b) For provision of Bad Debts

(i) If closing provision is more than the opening provision-

Profit and Loss A/c Dr.

To Provision for Bad debts A/c

(ii) If Closing Balance is less than opening provision -

Provision for Bad Debts A/c Dr.

To Profit and Loss A/c

Second Method

The 1st year

(a) (i) For Bad Debts

Bad Debts A/c Dr.

To Sundry Debtors A/c

(ii) Profit and Loss A/c Dr.

To Bad Debts A/c

(b) For provision for Bad Debts

Profit and Loss A/C Dr.

To Provision for Bad Debts A/c

The Second/subsequent year

(a) For Bad Debts

Provision for Bad Debts A/c Dr.

To Sundry Debtors A/c

(b) For provision of Bad Debts

(i) If new provision is more than the old provision

Profit and Loss A/c Dr

To Provision for Bad debts A/c

(ii) If new provision is less than old provision

Provision for Bad Debts A/c Dr.

To Profit and Loss A/c

Illustration 19.

Prepare Bad Debts Accounts, Provision for Bad Debts Accounts under each of the above methods from the following information:-

		₹
01.01.2012	Provision for Bad Debts	5,000
31.12.2013	Bad Debts written off	3,000
	Sundry Debtors	1,25,000
31.12.2013	Bad Debts written off	2,500
	Sundry Debtors	1,00,000

Provision for Doubtful debts to be provided for @ 5% for 2012 and 2.5% for 2013. Show also the Profit and Loss Account and Balance sheet.

Solution:

First Method

In the Books of ....

Dr. Bad Debts Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2011 Dec 31	To, Sundry Debtors A/c	3,000	2012 Dec 31	By, Profit and Loss A/c	3,000
		3,000			3,000
2012 Dec,31	To, Sundry Debtors A/c	2,500	2013 Dec,31	By, Profit and Loss A/c	2,500
		2,500			2,500

Dr. Provision for Bad Debts Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec 31	To, Balance c/d (5% on ₹1,25,000)	6,250	2012 Jan 1	By, Balance b/d	5,000
			2012 Dec 31	"Profit and Loss A/c (Bal Trf)	1,250
		6,250			6,250
2013 Dec,31	To, Profit and Loss A/c	3,750	2013 Jan,1	By, Balance b/d	6,250
	"Balance c/d (2.5% on 1,00,000)	2,500			
		6,250			6,250

Profit and Loss Account (Extract)

Dr. For the year ended 31st Dec, 2012 Cr.

Particulars		(₹)	Particulars	(₹)
To Bad Debts A/c		3,000		
"Provision for Bad Debts	6,250			
Less: Existing Provision	5,000	1,250		

Profit and Loss Account (Extract)

Dr. For the year ended 31st Dec., 2013 Cr.

Particulars	(₹)	Particulars	(₹)
To Bad Debts A/c	2,500	By, Provision for Bad Debts 6,250	
		Less: Existing Provision 3,500	3,750

Balance Sheet (Extract)

as at 31st December, 2012

Liabilities	(₹)	(₹)	Assets	(₹)	(₹)
			Debtors		
			Less : Bad debts	1,25,000	1,18,750
				6,250	

Balance Sheet (Extract)

as at 31st December, 2013

Liabilities	(₹)	(₹)	Assets	(₹)	(₹)
			Debtors	1,00,000	97,500
			Less : Bad debts	2,500	

Second Method

Dr. Bad Debts Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec 31	To, Sundry Debtors A/c	3,000	2012 Dec 31	By, Provision for Bad Debts A/c - Transfer	3,000
		3,000			3,000
2013 Dec,31	To, Sundry Debtors A/c	2,500	2013 Dec,31	By, Provision for Bad Debts A/c - Transfer	2,500
		2,500			2,500

Dr. Provision for Bad Debts Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec 31	To, Bad Debts A/c	3,000	2012 Jan 1	By, Balance b/d	5,000
	"Balance c/d (5% on ₹1,25,000)	6,250	2012 Dec 31	"Profit and Loss A/c (Bal fig)	4,250
		9,250			9,250
2013 Dec,31	To, Bad debts A/c	2,500	2013 Jan,1	By, Balance b/d	6,250
	"Profit and Loss A/c	1,250			
	"Balance c/d (2.5% on 1,00,000)	2,500			
		6,250			6,250

Profit and Loss Account (Extract)

Dr. For the year ended 31st Dec, 2012 Cr.

Particulars		(₹)	Particulars	(₹)
To Provision for Bad Debts	6,250			
Add: Provision Required	3,000			
	9,250			
Less: Existing Provision	3,000	6,250		
		6,250		

Profit and Loss Account (Extract)

Dr. For the year ended 31st Dec, 2013 Cr.

Particulars	(₹)	Particulars		(₹)
To Bad Debts A/c.	2,500	By, Provision for Bad Debts	6,250	
		Less: Provision required	2,500	3,750

The Balance Sheet under this method will be similar to the First Method stated above.

Illustration 20.

On 01.01.2013 the balance of Provision for Doubtful Debts was ₹ 5,000. The Bad Debts during the year were ₹ 900. The Sundry Debtors as on 31.12.2013 stood at ₹ 40,400 out of these debtors of ₹ 400 are bad and cannot be realized. The Provision for Doubtful Debts is to be raised to 5% on Sundry Debtors. Show the necessary ledger accounts and the balance sheet.

Solution:

In the Books of ....

Dr. Bad Debts Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Dec, 31	To, Balance b/d	900	2013 Dec 31	By, Provision for Bad debts A/c	1,300
2013 Dec, 31	To, Sundry Debtors A/c	400			
		1,300			1,300

Dr. **Provision for Bad Debts Account** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Dec 31	To, Bad Debts A/c	1,300	2013 Jan 1	By, Balance b/d	5,000
2013 Dec,31	To, Profit and Loss A/c	1,700			
2013 Dec,31	To, Balance c/d [5% on (40,400-400)]	2,000			
		5,000			5,000

Dr. **Sundry Debtors Account** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Dec 31	To, Balance b/d	40,400	2013 Dec 31	By, Bad debts A/c	400
			2013 Dec 31	By Balance c/d	40,000
		40,400			40,400

Profit and Loss Account (Extract)

Dr. **For the year ended 31st Dec, 2013** Cr.

Particulars	(₹)	Particulars	(₹)
To Bad Debts A/c. 900 Add: Further Bad Debts 400	1,300	By, Provision for Bad Debts A/c Existing Provision 5,000 Less: New Provision 2,000	3,000

Balance Sheet (Extract)

As at 31st December, 2013

Liabilities	(₹)	(₹)	Assets	(₹)	(₹)
			Debtors Less : Bad debts	40,400 400	
				40,000	
			Less: Provision for Bad debts	2,000	38,000

Illustration 21.

It was decided to make a specific provisions in the accounts for the year ended 31.03.12 for the following doubtful debts after examining the sales ledger of the firm:

A ₹ 1,900; B ₹ 300 ; C ₹ 2,680 and D ₹ 1,380.

It was decided to make also a general provision of 5% on the other debtors who were on 31st March 2011 amounted to ₹ 2,16,000.

No other transaction relating to the debtors were made but successors of A and D sent final dividend of ₹ 600 and ₹ 840 respectively and C paid his debt in full.

On 31.03.2012, it was decided to maintain the provision against B's debt and make further provision for the following debts considered doubtful:

E ₹ 1,300; F ₹ 680 and G ₹ 1,020.

The other debtors amounted to ₹ 2,60,000 and it was required to make the general provisions for doubtful debts equal to 5% of these debts. Show Bad Debts Account and Provision for Bad Debts Account.

Solution:

In the Books of ………..

Dr. **Bad Debts Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Mar 31	To, Sundry Debtors A/c	1,840[1]	2012 Mar 31	By, Provision for Bad debts A/c	1,840
		1,840			1,840

Dr. **Provision for Bad Debts Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec 31	To, Bad Debts A/c	1,840	2011 April 1	By, Balance b/d	17,060[2]
			2012 Mar,31	,,Profit and Loss A/c (further provision required)	1,080
2012 Dec,31	To, Balance c/d	16,300[3]			
		18,140			18,140

Workings:

1. **Bad Debts**

	₹
A: ₹(1,900 – 600)	1,300
D: ₹ (1,380- 840)	540
	1,840

2. **Opening Balance of provision for Bad debts**

	₹
A:	1,900
B:	300
C:	2,680
D:	1,380
General provision (5% of ₹ 2,16,000)	10,800
	17,060

3. **Closing Balance of provision for Bad debts**

	₹
B:	300
E:	1,300
F:	680
G:	1,020
General provision (5% of ₹ 2,60,000)	13,000
	16,300

Provision for Discount On Debtors:-

We know that Cash discount is allowed by the suppliers to customer for prompt settlement of cash. Naturally a provision is created for this purpose. Thus, the provision which is created on Sundry Debtors for allowing discount on receipt of Cash in that accounting period is called Provision for Discount on Debtors.

Accounting Steps

For the First year

(a) (i) For discount Allowed-

Discount allowed A/c Dr.

To, Sundry Debtors A/c

(ii) When discount Allowed is transferred

Discount allowed A/c Dr.

To, Sundry Debtors A/c

(b) For provision for discount on debtors –

Profit & Loss A/c Dr.

To, Provision for Disc on Debtors A/c

For the Second/ Subsequent year

(a) (i) For discount Allowed-

Discount Allowed A/c Dr.

To, Sundry Debtor A/c

(ii) For provision for discount on debtors –

Provision for Discount on Debtor A/c Dr.

To, Discount Allowed A/c

(b) Next year provision is estimated-

(i) If new provision is more than old one-

Profit and Loss A/c Dr.

To, Provision for Discount on Debtor A/c

(ii) If new provision is less than old one-

Provision for Discount on Debtor A/c Dr.

To, Profit and Loss A/c

Illustration 22.

On 01.04.2012, M/s Singh Bros. had a provision for bad debts of ₹ 6,500 against their book debts. During 2012-13, ₹ 4,200 proved irrecoverable and it was desired to maintain the provision for bad debts @4% on debtors which stood at ₹ 1,95,000 before writing off Bad Debts. They also decided to maintain a provision for discount on debtors @2%. Show Provision for Bad Debt Account and Provision for Discount on Debtors Account as would appear in the books of the firm in 2012-13.

Solution:

In the books of …………….

Dr. Provision for Bad Debt Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012-13 Mar. 31	To, Bad Debts A/c " Balance c/d (4% on ₹1,95,000-₹4,200 or ₹1,90,800)	4,200 7,632	2012 Apr.1	By, Balance b/d " Profit & Loss A/c -further provision required	6,500 5,332
		11,832			11,832

Dr. Provision for Discount on Debtors Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Mar.31	To, Balance c/d (2% on ₹1,95,000-₹4,200 - ₹ 7,632)	3,663	2012 Apr.1	By, Balance b/d " Profit & Loss A/c -further provision required	— 3,663
		3,663			3,663

Illustration 23.

A company maintains its reserve for bad debts @ 5% and a reserve for discount on debtors @ 2%.

You are given the following details :

	2012 (₹)	2013 (₹)
Bad debts	800	1,500
Discount allowed	1,200	500

Sundry debtors (before providing all bad debts and discounts) amounted to ₹ 60,000 on 31.12.2012 and ₹ 42,000 on 31.12.2013.

On 1.1.2012, Reserve for bad debts and Reserve of discount on debtors had balance of ₹ 4,550 and ₹ 800 respectively.

Show Reserve for Bad Debts and Reserve for Discount on Debtors Account.

Solution:

In the books of …………..

Dr. Reserve for Bad Debts Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec. 31	To, Bad Debts A/c	800	Jan 1	By, Balance b/d	4,550
	To, Profit and Loss A/c (provision found excess)	850			
	To, Balance c/d (5% on ₹ 58,000)	2,900			
		4,550			4,550
2013 Dec. 31	To, Bad Debt A/c	1,500	2013 Dec. 31	By, Balance b/d	2,900
	To, Balance c/d (5% on ₹ 40,000)	2,000		By, Profit and Loss A/c (for the provision required)	600
		3,500			3,500

Dr. Reserve for Discount on Debtors Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec. 31	To, Discount Allowed A/c	1,200	2012 Jan. 1	By, Balance b/d	500
	To Balance c/d (2% on ₹ 58,000-₹ 2,900)	1,102		" Profit & Loss A/c -further provision required	1,502
		2,302			2,302
2013 Dec. 31	To, Discount Allowed A/c	500		By, Balance b/d	1,102
	To Balance c/d (2% on ₹ 40,000-₹ 2,000)	760		" Profit & Loss A/c -further provision required	158
		1,260			1,260

Provision for Discount on Creditors

We also know that cash discount is received by the customer which is allowed by the creditors for prompt settlement of debts. So, a provision should be created for the purpose. Thus, the provision which is created on Sundry Creditors for securing discount for payment of cash in the next accounting period is called Provisions for Discount on Creditors.

Accounting Steps

In the first year

(a) (i) for Discount Received -

Sundry Creditors A/c. ……… Dr.

To Discount Received A/c

(ii) When transferred

Discount Received A/c Dr.

To Profit & Loss A/c

(b) When Provision is made for Discount

Provisions for Discount on Creditors A/c Dr.

To Profit and Loss A/c

In the second/subsequent years

(a) For Discount Received

(i) Sundry Creditors A/c Dr.

To Discount Received A/c

(ii) Discount for Transfer

Discount Received A/c Dr.

To Provision for discount on Creditors A/c

Next Provision is estimated

(i) If new provision is more than old provision,

Provision for Discount on Creditor A/c Dr.

To Profit and Loss A/c

(ii) If new provision is less than old one

Profit and Loss A/c Dr.

To Provision for Discount on Creditors A/c

Illustrations 24.

Prepare necessary ledger accounts from the following:

Provisions for Discount on Creditors as on 1.1.2012 ₹ 4,000

Discount Received during the year 2012 ₹ 2,000

Sundry Creditors as on 31.12.2012 ₹ 1,20,000

Discount Received during 2013 ₹ 500

Sundry Creditors as on 31.12.2013 ₹ 40,000

Provision to be made for discount on creditors @ 5%

Show also the Profit and Loss Account and Balance Sheet.

Solution:

In the books of ……………

Dr. Discount Received Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Dec. 31	To, Provision for discount on creditors A/c Transfer	2,000	2012 Dec. 31	By, Sundry Creditors A/c	2,000
		2,000			2,000
2013 Dec. 31	To Provision for discount on creditors A/c	500	2013 Dec. 31	By, Sundry Creditors A/c	500
		500			500

Dr. Provision for Discount on Creditors Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 Jan 2	To, Balance b/d	4,000	2012 Dec. 31	By, Discount Received A/c	2,000
Dec. 31	" Profit & Loss A/c Further provision required	4,000		" Balance c/d (5% on ₹ 1,20,000)	6,000
		8,000			8,000
2013 Dec. 31	To Balance b/d	6,000	2013 Dec. 31	By, Discount Received A/c	500
				" Profit & Loss A/c - Provision formed in excess	3,500
				" Balance c/d (5% on ₹ 40,000)	2,000
		6,000			6,000

Profit & Loss Account (Extract)

Dr. For the year ended 31st December 2012 Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
		By, Provision for Discount on Creditors: Provision required	6,000	
		Add: Discount Received	2,000	
			8,000	
		Less: Existing Provision	4,000	4,000

Profit & Loss Account (Extract)

Dr. For the year ended 31st December 2013 Cr.

Particulars	Amount (₹)		Particulars	Amount (₹)
To, Provision for Discount on Creditors A/c			By, Discount Received A/c	500
Existing Provision	6,000			
Less: Provision required	2,000	4,000		

Balance Sheet (Extract)

As at 31.12.2012

Liabilities	Amount (₹)			
Sundry Creditors	1,20,000			
Less: Provision for Discount on Creditors	6,000	1,14,000		

Balance Sheet (Extract)

As at 31.12.2013

Liabilities	Amount (₹)			
Sundry Creditors Less: Provision for Discount on Creditors	40,000 2,000	38,000		

Recovery of Bad Debts

We know that bad debt is a loss and as much, transferred to current year's Profit and Loss Account. Now, if the amount of bad dent is received in any succeeding year the same will be credited to Profit and Loss of that year as an income that is, recovery of bad debt is as income i.e., clear profit.

Accounting Steps

(a) When bad debts are recovered

Cash/Bank A/c Dr.

To Bad Debts Recovery A/c

(b) When the same is transferred

Bad Debts Recovery A/c Dr.

To Profit & Loss A/c

Illustration 25.

On 31.12.2012, Sundry Debtors and Provision for Bad Debts are ₹ 50,000 and ₹ 5,000 respectively. During the year 2012, ₹ 3,000 are bad and written off on 30.9.2013, an amount of ₹ 400 was received on account of a debt which was written off as bad last year on 31.12.2013, the debtors left was verified and it was found that sundry debtors stood in the books were ₹ 40,000 out of which a customer Mr. X who owed ₹ 800 was to be written off as bad.

Prepare Bad Debt A/c. Provision for bad A/c. assuming that some percentage should be maintained for provision for bad debt as it was on 31.12.2012.

Show also how the illustration appear in Profit & Loss A/ccount and Balance Sheet.

Solution:

In the books of ....

Dr. Bad Debt Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Sept. 30	To, Sundry Debtors A/c	3,000	2013 Dec. 31	By, Provision for Bad Debt A/c	3,800
Dec. 31	To, X A/c	800			
		3,800			3,800

Dr. Provision for Bad Debt Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Dec. 31	To, Bad Debt A/c " Balance c/d	3,800	2013	By, Balance b/d	5,000
	(10% on ₹ 39,200, ₹ 40,000 - ₹ 800)	3,920	Dec. 31	" Profit & Loss A/c -for the provision required	2,720
		7,720			7,720

Profit & Loss Account (Extract)

Dr. **For the year ended 31.12.2013** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)
To, Provision for Bad Debts:			By, Bad Debts	400
Prov. Required	3,920		Recovery A/c	
Add: Bad Debts	3,400			
Less: Existing Provision	7,320			
	5,000	2,300		

Balance Sheet (Extract)

As at 31.12.2013

Liabilities	Amount (₹)	Asset	Amount (₹)	Amount (₹)
		Sundry Debtors	40,000	
		Less: Bad Debts	800	
			39,200	
		Less: Provision for Bad Debts	3,920	35,280

4.4 PREPARATION OF FINANCIAL STATEMENTS OF A NON-TRADING CONCERN

Until now, we have seen accounting treatment for business transaction of business entities whose main objective is to earn profit. There are certain organisations that are not established for making profit but to provide some service. These services are generally given to members who make subscriptions to avail them. These are also called as non-trading entities. The examples of such organisations are:

- Gymkhana / sports clubs
- Educational institutions
- Public hospitals
- Libraries
- Cultural clubs like Rotary or Lions club
- Religious institutions
- Charitable trusts

These organisations get their funds in the form of contributions by way of entrance fees, life membership fees, annual subscriptions, donations, grants, legacies etc. The accounting of such organisations is based on similar principles followed by the other organisations. Given the nature of these institutions, there are certain items of revenue and expenses that need special understanding so that accounting treatment could be correctly decided.

Special Items

There are certain items of revenue and expenses that are unique for the non-trading entities. They could be listed as:

Revenue items	Expenditure items
Donations	Upkeep of grounds
Entrance fees	Tournament expenses
Subscriptions	Prizes
Grants received	Events

Let us see what accounting treatment should be given to some of the special items:

(a) **Entrance Fees –** These are received at the time of admission of a new member and thus are one-time fees. They are non-recurring in nature. It could be either capitalized as they are non-recurring or taken as revenue as per the rules of the institution. There's a view that addition of member is an ongoing activity and thus every year the institute will get entrance fees. So it may be taken as a normal revenue receipt.

(b) **Donations –** They could be used for meeting capital or revenue expenses. If donations are received for a special purpose, the amount is credited to a fund from which the amounts are disbursed. The fund may be invested in specified securities. Income from such investments is credited to the fund Account only. Small donation amounts which are not earmarked for any specific purpose may be treated as revenue receipts.

(c) **Legacy –** Many times trusts are formed in the memory of certain persons by their will. In such case after the demise of the person, the funds pass on to the institution. Such legacies are of course one-time and therefore should be taken to the capital fund.

(d) **Endowments –** Sometimes, donations are also in the form of endowments to be used as per instructions of the donor. These are to be treated as capital receipts.

(e) **Life membership fees –** These could be taken as capital receipts and every year a charge is debited based on some logic. In other words, when received, it could be treated as deferred receipt in the balance sheet and every year a specific amount is credited to I & E Account.

(f) **Subscriptions –** These are annual receipts and therefore taken as revenue receipts. These must be recognised as revenue on the accrual concept.

Financial Statements

These non-profit organisations prepare

Receipt and Payment Account – This is similar to cash book. Entries are made on cash basis and items pertaining to previous year or current year or subsequent years are also recorded. Receipts are shown on debit side and payments are shown on credit side. Capital as well as revenue items are entered in the R & P Account. This account is real account in nature. No provisions are recorded in this account. The account has an opening and a closing balance which is reflected as an asset in the balance sheet.

Features of receipts and payment account

1. It is an Account which contains all Cash and Bank transactions made by a nonprofit organization during a particular financial period.
2. It starts with the opening balances of Cash and Bank. All Cash Receipts both capital & revenue during the period are debited to it.
3. All Cash Payments both capital & revenue during the period are credited to this Account. It ends with the closing Cash and Bank Balances.
4. While recording the Cash and Bank transactions all entries are made on Cash Basis.
5. It is a summary of Cash Book.
6. It follows Real Account.

Receipt and Payment Account

Receipts	**Amount (₹)**	**Payments**	**Amount (₹)**
Starts with opening balance			
All receipts - capital or revenue		All payments - Capital or revenue	
May be related to any period previous, current or subsequent.		May be related to any period previous, current or subsequent.	
		Ends with closing balance	

Income and Expenditure account – This is similar to the Profit and loss Account and is prepared exactly based on same principles. As the name suggests only revenue items are recorded herein. Incomes are recorded on the credit side while the expenses on the debit side. Both incomes and expenses must be taken on the basis of accrual concept. This account should reflect only items that are pertaining to current period. Previous and subsequent year items are to be excluded. This account shows either a surplus or deficit. Excess of income over expenditure is called surplus and excess of expenditure over income is called as deficit.

Features of income and expenditure Account

1. It follows Nominal Account.
2. All expenses of revenue nature for the particular period are debited to this Account on accrual basis.
3. Similarly all revenue incomes related to the particular period are credited to this account on accrual basis.
4. All Capital incomes and Expenditures are excluded.
5. Only current year's incomes and expenses are recorded. Amounts related to other periods are deducted. Amounts outstanding for the current year are added.
6. Profit on Sale of Asset is credited. Loss on Sale of Asset is debited. Annual Depreciation on Assets is also debited.
7. If income is more than expenditure, it is called a Surplus, and is added with Capital or General Fund etc. in the Balance Sheet.
8. If expenditure is more than income, it is a deficit, and is deducted from Capital or General Fund etc. in the Balance Sheet.

Income and Expenditure Account

Expenses	**Amount (₹)**	**Income**	**Amount (₹)**
Only revenue expenses		Only revenue receipts	
Only related to current period.		Only related to current period	
Shows either surplus		Or shows deficit	

Balance Sheet – It is prepared as on the last day of the accounting period. It also has assets and liabilities and prepared based on accounting equation. But, there's no capital account. Instead there is a capital fund. The surplus or deficit from Income & Expenditure Account is adjusted against this capital fund at the end of the year.

Difference between Receipts and Payments Account and Income and Expenditure Account

	Receipts & Payments Account	**Income & Expenditure Account**
1.	It is a summarised Cash Book	It closely resembles the Profit & Loss Account of a Trading concern.
2.	Receipts are debited and Payments are credited.	Incomes are credited and Expenditures are debited.
3.	Transactions are recorded on Cash basis.	Transactions are recorded on Accrual Basis
4.	Amounts related to previous period or future period may remain included. Outstanding amount for current year is excluded.	Transactions are recorded on accrual basis. All amounts not related to the current period are excluded. Outstanding amounts of current period are added.
5.	It records both Capital and Revenue transactions.	It records Revenue transactions only.

6.	It serves the purpose of a Real Account.	It serves the purpose of a Nominal Account.
7.	It starts with opening Cash and Bank Balances and ends with closing Cash and Bank Balances.	It does not record such balances,rather its final balance shows a surplus or a deficit for the period.
8.	It does not record notional loss or noncash expenses like bad debts, depreciations etc.	It considers all such expenses for matching against revenues
9.	Its closing balance is carried forward to the same account of the next accounting Period.	Its closing balance is transferred to Capital Fund or General Fund or Accumulated Fund in the same period's Balance Sheet.
10.	It helps to prepare an Income & Expenditure Account.	It helps to prepare a Balance Sheet.

Difference between Profit and Loss Account and Income and Expenditure Account

	Profit and Loss Account	**Income & Expenditure Account**
1.	It is prepared by business undertaking.	It is prepared by non-trading organizations.
2.	The credit balance of Profit and Loss Account is known as "net profit" and added to opening capital.	Credit balance of Income and Expenditure Account is known as excess of income over expenditure or surplus and added to opening capital fund.
3.	The debit balance of this Profit and Loss Account is known as "net loss" and deducted from opening capital.	Debit balance of this Income and Expenditure Account is known as "excess of expenditure over income' or deficit and deducted from opening capital fund.
4.	To check correctness of accounts trial balance is prepared before preparing this account.	To check correctness of accounts, receipts and payments account is prepared before preparing this account.

Fund Asset Accounting and its peculiarities:

Following are the concepts of some funds which are generally maintained by organizations:

(i) **Capital Fund :** It is also called "General Fund" or "Accumulated Fund." It is actually the Capital of a non-profit concern. It may be found out as the excess of assets over liabilities. Usually "Surplus" or "Deficit" during a period is added with or deducted from it. A portion of Capitalised incomes like donations may be added with it.

(ii) **Special Fund:** It may be created out of special donation or subscription or out of a portion of the "Surplus". For example a club may have a "Building Fund". It may be used for meeting some specific expenses or for acquiring an asset. If any income is derived out of investments made against this fund or if any profit or loss occurs due to sale of such investments, such income or profit or loss is transferred to this fund.

Other Treatments

(a) If the Special Fund is used to meet an expense

Special Fund A/c Dr.

To Bank A/c (amt. of expense)

The balance of the Fund is shown as a liability.

If the balance is transferred to Capital Fund, the entry will be—

Special Fund A/c Dr.

To Capital Fund A/c (Balance of Special Fund)

(b) If the Special Fund is used to purchase an asset

Asset A/c Dr.

To Bank A/c (Cost of the asset)

Special Fund A/c Dr.

To Capital Fund A/c (Special Fund closed)

(iii) Donations

(a) Donation received for a particular purpose should be credited to Special Fund. For example, Donation received for Building should be credited to Building Fund Account.

(b) For other donations received the by-laws or rules of the concern should be followed.

(c) If there is no such rule, donations received of non-recurring nature should be credited to Capital Fund. Recurring donations received should be credited to Income & Expenditure Account.

(d) Donation paid by the concern should be debited to Income & Expenditure Account.

(iv) Legacy received : It is to be directly added with Capital Fund after deduction of tax, (if any). It is a kind of donation received according to the will made by a deceased person.

(v) Entrance Fees or Admission Fees

(a) The rules or by-laws of the concern should be followed.

(b) If there is no such rule, Admission or Entrance Fees paid once by members for acquiring membership should be added with Capital Fund.

(c) If such fees are of small amounts covering the expenses of admission only, the fees may be credited to Income & Expenditure Account.

(vi) Subscriptions

(a) Annual subscriptions are credited to Income & Expenditure Account on accrual basis.

(b) Life membership subscription is usually credited to a separate account shown as a liability.

Annual Subscription apportioned out of that is credited to Income & Expenditure Account and deducted from the liability. Thus the balance is carried forward till the contribution by a member is fully exhausted. If any member dies before hand, the balance of his life Membership contribution is transferred to Capital Fund or General Fund.

Illustration 26.

Ujjwal Vavishwa Club was holding a building valuing ₹ 10 lakhs as on 31.03.2012.

Building Fund stands ₹ 8 lakhs and Cash at Bank is ₹ 15 lakhs as on 01.04.2012.

During the year 2012-13 donation received for the building fund is ₹ 20 lakhs.

Give the journal entries and the effect in the Balance Sheet as on 31.03.2013

If (i) It purchases building of ₹ 15 lakhs during 2012-13

(ii) It purchases building of ₹ 30 lakhs during 2012-13

Solution:

Journal entries

(₹ in Lakhs)

Date	Particulars	L.F	Debit	Credit
	Bank A/c Dr. To, Donation for Building Fund A/c (Donation received for Building Fund)		20	 20
	Building A/c Dr. To, Bank A/c (Building purchased utilizing the Building Fund)		15	 15
	Building Fund A/c Dr. To, Capital Fund A/c (Being the capital expenditure transferred to the Capital Fund)		15	 15

Balance Sheet as on 31.03.2013

Liabilities	Amount (₹)	Amount (₹ Lakh)	Assets	Amount (₹)	Amount (₹ Lakh)
Capital Fund			Building	10.00	
Add: Building	15.00		Add: Purchase of building	15.00	25.00
Fund (Amount Transferred)			Bank	15.00	
Building Fund	8.00		Add: Donation Received	20.00	
Add: Donation	20.00				
	28.00			35.00	
Less: Amount transferred to Capital Fund	15.00	13.00	Less: Purchase of Building	15.00	20.00

Journal entries

(₹ in Lakhs)

Date	Particulars	L.F	Debit	Credit
	Bank A/c Dr. To, Donation for Building Fund A/c (Donation received for Building Fund)		20	 20
	Building A/c Dr. To, Bank A/c (Building purchased utilizing the Building Fund)		30	 30
	Building Fund A/c Dr. To, Capital Fund A/c (Being the capital expenditure transferred to the Capital Fund)		28	 28

Balance Sheet as on 31.03.2013

Liabilities	Amount (₹ Lakh)	Amount (₹ Lakh)	Assets	Amount (₹ Lakh)	Amount (₹ Lakh)
Capital Fund			Building	10.00	
Add: Building	28.00		Add: Purchase of building	30.00	40.00
Fund (Amount Transferred)			Bank	15.00	
Building Fund	8.00		Add: Donation Received	20.00	
Add: Donation	20.00			35.00	
	28.00		Less: Purchase of Building	30.00	5.00
Less: Amount transferred to Capital Fund	28.00	NIL			

Illustration 27.

On 31st December 2012, a club had subscription in arrears of ₹16,000 and in advance ₹4,000. During the year ended 31-12-2013, the club received subscription of ₹2,08,000 of which ₹10,400 was related to 2014. On 31st December 2013, there were 4 members who had not paid subscription for 2013 @ ₹1,600 per person. Write up subscription Account for the year 2013.

Solution:

A single subscription account should be prepared to reflect both advance and arrears figures. The balancing figure will reflect the subscription amount that will be recognised as Income and transferred to I & E A/c as shown below:

Dr. **Subscription Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Balance c/d (arrears)	16,000	By, Balance c/d (advance)	4,000
To, I & E A/c (income for 2013)	1,92,000	By, R & P A/c (received)	2,08,000
(Balance in figure)		By, Balance c/d (arrears)	6,400
To, Balance c/d (advance)	10,400		
	2,18.400		2,18,400

Illustration 28.

The sports club of Orissa had received in 2012-2013 ₹ 2,000 towards subscription. Subscription for 2011-12 unpaid on 1.4.2012 were ₹ 200.

Subscriptions paid in advance on 31.3.2012 were ₹ 50 and the same on 31.3.2013 was ₹ 40. Subscriptions for 2012-2013 unpaid on 31.3.2013 were ₹ 90.

Show how the subscriptions item will appear in the Income and Expenditure Account.

Solution:

Particulars	Amount (₹)
Subscriptions received during the year 2012-2013	2,000
Add : Subscription outstanding on 31.3.2013	90
	2,090
Less : Subscription outstanding on 1.4.2012	200
	1,890
Add : Subscription paid in advance on 31.3.2012	50
	1,940
Less : Subscription received in advance on 31.3.2013	40
Subscription Income for 2012-2013	1,900

Illustration 29.

The amount of Subscription appears in the Income and Expenditure Account of South Indian Club is ₹ 3,000.

Adjustments were made in respect of the following:

Subscription for 2012 unpaid at 1st Jan., 2013, ₹ 400; ₹ 200 of which was received in 2013.

Subscription paid in advance at 1.1.2013 ₹ 100.

Subscription paid in advance at 31.12.2013 ₹ 80.

Subscription for 2012 unpaid at 31.12.2013 ₹ 140.

Prepare Subscription Account.

Solution:

Dr. **Subscription Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Balance b/d	400	By, Balance b/d	100
To, Income & Expenditure A/c	3,000	By, Cash Received (bal fig)	3,040
To, Balance (paid in advance to 2013)	80	By, Balance (200+140) c/d	340
	3,480		3,480
To, Balance b/d:		By, Balance b/d (2013)	80
For 2012	200		
For 2013	140		

Note: Opening outstanding subscription = ₹ 400 of which ₹ 200 received in 2013.

Illustration 30.

From the following information, prepare the Subscription Account for the year ending on March, 31, 2013

(i) Subscription in arrears on 31.03.2012 ₹ 1,500

(ii) Subscription received in advance on 31.03.2012 ₹ 1,000

(iii) Amount of Subscription received during 2012-13 ₹ 40,000, which includes ₹1,000 for the year 2011-12, ₹ 1,500 for the year 2013-14.

(iv) Subscription outstanding ₹ 1,000.

Solution:

Dr. **Subscription Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Balance b/d	1,500	By, Balance b/d	1,000
To, Income & Expenditure A/c	39,500	By, Bank A/c	40,000
		By, Balance c/d	
		For 2011-12	500
To, Balance c/d		For 2012-13	1,000
For 2013-14	1,500		
	42,500		42,500

Restaurant Trading and Bar Trading

Some clubs have Restaurant and Bar facilities for members and outsiders. Under the circumstances, Restaurant Trading or Bar Trading Account is opened to ascertain the Restaurant or Bar profit, it is just like Trading Account which is opened in case of a trading concern. The Restaurant or Bar profit so ascertained from Restaurant Trading or Bar Trading is transferred to the Income and Expenditure Account as we generally transfer the Gross Profit from Trading Account to Profit and Loss Account in case of Trading concern. Hence, the method of preparing a Restaurant or Bar Trading Account is just like the method of preparing a Trading Account.

Illustration 31.

The following summary of the Cash Book has been prepared by the treasurer of a club:

Receipts	Amount (₹)	Payment	Amount (₹)
To Balance b/d	4,740	By Wages – outdoor staff	13,380
`` Subscriptions	29,720	`` Restaurant Purchase	50,400
`` Entrance Fees	3,200	`` Rent – 18 months' to July 30, 2013	7,500
`` Restaurant Receipts	56,800	`` Rates	2,700
`` Games & Competition Receipts	13,720	`` Secretary's Salary	3,120
		`` Lighting	7,200
		`` Competition Prizes	4,000
		`` Printing & Postage etc.	6,000
		``Placed in Fixed Deposit	8,000
		`` Balance c/d	5,880
	1,08,180		**1,08,180**

On April 1, 2012 the club's assets were:- Furniture ₹ 48,000, Restaurant stock ₹ 2,600; Stock of prizes ₹ 800; ₹ 5,200 was owing for supplies to the restaurant.

On March, 31, 2013, the Restaurant stocks were ₹ 3,000 and prizes in hand were ₹ 500, while the club owed ₹ 5,600 for restaurant supplies.

It was also found that subscriptions unpaid at March 31, 2013, amounted to ₹ 1,000 and that the figure of ₹ 29,720 shown in the Cash Book included ₹ 700 in respect of previous year and ₹ 400 paid in advance for the following year. Outstanding petty expenses ₹ 80.

Prepare an account showing the Profit or Loss made on the Restaurant and a General Income and Expenditure Account for the year ended 31.3.2013, together with a Balance Sheet as at that date, after writing Depreciation 10% off the Furniture.

Solution:

Restaurant Trading Account
For the year ended 31st March, 2013

Dr. **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To Opening Stock A/c		2,600	By Restaurant Receipts A/c		56,800
``Purchases A/c	50,400		`` Closing Stock A/c		3,000
``Add: Outstanding for 31.3.13	5,600				
	56,000				
``Less: Outstanding for 01.04.12	5,200				
		50,800			
``Income & Expenditure A/c (Surplus transferred)		6,400			
		59,800			**59,800**

Balance Sheet
As at 1st April, 2012

Liabilities	Amount (₹)	Assets	Amount (₹)
Accumulated Fund: (bal. fig.)	50,390	Furniture and Equipment	48,000
Owing for supplies to Restaurant	5,200	Restaurant Stock	2,600
Outstanding Rent (Jan. to March 2011)	1,250	Stock of Prize	800
		Outstanding Subscriptions	700
		Cash and Bank	4,740
	56,840		**56,840**

Income and Expenditure Account
For the year ended 31st March, 2013

Dr. **Cr.**

Expenditure	Amount (₹)	Amount (₹)	Income	Amount (₹)	Amount (₹)
To Wages A/c		13,380	By Subscription : Subscription already received	29,720	
" Rent A/c	7,500		Less: Outstanding for 1.4.12	700	
Less: Outstanding on 1.4.2012	1,250			29,020	
	6,250		Add: Outstanding for 2013	1,000	
Less: Prepaid for 3 months (7,500 x 3/18)	1,250	5,000		30,020	
" Rates A/c		2,700	Less: Received in advance	400	29,620
" Secretary's Salary A/c		3,120	" Games Competition Receipts		13,720
" Lighting, Cleaning, Services		7,200	" Restaurant Trading – Gross Profit		6,400
" Outstanding Petty Expenses		80			
" Competition Prize A/c	4,000				
" Add: Opening Stock	800				
	4,800				
" Less: Closing Stock	500	4,300			
" Printing, Postage and Sundries		6,000			
" Dep. on Furniture and Equipment @ 10%		4,800			
" Surplus – Excess of income over expenditure		3,160			
		49,740			**49,740**

Balance Sheet
As at 31st March, 2013

Liabilities	**Amount (₹)**	**Amount (₹)**	**Assets**	**Amount (₹)**	**Amount (₹)**
Accumulated Fund:			Furniture and Equipment	48,000	
Balance on 1.4.2012	50,390		Less: Depreciation	4,800	43,200
Add: Surplus	3,160	53,550	Restaurant Stock		3,000
Entrance fees		3,200	Stock of Prize		500
Subscription received in advance		400	Outstanding Subscriptions		1,000
Owing for supplies to Restaurant		5,600	Prepaid Rent		1,250
Outstanding Petty Expenses		80	Fixed Deposit with Bank		8,000
			Cash and Bank		5,880
		62,830			62,830

Illustration 32.

'Citizen Club' was registered in a city and the accountant prepared the following Receipts and Payments Account for the year ended Dec. 31, 2013 and showed a deficit of ₹ 14,520 :

		(₹)	(₹)
Receipts :	Subscriptions	62,130	
	Fare Receipts	7,200	
	Variety Show Receipts (net)	12,810	
	Interest	690	
	Bar Collection	22,350	
	Cash spent more	1,000	1,06,180
Payments :	Premises	30,000	
	Honorarium to Secretary	12,000	
	Rent	2,400	
	Rates and Taxes	3,780	
	Printing and Stationery	1,410	
	Sundry Expenses	5,350	
	Wages	2,520	
	Fair Expenses	7,170	
	Bar Purchase- payments	17,310	
	Repairs	960	
	New Car (less proceeds of old car ₹ 9,000)	37,800	
			1,20,700
	Deficit		14,520

The additional information should be obtained:

	1.1.2013 (₹)	31.12.2013 (₹)
Cash in hand	450	–
Bank balance as per Pass Book	24,690	10,440
Cheques issued not presented for Sundry Expenses	270	90
Subscriptions due	3,600	2,940
Premises at Cost	87,000	1,17,000
Accumulated dep. on Premises	56,400	–
Car at Cost	36,570	46,800
Accumulated dep. on Car	30,870	–
Bar Stock	2,130	2,610
Creditors for Bar Purchases	1,770	1,290

Cash overspent represents honorarium to secretary not withdrawn due to Cash deficit. His annual honorarium is ₹ 12,000. Depreciation on premises and car is to be provided at 5% and 20% on written-down value.

You are required to prepare the correct Receipts and Payments Account, Income and Expenditure Account and Balance Sheet as at Dec. 31, 2013.

Solution:

In the Books of Citizen Club
Receipts and Payments Accounts
for the year ended 31st December, 2013

Dr. **Cr.**

Receipts	Amount (₹)	Payment	Amount (₹)
To Balance b/d – Cash in hand	450	By, Premises	30,000
" Bank (24,690 – 270)	24,420	" Honorarium to Secretary	11,000
" Subscription	62,130	" Rent	2,400
" Fair Receipts	7,200	" Rates and Taxes	3,780
" Variety Show Receipts	12,810	" Printing and Stationery	1,410
" Interest	690	" Sundry Expenses	5,350
" Bar Receipts	22,350	" Wages	2,520
		" Fair Expenses	7,170
		" Bar Purchases	17,310
		" Repairs	960
		" New Car	37,800
		" Bank Balance (10,440 – 90)	10,350
	1,30,050		1,30,050

Income and Expenditure Accounts
for the year ended 31st December, 2013

Dr. **Cr.**

Expenditure	Amount (₹)	Amount (₹)	Income	Amount (₹)	Amount (₹)
To Honorarium to Secretary	11,000		By, Subscriptions	62,130	
Add: Outstanding	1,000	12,000	*Add:* Outstanding for 2013	2,940	
" Rent		2,400		65,070	
" Rates and Taxes		3,780	*Less:* Outstanding for 2012	3,600	61,470
" Printing and Stationery		1,410	" Fair receipts		7,200
" Sundry Expenses		5,350	" Variety show receipts		12,810
" Wages		2,520	" Interest		690
" Fair Expenses		7,170	" Profit on sale of old car [(₹ 9,000 - (36,570 - 30,870)]		3,300
" Repairs		960	" Profit on Bar Trading		6,000
" Depreciation on:					
Premises@ 5% on 60,600		3,030			
Car @20% on 46,800		9,360			
" Surplus—Excess of Income over Expenditure		43,490			
		91,470			91,470

Balance Sheet
as at 31st December, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Fund as on 1.1.13	65,130		Premises at Cost	1,17,000	
Add: Surplus	43,490	1,08,620	*Less:* Depreciation	59,430	57,570
Creditors (for bar purchase)		1,290	Car at Cost	46,800	
Secretary's honorarium			*Less:* Depreciation	9,360	37,440
outstanding		1,000	Bar Stock		2,610
			Outstanding Subscription		2,940
			Cash at bank		10,350
		1,10,910			1,10,910

Balance Sheet
As at 1st January, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Fund (bal. in figure)		65,130	Premises at Cost	87,000	
Creditors (for bar purchase)		1,770	Less: Depreciation	56,400	30,600
			Car at Cost	36,570	
			Less: Depreciation	30,870	5,700
			Bar Stock		2,130
			Outstanding Subscription		3,600
			Cash at Bank		24,420
			Cash in Hand		450
		66,900			66,900

Bar Trading Account for the year ended 31.12.2013

Dr. **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)
To Opening Stock		2,130	By Bar Receipts	22,350
To Bar Purchase	17,310		By Closing Stock	2,610
Add: Closing creditors for bar purchase	1,290			
	18,600			
Less: Opening creditors for purchase	1,770	16,830		
To Income and Expenditure A/c				
(Gross profit Transferred)		6,000		
		24,960		24,960

Calculation of Depreciation of Premises

W.D.V.	₹
Cost price	87,000
Less: Accumulated Depreciation	56,400
	30,600
Add: Purchase	30,000
	60,600

Depreciation of Premises: 60,600 x 50% = 3,030.

Illustration 33.

The following information was obtained from the books of Young Bengal Club as on 31-03-2013 at the end of first year of the club. Prepare the Receipt & Payment Account, Income & Expenditure Account and Balance sheet of the club

(1) Donations received for building & books - ₹ 2,00,000

(2) Other revenue incomes and receipts were:

	Rev. Income (₹)	**Actual Receipts (₹)**
Entrance fees	17,000	17,000
Subscription	20,000	19,000
Locker rent	600	600
Sundry Income	1,600	1,060
Refreshment account	Nil	16,000

(3) Other revenue expenditure and actual payments were

	Rev. Exp (₹)	**Actual Payment (₹)**
Land (cost ₹10,000)	Nil	10,000
Furniture (cost ₹ 146,000)	Nil	130,000
Salaries	5,000	4,800
Maintenance of play ground	2,000	1,000
Rent	8,000	8,000
Refreshment account	Nil	8,000

Donations were utilized to the extent of ₹25,000 for buying books, balance were unutilized. In order to keep it safe, 9% Govt. Securities were purchased on 31-3-2013 for ₹1,60,000. Remaining amount was put in bank as term deposit on 31-3-2013. Depreciate Furniture and books @ 10% for the whole year.

Solution:

Dr. **Receipt and Payments for the year ended 31-12-2013** **Cr.**

Receipts	Amount (₹)	Payments	Amount (₹)
To Donations	2,00,000	By Library books	25,000
To Entrance fees	17,000	By Land	10,000
To Subscription	19,000	By Furniture	1,30,000
To Locker Rent	600	By Salaries	4,800
To Sundry income	1,060	By Maintenance	1,000
To Refreshment	16,000	By Rent	8,000
		By Refreshment	8,000
To Balance c/d (Overdraft)	1,08,140	By 9% Govt. Bonds	1,60,000
		By Term deposits	15,000
	361,800		3,61,800

Dr. **Income & Expenditure Account for the year ended 31-12-2013** **Cr.**

Expenditure	Amount (₹)	Income	Amount (₹)
To Salary	5,000	By Entrance fees	17,000
To Maintenance of ground	2,000	By Subscriptions	20,000
To Rent	8,000	By Locker rent	600
To Depreciation on furniture	14,600	By Sundry Income	1,600
To Depreciation on books	2,500	By Profit on Refreshment	8,000
To Surplus	15,100		
	47,200		47,200

Balance Sheet as on 31-12-2013

Liabilities	Amount (₹)	Assets	Amount (₹)
Capital Fund	---	Land	10,000
Surplus	15,100	Library Books	22,500
Creditors for Furniture	16,000	(25,000 – 2,500)	
Outstanding Salaries	200	Furniture (1,46,000 – 14,600)	1,31,400
Outstanding for Maintenance Play		9% Govt. Bonds	
ground	1,000	Term Deposit	1,60,000
Bank Overdraft	1,08,140	Subscription Receivable	15,000
Donations	15,100	Sundry Income Accrued	1,000
			540
	3,40,440		3,40,440

Workings:

(1)

Dr. **Refreshment Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Refreshment A/c	8,000	By, Refreshment A/c	16,000
To, Income and			
Expenditure A/c	8,000		
	16,000		16,000

(2) Calculation of Term Deposit:

Donation Recd – (library books purchased + 9% Govt. Securities)

= 2,00,000 – (25,000 + 1,60,000)

= 2,00,000 – 1,85,000

= 15,000

Illustration 34.

Following is the Receipt and Payment A/c of a club for the year ended 31-03-2013

Dr. **Receipt and Payments for the year ended 31-03-2013** **Cr.**

Receipts	Amount (₹)	Payments	Amount (₹)
Opening balance:		Administrative expenses	1,25,000
Cash	3,000	Programme expenses	2,75,000
Bank	7,000	F.D. with bank	1,25,000
Membership fees received:		Investment in bonds	3,00,000
up to 31-03-2012	14,000	Fixed assets purchased	80,000
for 2012-13	1,50,000		
for 2013-14	16,000		
Advertisements	5,00,000		
F.D. with bank	75,000		
Interest on savings Account	700		
Interest on F.D	22,000	Closing balance:	
		Cash	2,700
Investment matured		Bank	5,000
(cost 80,000 & interest 8,000)	1,00,000		
	9,12,700		9,12,700

The club informs you that:

(a) Membership fee for 2012-13 due is ₹25,000; it includes ₹1,000 from a member who has not yet paid for 2011-12 as well. A provision needs to be done on this.

(b) Income receivable on 31-03-2013 on ICICI bond is ₹30,000 and on Govt. Securities is ₹24,000

(c) Prepaid expenses on 31-3-2013 amounts to ₹7,000

(d) Outstanding expenses as on 31-3-2013 ₹8,000

(e) Depreciation to be provided is ₹12,500

(f) Programme is an annual feature.

The balance sheet as on 31-3-2013 is also provided as below:

Balance Sheet as on 31-03-2013

Liabilities	Amount (₹)	Assets	Amount (₹)
Trust fund	5,00,000	Cash	3,000
Accumulated surplus	1,05,000	Bank Savings Account	7,000
Subscriptions in advance	10,000	Fixed Deposit	2,00,000
Outstanding Expenses	10,000	Govt. Securities	3,00,000
		Fixed Assets	95,000
		Subscription receivable	15,000
		Prepaid expenses	5,000
	6,25,000		6,25,000

Prepare Income and Expenditure Account and the closing balance sheet for the year 2012-13.

Solution:

Dr. Subscription Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Opening receivable	15,000	By, Opening advance received	10,000
To, I & E A/c	1,85,000	By, Received during year	1,80,000
(balancing figure)		By, Closing receivable :	
To, Closing advance received	16,000	for 2011-12	1,000
		for 2012-13	25,000
	2,16,000		2,16,000

Dr. Expenses Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Opening prepaid	5,000	By, Opening outstanding	10,000
To, Bank	1,25,000	By, I & E A/c (balancing figure)	1,21,000
To, Closing outstanding	8,000	By, Closing prepaid	7,000
	1,38,000		1,38,000

Dr. Provision for doubtful subscriptions Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
For 2011-12	1,000	By Balance c/d	2,000
For 2012-13	1,000		
	2,000		**2,000**

Dr. Income & Expenditure Account for the year ended 31-03-2013 Cr.

Expenditure	Amount (₹)	Income	Amount (₹)
To, Administrative expenses	1,21,000	By, Subscriptions	1,85,000
To, Depreciation on assets	12,500	By, Interest income	84,700
To, Provision on subscriptions	2,000	By, Surplus from programme	2,50,000
		By, Profit on sale of investment	12,000
To Surplus	3,96,200		
	5,31,700		5,31,700

Balance Sheet as on 31-03-2013

Liabilities	Amount (₹)	Assets	Amount (₹)
Trust fund	5,00,000	Cash	2,700
Accumulated surplus	1,05,000	Bank saving Account	5,000
Surplus for 2012-13	3,96,200	Fixed deposit (2,00,000+1,25,000-75,000)	2,50,000
Outstanding expenses	8,000	Govt. Securities (3,00,000 - 80,000)	2,20,000
Subscription in advance	16,000	ICICI bonds	3,00,000
		Interest receivable on:	
		Govt. securities	24,000
		ICICI Bonds	30,000
		Subscription (26,000 - 2,000)	24,000
		Prepaid Expenses	7,000
		Fixed assets (1,75,000- 12,500)	1,62,500
	10,25,200		10,25,200

Profit on disposal of Investment	₹
Amount received	1,00,000
Less: Interest	8,000
Net received	92,000
Cost of disposed investment	80,000
Profit on disposal	12,000

Illustration 35.

Prepare the Balance Sheet of Ocean Blue club based on following information: ₹

Furniture (before depreciation)	8,000	Outstanding consultancy	1,000
Depreciation on furniture	800	Allowances outstanding	800
Building fund	30,000	Capital Grants	10,000
Income from building fund	2,000	Entrance fees (50% be funded)	4,000
Fixed deposits	20,000	Legacies received(funded)	8,000
Opening General fund	10,000	Prize fund	10,000
Excess of income over expenditure	20,000	Income of prize fund	1,000
Opening balance of capital fund	60,000	Expenses of prize fund	800
Cost of swimming pool	40,000	Investment of prize fund	10,000
Equipments	20,000	Balance in current Account	10,000
Investment of general fund	36,000	Cash in hand	800
Subscription outstanding	10,000		

Solution:

Balance Sheet as on 31-03-2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Fund			**Fixed Assets:**		
Op balance	60,000		Swimming Pool		40,000
Add: Capital grants	10,000		Equipments		20,000
Add: Legacies	8,000		Furniture	8,000	
Add: Entrance fees (50%)	2,000	80,000	Less: Depreciation	800	7,200
General Fund			**Investment**		
Op balance	10,000		General fund	36,000	
Surplus	20,000	30,000	Prize fund	10,000	46,000
Building Fund			**Receivables**		
Op balance	30,000		Subscription		10,000
Add: Income	2,000	32,000	**Cash & bank**		
Prize Fund			Cash in hand	800	
Op balance	10,000		Current Account	10,000	
Add: Income	1,000		Fixed deposit	20,000	30,800
Less: Expenses	800	10,200			
Allowances Outstanding		800			
Consultancy Outstanding		1,000			
		1,54,000			1,54,000

Preparation of opening and closing Balance Sheet from a given Receipt and Payment account and Income and Expenditure account

A. While preparing opening Balance Sheet

(a) At fi rst, take the opening balance of Cash and Bank which are given in the Receipts and Payments Account as “Balance b/d”. The same will appear in the assets side of the opening Balance Sheet.

(b) All the opening assets will appear in the assets sides of the opening Balance Sheet which are given as adjustments. Similarly, all the opening liabilities will also appear in the liabilities side of the opening Balance Sheet.

(c) Ascertain the difference between the assets sides and the liabilities sides of the opening Balance Sheet which will be treated as “Capital Fund”.

B. While preparing closing Balance Sheet

(a) At first take the closing balance of cash and bank balance which are given in the4 Receipts and Payments Account as “Balance c/d”. The same will appear in the assets sides of the closing Balance Sheet.

(b) All the opening fi xed assets which have appeared in the asset sides of the opening Balance Sheet will also appear in the closing Balance sheet after charging depreciation (if not sold or lost). Including additions, if any.

(c) All the closing current liabilities including capital fund, surplus or defi cit (which are get from Income and Expenditure Account), other funds like, donation, Entrance fees etc will also appear in the liabilities sides of the closing Balance Sheet.

(d) Now, each individual item of Receipts and Payments Account should be compared with each individual item of Income and Expenditure Account and the same is to be adjusted accordingly.

Illustration 36.

The following particulars related to Fast Sports Club:

Income and Expenditure Account

Dr. For the year ended 31st December 2013 Cr.

Expenditure	Amount (₹)	Income	Amount (₹)
To Salaries	12,000	By Admission Fees	30,000
`` Printing & Stationery	5,500	`` Subscriptions	50,000
`` Advertising	2,000	`` Rent Receipts	9,600
`` Insurance Charges	1,800		
`` Electricity	1,000		
`` Dep. on Sports Equipments	24,000		
`` Surplus	43,800		
	89,600		**89,600**

Receipts and Payments Account

Dr. **For the year ended 31st December 2013** **Cr.**

Receipts	**Amount (₹)**	**Amount (₹)**	**Payments**	**Amount (₹)**	**Amount (₹)**
To, Balance b/d		10,000	By, Salary (including Adv.)		15,000
`` Admission Fees-			`` Printing & Stationery		5,000
2012	5,000		`` Advertising		2,000
2013	27,000	32,000	`` Insurance		
`` Subscription			(partly for next year)		2,400
2012	2,000		`` Electricity		1,000
2013	46,000		`` Fixed Asset Purchased		40,000
2014	4,000	52,000	`` Balance c/d		35,800
`` Rent		7,200			
		1,01,200			**1,01,200**

On 1.1.2013 the Club had the following assets:

Land and Building ₹1,20,000; Sports Equipment ₹ 60,000; Furniture ₹ 9,000. Prepare opening and closing Balance Sheet.

Solution:

Fast Sports Club
Balance Sheet as at 31st December, 2012

Liabilities	**Amount (₹)**	**Assets**	**Amount (₹)**
Capital Fund	2,06,000	Land and Building	1,20,000
(bal. fig.)		Sports Equipment	60,000
		Furniture	9,000
		Adm. Fee Receivable	5,000
		Outstanding Subs.	2,000
		Cash and Bank	10,000
	2,06,000		**2,06,000**

Balance Sheet as at 31st December, 2013

Liabilities	**Amount (₹)**	**Amount (₹)**	**Assets**	**Amount (₹)**	**Amount (₹)**
Capital Fund	2,06,000		Land and Building		1,20,000
Add: Surplus	43,800	2,49,800	Sports Equipment	60,000	
Subscription Received in Advance		4,000	Less: Depreciation	24,000	36,000
			Furniture		9,000
			Fixed Assets (other)		40,000
			Prepaid Insurance		600
			Prepaid Salary		3,000
			Rent Receivable		2,400
			Outstanding Subs.		4,000
			Outstanding Adm. Fee		3,000
			Cash and Bank		35,800
		2,53,800			**2,53,800**

Illustration 37.

The following are the items of Receipts and Payments of the Bengal Club as summarized from the books of account maintained by the Secretary:

Receipts		Amount (₹)	Payments	Amount (₹)
Opening Balance	1.1.2013	4,200	Manager's Salary	1,000
Entrance Fees	2012	1,000	Printing and Stationery	2,600
Do	2013	10,000	Advertising	1,800
Subscriptions	2012	600	Fire Insurance	1,200
Do	2013	15,000	Investments Purchased	20,000
Interest Received on Investments		3,000	Closing Balance 31.12.2013	7,600
Subscriptions	2014	400		
		34,200		**34,200**

It was ascertained from enquiry that the following represented a fair picture of the Income and Expenditure of the Club for the year 2013 for audit purpose:

Expenditure	Amount (₹)	Amount (₹)	Income	Amount (₹)
Manager's Salary		1,500	Entrance Fees	10,500
Printing & Stationery	2,000		Subscription	15,600
Add: Accrued	400	2,400	Interest on Investments	4,000
Advertising (accrued Nil)		1,600		
Audit Fees		500		
Fire Insurance		1,000		
Depreciation		4,940		
Excess of Income over Expenditure		18,160		
		30,100		**30,100**

You are required to prepare the Balance Sheet of the Club as on 31.12.2012 and 31.12.2013, it being given that the values of the Fixed Assets as on 31.12.2012 were: Building ₹ 44,000, Cricket Equipment ₹ 25,000 and Furniture ₹ 4,000. The rates of depreciation are Building 5%, Cricket Equipments 10%, Furniture 6%.

Your are entitled to make assumptions as may be justified.

Solution:

In the books of
Bengal Club

Balance Sheet as at 31st December, 2012

Liabilities	Amount (₹)	Assets	Amount (₹)
Outstanding Liabilities:		Building	44,000
Advertisement (1,800 – 1,600)	200	Furniture	4,000
Printing and Stationery (2,600 – 2,000)	600	Cricket Equipment	25,000
Capital Fund	78,000	Entrance Fees in arrear	1,000
(Balancing figure)		Subscription in arrear	600
		Cash	4,200
	78,800		**78,800**

Balance Sheet as at 31st December, 2013

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Fund:			Building	44,000	
Balance on 1.1.2013	78,000		Less: Depreciation 5%	2,200	41,800
Add: Excess of Income					
over Expenditure	18,160	96,160	Furniture	4,000	
Subscription Received in Advance		400	Less: Depreciation 6%	240	3,760
Outstanding Liabilities:					
Printing and Stationery		400	Cricket Equipment	25,000	
Manager's Salary:			Less: Depreciation 10%	2,500	22,500
(1,500 – 1,000)		500	Investments		20,000
Audit Fees		500	Subscriptions in arrear (15,600 – 15,000)		600
			Entrance Fees in arrear (10,500 – 10,000)		500
			Accrued Interest on Investments (4,000 – 3,000)		1,000
			Prepaid Insurance (1,200 – 1,000)		200
			Cash		7,600
		97,960			**97,960**

Note: Advertisement expenses and Printing and Stationery which were paid in excess over Income and Expenditure A/c are assumed to be outstanding for the previous year.

Preparation of Receipts and Payments Account from a given Income and Expenditure Account and a Balance Sheet

Receipts and Payments Account is a summary of Cash Book. If both Income and Expenditure Account and the Opening Balance Sheet are given, we are to consider each and individual items, one by one. Consider the following illustration:

Illustration 38.

The Income and Expenditure Account of Salt Lake Club is:

Income and Expenditure Account
For the year ended 31st December, 2012

Dr. **Cr.**

Expenditure	Amount ₹	Income	Amount ₹
To Salaries	1,750	By subscriptions	2,000
,, General Expenses	500	,, Donations	1,050
,, Depreciation	300		
,, Surplus	500		
	3,050		3,050

Adjustments:

(i) Subscriptions for 2012 unpaid at 1st January, 2013, ₹200; ₹180 of which was received in 2013.

(ii) Subscriptions paid in advance at 1.1.2013 ₹50.

(iii) Subscriptions paid in advance at 31.12.2013 ₹40

(iv) Subscriptions for 2013 unpaid at 31.12.2013 ₹70

(v) Sundry assets at the beginning of the period ₹2,600, Sundry assets after depreciation ₹2,700 at the end of the period.

(vi) Cash balance at 1st January, 2013 ₹160.

Prepare a Receipts and Payments Account.

Solution:

In the books of Salt Lake Club

Receipts and Payments Account for the year ended 31st December, 2013

Receipts	Amount ₹	Payments	Amount ₹
To Balance b/d	160	By Salaries	1,750
,, Donations	1,050	,, General Expenses	500
,, Subscriptions	2,100	,, Sundry Assets	400
		,, Balance c/d	660
	3,310		3,310

Workings:

Sundry Assets Account

Dr. **Cr.**

Particulars	Amount ₹	Particulars	Amount ₹
To Balance b/d	2,600	By Depreciation	300
,, Bank Purchase (bal. fig.)	400	,, Balance c/d	2,700
	3,000		3,000

Subscription Account

Dr. **Cr.**

Particulars	Amount ₹	Particulars	Amount ₹
To Balance b/d	200	By Balance b/d	50
,, Income & Expenditure	2,000	,, Cash Received (bal. fig.)	2,100
,, Balance (Paid in advance for 2013) c/d	40	,, Balance (unpaid) c/d	
		-2013	70
		- 2012	20
	2,240		2,240
To Balance b/d		By Balance b/d	40
For 2012	20		
For 2013	70		

Illustration 39.

You are given:

(i) Income and Expenditure Account;

(ii) Opening Balance Sheet;

(iii) Closing Balance Sheet relating to the year 2013.

(i) **Income and Expenditure Account**

Dr. **Cr.**

Expenditure	Amount (₹)	Amount (₹)	Income	Amount (₹)
To Salaries	1,100		By Subscriptions	800
Add: Outstanding	100		`` Medical Fees	1,400
		1,200		
`` Insurance	150			
Less: Prepaid	13			
		137		
`` Medicines		600		
`` Surplus		263		
		2,200		**2,200**

(ii) **Opening Balance Sheet**

Liabilities	Amount (₹)	Assets	Amount (₹)
Capital Fund	4,050	Medical Equipment	3,250
Outstanding Salary	100	Furniture	500
		Cash	300
		Outstanding Subscriptions	100
	4,150		**4,150**

(iii) **Closing Balance Sheet**

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Capital Fund:	4,050		Medical Equipment	3,250	
Add: Surplus	263		Additions	500	
		4,313			3,750
Donations		550	Investments		500
Outstanding Salary		100	Furniture		500
			Prepaid Insurance		13
Subscription Received in Advance		50	Cash		250
		5,013			**5,013**

Prepare from the above information the Receipts and Payments Account for 2013.

Solution:

Dr. **Receipts and Payments Accounts** **Cr.**

Receipts	Amount (₹)	Payments	Amount (₹)
To, Balance b/d	300	By, Salaries (1,200 + 100 – 100)	1,200
`` Subscription (800 + 100 + 50)	950	`` Insurance (137 + 13)	150
`` Medical Fees	1,400	`` Medicines	600
`` Donations	550	`` Medical Equipment	500
		`` Investment	500
		`` Balance c/d	250
	3,200		**3,200**

4.5 PREPARATION OF FINANCIAL STATEMENT UNDER SINGLE ENTRY SYSTEM INCLUDING CONVERSION OF SINGLE ENTRY INTO DOUBLE ENTRY SYSTEM

Introduction

Many times small business organizations do not maintain a comprehensive accounting system which is based on the double entry principle. The businessman is usually happy with the minimum information like the balances of cash and bank accounts and whether he has made a profit or loss. These people maintain rough or sketchy records that serve a limited purpose. Because, the principle of double entry is not followed, it is often referred to as a 'single entry system'. Such system maintains only personal accounts and cash book. Expenses and incomes are reflected in the cash book, whereas personal accounts reflect the debtors' and creditors' position. This system usually follows the principle of 'cash basis accounting' and hence no accrual or non-cash entries are passed. For example, entries like depreciation, provision for expenses, accrued incomes have no place under such system.

Features of Single Entry System:

Single Entry System has the following features.

(a) Maintenance of books by a sole trader or partnership firm: The books which are maintained according to this system can be kept only by a sole trader or by a partnership firm.

(b) Maintenance of cash book: In this system it is very often to keep one cash book which mixes up business as well as private transactions.

(c) Only personal accounts are kept: In this system, it is very common to keep only personal accounts and to avoid real and nominal accounts. Therefore, sometimes, this is precisely defined as a system where only personal accounts are kept.

(d) Collection of information from original documents: For information one has to depend on original vouchers, example, in the case of credit sales, the proprietor may keep the invoice without recording it anywhere and at the end of the year the total of the invoices gives an idea of total credit sales of the business.

(e) Lack of uniformity: It lacks uniformity as it is a mere adjustment of double entry system according to the convenience of the person.

(f) Difficulty in preparation of final accounts: It is much difficult to prepare trading, profit and loss account and balance sheet due to the absence of nominal and real accounts in the ledger.

Difference between single entry system and double entry system:

The distinctions between double entry system and single entry system are as follows:

(i) In double entry system both the aspects (debit and credit) of all the transactions are recorded. But in single entry system, there is no record of some transactions, some transactions are recorded only in one of their aspects whereas some other transactions are recorded in both of their aspects.

(ii) Under double entry system, various subsidiary books such as sales book, purchases book etc are maintained. Under single entry system, no such subsidiary books except cash book which is also considered as a part of ledger is maintained.

(iii) In the case of double entry system, there is a ledger which contains personal, real and nominal accounts. But in single entry system, the ledger contains some personal accounts only.

(iv) Under double entry system, preparation of trial balance is possible whereas it is not possible to prepare a trial balance in single entry system. Hence accuracy of work is uncertain.

(v) Under double entry system, Trading A/c, Profit & Loss A/c and the Balance Sheet are prepared in a scientific manner. But under single entry system, it is not possible – only a rough estimate of profit or loss is made and a Statement of Affairs is prepared which resembles a balance sheet in appearance but which does not present an accurate picture of the financial position of the business.

Benefits of single entry system

(a) It's quick and easy to maintain.

(b) One doesn't require employing a qualified accountant.

(c) This is extremely useful for business run by individuals where the volume of activity is not large,

(d) It is economical as it does not need a comprehensive record keeping.

Weaknesses of single entry system

(a) As principle of double entry is not followed, the trial balance cannot be prepared. As such, arithmetical accuracy cannot be guaranteed.

(b) Profit or loss can be found out only by estimates as nominal accounts are not maintained.

(c) It is not possible to make a balance sheet in absence of real accounts.

(d) It is very difficult to detect frauds or errors.

(e) Valuation of assets and liabilities is not proper.

(f) The external agencies like banks cannot use financial information. A bank cannot decide whether to lend money or not.

(g) It is quite likely that the business and personal transactions of the proprietor get mixed.

The method

This method is called statement of affairs method. The statement of affairs is similar to the balance sheet with regard to the format and is based on the same accounting equation of

Capital = Assets *less* Liabilities

The opening as well as closing statement of affairs is made on the basis of information available. Then a statement of profit or loss is prepared. This is made by considering the changes in capital due to additional money brought in by the businessman and the drawings made by him during the period.

Statement of Profit and Loss for the year ended.....

Particulars	**Amount (₹)**	**Amount (₹)**
Capital (at the end)	xx	
Less : Capital (at the beginning)	xx	xx
Add : Drawings		xx
		xx
Less : Further Capital (if any)		xx
Profit/Loss		xx
Less : Adjustments, if any say, Bad debts, Depreciation etc.		xx
Net Profit/Loss for the period		xx
Less : Appropriation items :		
(i) Interest on partner's capital	xx	
(ii) Partners' salaries etc.	xx	xx
Divisible Profit		xx

Illustration 40.

Mr. Prakash keeps his accounts on single entry system. He has given following information about his assets and liabilities.

Item	**On 31-3-2012**	**On 31-3-2013**
Creditors	55,200	58,500
Cash at bank	600	1,500
Bills payable	26,400	28,200
Bills receivables	16,200	18,300
Debtors	45,600	56,000
Stock in trade	31,000	47,300
Machinery	66,200	78,000
Computer	18,000	17,000

During the year, Prakash brought in additional ₹7,500 cash in business. He withdrew goods of ₹2,100 and cash of ₹7,200 for his personal use. Interest on opening capital is to be given at 5% and interest on drawing is to be charged at 10%.

Prepare statement of profit or loss for the year ended 31-03-2013.

Solution:

Here the information about opening and closing capital is not given. Both these figures can be computed based on statement of affairs as on 31-03-2012 and 31-03-2013. These can be worked out on the basis of information given. The balancing figures in both statements will represent capital figures as on those two days.

These figures will then be used together with the information to find out profit or loss. The interest on capital will increase it while, interest on drawings will result in decrease in capital. This will be included in the statement of profit or loss for the year ended 31-03-2013.

Statement of Affairs as on 31-3-2012

Liabilities	Amount (₹)	Assets	Amount (₹)
Creditors	55,200	Cash at Bank	600
Bills payable	26,400	Bills receivables	16,200
Capital (balancing figure)	96,000	Debtors	45,600
		Stock in trade	31,000
		Machinery	66,200
		Computers	18,000
	1,77,600		1,77,600

Statement of Affairs as on 31-3-2013

Liabilities	Amount (₹)	Assets	Amount (₹)
Creditors	58,500	Cash at Bank	1,500
Bills payable	28,200	Bills receivables	18,300
Capital (balancing figure)	1,31,400	Debtors	56,000
		Stock in trade	47,300
		Machinery	78,000
		Computers	17,000
	2,18,100		2,18,100

Statement of profit or loss for the year ended 31-03-2013

Particulars	Amount (₹)
Closing Capital as per statement of affairs as on (31-3-2013)	1,31,400
Less: Opening Capital as per statement of affairs as on (31-3-2012)	(96,000)
Increase or decrease in capital	35,400
Add: Drawings (goods + cash)	9,300
Add: Interest on drawings @ 10%on ₹ 9,300	930
	45,630
Less: Interest on opening capital @ 5% (96,000 * 5%)	(4,800)
Less: Fresh capital introduced	(7,500)
Net Profit or loss for the year	**33,330**

Illustration 41.

On 1st April 2012, Neha started a beauty parlor. She acquired a shop for ₹1200,000 and paid ₹2,00,000 for interior fittings. She put ₹4,00,000 into business Bank Account. She carried on till 31st March 2013, when she wanted to know what the parlor has earned over the period. She has approached you to find out the business results with following information as on 31-03- 2013:

In addition to the shop and fitting she had following possessions: Stock ₹6,00,000, Motor car (purchased on 30-09-2013) ₹5,50,000, Cash at bank ₹2,50,000. Based on her limited knowledge she has told you to charge depreciation of 2% p.a. on shop, 5% p.a. on fittings and 20% on car.

On 31-3-2013, ₹ 1,40,000 was payable to creditors, and ₹ 1,00,000 to a friend for money borrowed for business. She had withdrawn ₹ 2,000 per month from the business.

Prepare her statement of profit or loss for the year.

Solution:

Statement of Affairs as on 01-04-2012

Liabilities	Amount (₹)	Assets	Amount (₹)
Capital (balancing figure)	18,00,000	Shop	12,00,000
		Fittings	2,00,000
		Bank	4,00,000
	18,00,000		18,00,000

Statement of Affairs as on 31-3-2013

Liabilities	Amount (₹)	Assets	Amount (₹)
Creditors	1,40,000	Shop (12,00,000 Less 2% of 12,00,000)	11,76,000
Loan from Friend	1,00,000	Fittings (2,00,000 Less 5% of 2,00,000)	1,90,000
Capital (balancing figure)	24,71,000	Cash at Bank	2,50,000
		Motor car	4,95,000
		Stock in trade	6,00,000
	27,11,000		27,11,000

Statement of profit or loss for the year ended 31-03-2013

Particulars	Amount (₹)
Closing Capital as per statement of affairs as on 31-3-2013	24,71,000
Less: Opening Capital as per statement of affairs as on 31-3-2012	(18,00,000)
Increase or (decrease) in capital	(6,71,000)
Add: drawings (2000*12)	24,000
Net Profit or loss for the year	(6,95,000)
Note:	
Depreciation calculation	
Shop @ 2% for 1 year on ₹ 12,00,000	24,000
Fittings @ 5% for 1 year on ₹ 2,00,000	10,000
Car @20% for 6 months on ₹ 5,50,000	55,000

Illustration 42.

Rani, Priti and Deepa started a business in partnership on 1st April 2012 and agreed to share profits or losses in the ratio of 5:3:2. They brought in capital as – Rani ₹50,000, Priti ₹30,000 and Deepa ₹20,000.

On 31-03-2013 their state of affairs was: Cash in hand ₹2500, Bank Overdraft ₹15,000, creditors ₹10,200, Debtors ₹17,300 and Bills payable ₹3,500. Bills receivables ₹4,000, stock ₹20,400, Machinery ₹30,000, Furniture ₹9,800, Loan from Central Bank ₹20,000, Building ₹70,000 and outstanding salaries ₹1,000.

On verification of records, it's found that out of debtors ₹300 is bad & should be written off. Stocks were overvalued by ₹400 and furniture was undervalued by ₹200. Interest on loan was ₹1,000. A provision of 10% on remaining debtors needs to be made.

During the year, the cash withdrawal by partners for their personal use was – Rani ₹4,500, Priti ₹3,500 and Deepa ₹6,900. Salary of ₹500 per month was payable to Deepa.

Prepare statement of profit or loss made by the partnership firm.

Solution:

As the opening capital figures are given, there's no need to prepare the statement of affairs as on 1st April 2012. We need to show the closing statement of affairs as follows:

Statement of Affairs as on 31-3-2013

Liabilities	Amount (₹)	Assets		Amount (₹)
Bank overdraft	15,000	Cash in hand		2,500
Creditors	10,200	Debtors	17,300	
Bills payable	3,500	Less: Bad debts	(300)	
Loan from Central		Less: Provision @ 10%	(1,700)	15,300
Bank	20,000			
Outstanding salaries	1,000	Bills receivables		4,000
Outstanding interest on loan	1,000	Stock	20,400	
		less: Overvalued	(400)	20,000
Combined Capital (balance)	101,100	Machinery		30,000
		Furniture	9,800	
		add: Undervalued	200	10,000
		Building		70,000
	1,51,800			1,51,800

Statement of profit or loss for the year ended 31-03-2013

Particulars	Amount (₹)
Combined Closing Capital as per statement of affairs as on 31-3-2012	1,01,100
Less: Opening Capital (Rani ₹ 50,000, Priti ₹ 30,000 and Deepa ₹ 20,000)	(100,000)
Increase or (decrease) in capital	1,100
Add: Drawings (Rani ₹ 4,500, Priti ₹ 3,500 & Deepa ₹ 6,900)	14,900
Less: Salary to Deepa (₹ 500×12)	(6,000)
Net Profit or loss for the year	**10,000**

Note & Verification

Share of profits is Rani ₹ 5,000, Priti ₹ 3,000 and Deepa ₹ 2,000.

	Rani	Priti	Deepa	Total
Original capital	50,000	30,000	20,000	100,000
Add : Share in profit	5,000	3,000	2,000	10,000
Add: Salary	—	—	6,000	6,000
Less: Drawings	(4,500)	(3,500)	(6,900)	(14,900)
Closing Capital	50,500	29,500	21,100	101,100

Alternative method: Conversion of single entry to double entry:

It may be possible to prepare the P & L A/c and balance sheet for such organizations by converting the records into double entry method. In this method, various ledger accounts are prepared e.g. sales, purchases, debtors, creditors, Trading A/c, cash book. As full information is not available the balancing figure in each of these accounts needs to be correctly interpreted. For example, if we know opening & closing balances in Debtors' A/c and the cash received from debtors; then the balancing figure will obviously indicate sales figures. Also, if we know opening and closing balances of creditors & credit purchases figures; then the balancing figure will certainly mean cash paid to creditors.

Once these figures are calculated, it's easy to prepare the financial statements in regular formats.

Illustration 43.

Find out the collection from debtors from the following details	₹
Opening debtors	34,000
Opening Bank balance	8,000
Closing debtors	46,000
Closing bank balance	14,000
Payments to creditors	160,000
Credit sales	237,000
Bills receivable encashed	18,000
Bills payable paid	12,000
Drawings	24,000
Expenses paid	36,000
Discount allowed	5,000

Solution:

Dr. **Debtors Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Balance b/d	34,000	By, Bank (collection) A/c	2,25,000
To, Sales (credit)	2,37,000	By, Balance c/d	46,000
	2,71,000		2,71,000

Dr . **Cash / Bank Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Balance b/d	8,000	By, Creditors A/c	1,60,000
To, B/R encashed A/c	18,000	By, Discount allowed A/c	5,000
To, Debtors (collection) A/c	2,25,000	By, B/P paid A/c	12,000
		By, Drawings A/c	24,000
		By, Expenses A/c	36,000
		By, Balance c/d	14,000
	2,51,000		2,51,000

Illustration 44.

From the following particulars presented by Mr. Paul, you are asked to prepare:

(i) Total Debtors Account;

(ii) Total Creditors Account;

(iii) Bills Receivable Account;

(iv) Bills Payable Account.

On 1.1.2013:	**(₹)**
Total Debtors amounted to	30,000
Total Creditors amounted to	10,000
Total Bills Receivable amounted to	12,000
Total Bills Payable amounted to	4,000
Transaction during the year:	
Cash received from Debtors	20,000
Discount allowed to Debtors	5,000
Bad Debts written off	2,500
Returns Inward	4,000
Cash Sales	14,000
Cash Purchases	6,000
Cash received against Bills Receivable	9,000
Cash paid to Suppliers	8,000
(including a payment of ₹ 500 for purchasing a machine)	
Cash paid against Bills Payable	2,500
Discount received from suppliers	500
Returns Outward	1,000
Bills Payable dishonoured	500
On 31.12.2013:	
Total Debtors amounted to	50,000
Total Creditors amounted to	20,000
Total Bills Receivable amounted to	15,000
Total Bills Payable amounted to	7,000

Solution:

In the books of Mr. Paul

Dr. **Bills Payable Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Cash A/c `` Total Creditors (for dishonor) `` Balance c/d	2,500 500 7,000	By Balance b/d `` Total Creditors (bal. fig.)	4,000 6,000
	10,000		**10,000**

Dr. **Total Creditors Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Cash `` Discount Received `` Returns Outward `` Bills Payable `` Balance c/d	7,500 500 1,000 6,000 20,000	By Balance b/d `` Bills Payable(for dishonor) `` Credit Purchases (bal. fig.)	10,000 500 24,500
	35,000		**35,000**

Dr. **Bills Receivable Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Balance b/d	12,000	By Cash	9,000
`` Total Debtors A/c (bal. fig.)	12,000	`` Balance c/d	15,000
	24,000		**24,000**

Dr. **Total Debtors Account** **Cr.**

Particulars	Amount (₹)		Amount (₹)
To Balance b/d	30,000	By Cash	20,000
`` Credit Sales (bal. fig.)	63,500	`` Discount Allowed	5,000
		`` Bills Receivable	12,000
		`` Bad Debts	2,500
		`` Returns Inward	4,000
		`` Balance c/d	50,000
	93,500		**93,500**

Notes:

1. Purchase of a machine for ₹ 500 will be excluded.
2. Cash Sales and Cash purchases will have no impact on Total Debtors and Total Creditors account.

Study Note - 5

ACCOUNTING FOR SPECIAL TRANSACTIONS

This Study Note includes

5.1 BILLS OF EXCHANGE

Introduction

In India, the Negotiable Instruments Act 1981 governs the provisions for bills of exchange. As per this act, the bill of exchange is defined as " an instrument in writing containing an unconditional order signed by the maker, directing a certain person to pay a certain some of money only to the order of the certain person or to the bearer of the instrument"

Advantages:

- Proof of debt.
- Easily transferred.
- Safely transferred.

Based on this definition the following features of a bill of exchange are noticed:

(a) It's an instrument in writing.

(b) It contains an unconditional order.

(c) It's signed by the maker.

(d) It's drawn on a specific person

(e) There is an order to pay a specific sum of money

(f) It must be dated and stampe

Specimen of a bill of exchange:

Stamp	Address of Drawer Date
Three months after date pay to a sum of ₹ 50,000 (Fifty Thousands only) for the value received.	
To B accepted	
(B's signature & stamp)	
	A (Drawer)

Parties to Bill of Exchange

The parties involved in transaction that uses bill of exchange as a mode of settlement are:

(a) **Drawer:** He is a person who draws the bill. Typically, he is the seller or a creditor.

(b) **Drawee:** He is the person on whom the bill is drawn. Normally, he is the buyer or debtor. He has to pay the amount of the bill to the drawer on the due date.

(c) **Payee:** He is the person to whom the amount of bill is payable. He may be the drawer himself or the creditor of the drawer.

(d) **Endorser:** Person who transfers rights of payment.

(e) **Endorsee:** He is the person in whose favour the bill is endorsed by the drawer. He is usually the creditor of the drawer.

(f) **Bearer:** Person in possession of bearer bill.

Holder and Holder in Due Course

Holder

According to Sec 8 of the Negotiable Instruments Act a Holder is "Any person entitled in his own name to the possession thereof and to receive or recover the amount due thereon from the parties thereon". It indicates the person who is legally entitled to receive the money due on the instrument is called the 'Holder'.

Holder in Due Course

According to Sec 9 of the Negotiable Instruments Act, the holder in due course is a particular kind of holder. The person of a negotiable instrument is called holder if he/she satisfies the following conditions:

(a) He/she has obtained the instrument for valuable consideration.

(b) He/she became the holder of the instrument before the maturity of the instrument.

(c) He/she must acquire the instrument bona fide and having no cause to believe that, any defect existed in the title of the person from whom he derived his title.

Dishonour of Bill

Dishonour of a Bill means that the acceptor refuses to honour his commitment on due date and for this, payment of the bill on presentation does not take place.

To provide a legal evidence of dishonour, the fact of dishonour is to be noted on the bill by 'Notary Public'. The fact of dishonour which he is recording is called 'noting' and the amount charged by him for his services are called 'noting charges'. These charges are to be paid by the holder of the bill on the date of default. Actually the acceptor of the bill is liable for the dishonour, the noting charges paid by the holder are to be reimbursed by the acceptor.

The **Journal Entries for dishonor of a bill** are as follows:

(a) **When bill is retained till due date:**

Books of Drawer		**Books of Acceptor**	
Acceptor A/c	Dr.	Bills Payable A/c	Dr.
To Bills Receivable A/c		Noting Charges A/c	Dr.
To Cash A/c		To Drawer A/c	
(Acceptor account is debited with the amount of the bill and the amount of noting charges paid in cash)		(Drawer account is credited with the amount of the bill and the amount of the noting charges to be reimbursed through the drawer)	

(b) When bill is discounted from the bank:

Books of Drawer	Books of Acceptor
Acceptor A/c Dr. To Bank A/c (amount of the bill plus the noting charges paid by the bank are debited to Acceptor Account credited to Bank Account)	Bills Payable A/c Dr. Noting Charges A/c Dr. To Drawer A/c (Drawer account is credited with the amount of the bill and the amount of the noting charges paid by the bank to be reimbursed through the drawer)

Discounting of Bills

If the holder of a bill receivable cannot wait till the date of maturity of the bill and needs cash before the date due, then he can get the bill discounted from the bank. At the time of discounting it, the bank pays cash after deducting the discount from the value of the bill. The discount which is to be deducted depends upon the rate of interest and the remaining period of the bill and is calculated as follows.

Discount = Amount of the bill × Remaining period to maturity × Rate of interest

For example, if a bill of ₹10,000 due for payment on 15.03.2012 is discounted on 15.01.2012 at 24% p.a., the amount of discount is calculated as under:

Amount of Bill = ₹10,000

Rate of interest = 24%

Remaining period of the bill = 2 months

Discount = ₹10,000 × $\frac{2}{12}$ × $\frac{24}{100}$ = ₹400

Cash received on Discounting = ₹(20,000-400) = ₹19,600

Discount is an expenses for the holder receiving the payment and gain to the bank.

Journal Entries in the books of drawer and drawee at the time of discounting and payment on due date are as under:

Books of Drawer	Books of Drawee
1. At the time of cash received from Bank on discounting of bills: Bank(or Cash) A/c Dr. Discount A/c Dr. To Bills Receivable A/c (For bills, discounted from bank)	Discounting of bill: No entry is passed in the books of Drawee for discounting of the bill.
2. Payment of bill by drawee to Bank on due date: No entry is passed in the books of the drawer because the bill is duly honoured by the drawee.	Payment of the bill on due date : Bills Payable A/c. Dr. To, Cash (or Bank) A/c. (For payment of the bill to bank)
3. Transfer of discount to Profit and Loss Account: Profit & Loss A/c Dr. To Discount A/c	No entry

Tenure, Days of Grace and Date of Maturity or Due Date of Bills

Tenure

The bill is payable at sight, on demand after sight, after date etc. The period between the date of drawing of the bill and the period it becomes due is called Tenure of the Bill.

Days of Grace

In case the bill is payable on demand, it becomes due immediately on presentation for payment. In the same way if the bill is not payable on demand becomes due on the third day from the date of maturity. These three days are called Days of Grace. For example, if a bill is drawn on 1.4.2013 for 4 months, the due date or date of maturity will be 4.8.2013. The same can be computed as under:

Date of Drawing	1.4.2013
Add: Period/Tenure	4 months
	1.8.2013
Add: Days of Grace	3
Due Date / Date of Maturity	4.8.2013

Date of Maturity

Date of Maturity is also known as Due Date. The date on which the amount of the bill becomes payable is called 'Due Date' or 'Date of Maturity'. To compute due date, three days (called Grace Period) are included to the date of maturity of the period of the bill.

The date of maturity of the period of bills depends on whether (a) the bill is payable on date or bill is payable on sight. If the bill is payable on date, the date of maturity is computed by including tenure of bill to the making of the bill.

Date of maturity can be understood with the help of the following example:

Date of Drawing	12.12.2013
Tenure	+3 Months
	12.03.2014

However, If the bill becomes due at sight, the date of maturity is counted by including tenure of the bill to the date of acceptance of the bill. In that case, the due date of the bill is calculated as follows:

Date of Acceptance	16.12.2013
Tenure	+3 months
	16.3.2014

The due date of the bill after including grace period of 3 days is 16.03.2014 if the bill is payable at date and 19.3.2014 if the bill is payable at sight.

For computing the date of maturity, following points should be noted:

1. Days of grace are allowed on bills payable on maturity of a fixed period. In case of bills payable on demand, amount is required to be paid on presentation and no grace period is allowed.
2. If period of the bill matures on a date which is not there in the month in question, then the due date is taken as the last date of the month. For example, if a bill is drawn on 31.1.2013 and the period of the bill is 3 months, the period bill becomes payable on 30.4.2013 and after including grace days, due date is 3.5.2013.
3. In case the expiry date of a bill falls on a holiday, the bill becomes payable on the preceding day. But when the maturity date is a bank holiday or a Sunday and the second day of grace is also a holiday, the bill is payable on the next working day.

4. The tenure of the bill can be explained in months or in days. The due date of bill should be computed considering this fact in mind. Hence, if S draws bill on A on 31.1.2013 of one month, the maturity date of the bill is computed as follows :

Date of Drawing	31.1.2013	
Tenure	+1 month	
	29.2.2013	(2013 is a leap year.)
Days of Grace	+3 days	
	03.03.2013	

However, if tenure of the bill is 30 days , the expiry date of the bill is computed as follows :

Date of Drawing	31.1.2013
Tenure	+30 days
	01.03.2013
Days of Grace	+3 days
	4.3.2013

Hence, tenure of one month and 30 days are different.

Types of Bills of Exchange

(a) Trade bill: This bill is drawn to settle a trade transaction.

(b) Accommodation bill: This bill is used without a trade transaction and is for mutual benefit. If Mr. X is in need of money, he draws a bill on his friend Mr. Y who accepts it. This bill is then discounted with bank (bank will pay money before due date) and the money is shared between X and Y. On the due date, Y will pay to the bank and X will pay Y his share. Law generally does not recognise such bills.

Operating Cycle of the Trade Bill of Exchange

We will see the cycle in case of a trade bill of exchange. There is a trade transaction to begin with. The seller will then draw a bill on the buyer who will accept it and return it back to the seller. The seller has four options:

(a) Retain the bill with him till maturity and then present the bill to the buyer to claim the money on that date.

(b) Discount the bill with the bank if urgent money is needed. The bank will deduct discounting charges and pay the drawer. The bank will collect the bill from the drawee on due date.

(c) Endorse the bill to his creditor to settle his liability towards the creditor. Here, on the due date the creditor of the drawer will receive money from the drawee.

(d) Send the bill to the bank for collection. Here, the bank will keep the bill with them till maturity, collect the payment on the due date and credit it to the A/c of the drawer. Bank charges commission for such activity.

The bill of exchange, being a credit instrument, means a right to claim for the drawer and an obligation to pay for the drawee. For the drawer, the bill is Bill Receivable (often referred to as B/R) since he has to get the money on due date. This is a monetary asset shown under current assets in books of the drawer.

For the drawee, the bill is Bill Payable (often referred to as B/P) since he has to make the payment on the due date. This is shown under current liability in the books of the drawee.

For endorsee, it represents a monetary asset (B/R).

If on the due date the payment of the bill is not done, it is said to have dishonoured. When bill is dishonoured, the old claims of trade transaction is reopened.

Promissory Note

A person, by whom any amount is payable himself prepares and signs a written undertaking to pay. Here the credit document is called a 'Promissory Note'. It's a written document and contains an undertaking or promise to pay. As per Indian Negotiable Instrument Act, a 'Promissory Note' is "an instrument in writing (not being a bank note or a currency note) containing an unconditional undertaking signed by the maker to pay a certain sum of money to, or to the order of, a certain person." The person to whom the amount is payable is called Promisee or Payee.

A specimen of Promissory Note which is prepared by Mr. A.Chakraborty in favour of Mr.R.K.Nandy is as follows:

₹15,000	12-03-2013 J-49, B.N. Marg, New Delhi
I, promise to pay Mr. R. K. Nandy after 3 months on order, the sum of ₹15,000 (Rupees Fiteen Thousands only) for value Received.	
Place: Date : 16/03/2013	Sd/- A.Chakraborty 16-03-2013

Essential features of Promissory Note

Essential features of Promissory Note are as follows:

(i) It is a written document and adequately signed by the maker or promisor.

(ii) It must contain an undertaking or promise to pay a definite amount given in both figures and words.

(iii) The amount is payable either on demand or on the maturity of a fixed period.

(iv) The amount is payable either to a prescribed person or to his/her order. The person to whom the amount should be payable is known promisee or payee.

Difference between Bills of Exchange and Promissory Note

The differences between these two items are as under:

Bills of Exchange	Promissory Note
1. It is drawn by the seller.	1. It is drawn by the purchaser.
2. It involves an order to make payment.	2. It involves a promise to make payment
3. It consist of three parties, viz. the drawer, the acceptor and the payee.	3. It consist of two parties, namely, the promisor (or maker) and promisor (or payee)
4. To be effective, it must be accepted.	4. It does not need acceptance.
5. Drawer and the payee can be the same person.	5. Maker and payee cannot be the same person.
6. Acceptor is required to make payment on due date. In case of any default, drawer is liable to pay the amount to payee.	6. Drawer or maker is required to make payment on due date.

Methods of Accounting

Let us see what accounting entries are passed in the books of the drawer, drawee and the endorsee. These entries may be thoroughly understood. Here entries only regarding bill transactions are listed. The trade transaction that precedes the bill of exchange will be accounted for in the usual manner, hence the entries are not given here.

(a) When the drawer retains the bill till maturity

Situations	Drawer's books	Drawee's books	Endorsee's books
Drawing of a bill	B/R A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, B/P A/c	Not applicable
Payment on due date	Bank A/c Dr. To, B/R A/c	B/P A/c Dr. To, Bank A/c	Not applicable
Dishonoured on due date	Drawee A/c Dr. To, B/R A/c To, Bank A/c (for noting charges)	B/P A/c Dr. Noting Charges A/c Dr. To, Drawer A/c	Not applicable

(b) When the drawer discounts the bill with bank before maturity

Situations	Drawer's books	Drawee's books	Endorsee's books
Drawing of a bill	B/R A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, B/P A/c	Not applicable
Discounting with bank	Bank A/c Dr. Discount A/c Dr. To, B/R A/c	No Entry	Not applicable
Payment due date	No Entry	B/P A/c Dr. To, Bank A/c	Not applicable
Dishonoured on due date	Drawee A/c Dr. To, Bank A/c (bill + noting charges)	B/PA/c Dr. Noting charges A/c Dr. To, Drawer A/c	Not applicable

Proportionate Discount Charges

If the date of maturity of a bill falls on a date of a month within the accounting year, discounting of bill can be done without any problem. But when the date of maturity falls on a month of the next year i.e. the due date falls on two accounting periods, problem will arise. In such a situation, proportionate amount of discount will be charged to Profit and Loss Account. This can be understood with the help of the following example:

A bill was drawn on 1st November, 2013 for ₹20,000 for 3 months. The bill was discounted by the bank on same day @12% p.a. Therefore, the total amount of discount will be ₹600 (i.e. $20000 \times \frac{12}{100} \times \frac{3}{12}$). So 2/3rd of ₹600, i.e. ₹400 will be transferred to Profit and Loss Account for the year ended 31st December, 2013.

Treatment of Discount in the Books of the Bank

The following entries are recorded in the books of the bank:

(a) When the bill is discounted:

Bill Discounted A/c Dr.

To, Customer's Current A/c

To, Discounting on Bill A/c

(b) When amount is received from the drawee:

Cash A/c Dr.

To, Bills Discounted A/c

	Transactions	Entries in the books of Drawer	Entries in the books of Drawee
1	If the bill is drawn	Bills Receivable A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, Bills Payable A/c
2	If the bill is discounted by the bank	Cash/Bank A/c Dr. Discount A/c Dr. To, Bills Receivable A/c	—
3	If the bill is honoured at the due date	—	Bills Payable A/c Dr. To, Cash / Bank A/c

(c) When the drawer endorses the bill to a person before maturity

Situations	Drawer's books	Drawee's books	Endorsee's books
Drawing of a bill	B/R A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, B/P A/c	Not applicable
Endorsement	Endorsee A/c Dr. To, B/R A/c	No Entry	B/R A/c Dr. To Drawer A/c
Payment on due date	No Entry	B/P A/c Dr. To, Bank A/c	Bank A/c Dr. To, B/R A/c
Dishonoured on due date	Drawee A/c Dr. To, Endorsee A/c (bill + noting charges)	B/P A/c Dr. Noting Charges A/c Dr. To, Drawer A/c	Drawer A/c Dr. To, B/R A/c To, Bank A/c (noting charges)

(d) When the drawer sends the bill to bank for collection before maturity

Situations	Drawer's books	Drawee's books	Endorsee's books
Drawing of a bill	B/R A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, B/P A/c	No Entry
Sending for collection	Bill for Collection Dr. To, B/R A/c	No Entry	No Entry
Payment on due date	Bank A/c Dr. Collection Charges A/c Dr. To, Bill for Collection	B/P A/c Dr. To, Bank A/c	No Entry
Dishonoured on due date	Drawee A/c Dr. To, Bill for Collection A/c To, Bank A/c (bill & noting charges)	B/P A/c Dr. Noting Charges A/c Dr. To, Drawer A/c	No Entry

Illustration 1.

Mohan sold goods to Sohan for ₹ 50,000. On 1st Jan 2013, Mohan drew a bill for three months on Sohan who accepted the same. Pass necessary journal entries in the books of Mohan and Sohan in following situations:

(a) The bill is retained by Mohan till 31st March and Sohan paid it on that day upon presentation.

(b) Bill is discounted with the bank and the bank pays ₹ 49,000 to Mohan. Sohan paid the bill on due date.

(c) Mohan endorsed the bill to Rohan (his creditor) in settlement of his claim for ₹ 51,000. The bill is settled on the due date.

(d) Mohan sent the bill to the bank for collection on due date. The bank collected bill amount and after deducting collection charges of ₹ 100 paid the balance to Mohan.

Solution:

Entries in the books of Mohan

(a) Bill is retained by Mohan:

	Particulars		L.F.	Dr. (₹)	Cr. (₹)
On getting Sohan's acceptance	B/R A/c To, Sohan's A/c (Being the bill accepted by Sohan)	Dr.		50,000	 50,000
On payment on 31-03-13	Bank A/c To, B/R A/c (Being the payment received against the B/R)	Dr.		50,000	 50,000

(b) Bill is discounted by Mohan:

	Particulars		L.F.	Dr. (₹)	Cr. (₹)
On getting Sohan's acceptance	B/R A/c To, Sohan's A/c (Being the bill accepted by Sohan)	Dr.		50,000	 50,000
On discounting	Bank A/c Discount A/c To, B/R A/c (Being Sohan's acceptance discounted)	Dr. Dr.		49,000 1,000	 50,000

On the date of maturity, as the bill is settled by Sohan to bank, there will be no entry in Mohan's books.

(c) Bill is endorsed to Rohan by Mohan:

	Particulars		L.F.	Debit (₹)	Credit (₹)
On getting Sohan's acceptance	B/R A/c To, Sohan's A/c (Being the bill accepted by Sohan)	Dr.		50,000	 50,000
On endorsement	Rohan's A/c To, B/R A/c To, Discount A/c (Being B/R endorsed to Rohan and discount availed)	Dr.		51,000	 50,000 1,000

(d) Bill is sent for collection to bank by Mohan:

	Particulars	L.F.	Dr. (₹)	Cr. (₹)
On getting Sohan's acceptance	B/R A/c Dr. To, Sohan's A/c (Being the bill accepted by Sohan)		50,000	 50,000
On sending bill for collection	Bill for Collection A/c Dr. To, B/R A/c (being bill sent to bank for collection)		50,000	 50,000
On payment on due date	Bank A/c Dr. Collection Charges A/c Dr. To, Bills for Collection A/c (being payment received on bill collected)		49,900 100	 50,000

Entries in the books of Sohan

In all four situations, since the bill was honoured, the entries will be same as below.

	Particulars	L.F.	Debit (₹)	Credit (₹)
On acceptance of bill drawn by Mohan	Mohan's A/c Dr. To, B/P A/c (Being the bill of Mohan accepted)		50,000	 50,000
On payment on due date	B/P A/c Dr. To, Bank A/c (Being payment of bill)		50,000	 50,000

Insolvency of Drawee (Acceptor)

Insolvency of acceptor means that he cannot pay the amount owed by him. Therefore , on insolvency of the acceptor, bill will be treated as dishonoured and entries for dishonor of bill will be passed in the books of respective parties. Later on , when some amount is realized from the property or estate of the insolvent acceptor, entry for cash received is passed and the balance of amount due from the insolvent acceptor is treated as bad debts. In the books of acceptor the amount not paid is transferred to deficiency account (or profit and loss account). Normally, the amount paid by the insolvent person is expressed as percentage of the amount due and is called the 'Rate of Dividend'. For example, if ₹25,000 is payable by Mr. A to Mr. B and Mr. A is declared insolvent and a dividend of 20% is declared, journal entries for the final settlement are passed as under:

In the books of Mr. A

Particulars	L.F.	Dr. (₹)	Cr. (₹)
Mr. B A/c Dr.		25,000	
To, Cash A/c			5,000
To, Deficiency A/c			20,000

In the books of Mr. B

Particulars	L.F.	Dr. (₹)	Cr. (₹)
Cash A/c Dr.		5,000	
Bad Debts A/c Dr.		20,000	
To, Mr. A A/c			25,000

In case of insolvency, it is better to prepare acceptor's account to work out the amount finally owed by him. Then, calculate cash received on account of dividend declared and the amount of bad debts.

Illustration 2.

A owes B ₹ 21,000. On 1.1.2013 he accepts a Bill for 3 months for ₹ 20,000 in full settlement. On the same date B discounts the Bill from his Banker at 6% p.a.

Before the due date, A becomes bankrupt and B receives first and final dividend of 20 paise in the rupee.

Write up the necessary accounts to record the above transactions in the books of B.

Solution:

In the books of B

Dr. A Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
Jan. 1	To, Balance b/d	21,000	Jan. 1	By, Bills Receivable A/c	20,000
April 4	To, Bank	20,000	April 4	By, Discount A/c	1,000
	To, Discount A/c	1,000		By, Cash A/c	4,200
				By, Bad Debts A/c	16,800
		42,000			**42,000**

Dr. Bills Receivable Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
Jan. 1	To, A A/c	20,000	Jan. 1	By, Bank A/c	19,700
				By, Discount A/c	300
		20,000			**20,000**

Illustration 3.

Sagar purchased goods worth ₹ 1,000 from Ravi for which the latter drew a bill on the former, payable after one month. Sagar accepted it and returned it to Ravi. Ravi endorsed it to Kamal, and Kamal to Amal. Amal discounted the bill with State Bank of India at 6% p.a. On maturity, the bill was dishonoured, noting charge being ₹ 10.

Show the entries in the books of all the parties including the books of State Bank of India.

Solution:

In the books of Ravi
Journal Entries

Date	Particulars	L. F.	Dr. (₹)	Cr. (₹)
	Sagar A/c Dr. To, Sales A/c (Goods sold to Sagar)		1,000	 1,000
	Bills Receivable A/c Dr. To, Sagar A/c (Bills drawn and accepted by Sagar for 1 month)		1,000	 1,000
	Kamal A/c Dr. To, Bills Receivable A/c (Bill endorsed to Kamal)		1,000	 1,000
	Sagar A/c Dr. To, Kamal A/c (Bill endorsed to Kamal dishonoured by Sagar including noting charge of ₹ 10)		1,010	 1,010

In the books of Sagar
Journal Entries

Date	Particulars		L. F.	Dr. (₹)	Cr. (₹)
	Purchase A/c	Dr.		1,000	
	To, Ravi A/c				1,000
	(Goods purchased from Ravi)				
	Ravi A/c	Dr.		1,000	
	To, Bills Payable A/c				1,000
	(Bill accepted for 1 month)				
	Bill Payable A/c	Dr.		1,000	
	Noting Charge A/c	Dr.		10	
	To, Ravi A/c				1,010
	(Bill dishonoured at maturity, noting charge being ₹ 10)				

In the books of Kamal
Journal Entries

Date	Particulars		L. F.	Dr. (₹)	Cr. (₹)
	Bills Receivable A/c	Dr.		1,000	
	To, Ravi A/c				1,000
	(Bill received from Ravi)				
	Amal A/c	Dr.		1,000	
	To, Bills Receivable A/c				1,000
	(Bill received from Ravi endorsed to Amal)				
	Ravi A/c	Dr.		1,010	
	To, Amal A/c				1,010
	(Bill endorsed to Amal dishonoured on maturity, noting charge being ₹ 10)				

In the books of Amal
Journal Entries

Date	Particulars		L. F.	Dr. (₹)	Cr. (₹)
	Bills Receivable A/c	Dr.		1,000	
	To, Kamal A/c				1,000
	(Bill received from Kamal)				
	Bank A/c	Dr.		995	
	Discount A/c	Dr.		5	
	To, Bills Receivable A/c				1,000
	(Bill received from Kamal discounted by the Bank at 6% p.a.)				
	Kamal A/c	Dr.		1,010	
	To, Bank A/c				1,010
	(Bill received from Kamal dishonoured, noting charge being ₹ 10)				

In the books of State Bank of India
Journal Entries

Date	Particulars	L. F.	Dr. (₹)	Cr. (₹)
	Bill Discounted A/c Dr.		1,000	
	To, Amal's Current A/c			995
	To, Discount A/c			5
	(Amal's bill discounted which is due after 1 month)			
	Amal's Current A/c Dr.		1,010	
	To, Bills Discounted A/c			1,000
	To, Cash A/c			10
	(Bill received from Amal dishonoured at maturity, noting charge being ₹ 10)			

Renewal of Bills

Sometimes the drawee of a bill is not able to meet the bill on due date. He may request the drawer to draw a new Bill for the amount due. Sometimes he pays a certain amount out and accepts a first bill for the balance for which he has to pay a certain amount of interest which is either paid in cash or is included with the fresh bill. This bill is known as Renewal of Bills. That, the amount of the new bill will be face value of the original bill minus cash payment, if any, plus interest for the renewed period.

Entries in the books of Drawer and Drawee are shown below:

Transactions	Entries in the books of Drawer	Entries in the books of Drawee
(a) For dishonour of Bills	Usual entry	Bills Payable A/c Dr. To, Drawer A/c
(b) For interest on renewed period	Drawee A/c Dr. To, Interest A/c	Interest A/c Dr. To, Drawer A/c
(c) If interest is paid in Cash	Cash A/c Dr. To, Interest A/c	Interest A/c Dr. To, Cash A/c
(d) For fresh Bill	Bills Receivable A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, Bills Payable A/c

Illustration 4.

Sunil owed Anil ₹ 80,000. Anil draws a bill on Sunil for that amount for 3 months on 1st April 2013. Sunil accepts it and returns it to Anil. On 15th April 2013, Anil discounts it with Citi Bank at a discount of 12% p.a. On the due date the bill was dishonoured, the bank paid noting charges of ₹ 100. Anil settles the bank's claim along with noting charges in cash. Sunil accepted another bill for 3 months for the amount due plus interest of ₹ 3,000 on 1st July 2013. Before the new bill became due, Sunil retires the bill with a rebate of ₹ 500. Show journal entries in books of Anil.

Solution:

Journal entries in the books of Anil

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
2013 April, 1	Bills Receivables A/c Dr To, Sunil's A/c (Being acceptance by Sunil)		80,000	80,000
2013 April, 15	Bank A/c Dr Discount A/c Dr To, Bills Receivables A/c (Being discounting of the bill @ 12% p.a. & discounting charges for 2.5 months)		78,000 2,000	80,000
2013 June, 30	Sunil's A/c Dr. To, Bank A/c (Being dishonour of the bill & noting charges paid by bank)		80,100	80,100
2013 June, 30	Bank A/c Dr. To, Cash A/c (Being cash paid to bank)		80,100	80,100
2012 July, 1	Sunil's A/c Dr. To, Interest A/c (Being interest due from Sunil)		3,000	3,000
2013 July, 1	Bills Receivables A/c Dr. To, Sunil's A/c (Being new acceptance by Sunil for ₹ 80,100 & interest of ₹ 3,000)		83,100	83,100
2013 July, 1	Bank A/c Dr. Rebate A/c Dr. To, Bills Receivables A/c (Being the amount received on retirement of the bill)		82,600 500	83,100

Illustration 5.

On 1st April 2013 Mr. Bala draws a bill of ₹ 1,20,000 on Mr. Lala for the amount due for 4 months. On getting acceptance, on 5th April 2013, Bala endorses it to Mr. Kala in full settlement of his claim of ₹1,40,000 by paying the difference in cash. Lala approached Bala on 25th July saying that he needed to renew the bill for a further period of 4 months at an interest of 12% p.a. which Bala accepted. A fresh bill including interest was accepted by Lala on 1st August 2013. Bala settled his liability to Kala by cheque. This was duly settled on the due date. Pass journal entries in the books of Bala and Lala. Also show Bills Receivables Account and Bills Payable Account.

Solution:

Journal entries in the Books of Bala

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
2013 April 1	Bills Receivables A/c Dr. To, Lala's A/c (Being acceptance by Lala)		1,20,000	 1,20,000
2013 April 5	Kala's A/c Dr. To, Cash A/c To, Bills Receivables A/c (Being bill endorsed to Kala & cash payment made to him)		1,40,000	 20,000 1,20,000
2013 July 25	Lala's A/c Dr. To, Kala's A/c (Being cancellation of bill for renewal)		1,20,000	 1,20,000
2013 July 25	Lala's A/c Dr. To, Interest A/c (Being interest due from Lala)		4,800	 4,800
2013 July 25	Kala's A/c Dr. To, Bank A/c (Being claim of Mr. Kala settled)		1,20,000	 1,20,000
2013 August, 1	Bills Receivables A/c Dr. To Lala's A/c (Being acceptance by Lala with interest)		1,24,800	 1,24,800
2013 Nove., 30,	Bank A/c Dr. To Bills Receivables A/c (Being payment received on due date)		1,24,800	 1,24,800

Dr. Bills Receivable Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
1-Apr-13	To Lala A/c	1,20,000	5-Apr-13	By Kala A/c	1,20,000
1-Aug-13	To Lala A/c	1,24,800	30-Nov-13	By Bank A/c	1,24,800
		2,44,800			2,44,800

Journal entries in the Books of Lala

Date	Particulars	L.F.	Dr. (₹)	Cr. (₹)
2013 April, 1	Bala's A/c Dr. To Bills Payable A/c (Being acceptance of Bala's bill)		1,20,000	 1,20,000
2013 July, 25	Bills Payable A/c Dr. To Bala's A/c (Being cancellation of the bill for renewal)		1,20,000	 1,20,000
2013 August,1	Interest A/c Dr. To Bala's A/c (being interest due to Bala)		4,800	 4,800

2013 August,1	Bala's A/c Dr. To Bills Payable A/c (Being Bala's bill accepted with interest)		1,24,800	 1,24,800
2013 Nov. 30	Bills Payable A/c Dr. To Bank A/c (Being settlement of the bill due)		1,24,800	 1,24,800

Dr. **Bills Payable Account** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 July, 25	To Bala A/c	1,20,000	2013 April, 1	By Bala A/c	1,20,000
2013 Nov. 30	To Bank A/c	1,24,800	2013 August, 1	By Bala A/c	1,24,800
		2,44,800			2,44,800

Illustration 6.

On 1st January, 2013, P draws three moths bill of exchange for ₹ 30,000 on his debtor, Q who accepts it on the same date. P discounts the bill on 4th January, 2013 with his bankers, the discount rate being 6% p.a.

On the due date, the bill is dishonored, the noting charges being ₹ 200. Q immediately makes an offer to P to pay him ₹ 10,000 cash on account and to settle the balance by agreeing to accept one bill of exchange for ₹ 12,000 at one month and the other for the balance at three months, the latter including at 12% p.a. for both the bills.

P accepts the arrangement. The bill for ₹ 12,000 is met on the due date, but the other bill is dishonored.

Show Q's Account and Bills Receivable Account in the books of P.

Solution:

In the books of P

Dr. **Q's Account** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
Jan 1	To, Balance b/d	30,000	Jan 1	By , Bills Receivable A/c	30,000
Apr 4	To, Bank A/c	30,200	Apr 4	By, Bank A/c	10,000
	(dishonor +noting charge)		Apr 4	By , Bills Receivable A/c	12,000
Apr 4	To, Interest A/c	366		By, Bills Receivable A/c	8,566
July 7	To, Bills Receivable A/c	8,566		(8,200+366)	
			July 7	By, Balance c/d	8,566
		69,132			69,132
July 8	To, Balance b/d	8,566			

Dr. **Bills Receivable Account** Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
Jan. 1.	To, Q' A/c	30,000	Jan. 4.	By, Bank A/c	29,550
April 4.	To, Q' A/c	12,000		By, Discount A/c	450
	To, Q' A/c	8,566		$(30,000 \times \frac{6}{100} \times \frac{3}{12})$	
			May 7.	By, Bank A/c	12,000
			July 7.	By, Q' A/c	8,566
		50,666			50,666

Calculation of Interest

On ₹ 12,000 for 1 month @ 12%: (12,000 x 12% x 1/12) = ₹120

On ₹ 8,200 for 3 month @ 12%: (8,200 x 12% x 3/12) = ₹246

₹366

Illustration 7.

Short owes Slow ₹ 6,000 for which the former accepts a three months bill drawn by the latter. Slow immediately discounts the bill with his banker Strong Bank, at 12% p.a. On the due date the bill is dishonoured and Strong Bank pays ₹ 20 as noting charge.

Short pays ₹ 1,180 including interest of ₹ 200 and gives another bill at three months for the balance. Slow endorses the bill to his creditor Slim in full settlement of his debts for ₹ 5,100. Slim discounts the bill with his banker Strong Bank who charges ₹ 40 as discount. Before maturity Short becomes bankrupt and a first and final dividend of 20 paise in a rupee is realized from his estate.

Show the journal entries in the books of Slim and Strong Bank and ledger account of Short in the book of Slow.

Solution:

In the books of Slim
Journal Entries

Date	Particulars		L. F.	Dr. (₹)	Cr. (₹)
	Bills Receivable A/c	Dr.		5,040	
	Discount Allowed A/c	Dr.		60	
	To, Slow A/c				5,100
	(Endorsed bill received from Slow in full settlement)				
	Bank A/c	Dr.		5,000	
	Discount A/c	Dr.		40	
	To, Bills Receivable A/c				5,040
	(Bill discounted by the bank)				
	Slow A/c	Dr.		5,100	
	To, Bank A/c				5,040
	To, Discount Allowed A/c				60
	(Bill dishonoured at maturity)				

In the books of Strong Bank
Journal Entries

Date	Particulars		L. F.	Dr. (₹)	Cr. (₹)
	Bills Discounted A/c	Dr.		6,000	
	To, Slow's Current A/c				5,820
	To, Discount A/c				180
	(Bill discounted which is due for 3 months.)				
	Noting Charges A/c	Dr.		20	
	To, Cash A/c				20
	(Noting charges incurred for dishonor of the bill.)				
	Slow's Current Account A/c	Dr.		6,020	
	To, Bills discounted A/c				6,000
	To, Noting Charges A/c				20
	(Bill dishonoured, noting charge being ₹ 20.)				

	Bills Discount A/c To, Slim's Current A/c To, Discount A/c (Bill discounted which is due for 3 months.)	Dr.		5,040	 5,000 40
	Slim's Current A/c To, Bills Discounted A/c (Bill dishonored at maturity.)	Dr.		5,040	 5,040

In the books of Slow

Dr. **Short Account** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To ,Balance b/d		6,000	By, Bills Receivable A/c		6,000
To, Strong Bank A/c		6,020	By, Cash A/c		1,180
To, Interest A/c		200	By, Bills Receivable A/c		5,040
To, Slim A/c		5,040	By, Cash A/c	1,008	
			By, Bad Debts A/c	4,032	5,040
		17,260			17,260

Retirement of Bill

Sometimes the drawee pays the bill before the date of maturity. Under the circumstances, the drawer allows certain amount of rebate or discount which is calculated on certain percentage p.a. basis. The rebate is calculated from the date of payment to the date of maturity.

Entries in the books of drawer and drawee are given below :

Transaction	Entries in the books of drawer		Entries in the books of drawer	
When the bill is drawn	Bills Receivable A/c To, Drawer A/c	Dr.	Drawer A/c To, Bills Payable A/c	Dr.
When the bill is retired	Bank/Cash A/c Rebate Allowed A/c To, Bills Receivable A/c	Dr. Dr.	Bills Payable A/c To, Cash/Bank A/c To, Rebate Received A/c	Dr.

Illustration 8.

X bought goods from Y for ₹ 4,000. Y draws a bill on 1.1.2013 for 3 months which was accepted by X for this purpose. On 1.3.2013, X arranged to retire the bill at a rebate of 12% p.a. Show the entries in the books of X and Y.

Solution:

In the books of Y
Journal

Date	Particulars		L.F	Dr. (₹)	Cr. (₹)
2013 Jan 1	X A/c To, Sales A/c (Goods sold to X)	Dr.		4,000	 4,000
Jan 1	Bills Receivable A/c To, X A/c (Bills drawn for 3 months)	Dr.		4,000	 4,000
March 1	Cash A/c Rebate Allowed A/c To, Bills Receivable A/c (Bills retired under a rebate of 12% p.a.)	Dr. Dr.		3,954 46	 4,000

Rebate = ₹ 4,000 x 12/100 x 35/365 (1st March to 4th April) = ₹ 46.

In the books of X
Journal

Date	Particulars		L.F	Dr. (₹)	Cr. (₹)
2013 Jan 1	Purchase A/c To, Y A/c (Goods purchased from Y)	Dr.		4,000	4,000
Jan 1	Y A/c To, Bills Payable A/c (Bills accepted for 3 months)	Dr.		4,000	4,000
March 1	Bills Payable A/c To, Cash A/c To, Rebate Received A/c (Bills retired under a rebate of 12% p.a.)	Dr.		4,000	3,954 46

Operating Cycle of the Accommodation Bill of Exchange

The basis for accommodation bill is not a trade transaction. It is drawn to accommodate the financial requirements of drawer or even a drawee. This transaction presupposes trust and understanding between the parties to the transaction. The drawer normally discounts this bill with the bank. The amount received from bank is either retained by the drawer for himself or shared between the drawer and the drawee. On the date of maturity, the drawee settles the bill with bank by effecting payment. The drawer will pay the drawee either full amount of the bill or his share. Accounting entries for accommodation bill are:

Situations	Drawer's books	Drawee's books
Drawing of a bill	B/R A/c Dr. To, Drawee A/c	Drawer A/c Dr. To, B/P A/c
Discounting with bank	Bank A/c Dr. Discount A/c Dr. To, B/R A/c	No Entry
Payment on due date	Drawee A/c Dr. To, Bank A/c	B/P A/c Dr. To, Bank A/c

Illustration 9.

Following information is given to you by Govind from his books:

On 1st April 2012 he had with him bills of ₹ 1,50,000 accepted by his customers and ₹ 1,00,000 worth accommodation bills accepted by his friends. He had accepted bills worth ₹ 90,000 for his suppliers and ₹ 75,000 worth accommodation bills for his friends.

During the year the following transactions took place:

(i) He raised bills of ₹ 3,75,000 which were accepted by his customers.

(ii) He accepted bills of ₹ 2,25,000 for his suppliers.

(iii) He accepted accommodation bills of ₹ 60,000 for his friends.

(iv) His friend accepted accommodation bills of ₹ 1,25,000 for him.

(v) He honoured on due dates trade bills of ₹ 1,75,000 and accommodation bills of ₹ 85,000.

(vi) He received payments on due dates for trade bills of ₹ 4,00,000 and accommodation bills of ₹ 1,50,000.

(vii) He endorsed bills of ₹ 25,000 to his suppliers, which were honoured by the acceptors.

(viii) His customers endorsed bills of ₹ 30,000 to him which he accepted in favour of his suppliers.

(ix) Accommodation bills were settled on the due dates and money was paid and received duly.

Prepare Bills Receivable Account and Bills Payable Account for both trade and accommodation bills.

Solution:

Dr. Bills Receivable Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 April, 1	To Balance b/d	1,50,000	2013 March 31	By Bank A/c	4,00,000
2013 March 31	To Debtors A/c	3,75,000	2013 March 31	By Suppliers A/c	25,000
			2013 March 31	By Balance c/d	1,00,000
		5,25,000			5,25,000

Dr. Bills Payable Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
31-Mar-13	To, Bank A/c	1,75,000	1-Apr-12	By Balance b/d	90,000
31-Mar-13	To, Debtors A/c	30,000	31-Mar-13	By Suppliers A/c	2,25,000
31-Mar-13	To, Balance c/d	1,10,000			
		3,15,000			3,15,000

Dr. Accommodation Bills Receivable Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 April,1	To, Balance b/d	1,00,000	2013 March, 31	By, Bank A/c	1,50,000
2013 March, 31	To, Friends A/c (acceptors)	1,25,000	2013 March, 31	By, Balance c/d	75,000
		2,25,000			2,25,000

Dr. Accommodation Bills Payable Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 March, 31	To, Bank A/c	85,000	2012 April,1	By, Balance b/d	75,000
2013 March, 31	To, Balance c/d	50,000	2013 March, 31	By, Friends A/c (drawers)	60,000
		1,35,000			1,35,000

Dr. Friends (acceptors of bills) Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2012 March, 31	To, Bank A/c	1,50,000	2011 April,1	By, Balance b/d	1,00,000
2012 March, 31	To, Balance c/d	75,000	2012 March, 31	By, Accommodation BR A/c	1,25,000
		2,25,000			2,25,000

Dr. Friends (drawers of bills) Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2011 April,1	To, Balance b/d	75,000	2012 March, 31	By, Bank A/c	85,000
2012 March, 31	To, Accommodation BP A/c	60,000	2012 March, 31	By, Balance c/d	50,000
		1,35,000			1,35,000

Illustration 10.

Vijay draws a bill for ₹ 60,000 and Anand accepts the same for mutual accommodation of both of them to the extent of Vijay 2/3rd and Anand 1/3rd. Vijay discounts it with bank for ₹ 56,400 and remits 1/3rd share to Anand. Before the due date, Anand draws another bill for ₹ 84,000 on Vijay in order to provide funds to meet the first bill on same sharing basis. The second bill is discounted at ₹ 81,600. With these proceeds, the first bill is settled and ₹ 14,400 were remitted to Vijay. Before the due date of the second bill, Vijay becomes insolvent and Anand receives a dividend of only 50 paise in a rupee in full satisfaction. Pass journal entries in the books of Vijay.

Solution:

In case of accommodation bills, the proceeds of discounting are shared by parties as agreed. The discounting charges are also shared in agreed proportion. Here, the ratio between Vijay and Anand is given as two-thirds and one-third. The first bill of ₹ 60,000 is discounted at ₹ 56,400 which means the discounting charges are ₹ 3,600. The share of each one is:

	1st Bill		2nd Bill	
	Proceeds (₹)	Discount (₹)	Proceeds (₹)	Discount (₹)
Vijay (2/3rd)	37,600	2,400	54,400	1,600
Anand (1/3rd)	18,800	1,200	27,200	800
Total	56,400	3,600	81,600	2,400

Further, as Vijay has become insolvent, the amount due to Anand is settled at 50% of total. To calculate this amount, it's necessary to post all transactions to Anand's account and arrive at the balance.

In the Books of Vijay
Journal Entries

Date	Particulars		L.F.	Dr. (₹)	Cr. (₹)
	Bills Receivable A/c	Dr.		60,000	
	To, Anand's A/c				60,000
	(Being bill drawn on Anand)				
	Bank A/c	Dr.		56,400	
	Discount A/c	Dr.		3,600	
	To, Bills Receivables A/c				60,000
	(Being discounting of bil)				
	Anand's A/c	Dr.		20,000	
	To, Bank A/c				18,800
	To, Discount A/c				1,200
	(Being 1/3rd proceeds paid to Anand)				
	Anand's A/c	Dr.		84,000	
	To, Bills payable A/c				84,000
	(being acceptance of bill)				
	Bank A/c	Dr.		14,400	
	Discount A/c	Dr.		1,600	
	To, Anand's A/c				16,000
	(Being proceeds of discounting 2nd bill)				
	Bills Payable A/c	Dr.		84,000	
	To, Anand's A/c				84,000
	(Being dishonour of bill)				
	Anand's A/c	Dr.		56,000	
	To, Bank A/c				28,000
	To, Deficiency A/c				28,000
	(Being payment of 50% & balance proved to be bad)				

Dr. Anand's Account Cr.

Particulars	Amount ₹	Particulars	Amount ₹
To, Bank A/c	18,800	By B/R A/c	60,000
To, Discount A/c	1,200	By Bank A/c	14,400
To, B/P A/c	84,000	By Discount A/c	1,600
		By B/P A/c	84,000
To, Bank A/c	28,000		
To, Deficiency A/c	28,000		
	1,60,000		1,60,000

Illustration 11.

Rahim, for mutual accommodation, draws a bill for ₹ 3,000 on Ratan. Rahim discounted it for ₹ 2,925. He remits ₹ 975 to Ratan. On the due date, Rahim is unable to remit his dues to Ratan to enable him to meet the bill. He, however, accepts a bill for ₹ 3,750 which Ratan discounts for ₹ 3,625. Ratan sends ₹ 175 to Rahim after discounting the above bill. Rahim becomes insolvent and a dividend of 80 paise in the rupee is received from his estate.

Pass the necessary journal entries in the books of both the parties.

Solution:

In the books of Rahim

Journal Entries

Date	Particulars		L.F.	Dr. (₹)	Cr. (₹)
	Bills Receivable A/c To, Ratan A/c (Bill drawn for mutual accommodation and accepted by Ratan)	Dr.		3,000	 3,000
	Bank A/c Discount A/c To, Bills Receivable A/c (Bill discounted by the bank)	Dr. Dr.		2,925 75	 3,000
	Ratan A/c To, Bank A/c To, Discount A/c ($\frac{1}{3}$ Proceeds remitted to Ratan)	Dr.		1,000	 975 25
	Ratan A/c To, Bills Payable A/c (Bill accepted.)	Dr.		3,750	 3,750
	Bank A/c Discount A/c To, Ratan A/c (Proceeds received from Ratan including discount charges)	Dr. Dr.		175 75	 250
	Bills Payable A/c To, Ratan A/c (Bill dishonored since he became insolvent)	Dr.		3,750	 3,750
	Ratan A/c To, Bank A/c `` Deficiency A/c (Cash paid to Ratan @80 paise in the rupee and balance transferred to deficiency account)	Dr.		2,250*	 1,800 450

***** This amount can be ascertained by preparing Ratan's Account in Rahim's book.

In the books of Ratan
Journal Entries

Date	Particulars		L.F.	Dr. (₹)	Cr. (₹)
	Rahim A/c To, Bills Payable A/c (Bill accepted for mutual accommodation).	Dr.		3,000	 3,000
	Bank A/c Discount A/c To, Rahim A/c ($\frac{1}{3}$ proceeds received from Rahim including discount)	Dr. Dr.		975 25	 1,000
	Bills Receivable A/c To, Rahim A/c (Bill drawn and accepted by Rahim)	Dr.		3,750	 3,750
	Bank A/c Discount A/c To, Bills Receivable A/c (Bill discounted)	Dr. Dr.		3,625 125	 3,750
	Rahim A/c To, Bank A/c "Discount A/c (Proceeds remitted to Rahim including discount)	Dr.		250	 175 75
	Rahim A/c To, Bank A/c (Bill honoured at maturity)	Dr.		3,750	 3,750
	Bills Payable A/c To, Bank A/c (Bill honoured at maturity)	Dr.		3,000	 3,000
	Bank A/c Bad Debt A/c To, Rahim A/c (Amount realised from the official liquidator of Rahim @ 80 paise in the rupee and the balance proved bad)	Dr. Dr.		1,800 450	 2,250

Note:

Sharing discount:

After discounting of the 1st bills, Rahim received	₹ 2,000 (including discount)
Add: Amount remitted by Ratan (after discounting of the 2nd bill).	₹ 175
Total benefit received by Rahim.	₹ 2,175

Now,

After discounting of the 2nd bill Ratan received ₹ 3,675 (Net)

∴ Proportion of Rahim to Ratan = $\frac{₹\ 2,175}{₹\ 3,625}$ x 125 = ₹ 75

∴ Rahim is to bear = ₹ 75 of discounting charges, and the balance by Ratan.

Illustration 12.

On 1.7.2013 Salil, for mutual accommodation of himself and Sunil, drew on the other a bill for ₹ 10,000 payable at 3 months date. The bill was discounted with Central Bank of India at 5% and half of the proceeds were remitted to Sunil on 2.7.2013.

On 2.7.2013, Sunil drew a bill on Salil for ₹ 4,000 payable at 3 months' date. He discounted the bill with Bank of India at 10% and remitted half the proceeds to Salil.

Sunil became bankrupt on 31.8.2013 and only 25% was received by Salil on 15.9.2013 as the first and final dividend from his estate. Write the journal entries in the books of Salil.

Solution:

In the books of Salil
Journal Entries

Date	Particulars		L.F.	Dr. (₹)	Cr. (₹)
2013 July 1.	Bills Receivable A/c	Dr.		10,000	
	To, Sunil A/c				10,000
	(Bill drawn for mutual accommodation for 3 months)				
July 2.	Bank A/c	Dr.		9,875	
	Discount A/c	Dr.		125	
	To, Bills Receivable A/c				10,000
	(Bill discounted by the bank)				
``	Sunil A/c	Dr.		5,000	
	To, Bank A/c				4,937.5
	To, Discount A/c				62.5
	(Half the proceeds remitted to Sunil)				
``	Sunil A/c	Dr.		4,000	
	To, Bills Payable A/c				4,000
	(Bill accepted for 3 months)				
``	Bank A/c	Dr.		1,950	
	Discount A/c	Dr.		50	
	To, Sunil A/c				2,000
	(Proceeds received from Sunil)				
Aug. 31	Sunil A/c	Dr.		10,000	
	To, Bank A/c				10,000
	(Bill dishonoured as Sunil became insolvent)				
Sept. 15	Bank A/c	Dr.		1,750	
	Bad Debts A/c	Dr.		5,250	
	To, Sunil A/c				7,000
	(Amount realized from the official liquidator of Sunil @ 25% and the balance proved bad)				

Illustration 13.

On 1.1.2013, Pandit, for mutual accommodation of himself and Thakur, drew upon the latter a 3 months' bill for ₹ 12,000 which was duly accepted. Pandit discounted the bill at 6% p.a. on 4.1.2013 and remitted half of the proceeds to Thakur.

On 1.2.2013, Thakur drew and Pandit accepted a bill at 3 months' for ₹ 4,800. On 4.2.2013, Thakur discounted the bill at 6% p.a. and remitted half of the proceeds to Pandit.

At maturity Pandit met his acceptance but Thakur failed to meet his and Pandit had to take it up. Pandit drew and Thakur accepted a new bill at 2 months on 4.5.2013 for the amount due to Pandit plus ₹ 100 as interest. On 1.7.2013, Thakur became insolvent and first and final dividend of 50 paise in the rupee was received from his estate on 30.09.2013.

Pass necessary journal Entries in the books of Pandit.

Solution:

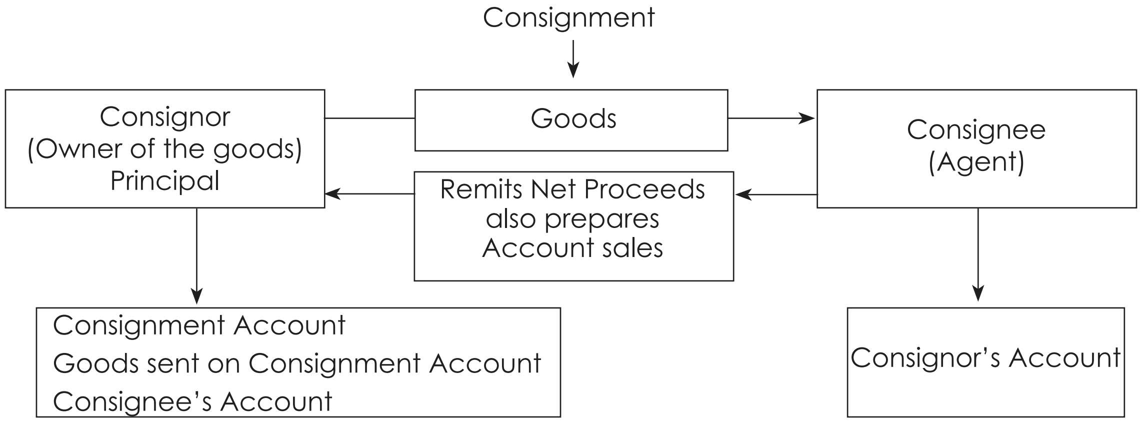
In the books of Pandit

Journal Entries

Date	Particulars		L. F.	Dr. (₹)	Cr. (₹)
2013					
Jan. 1	Bills Receivable A/c	Dr.		12,000	
	To, Thakur A/c				12,000
	(Bill Drawn on Thakur)				
Jan.4	Bank A/c	Dr.		11,820	
	Discount A/c	Dr.		180	
	To, Bills Receivable A/c				12,000
	(Bill discounted by bank)				
	Thakur A/c	Dr.		6,000	
Jan.4	To, Bank A/c				5,910
	To, Discount A/c				90
	(Half of the proceeds remitted to Thakur)				
	Thakur A/c	Dr.		4,800	
Feb. 1	To, Bills Payable A/c				4,800
	(Bill accepted)				
	Bank A/c	Dr.		2,364	
Feb. 1	Discount A/c	Dr.		36	
	To, Thakur A/c				2,400
	(Half of the proceeds received from Thakur)				
	Thakur A/c	Dr.		12,000	
Apr. 4	To, Bank A/c				12,000
	(Bill dishonoured at maturity)				
May 4	Bills Payable A/c	Dr.		4,800	
	To, Bank A/c				4,800
	(Bills honoured at maturity)				
	Thakur A/c	Dr.		100	
May 4	To, Interest A/c				100
	(Interest becomes due)				
	Bills Receivable A/c	Dr.		8,500	
May 4	To, Thakur A/c				8,500
	(Fresh bill drawn on Thakur)				
July 1	Thakur A/c	Dr.		8,500	
	To, Bills Receivable A/c				8,500
	(Bill dishonoured at maturity.)				
Sept. 30	Bank A/c	Dr.		4,250	
	Bad Debts A/c	Dr.		4,250	
	To, Thakur A/c				8,500
	(Dividend received from Thakur's estate @ 50 in a rupee)				

5.2 CONSIGNMENT ACCOUNTING

Introduction – a diagramatic representation:



Nature of a Consignment

- If the owner of the goods does not have retail outlets, he can consign the goods to an agent.
- The agent will sell the goods for him and receive a commission in return.

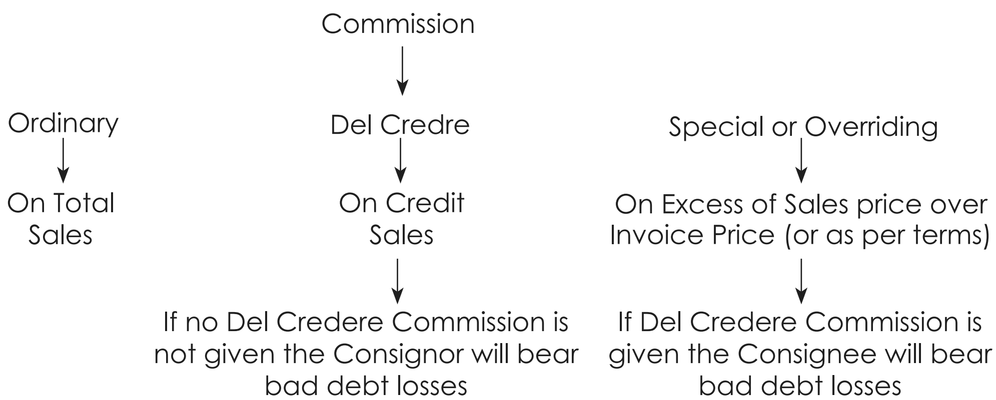
Main Terms of Consignment Trade

Consignor – He is the person who sends goods to agents e.g. a manufacturer or wholesaler.

Consignee – He is the agent to whom goods are sent for selling.

Ordinary Commission – This is a fee payable by consignor to consignee for sale of goods when the consignee does not guarantee the collection of money from ultimate customer. The % of such commission is generally lower.

Del Credre Commission – This is additional commission payable to the consignee for taking over additional responsibility of collecting money from customers. In case, the customers do not pay of the consignee takes over the loss of bad debts in his books. Although it's paid for taking over risk of bad debts that arise out of credit sales only, this commission is calculated on total sales and not on credit sales.



Account Sales – This is a periodical statement prepared by consignee to be sent to the consignor giving details of all sales (cash and credit), expenses incurred and commission due for sales, destroyed-in-transit, or in godown and deducting the amount of advance remitted by him.

Operating Cycle of Consignment Arrangement

(i) Goods are sent by consignor to the consignee

(ii) Consignee may pay some advance or accept a bill of exchange

(iii) Consignee will incur expenses for selling the goods

(iv) Consignee maintains records of all cash and credit sale.

(v) Consignee prepares a summary of results called as Account sales

(vi) Consignor pays commission to the consignee

Sometimes, the consignor may send the goods at a price higher than cost so that the consignee gets no knowledge of the real cost of goods which is confidential for the consignor.

Accounting for Consignment Business

The consignor and consignee keep their own books of accounts. The consignor may send goods to many consignees. Also, a consignee may act as agent for many consignors. It is appropriate that both of them would want to know profit or loss made on each consignment. There are certain new accounts that are to be opened in addition to regular accounts as cash or bank. Let us see the entries in the books of consignor as well as consignee.

Situations	**Consignor's books**	**Consignee's books**
On sending goods	Consignment A/c Dr To Goods Sent on Consignment	No Entry
On expenses for sending goods	Consignment A/c Dr To Cash/ Bank A/c	No Entry
On consignee accepting bill of exchange	Bill Receivables A/c Dr To Consignee's Personal A/c	Consignor's Personal A/c Dr To Bills Payable A/c
On expenses incurred by consignee	Consignment A/c Dr To Consignee's Personal A/c	Consignor's Personal A/c Dr To Cash/ Bank A/c
On consignee reporting sales	Consignee's Personal A/c Dr To Consignment A/c	Cash/ Bank A/c Dr To Consignor's Personal A/c
For commission	Consignment A/c Dr To Consignee's Personal A/c	Consignor's Personal A/c Dr To Commission A/c
On closing stock	Stock on Consignment A/c Dr To Consignment A/c	No Entry

Credit Sales Accounting in books of Consignor

In case consignee sales goods on cash and credit both, the responsibility of collection from customers may be either with consignee or consignor. The risk of non-collection is usually borne by the consignor. If consignor want this to be shouldered by the consignee, additional commission in the form of 'Del Credre' commission is payable. It may be noted that in case of credit sales, the personal accounts of debtors are to be maintained by the consignor and not the consignee. The entry for credit sales will be:

Consignment Debtors A/c Dr

To Consignment A/c

Del Credere Commission and Bad Debts

Sometimes the consignor allows an extra commission to the consignee in order to cover the risk of collection from customer. On account of credit sales which is known as Del Credere Commission. Naturally, if debt is found to be irrecoverable the same must be form borne by the consignee. There will be no effect in the books of consignor. In short, credit sales will be treated as cash sales to consignor. If no Del credere commission is given by the consignor to the consignee, the amount of Bad debts must be borne by the consignor.

Entries in the Books of Consignor

(a) When Del Credere Commission is given

(i)	**For Credit Sales** Consignee's Personal A/c Dr. To, Consignment A/c
(ii)	**For Bad Debts** No Entry
(iii)	**For Del Credere Commission** Consignment A/c Dr. To, Consignee's Personal A/c

(b) When Del Credere Commission is not given

(i)	**For Credit Sales** Consignment Debtors A/c Dr. To, Consignment A/c
(ii)	**For Bad Debts** Consignment A/c Dr. To, Consignment Debtors A/c
(iii)	**(a) For realization of Cash** Cash A/c Dr. To, Consignment Debtors A/c if collected by Consignor
	(b) Consignee's Personal A/c Dr. To, Consignment Debtors A/c if collected by Consignee

Entries in the Books of Consignee

(a) When Del Credere Commission is given

(i)	**For Credit Sales** Consignment Debtors A/c Dr. To, Consignor A/c
(ii)	**For Bad Debts** Bad Debts A/c Dr. To, Consignment Debtors A/c
(iii)	**For realization of cash from cash from Debtors** Cash/ Bank A/c Dr. To, Consignment Debtors A/c
(iv)	**For Closing Bad Debts A/c** Commission Received A/c Dr. To, Bad Debts A/c

(b) When Del Credere Commission is not given –

There will be no entry against a bad debts entry in the books of consignee.

Valuation of Stock

- If there are unsold goods on consignment at the end of the accounting period, the value of the unsold stock will be carried down to the following period.
- Unsold stock on consignment should properly value; otherwise final accounts cannot be prepared.
- Usually, unsold stock on consignment is value at (Consignor's Cost +Consignee's Expenses)

- Alternatively, total cost of goods plus total expenses incurred by the consignor plus total non recurring expenses of the consignee are to be added and stock should valued on the basis of proportionate unsold goods.

The entry will be:

Stock on Consignment A/c Dr.

To, Consignment A/c

(Unsold stock on consignment will appear in the asset side of Balance Sheet.)

Illustration 14.

Sree Traders of Gujrat purchased 10,000 sarees @ ₹ 100 per saree. Out of these 6,000 sarees were sent on consignment to Nirmala Traders of Kolkata at the selling price of ₹ 120 per saree. The consignors paid ₹ 3,000 for packing and freight.

Nirmala Traders sold 5,000 sarees @ ₹ 125 per saree and incurred ₹ 1,000 for selling expenses and remitted ₹ 5,00,000 to Gujrat on account. They are entitled to a commission of 5% on total sales plus a further of 25% commission on any surplus price realized over ₹ 120 per saree.

3,000 sarees were sold at Gujrat @ ₹ 110 per saree.

Owing to fall in market price, the value of stock of saree in hand is to be reduced by 5%. Your are required to prepare (i) Consignment Account, and (ii) Nirmala Traders Account.

Solution:

(i) In the books of Sree Traders

Dr. Consignment Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Goods Sent on Consignment A/c	6,00,000	By Nirmala Traders A/c :	
(6,000 x ₹ 100)		Sale proceeds (5,000 x ₹ 125)	6,25,000
To, Bank A/c (Packing and Freight)	3,000	By, Stock on Consignment A/c(W.N.2)	90,250
To, Nirmala Traders A/c			
- Selling Expenses	1,000		
- Commissions (W.N.1)	37,500		
To, Profit & Loss A/c	73,750		
(Profit on Consignment)			
	7,15,250		**7,15,250**

Note:

3,000 sarees which were sold at Gujrat @ ₹ 110 per saree are not to be taken into consideration since it is not a consignment transaction and hence the same is extended from Consignment Account.

Although the consignor purchased 10,000 sarees, only 6,000 sarees are related to consignment transaction, balance is not to be taken into Consignment Account at all.

(ii)

Dr. Nirmala Traders Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To Consignment A/c :		By, Bank A/c (Advance)	5,00,000
Sales Proceeds	6,25,000	By, Consignment A/c (Exp. + Com.)	38,500
		By, Balance c/d	86,500
	6,25,000		**6,25,000**

Workings:

1. Calculation of Commission payable to Nirmala Traders:

	₹
Total Sales @ ₹ 125 per saree	6,25,000
Less: Amount ₹ 120 per saree	6,00,000
Surplus Price Realised	25,000
Less: @ 5% on total Sales (₹ 6,25,000 x 5%)	31,250
Add: 25% on ₹ 25,000	6,250
	37,500

2. Valuation of Unsold Stock:

Since market price has fallen by 5%, valuation of unsold stock on consignment will be calculated as under:

	(₹)
Total Cost (1,000 x ₹ 100)	1,00,000
(without Considering expenses)	
Less: 5% in reduction	5,000
	95,000
Less: Consignee's Com. @ 5%	4,750
Estimated Selling Price	**90,250**

Losses on Consignment

There are two types of losses which may arise in case of a consignment transaction, viz.

(a) Normal Loss, and

(b) Abnormal Loss

(a) Normal Loss – Normal Losses arise as a result of natural causes, e.g. evaporation, leakage, breakage etc., and they are inherent in nature. Since normal loss is a charge against gross profit no additional adjustment is required for this purpose. Moreover, as the same is a part of cost of goods, when valuation of unsold stock is made in case of consignment account the quantity of such loss (not the amount) should be deducted from the total quantity of the goods received by the consignee in good condition. Thus,

Value of closing stock will be = $\text{Total Value of goods sent} \times \dfrac{\text{Unsold quantity}}{\text{Good quantity received by consignee}}$

Illustration 15.

From the following particulars ascertain the value of unsold stock on Consignment.

Goods sent (1,000 kgs.)	₹ 20,000
Consignor's expenses	₹ 4,000
Consignees non-recurring expenses	₹ 3,000
Sold (800 kgs.)	₹ 40,000
Loss due to natural wastage (100 kgs.)	

Solution:

Value of unsold stock	₹
Total cost of goods sent	20,000
Add : Consignor's expenses	4,000
Add : Non-recurring expenses	3,000
Cost of (1,000 kgs – 100 kgs) = 900 kgs.	27,000

∴ Value of unsold stock (1,000 – 800 – 100) = 100 kgs. will be $= ₹\ 27{,}000 \times \frac{100\text{ kgs.}}{900\text{ kgs.}}$

$= ₹\ 3{,}000$

(b) Abnormal Losses - Abnormal Losses arises as a result of negligence/ accident etc., e.g., theft, fire etc. Before ascertaining the result of the consignment, value of abnormal loss should be adjusted. The method of calculation is similar to the method of calculating unsold stock. Sometimes insurance company admits the claim in part or in full. The same should also be adjusted against such abnormal loss.

Treatment of Abnormal Loss

(i) For abnormal Loss –

Abnormal Loss A/c Dr

To Consignment A/c

(ii) If goods are insured and admitted or covered by Insurance Company.

Insurance Co./Bank A/c Dr

To Abnormal Loss A/c

(iii) If goods are not insured:

Profit & Loss A/c Dr

To Abnormal Loss A/c

(iv) For the balance (i.e. which is not covered/ admitted by Insurance Co.):

Profit & Loss A/c Dr

To Abnormal Loss A/c

Illustration 16.

5,000 shirts were consigned by Raizada & Co. of Delhi to Zing of Tokyo at cost of ₹ 375 each. Raizada & Co. paid freight ₹ 50,000 and Insurance ₹ 7,500.

During the transit 500 shirts were totally damaged by fire. Zing took delivery of the remaining shirts and paid ₹ 72,000 on custom duty.

Zing had sent a bank draft to Raizada & Co. for ₹ 2,50,000 as advance payment. 4,000 shirts were sold by him at ₹ 500 each. Expenses incurred by Zing on godown rent and advertisement etc. amounted to ₹ 10,000. He is entitled to a commission of 5%

One of the customer to whom the goods were sold on credit could not pay the cost of 25 shirts.

Prepare the Consignment Account and the Account of Zing in the books of Raizada & Co. Zing settled his account immediately. Nothing was recovered from the insurer for the damaged goods.

Solution:

In the books of Raizada & Co.

Dr. Consignment Account Cr.

Particulars		Amount (₹)	Particulars	Amount (₹)
To, Goods Sent on Consignment A/c		18,75,000	By, Zing A/c :	
(5,000 x ₹ 375)			- Sale proceeds (3,975 x ₹ 500)	19,87,500
To, Bank A/c :			By, Consignment Debtors A/c	
- Freight	50,000	57,500	- Credit Sales (25 x ₹ 500)	12,500
- Insurance	7,500		By, Abnormal Loss A/c (W.N. 1)	1,93,250
To, Zing A/c :			By, Stock on Consignment A/c: (W.N.2)	2,01,250
- Custom Duty	72,000			
- Godown Rent, Adv. etc	10,000			
- Commissions @5% on total Sales	1,00,000	1,82,000		
To, Consignment Debtors A/c:				
- Bad Debts		12,500		
To, Profit and Loss A/c :				
- Profit on Consignment transferred		2,67,500		
		23,94,500		**23,94,500**

Dr. Zing Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment A/c		By, Bank Draft A/c	
Sale Proceeds	19,87,500	Advance	2,50,000
		By, Consignment A/c	
		Expenses & Com.	1,82,000
		By, Bank A/c	
		Final Settlement	15,55,500
	19,87,500		**19,87,500**

Dr. Abnormal Loss Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment A/c	1,93,250	By, Profit and Loss A/c	1,93,250
	1,93,250		**1,93,250**

Workings:

1. Valuation of goods Lost-in-transit and unsold Stock: (₹)

Total Cost	18,75,000
Add: Consignor's Expenses	57,500
C.P. of 5,000 Shirts	19,32,500
Less: Lost-in-transit $\left(\frac{₹\ 19,32,500 \times 500}{5,000}\right)$	(1,93,250)
Add: Non-recurring Ex. of Consignee	72,000
C.P. of 4,500 Shirt	**18,11,250**

2. **Value of under Stock** $\frac{₹18,11,250 \times 500}{4,500}$ = ₹ 2,01,250

Note:

Since Del Credere Commission is not given by the consignor to the consignee, amount of bad debt is to be charged against Consignment Account.

Simultaneous Normal Loss and Abnormal Loss

Illustration 17.

Lubrizols Ltd. of Mumbai consigned 1,000 barrels of lubricant oil costing ₹ 800 per barrel to Central Oil Co. of Kolkata on 1.1.2013. Lubrizols Ltd. paid ₹ 50,000 as freight and insurance. 25 barrels were destroyed on 7.1.2013 in transit. The insurance claim was settled at ₹ 15,000 and was paid directly to the consignor.

Central Oil took delivery of the consignment on 19.1.2013 and accepted a bill drawn upon them by Lubrizols Ltd., for ₹ 5,00,000 for 3 months. On 31.3.2013 Central Oil reported as follows:

(i) 750 barrels were sold as ₹ 1,200 per barrel.

(ii) The other expenses were:

	(₹)
Clearing charges	11,250
Godown Rent	10,000
Wages	30,000
Printing, Stationery, Advertisement	20,000

25 barrels of oil were lost due to leakage which is considered to be normal loss.

Central Oil Co. is entitled to a commission of 5% on all the sales affected by them. Central Oil Company paid the amount due in respect of the consignment on 31st March itself.

Show the Consignment Account, the Account of Central Oil Co., and the Lost –in-Transit Account as they will appear in the books of Lubrizols Ltd.

Solution:

In the books of Lubrizols Ltd.

Dr. Consignment to Kolkata Account Cr.

Date	Particulars	Amount (₹)	Amount (₹)	Date	Particulars	Amount (₹)
2013 Jan. 1	To Goods sent on Consignment A/c (1,000 x ₹ 800)		8,00,000	2013 Jan. 7	By, Abnormal Loss A/c	21,250
Mar.31	To, Bank A/c – Expenses		50,000	Mar.31	By, Central Oil Co. A/c Sale proceeds (750 x ₹ 1,200)	9,00,000
	To, Central Oil Co. A/c :				By, Stock on Consignment A/c	1,76,842
	Clearing charges	11,250				
	Godown Rent	10,000				
	Wages	30,000				
	Printing	20,000	71,250			
	To, Central Oil Co. A/c : Commissions @5%		45,000			
	To, Profit on Consignment A/c: (Transferred to Profit & Loss A/c)		1,31,842			
			10,98,092			**10,98,092**

Dr. **Central Oil Co. Ltd. Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Mar.31	To, Consignment to Kolkata A/c -Sale Proceeds	9,00,000	2013 Jan.7 Mar.31	By, Bills Receivable A/c By, Consignment to Kolkata A/c - Expenses - Commission By, Bank (amount due)	5,00,000 71,250 45,000 2,83,750
		9,00,000			**9,00,000**

Dr. **Abnormal Loss Account** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013 Jan. 7	To, Consignment to Kolkata A/c	21,250	2013 Jan.7 Mar.31	By Bank-Insurance Claim A/c By, Profit and Loss A/c (bal. fig.)	15,000 6,250
		21,250			**21,250**

Workings:

Valuation of Goods Lost-in-transit and Unsold Stock:

	(₹)
Total Cost (1,000 x ₹ 800)	8,00,000
Add: Consignor's Expenses	50,000
Value of 1,000 barrels	8,50,000
Less: Lost-in-transit $25 \times \frac{₹\ 8,50,000}{1,000}$	21,250
Add: Non-recurring expenses of Consignee	11,250
Value of (1,000 – 25 – 25) = 950 Kg.	**8,40,000**

Therefore, Value of Stock = $200 \times ₹\ \frac{₹\ 8,40,000}{950}$ = ₹ 1, 76, 842 (App.)

Invoice Price Method

Generally, the method is used where the consignor does not want to disclose the real price of the goods which are sent to the consignee for a number of reasons. For this purpose, he sends goods at invoice price. It means, certain amount of profit is added to the cost price of goods. Profit/ Loading is calculated after charging certain percentage either on Cost or Sale/ Invoice price.

Naturally, for finalization of accounts, such loading should be adjusted accordingly. Loading is usually calculated on:

(a) Goods Sent on Consignment; (b) Any Abnormal Cost; or (c) Unsold Stock.

Entries to be Recorded in the Books of Consignor

a. **For Goods Sent on Consignment -**

Consignment A/c Dr.
To, Goods sent on Consignment A/c } At Invoice Price.

b. For Loading of Goods sent on Consignment –

Goods Sent on Consignment A/c Dr.
To, Consignment A/c
} With the Amount of Loading on Goods Sent.

c. For Loading on Abnormal Loss –

Consignment A/c Dr.
To, Abnormal Loss A/c
} With the Amount of Loading on Abnormal Loss .

d. For Loading on Unsold Stock-

Consignment A/c Dr.
To, Stock Suspense A/c / Stock Reserve A/c

Note: Other entries are as usual.

Illustration 18.

Mr. X , the consignor , consigned goods to Mr. Y 100 Radio sets valued ₹ 50,000. This was made by adding 25% on cost. Mr. X paid ₹ 5,000 for freight and insurance. 20 sets are lost – in- transit for which Mr. X received ₹ 5,000 from the Insurance company.

Mr. Y received remaining goods in good condition. He incurred ₹ 4,000 for freight and miscellaneous expenses and ₹ 3,000 for godown rent. He sold 60 sets for ₹ 50,000. Show the necessary ledger account in the books of Mr. X assuming that Mr. Y was entitled to an ordinary Commission of 10% on sales and 5% Del Credere Commission on sales. He also reported that ₹ 1,000 were provide bad .

Solution:

In the books of Mr.X

Dr. Consignment Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Goods Sent on Consignment A/c	50,000	By, Goods Sent on Consignment A/c (Loading) (₹ 50,000x100/125)	10,000
To, Bank A/c – Expenses	5,000	By, Y A/c – Sale Proceeds	50,000
To, Y A/c		By, Abnormal Loss A/c	11,000
- Freight and Misc. Expenses	4,000		
- Godown Rent	3,000		
To, Abnormal Loss A/c (Loading)	2,000	By, Stock on Consignment A/c	12,000
To, Stock surplus A/c	2,000		
To, Y A/c			
- Commission (ordinary) @ 10%	5,000		
- Del credere Commission @ 5%	2,500		
To, Profit and Loss A/c			
- Profit on Consignment	9,500		
	83,000		**83,000**

Dr. Y Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment A/c – Sale proceeds	50,000	By, Consignment A/c	
		- Expenses	7,000
		- Commission	7,500
		By, Balance c/d	35,500
	50,000		**50,000**

Dr. **Abnormal Loss Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment A/c	11,000	By, Consignment A/c (Loading)	2,000
		By, Bank A/c – Insurance Claim	5,000
		By, Profit and Loss A/c - Loss transferred	4,000
	11,000		**11,000**

Workings:

(1) Calculation of Loading:

	I.P.	Load	C.P.
	125	25	100
	50,000		$\frac{100 \times 50,000}{125}$ = ₹ 40,000

∴ Loading = ₹(50,000 – 40,000) = ₹ 10,000

Loading Per Set = ₹ 10,000 ÷ 100 = ₹ 100

(2) Valuation of Goods Lost – in – transit and Unsold stock

	₹
Total Invoice Price	50,000
Add: Consignor's Expenses	5,000
Invoice Price of 100 sets	55,000
Less: Lost In Transit – $\frac{20 \times 55,000}{100}$	11,000
	44,000
Add: Non recurring Expenses of Mr. Y	4,000
I. P. of 80 sets	48,000

∴ For Unsold Stock of (100 – 20 -60) = 20 sets

$= \frac{48,000 \times 20}{80}$ = ₹ 12,000

(3) Loading on Abnormal Loss = 20 x ₹ 100 = ₹ 2,000

(4) Stock suspense = 20sets x ₹ 100 = ₹2,000

(5) Since Del Credere Commission is given that will not be any entry for bad debts.

Illustration 19.

On 1.7.2012, Mantu of Chennai consigned goods of the value of ₹ 50,000 to Pandey of Patna. This was made by adding 25% on cost. Mantu paid that on ₹ 2,500 for freight and ₹ 1,500 for insurance. During transit $\frac{1}{10}$ th of the goods was totally destroyed by fire and a sum of ₹ 2,400 was realised from the insurance company. On arrival of the goods, Pandey paid ₹ 1,800 as carriage to godown. During the year ended 30th June 2013, Pandey paid ₹ 3,600 for godown rent and ₹ 1,900 for selling expenses. $\frac{1}{9}$ th of the remaining goods was again destroyed by fire in godown and nothing was recorded from the insurance company. On 1.6.2013, Pandey sold half ($\frac{1}{2}$) the original goods for ₹ 30,000 and changed a commission of 5% on sales. As on 30.6.2013, Pandey sent a bank draft to Mantu for the amount so far due from him.

You are required to prepare the following ledger accounts in the books of Mantu of Chennai for the year ended 30.6.2013.

(a) Consignment to Patna Account; (b) Goods Destroyed by Fire Account; and (c) Personal Account of Pandey.

Solution:

In the books of Mantu of Chennai

Dr. Consignment to Patna Account Cr.

Particulars		Amount (₹)	Particulars	Amount (₹)
To Goods Sent on Consignment A/c		50,000	By, Goods Sent on Consignment A/c. - Loading	10,000
To, Bank A/c :				
Freight	2,500			
Insurance	1,500	4,000	By, Pandey A/c : Sale Proceeds	30,000
To, Pandey A/c :				
Carriage Inward	1,800		By, Goods Destroyed by Fire A/c	11,000
Godown Rent	3,600		By, Stock on Consignment A/c	16,800
Selling Expenses	1,900	7,300		
To, Pandey A/c :				
Commission (5% on ₹ 30,000)		1,500		
To, Goods Destroyed by Fire A/c : Loading		2,000		
To, Stock Suspense A/c : Loading on unsold stock		3,000		
		67,800		**67,800**

Note: There is no normal Profit or Loss on Consignment.

Dr. Goods Destroyed by Fire Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment to Patna A/c :		By, Consignment to Patna A/c : Loading	2,000
– In transit	5,400		
– In Godown	5,600		
		By, Bank A/c – Insurance claim	2,400
		By, Profit & Loss A/c	6,600
	11,000		**11,000**

Dr. Pandey Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment to Patna A/c		By, Consignment to Patna A/c :	
Sale proceeds	30,000	Expense	7,000
		Commission	1,500
		By, Draft A/c	21,200
	30,000		**30,000**

Working:

Valuation of goods destroyed by fire and unsold stock

Particulars	Amount (₹)
Total Insurance Claim	50,000
Add: Consignor's Expenses	4,000
	54,000
Less: Lost-in-Transit ($\frac{1}{10}$ x ₹ 54,000)	5,400
Goods received ($\frac{9}{10}$ th of ₹ 54,000)	48,600
Add: Non- recurring expenses of Pandey	1,800
	50,400
Less: Value of goods destroyed by fire in godown ($\frac{1}{9}$th of ₹ 50,400)	5,600
Value of $\frac{8}{10}$ th	**44,800**

$\therefore$ Value of unsold stock $\frac{9}{10} - (\frac{1}{9}\text{th of } \frac{9}{10}) = \frac{9}{10} - \frac{1}{10} = \frac{8}{10}$

Goods sold $\frac{1}{2}$ i.e., $= \frac{8}{10} - \frac{1}{2} = \frac{3}{10}$th

$\therefore$ Value of unsold stock = ₹ 44,800 x $\frac{3}{10}$ x $\frac{10}{8}$ = ₹ 16,800

Loading on goods destroyed = ₹ 10,000 x $\frac{2}{10}$ = ₹ 2,000

Loading on unsold stock = ₹ 10,000 x $\frac{3}{10}$ = ₹ 3,000.

Illustration 20.

Usha sent goods costing ₹ 75,50,000 on consignment basis to Gayatri on 1st Feb 2012 @ 8.5% commission. Usha spent ₹ 8,25,000 on transportation. Gayatri spent ₹ 5,25,000 on unloading. Gayatri sold 88% of the goods for ₹ 90,00,000, 10% of the goods for ₹ 10,00,000 and the balance are taken over by her at 10% below the cost price. She sent a cheque to Usha for the amount due after deducting commission.

Show Consignment to Gayatri Account and Gayatri's Account in the books of Usha.

Solution:

Calculation of sales	**Cost (₹)**	**Invoice (₹)**
Goods sent	75,50,000	
88% of the goods	66,44,000	90,00,000
10% of goods	7,55,000	10,00,000
Total sales	73,99,000	1,00,00,000
Goods taken over by Gayatri	1,51,000	1,35,900

There is no closing stock here as all unsold goods were taken over by Gayatri. The commission is payable only on sales to outsiders and not on goods taken over by Gayatri.

Thus, commission is 8.5% on ₹ 10,000,000 i.e. ₹ 8,50,000

The required ledger Accounts are shown below.

Dr. **Consignment to Gayatri Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Goods Sent on Consignment A/c	75,50,000	By Gayatri's A/c (sales)	1,00,00,000
To Bank A/c (transportation)	8,25,000	By Gayatri's A/c (goods taken over)	1,35,900
To Gayatri's A/c :			
- Unloading charges	5,25,000		
- Commission	8,50,000		
To P & L A/c	3,85,900		
	1,01,35,900		**1,01,35,900**

Dr. **Gayatri's Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Consignment A/c	1,01,35,900	By Consignment A/c (expenses)	5,25,000
		By Consignment A/c (commission)	8,50,000
		By Bank A/c	87,60,900
	1,01,35,900		**1,01,35,900**

Advance from Consignee as Security Money:

Usually the consignor takes certain some of money as advance by way of cash/draft/bill etc from the consignee against the goods that are sent for sale to the consignee. The so called advance money is automatically adjusted against the total dues in order to determine the net amount payable. If the advance money is not treated as security money, then the entire amount of advance money may be adjusted even if a part of goods are sold. But if the advance money is treated as security money, in that case, the proportionate amount of such advance money will be carried forward as the same is treated to the unsold stock. The entries in the books of both companies and consignor will be:

In the books of Consignor		In the books of Consignee	
Cash/ Draft/Bill Receivable A/c	Dr.	Consignor A/c	Dr.
To, Consignee's Personal A/c		To, Cash/ Draft/B/P A/c	

Illustration 21.

Ram of Patna consigns to Shyam of Delhi for sale at invoice price or over. Shyam is entitled to a commission @ 5% on invoice price and 25% of any surplus price realized. Ram draws on Shyam at 90 days sight for 80% of the invoice price as security money. Shyam remits the balance of proceeds after sales, deducting his commission by sight draft.

Goods consigned by Ram to Shyam costing ₹ 20,900 including freight and were invoiced at ₹ 28,400. Sales made by Shyam were ₹ 26,760 and goods in his hand unsold at 31st Dec, represented an invoice price of ₹ 6,920. (Original cost including freight ₹ 5,220). Sight draft received by Ram from Shyam upto 31st Dec was ₹ 6,280. Others were in- transit.

Prepare necessary any Ledger Accounts.

Solution:

In the books of Ram

Dr. **Consignment to Delhi Account** **Cr.**

Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To, Goods Sent on Consignment A/c	28,400	By, Goods Sent on Consignment A/c (Loading) ₹ (28,400- 20,900)	7,500
To, Y A/c – Commission	2,394	By, Shyam A/c – Sale proceeds	26,760
To, Stock Reserve A/c ₹(6,920 – 5,220)	1,700	By, Stock on Consignment A/c	6,920
To, Profit and Loss A/c- Profit on consignment transferred	8,686		
	41,180		41,180

Dr. **Shyam Account** **Cr.**

Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To, Consignment to Delhi A/c	26,760	By, Bills Receivable A/c	22,720
To, Balance c/d (₹ 6,920 x 80%)	5,536	By, Consignment to Delhi A/c - commission	2,394
		By, Draft A/c	6,280
		By, Draft- in- Transit A/c	902
	32,296		32,296

Dr. **Goods sent on Consignment Account** **Cr.**

Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To, Consignment to Delhi A/c	7,500	By, Consignment to Delhi A/c	28,400
To, Trading A/c (bal.fig)	20,900		
	28,400		28,400

Workings:

Calculation of Commission:	₹
Invoice value of goods	28,400
Less: Unsold stock	6,920
Invoice value of goods sold	21,480
Total sale proceeds	26,760
Less: Invoice value of goods sold	21,480
Surplus price	5,280
Commission @ 5% on ₹ 21,480	1,074
Add: @ 25% on ₹ 5,280	1,320
	2,394

5.3 JOINT VENTURE ACCOUNTS

Introduction

Joint Venture is a temporary form of business organization. There are certain business activities or projects that may involve higher risks; higher investments and even they demand multi-skills. In such cases, an individual person may not be able to muster all resources. Hence two or more people having requisite skill sets come together to form a temporary partnership. This is called a Joint Venture. There is a Memorandum of Undertaking (MOU) signed for this purpose.

- The business activities for which Joint Ventures (JV) are formed could be :
  - Construction of dams, bridges, roads etc
  - Buying & selling of goods for a particular season
  - Producing a film
  - Purchasing land selling plots
- The basic features of a Joint Venture business are :
  - (i) It is done for a specific purpose and hence has a limited duration.
  - (ii) The partners are called co-venturers.
  - (iii) The profit or loss on joint venture is shared between the co-venturers in the agreed ratio.
  - (iv) The co-venturers may or may not contribute initial capital.
  - (v) The JV is dissolved once the purpose of the business is over.
  - (vi) The accounts of the co-venturers are settled immediately on dissolution.
  - (vii) A joint venture has no name.

Accounting Entries

There may be three ways of maintaining the books of account for the joint venture business. They are:

(a) Where separate books of accounts are maintained

(b) Where no separate books of accounts are maintained

(c) Memorandum Joint Venture

(a) When Separate Books are Maintained

As the business duration is short, the books of accounts are not very comprehensive. The basic purpose is to know profit or loss on account of the joint venture.

(a) Like a normal P & L A/c, a "Joint Venture A/c" is opened which records all transactions related to the activities carried out. The net result of this a/c will be either profit or loss.

(b) To record cash/bank transactions a "Joint Bank A/c" is maintained. This could take a form of cash book with cash and bank column. It will record, the initial contributions made by each co-venturer, proceeds of sales, expenses and distribution of net balances among co-venturers on dissolution of the venture.

(c) To record transaction related to co-venturers, "Co-Venturers' personal A/cs" are also maintained.

The accounting entries are normally as follows:

No.	Transaction	Entry
1	Contribution of co-venturers	Joint Bank A/c Dr. To, Co-Venturers A/c
2	Goods sent by co-venturer out of his own stock	Joint Venture A/c Dr. To, Co-Venturers A/c
3	Expenses paid by co-venturers	Joint Venture A/c Dr. To, Co-Venturers A/c

No.	Transaction	Entry
4	Materials purchased out of joint venture funds	Joint Venture A/c Dr. To Joint Bank A/c
5	For expenses out of joint bank A/c	Joint Venture A/c Dr. To Joint Bank A/c
6	For goods sold for cash	Joint Bank A/c Dr. To Joint Venture A/c
7	Contract / sale price received in form of shares / cash	Joint Bank A/c Dr. Shares A/c Dr. To Joint Venture A/c
8	Commission / salary to co-venturers	Joint Venture A/c Dr. To Co-Venturers A/c
9	Unsold goods taken over by co-venturers	Co-Venturers A/c Dr. To Joint Venture A/c
10	Shares taken over by co-venturers	Co-Venturers A/c Dr. To Shares
11	If shares are sold in open market	Joint Bank A/c Dr. To Shares
12	For profit on joint venture	Joint Venture A/c Dr. To Co-Venturers A/c
13	For loss on joint venture	Co-Venturers A/c Dr. To Joint Venture A/c
14	For final distribution of funds	Co-Venturers A/c Dr. To Joint Bank A/c

Illustration 22.

Aditya and Amit entered into a joint venture to buy and sale Ganesh idols for the Ganesh festival. They opened a Joint Bank Account. Aditya deposited ₹ 2,00,000 and Amit ₹ 1,50,000. Aditya supplied Ganesh idols worth ₹ 25,000 and Amit supplied decoration material worth ₹ 15,000.

The following payments were made by the venture:

(a) Cost of Ganesh idols purchased ₹ 2,50,000

(b) Transportation charges ₹ 12,000

(c) Advertising ₹ 7,500 and Sundry Expenses ₹ 2,500

They sold idols for ₹ 4,00,000 for cash. Aditya took over some idols for ₹ 30,000 and Amit took over remaining for ₹ 10,000. The profit or losses were to be shared equally between co-venturers. Prepare Joint Venture Account, Joint Bank Account and each Co-Venturer's Account.

Solution:

Dr. Joint Venture Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Aditya A/c (Materials)	25,000	By, Joint Bank A/c –sales	4,00,000
To, Amit A/c (Materials)	15,000	By, Aditya A/c	30,000
To, Joint Bank A/c (Materials Purchased)	2,50,000	By, Amit A/c	10,000
To, Joint Bank A/c (Transport)	12,000		
To, Joint Bank A/c (Advertising)	7,500		
To, Joint Bank A/c (Sundry Exp.)	2,500		
To, Profit on Venture A/c :			
Aditya	64,000		
Amit	64,000		
	4,40,000		4,40,000

Dr.	Joint Bank Account		Cr.
Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To, Aditya A/c	2,00,000	By, Joint Venture A/c : material purchase	2,50,000
To, Amit A/c	1,50,000	By, Joint VentureA/c : transport	12,000
To, Joint Venture A/c - sales	4,00,000	By, Joint Venture A/c : advertising	7,500
		By, Joint Venture A/c : sundry	2,500
		By, Aditya A/c : closing	2,59,000
		By, Amit A/c : closing	2,19,000
	7,50,000		7,50,000

Dr.	Aditya's Account		Cr.
Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To Joint Venture A/c - material	30,000	By, Joint Bank	2,00,000
To Joint Bank A/c - closing	2,59,000	By, Joint Venture - materials	25,000
		By, Joint Venture – profit	64,000
	2,89,000		2,89,000

Dr.	Amit's Account		Cr.
Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To Joint Venture A/c - material	10,000	By Joint Bank A/c	1,50,000
To Joint Bank A/c - closing	2,19,000	By Joint Venture A/c - materials	15,000
		By Joint Venture A/c– profit	64,000
	2,29,000		2,29,000

Illustration 23.

Prabir and Mihir doing business separately as building contractors undertake jointly to build a skyscraper for a newly started public limited company for a contract price of ₹ 1,00,00,000 payable as ₹ 80,00,000 in cash and the balance by way of fully paid equity shares of the new company. A Bank Account was opened for this purpose in which Prabir paid ₹ 25,00,000 and Mihir ₹ 15,00,000. The profit sharing ratio was agreed as 2:1 between Prabir and Mihir. The transactions were:

(a) Advance received from the company ₹ 50,00,000

(b) Wages to contractors ₹ 10,00,000

(c) Bought materials ₹ 60,00,000

(d) Material supplied by Prabir ₹ 10,00,000

(e) Material supplied by Mihir ₹ 15,00,000

(f) Architect's fees paid from Joint Bank account ₹ 21,00,000

The contract was completed and the price was duly paid. The joint venture was duly closed by Prabir taking all the shares at ₹ 18,00,000 and Mihir taking over the balance material for ₹ 3,00,000. Prepare the Joint Venture Account, Joint Bank Account. Co-venturer's Accounts and Shares Account.

Solution:

Dr.	Joint Venture Account		Cr.
Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To, Joint Bank A/c – wages	10,00,000	By, Joint Bank A/c - advance	50,00,000
To, Joint Bank A/c - material	60,00,000	By, Joint Bank A/c - balance price	30,00,000
To, Joint Banks A/c - Architect	21,00,000	By, Shares A/c – received	20,00,000
To, Prabir A/c - material	10,00,000	By, Mihir A/c - stock taken	3,00,000
To, Mihir A/c - material	15,00,000	By, Prabir A/c - 2/3rd loss	10,00,000
To, Shares A/c - loss	2,00,000	By, Mihir A/c - 1/3rd loss	5,00,000
	1,18,00,000		1,18,00,000

Dr. Joint Bank Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Prabir A/c	25,00,000	By, Joint Venture A/c – wages	10,00,000
To, Mihir A/c	15,00,000	By, Joint Venture A/c – materials	60,00,000
To, Joint Venture A/c - advance	50,00,000	By, Joint Venture A/c – Architect	21,00,000
To, Joint Venture A/c - balance	30,00,000	By, Prabir A/c - balance paid	7,00,000
		By, Mihir A/c - balance paid	22,00,000
	1,20,00,000		1,20,00,000

Dr. Prabir's Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Shares A/c – taken	18,00,000	By, Joint Bank A/c	25,00,000
To, Joint Venture A/c - loss	10,00,000		
To, Joint Bank A/c - Balance paid	7,00,000	By, Joint Venture A/c - material	10,00,000
	35,00,000		35,00,000

Dr. Mihir's Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Joint Venture A/c – stock taken	3,00,000	By, Joint Bank A/c	15,00,000
To, Joint Venture A/c – Loss	5,00,000		
To, Joint Bank A/c - Balance paid	22,00,000	By, Joint Venture - material	15,00,000
	30,00,000		30,00,000

Dr. Shares Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Joint Venture A/c	20,00,000	By, Prabir A/c	18,00,000
		By, Joint Venture A/c - loss	2,00,000
	20,00,000		20,00,000

Illustration 24.

P and Q entered into a joint venture for underwriting the subscription at par of 25,000 shares of ₹ 10 each of a Joint Stock Company. They agreed to share profits or losses in the ratio of $\frac{3}{5}$ and $\frac{2}{5}$, respectively. The consideration for guaranteeing the subscription was 250 other shares of ₹ 10 each fully paid to be issued to them.

The public took up 24,000 of the shares and the remaining shares of the guaranteed issue were taken up by P and Q who provide cash equally. The entire shareholding of the venture was then sold through other brokers, 60% at a price of ₹ 9.50 less brokerage 50 paisa per share, 20% at a price of ₹ 9.75 less brokerage 50 paisa per share and the balance were taken over by P and Q equally at ₹ 9.00 per share.

Prepare a Joint Venture Account, the Joint Bank Account, and Capital Accounts of P and Q.

Solution :

In the books of P and Q

Dr. Joint Venture Account Cr.

Particular	Amount (₹)	Particular	Amount (₹)
To, Joint Bank A/c Cost of 1,000 shares @ ₹ 10	10,000	By, Joint Bank A/c Sale proceeds of shares	9,063
		By, P's Capital A/c Shares taken	1,125
To, Capital A/c – Profit on Venture : – P-788 – Q-525	1,313	By, Q's Capital A/c Shares taken	1,125
	11,313		11,313

Dr. **Joint Bank Account** Cr.

Particular	**Amount (₹)**	**Particular**	**Amount (₹)**
To, P's Capital A/c	5,000	By, Joint Venture A/c	10,000
To, Q's Capital A/c	5,000	(Cost of shares)	
To, Joint Venture A/c	9,063	By, P's Capital A/c	4,662
		By, Q's Capital A/c	4,400
	19,063		**19,063**

Dr. **Capital Account** Cr.

	P	**Q**		**P**	**Q**
Particular	**Amount (₹)**	**Amount (₹)**	**Particular**	**Amount (₹)**	**Amount (₹)**
To, Joint Venture A/c	1,125	1,125	By Joint Book A/c		
– Shares taken			(Cost of shares)	5,000	5,000
"Joint Bank A/c	4,663		"Joint Venture Profit A/c	788	
— Final Payment		4,400	"Joint Venture Profit A/c		525
	5,788	**5,525**		**5,788**	**5,525**

Working :

Cost of 1,000 shares @ ₹ 10 = ₹ 10,000 to be contributed by P and Q equally, i.e., ₹ 5,000 each

Calculation of sale proceeds :

	₹	
Share purchased	1,000	
Taken as Com.	250	
	1,250	
60% of 1,250 = 750 × ₹ 9 (i.e. ₹ 9.50 – .50) =		₹ 6,750
20% of 1,250 = 250 × ₹ 9.25 (i.e. ₹ 9.75 – .50) =		₹ 2,313
80%		9,063

20% of 1,250 = 250 × ₹ 9 = ₹ 2,250 to be taken by P and Q equally, i.e. ₹ 1,125 each.

(b) When no Separate Books of Accounts are Maintained

The co-venturers may decide not to keep separate books of account for the venture if it is for a very short period of time. In this case, all co-venturers will have account for the transactions in their own books. Here no Joint Bank Account is opened and the co-venturers do not contribute in cash. Goods are supplied by them from out of their stocks and expenses for the venture are also settled the same way.

Each co-venturer will prepare a Joint Venture A/c and the other Co-Venturer's A/c in his books. Naturally, the profit or loss is separately calculated by each co-venturer. Each co-venturer will take into A/c all transactions i.e. done by himself and by his co-venturer as well.

The accounting entries are:

In books of Co-venturer A		**In books of co-venturer B**	
When goods are supplied and expenses paid by A			
Joint Venture A/c To, Goods A/c To, Cash / Bank A/c	Dr.	Joint Venture A/c To, A's A/c	Dr.
When goods are supplied by B and expenses paid by B			
Joint Venture A/c To, B's A/c	Dr.	Joint Venture A/c To, Goods A/c To, Cash / Bank A/c	Dr.
When advance is given by A to B or bill accepted by A			
B's A/c To, Cash / Bank A/c To, B/P A/c	Dr.	Cash / Bank A/c B/R A/c To, A's A/c	Dr. Dr.
When sale proceeds are received by A			
Cash / Bank A/c To, Joint Venture A/c	Dr.	A's A/c To, Joint Venture A/c	Dr.
When sale proceeds are received by B			
B's A/c To, Joint Venture A/c	Dr.	Cash / Bank A/c To, Joint Venture A/c	Dr.
For unsold goods taken over by A			
Goods A/c To Joint Venture A/c	Dr.	A's A/c To Joint Venture A/c	Dr.
For unsold goods taken over by B			
B's A/c To, Joint Venture A/c	Dr.	Goods A/c To, Joint Venture A/c	Dr.
For profit on joint venture business			
Joint Venture A/c To, B's A/c To, P & L A/c	Dr.	Joint Venture A/c To, A's A/c To, P & L A/c	Dr.
For loss on joint venture business			
B's A/c P & L A/c To, Joint Venture A/c	Dr. Dr.	A's A/c P & L A/c To, Joint Venture A/c	Dr. Dr.

After closure the business of joint venture, the co-venturer who has received surplus cash will remit it to the other co-venturer.

As a variation from this system, the co-venturers may decide to maintain a separate 'Memorandum Joint Venture Account' in joint books. In this transactions made by each co-venturer is shown against their name. This Account will show profit or loss. The co-venturers will keep an account called "Joint venture with co-venturer Account" wherein all transactions done by him only are recorded.

Illustration 25.

John and Smith entered into a joint venture business to buy and sale garments to share profits or losses in the ratio of 5:3. John supplied 400 bales of shirting at ₹ 500 each and also paid ₹ 18,000 as carriage & insurance. Smith supplied 500 bales of suiting at ₹ 480 each and paid ₹ 22,000 as advertisement & carriage. John paid ₹ 50,000 as advance to Smith.

John sold 500 bales of suiting at ₹ 600 each for cash and also all 400 bales of shirting at ₹ 650 each for cash. John is entitles for commission of 2.5% on total sales plus an allowance of ₹ 2,000 for looking after business. The joint venture was closed and the claims were settled.

Prepare Joint Venture Account and Smith's Account in the books of John and John's Account in the books of Smith.

Solution:

Books of John

Joint Venture Account

Dr. | Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Goods A/c - shirting (400x500)	2,00,000	By, Cash A/c – sales	
To, Bank A/c - carriage & insurance	18,000	shirting (500 x 600)	3,00,000
To, Smith A/c - suiting (500x480)	2,40,000	suiting (400 x 650)	2,60,000
To, Smith A/c - advt & Carriage	22,000		
To, Commission A/c - 2.5%	14,000		
To, Allowance A/c	2,000		
To, P & L A/c (5/8th share)	40,000		
To, Smith A/c (3/8th share)	24,000		
	5,60,000		5,60,000

Smith's Account

Dr. | Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Cash A/c - advance	50,000	By, Joint Venture A/c - suiting	2,40,000
To, Cash A/c - balance paid	2,36,000	By, Joint Venture A/c - expenses	22,000
		By, Joint Venture A/c - profit	24,000
	2,86,000		2,86,000

Books of Smith

John's Account

Dr. | Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Joint Venture A/c - sales	5,60,000	By, Cash A/c - advance	50,000
		By, Joint Venture A/c - shirting	2,00,000
		By, Joint Venture A/c - expenses	18,000
		By, Joint Venture A/c - commission	14,000
		By, Joint Venture A/c - Allowance	2,000
		By, Joint Venture A/c – profit	40,000
		By, Cash A/c - balance paid	2,36,000
	5,60,000		5,60,000

(c) Memorandum Joint Venture Account

When all the parties keep accounts, the method adopted for recording the transactions relating to joint venture, is called Memorandum Joint venture method. Here each Co-Venturer records only those joint venture transactions which are affected by him with the help of a personal account designed as 'Joint Venture with……….(Name of the other Co-Venturer)……Account'. It is debited with the amount of purchases/supplies made and expenses incurred by the Venturer.

Each Co-Venturer sends a periodic statement of joint venture transactions effected by him only, to the other Co-Venturer and on receipt of the aforesaid statement, each Co-Venturer prepares Memorandum Joint Venture Account in order to ascertain the profit/loss on Joint Venture transactions.

Since this account is in fact, not a part and parcel of double entry system the word 'memorandum' is prefixed.

Journal Entries: The journal entries which may be required at any point of time, are summarized below:

1.(a) On receipt of any amount/Bills Receivable from other Co-Venturer: Cash/Bank/Bills Receivable A/c To, Joint Venture with ....A/c	 Dr.	
1.(b) On discounting Bills Receivable: Bank A/c Joint Venture with ....A/c To, Bills Receivable A/c	 Dr. Dr.	 (with net proceeds) (with discount) (with total)
2. On purchase of goods: Joint Venture with ....A/c To, Cash/Bank A/c To, Supplier's A/c	 Dr.	 (with total) (with cash purchase) (with credit purchase)
3. On making payment to supplier Supplier's A/c To, Cash/Bank/Bills Payable A/c To, Joint Venture with ....A/c	 Dr.	 (with total) (with payment made) (with discount received)
4. On supply of goods out of own stock: Joint Venture with ....A/c To, Purchases/Goods sent on Joint Venture A/c To, Sales A/c	 Dr.	 (if supplies at cost) (if supplies at profit)
5. On payment of expenses: Joint Venture with ....A/c To, Cash/Bank A/c To, Creditor's A/c	 Dr.	 (with total) (with cash expenses) (with outstanding expenses)
6. On sale of goods: Cash/Bank A/c Customer's A/c To, Joint Venture with ....A/c	 Dr. Dr.	 (with cash sales) (with credit sales) (with total)
7. On receiving payment from a customer: Cash/Bank A/c Joint Venture with ....A/c To, Customer's A/c	 Dr. Dr.	 (with the payment received) (discount allowed/bad debt) (with total)
8. On taking away of unsold goods: Goods sent on Joint Venture A/c To, Joint Venture with ....A/c	 Dr.	
9. On considering some commission/salary to the Co-Venturer: Joint Venture with ....A/c To, Commission/Salary A/c	 Dr.	
10. On recording the share of Profit/Loss: (a) When profit- Joint Venture with ....A/c To, Profit & Loss A/c (b) When loss- Profit & Loss A/c To, Joint Venture with ....A/c	 Dr. Dr.	
11. On settlement of balance of Joint Venture with ....A/c: (a) When there is a debit balance: Cash/Bank A/c To, Joint Venture with ....A/c (b) When there is a credit balance: Joint Venture with ....A/c To, Cash/Bank A/c	 Dr. Dr.	

Illustration 26.

Ravi and Suresh entered into a Joint Venture for purchase and sale of electronic goods, sharing profit & loss in this ratio of 3:2. They also agreed to receive 5% commission on their individual sales and the following information was extracted from the records.

July 1. 2013 : Ravi purchased goods worth ₹ 1,90,000 financed to the extent of 90% out of his funds and balance by load from his uncle Shyam.

Aug. 1 2013 : Ravi sent goods costing ₹ 1,70,000 to Suresh and paid ₹ 1,410 as freight. Suresh paid ₹ 13,410 to Ravi.

Oct. 1 2013 : Suresh sold all the goods sent to him. Ravi paid the loan takes from his uncle including interest of ₹ 350.

All sales by either party were made at as uniform profit of 40% after cost. On Nov. 30, 2013, they decided to close the venture by transforming the balance of goods unsold lying with Ravi at a cost of ₹ 9,000 to a wholesale dealer. You are required to prepare the Memorandum Joint Venture Account, Joint Venture with Ravi in the books of Suresh and Joint Venture with Suresh in the books of Ravi. They further disclosed that goods worth ₹ 4,000 were taken personally by Ravi at an agreed price of ₹ 5,000.

Solution:

Dr. Memorandum Joint Venture Account Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
July 1.	To, Ravi – Purchase 1,71,000		Oct. 1.	By, Suresh–Sale	2,38,000
	To, Loan – Purchase 19,000	1,90,000	Nov.30.	Proceeds	
				(₹ 1,70,000 + 40% of 1,70,000)	
Aug. 1.	To, Ravi – Freight	1,410		By, Ravi – Stock taken	5,000
Oct. 1.	To, Ravi – Interest on Loan	350		By, Ravi – Sale Proceeds	9,800
	To, Suresh – Commission (5% on ₹ 2,38,000)	11,900		(₹1,90,000-₹1,70,000 – ₹ 9,000 – ₹ 4,000) = ₹ 7,000 + 40% of 7,000	
				By, Ravi - Stock (transferred to wholesale dealer)	9,000
Nov.30.	To, Ravi – Commission (5% on ₹ 9,800)	490			
	To, Profit on Venture:				
	Ravi - $(\frac{3}{5})$ 34,590				
	Suresh - $(\frac{2}{5})$ 23,060	57,650			
		2,61,800			**2,61,800**

In the books of Ravi

Dr. Joint Venture with Suresh Cr.

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013		
July 1.	To, Bank (Purchase of goods)	1,90,000	Aug. 1.	By, Cash	13,410
Aug. 1.	To, Bank (freight)	1,410	Nov.30.	By, Stock taken	5,000
Oct. 1.	To, Bank (Interest on loan)	350		By, Stock transferred to wholesale dealer	9,000
Nov.30.	To, Commission	490		By, Bank(Sale Proceeds)	9,800
	To, Share of Profit	34,590		By, Bank (final settlement)	1,89,630
		2,26,840			**2,26,840**

In the books of Suresh

Dr. **Joint Venture with Ravi** **Cr.**

Date	Particulars	Amount (₹)	Date	Particulars	Amount (₹)
2013			2013 Oct 1	By Bank(Sale Proceeds)	2,38,000
Aug. 1.	To Cash	13,410			
Oct. 1.	`` Commission	11,900			
Nov.30.	`` Share of Profit	23,060			
	`` Bank (final settlement)	1,89,630			
		2,38,000			**2,38,000**

Illustration 27.

M and N decided to work in partnership with the following scheme, agreeing to share profits as under :

M — ¾th share.

N—¼th share.

They guaranteed the subscription at par of 10,00,000 shares of ₹ 1 each in U Ltd. And to pay all expenses up to allotment in consideration of U Ltd. issuing to them 50,000 other shares of ₹ 1 each fully paid together with a commission @ 5% in cash which will be taken by M and N in 3 : 2.

M and N introduced cash as follows:

		₹
M—	Stamp Charges, etc.,	4,000
	Advertising Charges	3,000
	Printing Charges	3,000
N—	Rent	2,000
	Solicitor's Charges	3,000

Application fell short of the 10,00,000 shares by 30,000 shares and N introduced ₹ 30,000 for the purchase of those shares.

The guarantee having been fulfilled, U Ltd. handed over to the venturers 50,000 shares and also paid the commission in cash. All their holdings were subsequently sold by the venturer N receiving ₹ 18,000 and M ₹ 50,000.

Write-up necessary accounts in the books of both the parties on the presumption that Memorandum Joint Venture Account is opened for the purpose.

Solution :

Dr. **Memorandum Joint Venture Account** **Cr.**

Particulars	Amount (₹)	Amount (₹)	Particulars	Amount (₹)	Amount (₹)
To, N : Cost or Shares		30,000	By M : Commission ($\frac{3}{5}$)		30,000
To, M : Stamp Charges etc,	4,000		N : Commission ($\frac{2}{5}$)		20,000
Advertising Charges	3,000		By M : Sale Proceeds		50,000
Printing Charges	3,000	10,000	N : Sale Proceeds		18,000
To, N : Rent	2,000				
Solicitor's Charges	3,000	5,000			
To, Profit on Venture :					
To, M — ¾	54,750				
To, N — ¼	18,250	73,000			
		1,18,000			**1,18,000**

In the books of M

Dr. **Joint Venture with N** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Bank : Stamp, Adv. And Printing Charges	10,000	By, Bank : Commission	30,000
		By, Bank : Sale Proceeds	50,000
To, Share of Profit	54,750		
To, Bank (Remittance)	15,250		
	80,000		**80,000**

In the books of N

Dr. **Joint Venture with M** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Bank : Cost of Shares	30,000	By, Bank : Commission	20,000
To, Bank : Rent and Solicitor's Charges	5,000	By, Bank : Sale Proceeds	18,000
To, Share of Profit	18,250	By, Bank (Remittance)	15,250
	53,250		**53,250**

Joint Venture Business on Consignment Principle

The co-venturers may decide to appoint an agent for selling goods on their behalf on consignment basis. He is allowed expenses and commission on sales. The agent would remit the cash to co-venturers. In such case in addition to Joint Venture A/c and the co-venturer's A/c a separate Account is maintained for the agent as well.

The Agent's A/c is debited with the sales proceeds received by him and credited with the expenses incurred and commission payable to him.

Hence additional entries are:

(i) Goods sold by the agent

Agent's A/c Dr.

To, Joint Venture A/c

(ii) Expenses & commission entitled to agent

Joint Venture A/c Dr.
To, Agent's A/c

(iii) Payment received from agent

Bank A/c Dr.
To, Agent's A/c

(iv) Cash paid by agent to co-venturers

Co-Venturers' A/c Dr.
To, Agent's A/c

Illustration 28.

Sahani and Sahu entered into a joint venture to sale 800 bags of food grains. The business risks are to be shared in the ratio of 3:2 between them. Sahani supplied 400 bags at ₹ 800 per bag and paid freight ₹ 8,000 and insurance ₹ 2,000. Sahu sent 400 bags at ₹ 1,000 per bag. He paid ₹ 2,500 as freight, Insurance ₹ 8,000 and sundry expenses as ₹ 500. Sahani paid ₹ 50,000 as advance to Sahu.

They appointed Sandeep as agent for sale of grains. Sandeep sold all bags at ₹ 1,200 per bag. He deducted ₹ 21,000 as his expenses and commission of 5% on sales. He remitted ₹ 6,00,000 by cheque to Sahani and the balance to Sahu by way of a bill of exchange. The co-venturers settled their accounts. Prepare Joint Venture A/c Sahu's A/c and Sandeep's A/c in the books of Mr. Sahani.

Solution:

Books of Sahani

Dr. Joint Venture Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Food grains A/c (400×800)	3,20,000	By, Sandeep A/c - sales (800×1200)	9,60,000
To, Bank A/c - freight & insurance	10,000		
To, Sahu A/c -food grains(400×1000)	4,00,000		
To, Sahu A/c - expenses	11,000		
To, Sandeep A/c - expenses	21,000		
To, Sandeep A/c - commission 5%	48,000		
To, Profit & Loss A/c 3/5th share	90,000		
To, Sahu A/c 2/5th share	60,000		
	9,60,000		960000

Dr. Sahu's Account (Co-venturer) Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Bank A/c - advance	50,000	By, Joint Venture A/c - grains	4,00,000
To, Sandeep A/c - bill	2,91,000	By, Joint Venture A/c - expenses	11,000
To, Bank A/c - final balance	1,30,000	By, Joint Venture A/c - profit share	60,000
	4,71,000		4,71,000

Dr. Sandeep's Account (Agent) Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Joint Venture A/c - sales	9,60,000	By, Joint Venture A/c - expenses	21,000
		By, Joint Venture A/c - commission	48,000
		By, Bank A/c - cheque received	6,00,000
		By, Sahu A/c - Bill	2,91,000
	9,60,000		9,60,000

Conversion of Consignment in to JV

A variation could be that an ongoing consignment arrangement may get converted into a joint venture arrangement. In Such case, a normal accounting for consignment business is done till the conversion. Upon the conversion, the balance stock on consignment is transferred to the Joint Venture A/c and from that day onwards, accounting is done on the basis of principles followed for joint venture.

Illustration 29.

Daga of Kolkata sent to Lodha of Kanpur goods costing ₹ 40,000 on consignment at a commission of 5% on gross sales. The packaging and forwarding charges incurred by consignor amounted to ₹ 4,000. The consignee paid freight and carriage of ₹ 1,000 at Kanpur. Three-fourth of the goods were sold for ₹ 48,000. Then the consignee remitted the amount due from him to consignor along with the account sale, but he desired to return the goods still lying unsold with him as he was not agreeable to continue the arrangement of consignment. He was then persuaded to continue on joint venture basis sharing profit or loss as Daga 3/5th and Lodha 2/5th.

Daga then supplied another lot of goods of ₹ 20,000 and Lodha sold out all the goods in his hand for ₹ 50,000 (gross). Daga paid expenses ₹ 2,000 and Lodha ₹ 1,700 for the second lot of goods.

Show necessary Ledger A/c in the books of both parties. No final settlement of balance due is yet made.

Solution:

Books of Daga

Dr. Consignment to Lodha Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Goods Sent on Consignment A/c	40,000	By, Lodha's A/c (sales)	48,000
To, Bank A/c (packing & dispatching)	4,000	By, Joint Venture with Lodha A/c	11,250
To, Lodha's A/c :		(stock transferred on conversion to JV)	
Freight & Carriage	1,000		
Commission	2,400		
To, P & L A/c	11,850		
	59,250		59,250

Dr. Lodha's Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To Consignment A/c - sales	48,000	By, Consignment A/c- expenses	1,000
		By, Consignment A/c - commission	2,400
		By, Cash A/c	44,600
	48,000		48,000

Dr. Joint Venture with Lodha Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Consignment to Lodha A/c	11,250	By, Balance c/d	42,280
To, Goods A/c	20,000		
To, Bank A/c - expenses	2,000		
To, P & L A/c (profit)	9,030		
	42,280		42,280

Books of Lodha

Dr. Daga's Account (as consignor) Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Cash A/c- expenses	1,000	By, Bank A/c – sales	48,000
To, Commission A/c	2,400		
To, Bank A/c - remittance	44,600		
	48,000		48,000

Dr. Joint Venture with Daga Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Cash A/c - expenses	1,700	By, Bank A/c – sales	50,000
To, P & L A/c (profit)	6,020		
To, Balance c/d	42,280		
	50,000		50,000

Working note:

Dr. Memorandum Joint Venture Account Cr.

Particulars	Amount ₹	Particulars	Amount ₹
To, Daga A/c - goods	11,250	By, Lodha A/c – sales	50,000
To, Daga A/c- goods	20,000		
To, Daga A/c- expenses	2,000		
To, Lodha A/c- expenses	1,700		
To, Net Profit :			
Daga 3/5th Share	9,030		
Lodha 2/5th share	6,020		
	50,000		50,000

5.4 SALE OF GOODS ON APPROVAL OR RETURN BASIS

Introduction

Sometimes goods are sent to Customs with an option either to accept the goods or to reject the goods within a stipulated time. This type of transactions is known as "Sale on Approval Basis" or "Sale on Return Basis". The main purpose of this type of sale is to boost up sales although this facility usually goes to very few reliable customers.

It must be remembered that when goods are sold on approval basis it is nothing but a mere transfer of goods and not the ownership. Since the ownership is not transferred it cannot be called a sale. It will be treated as a sale only when the approval of customer is received about the goods.

Methods of Accounting

Three methods of accounting are usually followed for recording "sale on approval or return basis" transactions, viz.

(a) When there are only a few transactions

(b) When there are considerable number of transactions

(c) When there are many transactions.

(a) When there are only a Few Transactions

ACCOUNTING TREATMENTS:

1. Where Sale or Return transactions are a few

	NOTE
1. **For goods sent for approval** Sundry Debtor/ customers A/c……….......Dr. To Sales A/c	(i) The amount will be the Invoice of goods sent. (ii) Goods sent for approval are treated as actual sales and passed through sales day Book.
2. **For goods Returns within specified time limit** Sales/ Sales Return A/c………………………Dr. To Sundry Debtors/ Customers A/c	The amount will be the Invoice Price of the goods returned.
3. **If the customers accept the goods (and do not return)** (a) At Invoice price (b) **At a price higher than the Invoice Price** Sundry Debtors/ Customers A/c……..Dr. To sales A/c (c) At a price lower than Invoice Price Sales A/c …………………………………Dr. To Sundry Debtors/Customers A/c	(a) No entry is Required (b) The amount will be = Price at which such goods are accepted – Price at which such goods were sent (c) Amount to be recorded = Price at which the goods were sent – price at which the goods are being accepted
4. **At year ending, for goods yet to be confirmed and for which the specified time limit has not expired** Sales A/c………………………………………Dr. To sundry debtors/Customers A/c (OR sale or Return Suspense A/c).	Amount to be recorded = Invoice price of such goods.
5. **For including such unconfirmed goods with customers into stock** Stock on sale or Return A/c ……………….Dr. To Trading A/c	Amount to be recorded = Cost price of such goods = Invoice Price – Loading if any. OR If Market Price is given and it is lower than the cost price, then at Market Price.

Illustration 30.

Mr. Haridas sends goods to his customers on sale or return basis. The following transactions took place during the month of April 2013 :

			₹
April	4.	Goods sent on Sale or Return basis at cost plus 20%	60,000
	8.	Goods returned by customers	15,000
	20.	Sale information received from customers	30,000
	30.	No intimation received about the goods (i.e., neither sold nor returned)	15,000

Assume that the accounts are closed on 31st March every year and Haridas records the above transactions as ordinary sales basis.

Solution:

In the books of Haridas
Journal

Date	Particulars	L.F	Debit ₹	Credit ₹
4.4.2013	Debtors A/c Dr. To, Sales A/c (Being goods sent on sale or approval basis and treated as sales))		60,000	60,000
8.4.2013	Returns Inward/ Sales A/c Dr. To, Debtors A/c (Being goods returned by customers)		15,000	15,000
20.4.2013	NO ENTRY			
30.4.2013	Sales A/c Dr. To, Debtors A/c (Being goods sent on 'Sale or Return' basis and included in sales but not approved by the customers within 31st December, now adjusted)		15,000	15,000
	Closing Stock A/c $(15{,}000 \times \frac{100}{120})$ Dr. To, Trading A/c (Recorded at cost price)		12,500	12,500

(b) When there are Considerable Number of Transactions

Under the circumstances, the recording of transactions is not done as per above method. In this case, a separate Sales or Return Day Book is maintained. It is divided into four parts viz.,

(i) First column – for recording goods sent on approval

(ii) Second column – for recording goods which are sold

(iii) Third column – for recording goods which are returned, and

(iv) Fourth column – for recording balance of stock of goods

Illustration 31.

Mr. X sends out the following goods to his customers on sale or return basis in the month of April 2013. You are requested to prepare Sale of Return Day Book for the month of April 2013 for the following transactions assuming that the transactions are in considerable numbers.

Date 2013	Particulars	Amount (₹)	Date 2013	Particulars
April 1	A Sen	2,000	April 5	Retained all
5	P Das	1,000	9	Returned all
12	T Mukherjee	3,000	20	50% retained and 50% returned
18	H Banerjee	500	25	Goods returned value ₹400 and no intimation was received for the balance
30	C Saha	1,800		Neither intimation received nor goods returned

Solution:

Sale or Return Day Book

Goods sent out on approval			Goods sold			Goods returned		Balance
Date 2012	Particulars	Amount (₹)	Date 2013	LF	Amount (₹)	Date 2013	Amount (₹)	Amount (₹)
April 1	A Sen	2,000	April 5		2,000			
5	P Das	1,000				April 9	1,000	
12	T Mukherjee	3,000	20		1,500	20	1,500	
18	H Banerjee	500				25	400	100
30	C Saha	1,800						1,800

Value of stock amounted to ₹1,900 and valuation should be made on the basis of cost price or market price whichever is lower.

(c) When there are many Transactions

This method is applicable where the number of transactions in a period is fairly large and numerous in character. Under this circumstances, the following three books are opened :

(i) Sale or return Day Book;

(ii) Sale or Return Journal; and

(iii) Sale or Return Ledger

(i) Sale or Return Day Book;

Sale or Return Day Book records the transactions relating to goods sent on sale or return on approval basis where such transactions are accrued. This book can be compared with the subsidiary books, viz. Sale Day Book, Purchase Day Book, etc.

Format of Sale or Return Day Book is given below :

Sale or Return Day Book

Date	Particulars, Name of the parties	Sale or return ledger folio no.	Amount (₹)

(ii) Sale or Return Journal

Goods sold					Goods returned			
Date	Particulars	Sale or return LF No.	Sales LF No.	Amount (₹)	Date	Particulars	Sale or return LF No.	Amount (₹)

(iii) Sale or Return Ledger:

Like ordinary sale, i.e., when sales are made, they are at first recorded in Sales Book and then personal account is debited and Sales Account is credited. In the same manner, transactions which are recorded in the Sale or Return Book, i.e., personal account are debited and Sale or Return account credited. Thus, a separate ledger viz., Sale or Return ledger is opened for recording the transactions of the parties to whom goods have been sent on Sale or Return Basis.

Illustration 32.

S Ltd. sells goods on Sale or Return basis. Customers having the choice of returning the goods within 9 months. During April 2012, the following are the details of the goods sent.

Date 2013	Customers	Value (₹)	Proforma Invoice No.
April 2	G	20,000	002
4	H	36,000	005
16	I	50,000	017
20	J	16,000	020
24	K	42,000	031
28	L	60,000	060

Within the stipulated time G and I returned the goods while H, J and K informed that they have accepted the goods. Show the following accounts in the books of the firm.

Sale on Approval Account and Customers for Sale on Approval Account as on 15th May 2013.

Solution:

In the books of S Ltd.

Dr. Sale on Approval Account Cr.

Date 2013	Particulars	Amount (₹)	Date 2013	Particulars	Amount (₹)
April	To, Customers for Sale on Approval A/c		April	By, Customer for Sale on Approval A/c	
2	- Returned by G	20,000		- G	20,000
4	- Sold to H	36,000		- H	36,000
16	- Returned by I	50,000		- I	50,000
20	- Sold to J	16,000		- J	16,000
24	- Sold to K	42,000		- K	42,000
30	To, Balance c/d	60,000		- L	60,000
		2,24,000			**2,24,000**

Dr. Customers for Sale on Approval Account Cr.

Date 2012	Particulars	Amount (₹)	Date 2012	Particulars	Amount (₹)
April	To, Sale on Approval A/c		April	By, Sale on Approval A/c	
	- G	20,000		- Returned by G	20,000
2	- H	36,000		- Sold to H	36,000
4	- I	50,000		- Returned by I	50,000
16	- J	16,000		- Sold to J	16,000
20	- K	42,000		- Sold to K	42,000
24	- L	60,000		By, Balance c/d	60,000
		2,24,000			**2,24,000**

Study Note - 6

FUNDAMENTALS OF COST ACCOUNTING

This Study Note includes

6.1 INTRODUCTION

Can the business be run without making decisions? Even doing nothing is a decision! *Decision is 'making a choice from among the available alternative courses of action'*. How is this choice made? Why a particular alternative is chosen and the others are not? What is the basis for this choice? The most obvious basis is an economic evaluation of the alternatives available. Economic evaluation means comparing benefits with costs. The alternative that brings more benefit than the cost will be the obvious choice. As such measurement of both, benefits and costs, becomes very crucial. Managers must evaluate the financial implications of decisions that require trade-offs between costs and benefits of different alternatives.

A decision maker will definitely need information to be able to decide. This information is both quantitative as well as qualitative. The financial accounting information will not serve this purpose as it talks about '*how to deal with transaction when they occur*'. The information needed will be more specific and relevant to the decision to be made. Let us consider some decisions taken in managing or running a business:

(a) How much quantity should be produced during the coming year?

(b) At what price should the product be sold in various markets?

(c) In what quantities should the material be procured?

(d) How much should be paid to the workers and how to control their performance?

(e) What level of capacity should be used?

(f) Whether a particular order should be taken or not?

(g) Whether to expand or close a particular line of business?

(h) Assessing the performance of different divisions

The basic aim of business is to make profit. In other words, it must ensure that the business transactions are profitable. This would mean that decision to do a business transaction must be as accurate as possible. It is therefore logical that the decisions must be taken on the basis of correct and timely information pertaining only to the issue under consideration. A very basic definition of profit is the difference between revenue (i.e. selling price) and costs. In today's market driven world economy, selling price is almost decided by the market forces viz. demand and supply. If that be so, how does one increase profits? There's only one way and that is to keep costs to absolute minimum possible. Knowledge of costs therefore is imperative. Costs and information do go hand in hand. The art and science of Cost and Management Accounting provides knowledge to effective decisions for cost control, enhancement of profitability and internal reporting.

Cost and Management Accounting is internal to the business. It is a very potent tool in the hands of management to achieve goals by making effective decisions with the aid of well developed cost accounting techniques and management accounting tools. These enable the management to answer "*why*" than merely understanding "*what*". The evolution of Cost & Management Accounting is as old as the business activity in the world. Let us get a perspective of the same. Remember, Cost and Management Accounting has developed on the platform of very strong science of Financial Accounting.

6.2 GENERALLY ACCEPTED COST ACCOUNTING PRINCIPLES (GACAP) & COST ACCOUNTING STANDARDS (CASs)

Like Generally Accepted Accounting Principles (GAAP) for Financial Accounting, the Cost accounting has the Generally Accepted Cost Accounting Principle (GACAP) which are followed by the Indian industry are summarized as below.

Before proceeding with element wise cost accounting principles, let us see the principles applicable to all the elements.

(a) When an element of cost is accounted at standard cost, variances due to normal reasons are treated as a part of the element wise cost. Variances due to abnormal reasons will not form part of the cost.

(b) Any subsidy / grant / incentive and any such payment received / receivable with respect to the input cost is reduced from the cost of the cost object to which such amount pertains.

(c) Any abnormal cost where it is material and quantifiable will not form part of the cost.

(d) Penalties, damages paid to statutory authorities or other third parties will not form part of the Total cost.

(e) Cost reported under various elements of cost will not include imputed costs.

(f) Finance costs incurred in connection with the acquisition of resources such as material, utilities and the like will not form part of the cost of such resources

(g) Any credits or recoveries from employees or suppliers or other parties towards the costs incurred by the entity for a resource will be netted against such cost.

(h) Except otherwise stated, the measurement of costs for cost accounting purposes will follow the same principles as set out in Generally Accepted Cost Accounting Principles applicable to the concerned entity.

Generally Accepted Cost Accounting Principles – Element wise

(i) Material Cost:

(a) Material cost usually includes all costs required to bring the materials to the present condition and location.

(b) Material receipt is valued at purchase price including duties and taxes, freight inwards, insurance and other expenditure directly attributable to procurement (net of trade discounts, rebates, taxes and duties refundable or to be credited by taxing authorities) that can be quantified with reasonable accuracy at the time of acquisition.

(c) Normal loss due to shrinkage or evaporation and gain due to elongation or absorption or moisture ...etc before the material is received is absorbed in material cost to the extent they are normal, with corresponding adjustment in quantity.

(d) Normal loss or spoilage of material prior to reaching the factory or at places where the services are provided is absorbed in the cost of balance of materials net of amounts recoverable from suppliers, insurers, transporters or recoveries from disposal.

(e) The foreign exchange component of imported material cost is converted at the rate on the date of transaction. Any subsequent change in the exchange rate till payment or otherwise will not form part of the material cost.

(f) Self manufactured materials are valued at cost including direct material cost, direct employee cost, direct expenses, factory overheads and share of administrative overheads relating to production. Share of other administrative overheads, finance cost and marketing overheads are excluded.

(g) Material cost of abnormal scrap/defectives should not be included in the material cost, but treated as loss after giving credit to the realizable value of such scrap/defectives.

(h) When material is processed or part is manufactured by a third party according to the specifications provided by the buyer, the processing / manufacturing charges payable to third party is treated as part of the material cost.

(i) Material costs are assigned to cost objects on the basis of material quantity consumed where traceable and technical norms or estimates may be taken as basis where the quantity consumed cannot be traced.

(ii) Employee Cost:

(a) Employee Cost or labour cost is ascertained taking into account the gross pay including all allowances payable along with the cost to the employer of all benefits

(b) Bonus whether payable as a statutory minimum or on a sharing of surplus and ex gratia payable in lieu of or in addition to bonus is treated as part of the employee cost

(c) Remuneration payable to managerial personnel including executive directors on the board and other officers of a corporate body under a statute is considered as part of the employee cost of the year under reference, whether whole or part is computed as a percentage of profits.

(d) Gratuity, Superannuation, and other benefits measured using actuarial valuation method or any other methods are part of employee cost.

(e) Separation costs related to voluntary retirement, retrenchment, termination etc. should be amortized over the period benefiting from such costs.

(f) Recruitment costs, training costs and other such costs is treated as overheads and dealt with accordingly

(iii) Direct Expenses:

(a) The identification of direct expenses is based on the traceability in an economically feasible manner and if an item of expense does not meet the test of materiality, it can be treated as part of overheads.

(b) Expenses paid or incurred in lump sum or which is in the nature of 'one-time' payment is amortized on the basis of the estimated output or benefit to be derived from such expenses.

(c) Direct expenses are by definition directly traceable to cost objects and hence no special principles are involved for them to be assigned to cost object.

(iv) Utilities:

(a) The cost of utilities purchased is measured at cost of purchase including duties and taxes, transportation cost, insurance and other expenditure directly attributable to procurement.

(b) The cost of generated utilities includes direct materials, direct labour , direct expenses and factory overheads.

(c) Cost of utilities generated for the purpose of inter unit transfers is arrived as cost of self generated utilities with distribution cost added.

(d) Cost of utilities generated for the purpose of intercompany transfers is arrived as cost of self generated utilities with distribution costs plus share of administrative overheads.

(e) Cost of utilities generated for sale to outside parties is arrived as cost of self generated utilities with distribution cost plus share of administrative and marketing overheads.

(f) Cost of standby utilities includes the committed cost of maintaining such utility.

(g) The most appropriate basis for distribution of cost of a utility to the departments consuming services is to be derived from usage parameters.

(v) Repairs & Maintenance Cost:

(a) The Cost of repairs and maintenance is the aggregate of direct and indirect cost relating to repairs and maintenance activity.

(b) Cost of in-house repairs and maintenance activity will include cost of materials, consumable stores, spares manpower, equipment usage, utilities and other resources used in the activity.

(c) Cost of repairs and maintenance activity carried out by outside contractors within the factory / entity, will include the charges payable to the contractor in addition to the in-house materials / spares cost issued.

(d) When a high value spare is replaced and the replaced spare is reconditioned and such spare is expected to result in future economic benefit & it is taken into stock, then such spare is valued at an amount that measures its service potential in relation to the new spare, the amount of which will not exceed the cost of reconditioning the spare. The difference between the total of the cost of new spare and the reconditioning cost and the value of reconditioned spare should be treated as Repairs and Maintenance.

(e) Cost of major overhaul is to be amortized on a rational basis.

(vi) Production Overheads:

(a) Production overheads are indirect costs involved in the production process or in rendering services. Production overheads include administration cost relating to production, factory, works or manufacturing. Production related expenses incurred at administrative office for example Design office expenses, industrial relations dept, materials management dept...etc.

(b) While assigning the overheads, traceability to a cost object in an economically feasible manner shall be the guiding principle. The costs which can be traced directly to a cost object shall be directly assigned.

(c) Assignment of overheads to cost objects shall be based on either of the following principles.

(d) *Cause & Effect*: Cause is the process or operation or activity and effect is the incurrence of cost.

(e) *Benefits Received:* Overheads are to be apportioned to the various cost objects in proportion to the benefits received by them.

(f) It is not good practice to allocate overheads to Cost centres / Cost objects on the basis of what the traffic will bear – That is by size of the user.

(g) Production overheads of production cost centres have to be segregated between fixed overheads and variable overheads. The fixed overheads are to be absorbed by products based on the normal capacity or actual capacity utilization whichever is higher. Variable overheads are absorbed by products based on actual capacity utilized. Under absorbed fixed overheads are charged off to Costing Profit and Loss account.

(vii) Administrative Overheads:

Administrative overheads are the aggregate cost of resources consumed in activities relating to general management and administration of an organization.

Since most of the administrative overheads are fixed in nature, it is preferable to charge them to users on 'readiness to serve' basis such as installed capacity, budgeted sales etc. rather than actual production or actual sales.

In case of leased assets, if it is on operating lease then entire rental will be treated as a part of administrative overheads, while in case of financial lease, the finance cost portion will be segregated and treated as a part of finance cost. The assignment of administrative overheads to cost objects is based on either of the principles of Cause & Effect or Benefits received, if it is not traceable.

(viii) Selling and Distribution Overheads:

The acceptable basis for apportionment of selling costs to customers/ products are:

(a) Weight

(b) Units/ Equivalent Units

(c) Value of goods

(d) Any other appropriate and equitable basis

The acceptable bases for assigning common transport cost to products are:

(a) Weight

(b) Volume of Goods

(c) Tonne Kilometre

(d) Value of goods

(e) Units / Equivalent units

(ix) Interest and Finance Charges:

Many entities started including the financing charges in computing the Cost of Sales. Normally these costs are assigned to products before arriving margin by product/ product line.

Normally interest charges are grouped under two categories i.e, interest on long-term borrowings and interest on working capital. The interest on long-term funds is assigned to products based on the fixed capital investment in such products. Interest on working capital may be assigned based on the net working capital of the product lines.

Cost Accounting Standards

(i) Preface to Cost Accounting Standards:

The council of the Institute of Cost Accountants of India, has constituted 'Cost Accounting Standards Board' (CASB) with the objective of formulating cost accounting standards, after recognizing the need for structured approach to the measurement of cost so as to provide guidance to the user organizations, government bodies, regulators, research agencies, academic institutions and others to achieve uniformity and consistency in classification, measurement and assignment of costs.

The composition of the CASB will be broad based and ensure participation of all interest groups in the standard setting process. The chairman of the CASB will be nominated by the council of the Institute. Apart from six members of the council nominated on the CASB the following will be represented on the CASB:

(1) A nominee of the central government representing Ministry of Corporate Affairs

(2) Adviser (Cost), cost audit branch, Ministry of Corporate Affairs, Government of India

(3) A nominee of the central government representing the Central Board of Excise and Customs, Government of India

(4) A nominee of the central government representing the Central Board of Direct Taxes

(5) Two members of the institute representing leading companies

(6) Four nominees from regulators i.e. CAG, RBI, SEBI, IRDA,TRAI...etc

(7) Two nominees from professional institutions i.e. ICAI and ICSI

(8) Three nominees of industry associations viz ASSOCHAM, CII, FICCI....etc

(9) Two nominees from academic institutions like IIM, MDI, Universities...etc

(10) Four eminent practicing members of the institute

(11) President is authorized to include a maximum of two eminent persons having knowledge and expertise in the cost and management accounting / Accounting standards not falling under the categories as defined in the constitution

(ii) Objectives and Functions of the Cost Accounting Standards Board:

The objectives of the CASB are to develop high quality Cost Accounting Standards to enable the management to take informed decisions and to enable regulators to function more effectively by integrating, harmonizing and standardizing cost accounting principles and practices.

The following will be the functions of the CASB:

(a) To issue the framework for the Cost Accounting Standards

(b) To equip the cost & management accounting professionals with better guide lines on cost accounting principles

(c) To assists the members in preparation of uniform cost statements under various statutes

(d) To provide from time to time interpretations on Cost Accounting Standards

(e) To issue application guidance relating to particular standard

(f) To propagate the Cost Accounting Standards and to persuade the users to adopt them in the preparation and presentation of general purpose cost statement

(g) To persuade the government and appropriate authorities to enforce Cost Accounting Standards, to facilitate the adoption thereof, by industry and corporate entities in order to achieve the desired objectives of standardization of cost accounting practices

(h) To educate the users about the utility and the need for compliance of Cost Accounting Standards

Overview of Cost Accounting Standards issued till date are as follows:

Cost Accounting Standards

CAS No	Title	Objective
CAS1	Classification of Cost	For preparation of Cost Statements
CAS2	Capacity Determination	For determination of capacity
CAS2 (Revised 2012)	Capacity Determination	To bring uniformity and consistency in the principles and methods of determination of capacity with reasonable accuracy.
CAS3	Overheads	For Collection, Allocation, Apportionment and Absorption of overheads
CAS3 (Revised 2011)	Overheads	To bring uniformity and consistency in the principles and methods of determining the Overheads with reasonable accuracy.
CAS4	Cost of Production for Captive Consumption	To determine the assessable value of excisable goods used for captive consumption.
Annexure to Appendix 1 (CAS-4)		
CAS5	Average (equalized) Cost of Transportation	To determine averaged/equalized transportation cost
CAS6	Material Cost	To bring uniformity and consistency in the principles and methods of determining the material cost with reasonable accuracy in an economically feasible manner.
CAS7	Employee Cost	To bring uniformity and consistency in the principles and methods of determining the Employee cost with reasonable accuracy.

CAS8	Cost of Utilities	To bring uniformity and consistency in the principles and methods of determining the Cost of Utilities with reasonable accuracy.
CAS9	Packing Material Cost	To bring uniformity and consistency in the principles and methods of determining the Packing Material Cost with reasonable accuracy.
CAS10	Direct Expenses	To bring uniformity and consistency in the principles and methods of determining the Direct Expenses with reasonable accuracy.
CAS11	Administrative Overheads	To bring uniformity and consistency in the principles and methods of determining the Administrative Overheads with reasonable accuracy.
CAS12	Repairs And Maintenance Cost	To bring uniformity and consistency in the principles and methods of determining the Repairs and Maintenance Cost with reasonable accuracy.
CAS13	Cost of Service Cost Centre	To bring uniformity and consistency in the principles and methods of determining the Cost of Service Cost Centre with reasonable accuracy.
CAS14	Pollution Control Cost	To bring uniformity and consistency in the principles and methods of determining the Pollution Control Costs with reasonable accuracy.
CAS15	Selling and Distribution Overheads	To bring uniformity and consistency in the principles and methods of determining the Selling and Distribution Overheads with reasonable accuracy.
CAS16	Depreciation and Amortisation	To bring uniformity and consistency in the principles and methods of determining the Depreciation and Amortisation with reasonable accuracy.
CAS17	Interest and Financing Charges.	To bring uniformity and consistency in the principles ,methods of determining and assigning the Interest and Financing Charges with reasonable accuracy.
CAS18	Research and Development Costs	To bring uniformity and consistency in the principles and methods of determining the Research, and Development Costs with reasonable accuracy and presentation of the same.
CAS19	Joint Costs	To bring uniformity and consistency in the principles and methods of determining the Joint Costs.
CAS20	Cost Accounting Standard on Royalty and Technical Know-How Fee	To bring uniformity and consistency in the principles and methods of determining the amount of Royalty and Technical Know-how Fee with reasonable accuracy.
CAS21	Cost Accounting Standard on Quality Control	To bring uniformity, consistency in the principles, methods of determining and assigning Quality Control cost with reasonable accuracy.
CAS22	Cost Accounting Standard on Manufacturing Cost	To bring uniformity and consistency in the principles and methods of determining the Manufacturing Cost of excisable goods

Each of the Cost Accounting Standard has been explained in brief as follows.

CAS -1: Classification of Costs

Objective:

(a) The objective of this standard is to prescribe the classification of costs for ascertainment of cost of a product or service and preparation of cost statements on a consistent and uniform basis with a view to effect the comparability of the same of an enterprise with that of previous periods and of other enterprises

(b) The classification and its disclosure are aimed at providing better transparency in the cost statement

(c) The standard is also for better adoption of uniform costing and inter-firm comparison

Scope:

The standard on classification of cost should be applied in assessment of cost of a product or service, application of costing technique and in case of management decision making by the manufacturing industries in India.

The standard is to be followed by an enterprise, whether covered under section 209(1)(d) of the Companies Act,1956 or not, to classify cost in order to prepare cost statement on uniform basis to make it relevant and understandable for effective cost management.

The standard has also to be followed for the purpose of assessment of cost of production or valuation of product or the valuation of stock to be certified for calculation of duties and taxes, tariffs and other purposes as the case may be. The cost statement prepared based on standard will be used for assessment of excise duty and other taxes, anti-dumping measures, transfer pricing etc.

CAS -2: Capacity Determination

This standard deals with the principles and methods of determining the capacity of a manufacturing facility of an entity. Capacity is determined for assignment of overheads to cost objects. Principles of assignment of overheads have been stipulated in Cost Accounting Standard – 3 (Revised 2011) on Overheads. This standard deals with the principles and methods of classification and determination of capacity of a plant of an entity for ascertainment of the cost of product, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determination of capacity with reasonable accuracy.

Scope:

This standard shall be applied to the cost statements, including those requiring attestation, which require determination of capacity for assignment of overheads.

CAS-3: Cost Accounting Standard on Overheads

This standard deals with the principles and methods of determining the Overheads. This standard deals with the principles and methods of classification, measurement and assignment of Overheads, for determination of the cost of product or service, and for the presentation and disclosure in cost statements.

Objectives:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Overheads with reasonable accuracy.

Scope:

This standard shall be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Overheads including those requiring attestation.

CAS-4: Cost Accounting Standard on Cost of Production for Captive Consumption

The Cost Accounting principle for determination of cost of production is well established. Similarly, rules for levy of excise duty on goods used for captive consumption are also well defined. Captive Consumption means the consumption of goods manufactured by one division and consumed by another division(s) of the same organization or related undertaking for manufacturing another product(s). Liability of excise duty arises as soon as the goods covered under excise duty are manufactured but excise duty is collected at the time of removal or clearance from the place of manufacture even if such removal does not amount to sale. Assessable value of goods used for captive consumption is based on cost of production. According to the Central Excise Valuation (Determination of Price of Excisable Goods) Rules 2000, the assessable value of goods used for captive consumption is 115% **(110% w.e.f. 05-08- 2003)**of cost of production of such goods, and as may be prescribed by the Government from time to time.

Objective

(a) The purpose of this standard is to bring uniformity in the principles and methods used for determining the cost of production of excisable goods used for captive consumption.

(b) The cost statement prepared based on standard will be used for determination of assessable value of excisable goods used for captive consumption.

(c) The standard and its disclosure requirement will provide better transparency in the valuation of excisable goods used for captive consumption.

Scope

The standard is to be followed for determining the cost of production to arrive at an assessable value of excisable goods used for captive consumption.

Cost of production will include various cost components. They are already defined in Cost Accounting Standard-1 ('Classification of Cost' – CAS-1). Thus, this standard has to be read in conjunction with CAS 1.

CAS-5: Cost Accounting Standard on Determination of Average (Equalized) Cost of Transportation

The cost accounting principles for tracing/identifying an element of cost, its allocation/apportionment to a product or service are well established. Transportation cost is an important element of cost for procurement of materials for production and for distribution of product for sale. Therefore, Cost Accounting Records should present transportation cost separately from the other cost of inward materials or cost of sales of finished goods. The Finance Act 2003 also specifies the certification requirement of transportation cost for claiming deduction while arriving at the assessable value of excisable goods cleared for home consumption/ export. There is a need to standardize the record keeping of expenses relating to transportation and computation of transportation cost.

Objective

(a) To bring uniformity in the application of principles and methods used in the determination of averaged/equalized transportation cost.

(b) To prescribe the system to be followed for maintenance of records for collection of cost of transportation, its allocation/apportionment to cost centres locations or products.

(c) To provide transparency in the determination of cost of transportation.

Scope:

This standard should be applied for calculation of cost of transportation required under any statute or regulations or for any other purpose. For example, this standard can be used for :

(a) Determination of average transportation cost for claiming the deduction for arriving at the assessable value of excisable goods

(b) Insurance claim valuation

(c) Working out claim for freight subsidy under Fertilizer Industry Coordination Committee

(d) Administered price mechanism of freight cost element

(e) Determination of inward freight costs included or to be included in the cost of purchases attributable to the acquisition.

(f) Computation of freight included in the value of inventory for accounting on inventory or valuation of stock hypothecated with Banks / Financial Institution ...etc

CAS-6: Cost Accounting Standard on Material Cost

This standard deals with principles and methods of determining the Material Cost. Material for the purpose of this standard includes raw materials, process materials, additives, manufactured / bought out components, sub-assemblies, accessories, semi finished goods, consumable stores, spares and other indirect materials. This standard does not deal with Packing Materials as a separate standard is being issued on the subject.

This standard deals with the principles and methods of classification, measurement and assignment of material cost, for determination of the Cost of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the material cost with reasonable accuracy.

Scope:

This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of material costs including those requiring attestation.

CAS-7: Cost Accounting Standard on Employee Cost

This standard deals with the principles and methods of determining the employee cost. This standard deals with the principles and methods of classification, measurement and assignment of employee cost, for determination of the cost of product or service and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the employee cost with reasonable accuracy.

Scope:

This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of employee cost including those requiring attestation.

CAS-8: Cost Accounting Standard on Cost of Utilities

This standard deals with the principles and methods of determining the cost of Utilities. This standard deals with the principles and methods of classification, measurement and assignment of cost of utilities, for determination of the cost of product or service and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the cost of utilities with reasonable accuracy.

Scope:

This standard shall be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of cost of utilities including those requiring attestation.

For determining the cost of production to arrive at an assessable value of excisable utilities used for captive consumption, Cost Accounting Standard 4 on Cost of Production for Captive Consumption (CAS 4) shall apply. This standard shall not be applicable to the organizations primarily engaged in generation and sale of utilities. This standard does not cover issues related to the ascertainment and treatment of carbon credits, which shall be dealt with in a separate standard.

CAS-9: Cost Accounting Standard on Packing Material Cost

This standard deals with the principles and methods of determining the Packing Material Cost. This standard deals with the principles and methods of classification, measurement and assignment of Packing Material Cost, for determination of the cost of product, and the presentation and disclosure in cost statements. Packing Materials for the purpose of this standard are classified into primary and secondary packing materials.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the packing material cost with reasonable accuracy.

Scope:

This standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Packing Material Cost including those requiring attestation.

CAS-10: Cost Accounting Standard on Direct Expenses

This standard deals with the principles and methods of determining the Direct Expenses. This standard deals with the principles and methods of classification, measurement and assignment of Direct Expenses, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objectives:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Direct Expenses with reasonable accuracy.

Scope:

This standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Direct Expenses including those requiring attestation.

CAS-11: Cost Accounting Standard on Administrative Overheads

This standard deals with the principles and methods of determining the administrative overheads.

This standard deals with the principles and methods of classification, measurement and assignment of administrative overheads, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the administrative overheads with reasonable accuracy.

Scope:

The standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of administrative overheads including those requiring attestation.

CAS-12: Cost Accounting Standard on Repairs and Maintenance

This standard deals with the principles and methods of determining the repairs and maintenance cost.

This standard deals with the principles and methods of classification, measurement and assignment of repairs and maintenance cost, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the repairs and maintenance cost with reasonable accuracy.

Scope:

The standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of repairs and maintenance cost including those requiring attestation.

CAS-13: Cost Accounting Standard on Cost of Service Cost Centre

This standard deals with the principles and methods of determining cost of service cost centres. This standard deals with the principles and methods of classification, measurement and assignment of cost of service cost centre, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the cost of service cost centre with reasonable accuracy.

Scope:

The standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of cost of service cost centres including those requiring attestation. It excludes Utilities and Repairs & Maintenance Services dealt with in CAS-8 and CAS-12 respectively.

CAS-14: Cost Accounting Standard on Pollution Control Cost

This standard deals with the principles and methods of determining Pollution Control Cost. This standard deals with the principles and methods of classification, measurement and assignment of pollution control costs, for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the pollution control costs with reasonable accuracy.

Scope:

The standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of pollution control costs including those requiring attestation.

CAS-15: Cost Accounting Standard on selling and Distribution overheads

This standard deals with the principles and methods of determining the Selling and Distribution Overheads.

This standard deals with the principles and methods of classification, measurement and assignment of Selling and Distribution Overheads, for determination of the cost of sales of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Selling and Distribution Overheads with reasonable accuracy.

Scope:

This standard should be applied to cost statements, which require classification, measurement, assignment, presentation and disclosure of Selling and Distribution Overheads including those requiring attestation.

CAS – 16 : Cost Accounting Standard on Depreciation and Amortization

This Standard deals with the principles and methods of measurement and assignment of Depreciation and Amortization for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the depreciation and amortization with reasonable accuracy.

Scope:

This standard shall be applied to cost statements which require measurement, assignment, presentation and disclosure of Depreciation and amortization, including those requiring attestation.

CAS - 17 : Cost Accounting Standard on Interest and financing Charges

This standard deals with the principles and methods of classification, measurement and assignment of Interest and Financing charges.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles, methods of determining and assigning the interest and Financing charges with reasonable accuracy.

Scope:

This standard should be applied to cost statements which require classification, measurement, assignment, presentation and disclosure of Interest and Financing charges including those requiring attestation. This standard does not deal with costs relating to risk management through derivatives.

CAS - 18 : Cost Accounting Standard on Research and Development Costs.

This standard deals with the principles and methods of determining the Research and Development costs and their classification, measurement and assignment for determination of the cost of product or service, and the presentation and disclosure in cost statements.

Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the Research and Development Costs with reasonable accuracy and presentation of the same.

Scope

This standard should be applied to cost statements that require classification, measurement, assignment, presentation and disclosure of Research and Development costs including those requiring attestation.

CAS – 19 : Cost Accounting Standard on Joint Costs.

The standard deals with the principles and methods of measurement and assignment of Joint Costs and the presentation and disclosure in cost statement.

Objective:

The objective of this standard is to bring uniformity, consistency in the principles, methods of determining and assigning Joint Costs with reasonable accuracy.

Scope:

The standard shall be applied to cost statements which require classification, measurement, assignment presentation and disclosure of Joint Costs including those requiring attestation.

CAS – 20 : Cost Accounting Standard on royalty and technical know-how fee.

This standard deals with the principles and methods of determining the amount of Royalty and Technical know-how fee. This standard deals with the principles and methods of classification, measurement and assignment of the amount of Royalty and Technical know-how fee, for determination of the cost of product or service, and their presentation and disclosure in cost statements.

Objective

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the amount of Royalty and Technical know-how fee with reasonable accuracy.

Scope:

This standard should be applied to cost statements which require classification, measurement, assignment presentation and disclosure of the amount of Royalty and Technical know- how fee including those requiring attestation.

CAS – 21 : Cost Accounting Standard on Quality Control.

The standard deals with the principles and methods of measurement and assignment of quality control cost and the presentation and disclosure in cost statement.

Objective:

The objective of this standard is to bring uniformity consistency in the principles, methods of determining and assigning quality control and cost with reasonable accuracy.

Scope:

The standard should be applied to cost statements which require classification, measurement assignment, presentation and disclosure of Quality control cost including those requiring attestation.

CAS – 22 : Cost Accounting Standard on Manufacturing Cost.

This standard deals with the principles and methods of determining the manufacturing cost of excisable goods.

This standard deals with the principles and methods of classification, measurement and assignment for determination of the manufacturing cost of excisable goods and the presentation and disclosure in cost statements.

Objective:

The objective of this standard is to bring uniformity and consistency in the principles and methods of determining the manufacturing cost of excisable goods.

Scope:

This standard should be applied to cost statements which require classification, measurement, assignment presentation and disclosure of manufacturing cost of excisable goods.

6.3 DEFINITIONS

Some basic definitions are as follows:

(a) Cost – *It is a measurement, in monetary terms, of resources used for some purpose*. The resources may be tangible (material or machinery) or intangible (wages, power, time spent). The use of resources is implicit in the term 'cost'. The measurement is in monetary terms obviously because money is common denominator. Further, cost always relates to a *purpose*. The purpose could be products, departments, projects, services or any activity for which monetary measurement of resources is needed. Here also could mean a context, without which cost does not convey anything. The word 'cost' cannot be used in isolation and has to be always with a reference to a context. With change in context, the interpretation of 'cost' will change.

(b) Costing – *It is defined as the technique and process of ascertaining cost*. The cost may have to be ascertained for a product or service or a department or any activity carried out by the business. It denotes accumulating all such expenses incurred for producing a product or rendering a service or carrying out business activity. These expenses are mainly in the form of material, labour and other expenses. Many methods of costing exist depending on the nature of product, type of business. These are Job Costing, Contract Costing, Process Costing, Service Costing etc. These are explained in the coming sections.

(c) Cost Accounting – *It involves the process of classifying, identifying and recording of expenditure with the intention of ascertaining cost of a cost centre or cost unit for the purpose of cost control*. Cost accounting attempts to look at individual components of the organisation like a department, a job, or a process etc. It tries to compare the cost of these individual components vis-à-vis the benefits they offer in order to determine the efficiency and effectiveness of each resource used in the business. The Broad process of Costing or Cost Accounting Comprises of:

- *Cost Book-keeping* is recording of costs according to preset classification. Cost classification is done on the basis of nature of organisation, nature of product or service it deals in and requirements of management. At present, cost book keeping is done concurrently with financial accounting. ERP accounting systems provide facility of recording financial as well as costing aspect of a transaction. This is called an integrated accounting. A transaction is recorded with respect not only to the double entry effects, but also as per classification of costs and link with the respective cost centre or cost object.

- *Cost Control* is evaluating what level of cost is the most ideal for a given activity. It provides mechanism to keep costs within those predetermined limits. The word control is not used with its restrictive meaning, but also to ensure to maintain cost to the levels what ought to be. Organisations can sustain competition only if they understand the cost structure very well. Based on this understanding, companies are able to innovate to offer more value to the customer.

- *Cost Analysis* tries to link costs with their determinants or drivers and also provides tools to measure reasons of why costs are out of sync and fix responsibility there for. It comprises of techniques of standardizing costs or estimating costs which could be effectively used to take managerial decisions. Hence, the primary emphasis is cost and its determination, analysis, interpretation and reporting.

(d) Cost Accountancy – *This is a broader and comprehensive term. The Chartered Institute of Management Accountants (CIMA) London defines it as "The application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability. It includes the presentation of information, derived there from for the purpose of managerial decision making."*

(e) Management Accountancy – *It is an integral part of management that is concerned with identifying, presenting and interpreting information for formulating strategy, planning & controlling activities, decision making, optimizing use of resources, and reporting to external and internal stakeholders*. It is the process of analysis and interpretation of financial data collected with the help of financial accounting and cost accounting, with the intention to draw inferences there from, in order to assist management in the process of decision making. Management Accounting is a relatively younger field. The main facets of management accounting are:

(1) The focus is on analysis of information. It is done with the help of concepts or techniques that emerge from financial accounting, cost accounting, economics, mathematics, statistics and more importantly information technology.

(2) Accumulation, synthesis and analysis of the quantitative and qualitative data are an integral part of management accounting.

(3) The thrust is measuring performance of various facets of business and comparing it with the targets set to enable management to take corrective actions in time to meet the objectives. There is a continuous monitoring of deviations from the standards or plans.

(4) It equips management for strategy formulation by providing decision making tools for short term and long term.

(5) Management accounting helps in optimizing the resource mobilization and utilization. Remember resources are limited and the uses to which they could be put are unlimited. Effective resource utilization is important for a consistent and profitable running of business.

Difference between Cost Accounting and Financial Accounting :

The difference between Cost Accounting and Financial Accounting are enumerated below :

Sl No.	Point of Difference	Cost Accounting	Financial Accounting
1	Meaning	Cost accounting records the different techniques of cost, principles and also the various methods for determining costs. It also presents the variance in comparison with the standards. It also explains their reasons.	Financial accounting, on the other hand, keeps records for all monetary transactions and presents the operating result and financial position.
2	Scope	Cost accounting presents to the management the required information which are useful for decision-making purposes.	Financial accounting supplies information about the results of the firm i.e. profit or loss and the financial position at a particular date.
3	Aims	The main purpose of cost accounting is to ascertain and allocates the different types of cost at their respective places.	The main purpose of financial accounting is to maintain records for ascertaining profit or loss by preparing income statement and Balance sheet.
4	Valuation of Stock	Stocks should always be valued as per cost price. Market price is ignored here.	Stocks are valued as per cost price or market price whichever is lower.
5	Applicability	Cost accounting is applicable in various manufacturing firms and service industries at the same time.	Financial accounting is applicable irrespective of caste and creed i.e. everywhere.

Difference between Cost Accounting and Management Accounting :

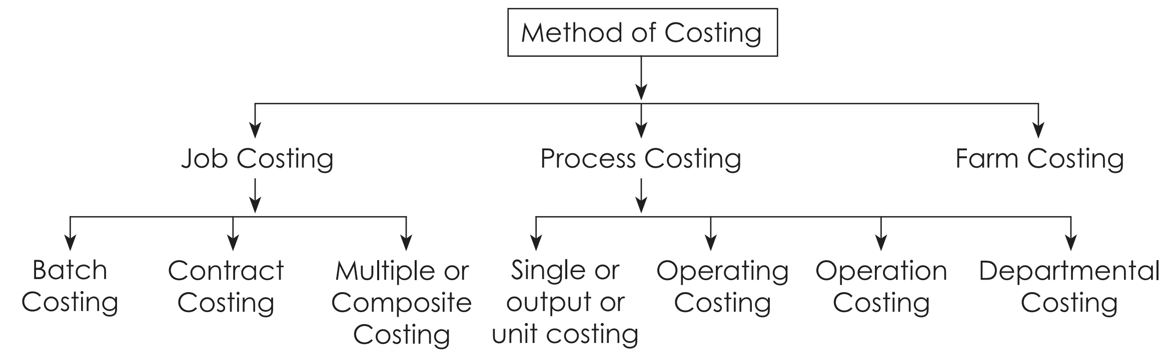
The significant points of difference between Cost Accounting and Management Accounting are :

Sl No.	Point of Difference	Cost Accounting	Management Accounting
1	Meaning	Cost accounting records the different techniques of cost, principles and also the various methods for determining costs. It also present the variance in comparison with the standards. It also explains the reasons therefor.	Management accounting on the other hand, is the presentation of accounting information to formulate the various policies to be adopted by the management.
2	Areas	The area of cost accounting is limited. It does neither record the matters relating to management accounting and nor the financial accounting.	Management accounting covers a wide range of activities i.e., matters relating to financial activities.

3	Techniques	Cost accounting supplies required information by applying Marginal Costing, Standard Costing etc.	Management accounting supplies required information to the management relating to financial decisions by taking the required data from financial accounting.
4	Periods	It takes a specific accounting period.	It does not relate to a specific accounting period.
5	Applicability	The area of cost accounting is limited.	It covers a wide range of activities.
6	Aims	The aim of cost accounting is to ascertain and allocate costs.	The aim of management accounting is to provide the required information to the management for decisions making purposes.
7	Maintenance of Records	Cost accounting keeps various sets of accounting records which are necessary for ascertaining cost.	Management accounting taken the date from financial accounting, as such, no accounting records are maintained.

6.4 METHODS OF COSTING

There are different methods of costing. The methods can be divided into :



These are detailed as below:

A. Job Costing

The main objective of Job Costing is to determine the cost and profit or loss for each job which are undertaken by the firm. It may be mentioned here that the job may consist of one item or a group of items. Cost of each job is separately determined. This method of costing is applicable in case where a specific job is done against a fixed price, viz. Printing Press, Machine tools etc.

Now, the job costing is sub-divided into :

(a) Batch Costing;

(b) Contract Costing; and

(c) Multiple or Composite Costing

These are explained as below:

(a) Batch Costing – It is a method of accounting in which costs are accumulated by batches. Costs are collected as per Batch order number and total costs are divided by the total number in a batch to find out the cost per unit of each batch. It is applicable to toy making industries, biscuit factories, medicine industries etc.

(b) Contract Costing – According to CIMA, "That form of specific order costing which applies where work is undertaken to customer's special requirement and each order is of long duration (compared with those to which job costing applies). The work is usually constructions and, in general, the method is similar to Job Costing." That is, it is a special type of job costing. It deals with the business relating to constructions of building or engineering projects etc.

(c) Multiple or Composite Costing – This costing applies where both job costing and process costing are jointly used. This costing is applicable where neither job costing nor process costing is successfully used, e.g. in a motor car industries, a variety of components are produced and assembled subsequently. So, this costing is applicable in Motor car industries, T. V. producing industries etc.

B. Process Costing

Process costing is a method of cost accounting whereby costs are charged to process and not charged over units produced. It is primarily employed where a finished product is the result of a more or less continuous operations, e.g. paper mills, refineries, chemical plants etc.

Process costing is sub-divided into :

(a) Single or output or unit costing;

(b) Operating costing;

(c) Operation costing; and

(d) Departmental costing

These are explained as below:

(a) Single or Output or Unit Costing – where there is a continuous manufacturing process and units which are produced are identical, this costing is used. The total cost of production is divided by the total number of units produced to get the cost of production per unit i.e., single output cost. This costing is applicable in mines, paper mills etc.

(b) Operating Costing – Operating costing refers to the costs of undertakings who do not manufacture any product but renders services, e.g., transport undertaking, hospitals, hotels etc. In other words, it is used to find out the cost of services which are rendered. In order to ascertain the unit cost, the total cost is divided by the units of service that are rendered by the particular transport.

(c) Operation Costing – This costing refers to the ascertainment of cost of operation and not the processes. Under the circumstances, each operation is considered as the cost centre. This costing is found where production is carried on by various distinctive operations. Cost of each operation is separately determined.

(d) Departmental Costing – Under this method of costing, in order to find out the cost per unit, the total cost of each department is determined first which is divided by the total number of units that are produced in that particular department. But if one particular product passes through various department for its completion, the cost of each department should be ascertained separately and the total cost per unit should be the price after adding the cost per unit of various departments, the product passes through for its completions. The cost so ascertained will be the cost per unit of the product.

(e) Farm Costing – Farm costing constitutes activities agriculture, dairy, nursery etc. This costing is the application of costing principles and techniques to farming activities. It is known to us that farms activity is largely affected by the natural activities, viz. water, air, sun etc. Thus, farm costing is totally different than other costing systems which are applicable to manufacturing industries. That is, a new method of costing should be applied to farm which will be found most suitable for farms and the same is taken as farm costing.

In addition to above, there are other methods of costing also like (a) Standard Costing, (b) Uniform Costing, (c) Marginal Costing etc.

6.5 COST AND COST OBJECT

Commonly understood 'Cost' is expenditure incurred for creation of a value. However, cost can very rarely stand alone and should always be qualified as to its nature and limitations. A number indicated as cost would mean differently under different circumstances. Further this number may be an approximation. It may not necessarily be an actual cost, but may be estimation.

The term cost may denote any of the following:

- an expense that is related to a product or service e.g. cost of material used to produce a TV set.
- an expense that may be related to time i.e. deferred cost, the benefit from which is yet to be received.
- an expense that is lost i.e. there won't be a benefit accruing out of the incurrence of the cost e.g. cost of stock damaged in a fire.

A cost accountant must be able to differentiate cost with respect to product or service, time and the benefit related to it. The purpose is to identify cost with a thing to which it is related to.

Therefore the term cost should always be linked with a cost object to be more meaningful. Cost object is the technical name for a product or a service, a project, a department or any activity to which a cost relates.

Establishing relevant cost object is very crucial for a sound cost accounting system. When costs are accounted for, they are to be booked (i.e. entered under) to a correct cost object. If at this first level of cost data collection, the entry is not made to correct cost object, it will affect the whole process of cost ascertainment and will not aid business decisions.

At a broader level a cost object may be named as a cost centre, whereas at a lowermost level it may be called as a cost unit.

Cost Centre

Commonly understood, cost centres are sub-units of an organisation. We use the terms such as departments, divisions, regions, and zones etc. that convey the same meaning of cost centre. Correct identification of these sub-units is essential for implementing cost accounting system as the costs are ascertained and controlled with respect to the cost centres. Cost centres are sometimes called as centres that add to costs of the organisation and only indirectly add to the profit of the organisation.

The official terminology of CIMA defines a cost centre as "*a location, a person or an item of equipment (or a group of them) in or connected with an undertaking, in relation to which costs ascertained and used for the purpose of cost control.*"

This definition clearly brings out a very wide connotation of the term. It can be explained as follows:

(a) A cost centre could be a location or locations like a branch, a region or zone of sales, etc.

(b) It could be identified as a person such as Chairman's office or MD's office

(c) It could be equipment or a group thereof such as lathe machines, Computers, etc.

(d) It may be a department carrying out a certain activity e.g. production departments like turning, fitting, welding, blending, assembly etc. The activity could be a service activity as well like a stores department, labour office, accounts department etc.

When different responsibility centres are properly set up, cost collection and use of cost information for control purposes can be done effectively.

Cost Unit

The cost unit is the narrowest possible level of a cost object for which costs are collected. Usually it represents the unit used to express the quantity in which the product or service offered by an organisation is measured. This is a normal selling unit or output for which costs are calculated.

The CIMA official terminology defines cost unit as "*a unit of product or service in relation to which costs are ascertained*".

Let us see some of the common examples of cost units in the following table.

Business	**Cost unit**	**Expressed as**
Automobile	A car, a scooter, a motor bike etc.	Number / each
Pharmaceuticals	A strip or a pack or a bottle of medicine	Number of strips of tablets or capsules of various potencies, a crate of bottles of different sizes
Sugar, fertilizer, chemicals	Kg / litres / tonnes	Number
Furniture	Article	Number of sofas, beds, chairs etc.
Power	Kilowatt hour	Number of Kwh
Professional service	Chargeable hours	Number of hours
Construction	A job or a contract	Number / each
Tele marketing	Customer calls made	Number of calls
BPO service	Accounts handled	Number of accounts
Gas	Cubic foot or cu mtr	Number

For service industry, the cost unit is usually a composite cost unit i.e. it's a combination of more than one cost unit. Examples of such composite units are shown below:

Business	**Composite Cost unit**
Goods carrying company	Tonne-miles / Tonne-kilometers
Hospital	Patient day
Hotel	Bed night
Education	Student year
Railways	Passenger kilometers

Classification of Costs

Meaning of costs vary with purpose for which it is incurred. There has to be a logical way to group the different types of costs in order to devise an efficient system collecting and analyzing costs. These costs are to be further analysed and interpreted so that the objective for which they are collected can be served in a better way.

The CIMA official terminology defines classification as "*the arrangement of items in logical groups having regard to their nature (subjective classification) or purpose (objective classification)*".

The cost classification can be done in the following ways:

Basis	**Cost types**
Nature of expenses i.e. element	Material costs Labour costs Other expenses
Traceability to object	Direct costs Indirect costs

Functional	Production cost Administration costs Selling costs Distribution costs Research & development costs
Behavioural	Fixed costs Variable costs Semi-fixed or semi-variable or mixed costs
Production process	Job / contract costs Process costs Operation costs Service costs
Decision making	Relevant costs Opportunity costs Target costs Standard costs Marginal costs Budgeted costs

A. Element-wise classification :

According to elements or nature of expenses costs can be classified as material costs, labour costs and other expenses. Any item of expense can fit into one of these three.

(i) **Material Costs** are costs of physical commodities used to make a final product. They obviously exist in case of manufacturing companies invariably and also in case of some service industries like restaurants. The material could be basic raw material, components, consumables, spares, packing material etc.

(ii) **Labour Costs** comprise of expenses in relation to salaries, wages, bonuses, expenses on staff welfare, statutory benefits like provident fund, gratuity etc. This is an intangible source of cost and one cannot physically see this element into the final product. Usually, it comes next to material cost with regard to its proportion to total costs. In case of service providing organisations, of course, labour costs will constitute greater proportion.

(iii) **Other Expenses** are incurred either to provide support to manufacturing or service activity or to ensure smooth running of business.

All elements put together are called as "Total cost" or "Full cost". Labour and other expenses put together may be called as 'conversion costs'. They help the conversion of raw material into finished product.

B. Classification based on traceability to cost object

The word traceability here means the connectivity of an item of cost to the cost object which could be either a cost centre or a cost unit. It's very important to know to what extent there is a direct relationship between costs and cost objects. On this basis costs can be classified into:

(i) **Direct Costs** are costs that can be easily identified with the unit of output. The meaning here is these cost owe their existence directly to the units produced. The direct costs could be direct material costs, direct labour costs or direct expenses. Hence all elements of costs could fit in as direct costs as the test is whether there is a direct linkage of them to the unit produced or service rendered. The Direct Costs (material plus labour plus expenses) together make a Prime Cost.

(ii) **Indirect Costs** are those which are not easily directly connected with the cost unit or cost centre. Here again one may see indirect material costs or indirect labour costs or indirect expenses. All indirect costs (material plus labour plus expenses) together are termed as 'Overheads'. As there is no direct linkage with cost unit, such costs are either allocated or apportioned to the final product on some suitable basis.

C. Functional classification

The business activities, by and large, can be sub-divided into groups as production activities, administration activities, selling & distribution activities. Mostly any organisation will have these functions as cost centres. Non-manufacturing companies may not have factory or production, but they may use other functions.

(i) **Factory or Production Costs** comprise of items of expenses related directly to the factory or production activity. These could include all elements viz. material, labour and expenses.

(ii) **Administrative or Office Costs** are those incurred for overall administration of the organisation. This may includes items like stationery, office supplies, building maintenance, salaries of office people etc. This category may include material, labour & other expenses.

(iii) **Selling and Distribution Costs** are costs incurred after the production is over. These are related to efforts for selling and distributing the products. It may involve advertising, free samples, distribution van expenses, secondary packing material, carriage outwards, discounts and schemes offered to customers. Thus these costs also may include material, labour and expenses.

(iv) **Research & Development Costs** are costs associated with efforts undertaken by the organisation to innovate new products, new designs, and new processes. These costs cannot be related to the ultimate cost unit. Hence they are normally not included in the total cost. There may be various research projects going on simultaneously. Some of them may be commercially successful while the other may not. The cost of non-successful projects may be written off to the P & L A/c in the year in which they are incurred.

D. Behavioural classification of Costs

The word behaviour, here, denotes the relativity or variability of change in the cost with respect to change in the level of business activity. The level of business activity may be indicated in terms of volume of output, hours utilised, capacity operated etc. It is in this connection that the costs are classified into fixed, variable and semi-variable costs. This classification is a very powerful tool in the hands of management for the purpose of short term decision making.

(i) **Fixed Costs** are those cost which do not change with change in the level of activity within the relevant range (installed capacity). Consider the item of rent for factory. The rent payment is associated with time period. Once an organisation makes a rent agreement, the cost is payable irrespective of whether there is any activity or not. An interesting aspect about fixed costs is that while the total fixed costs remain constant, per unit fixed cost will go on decreasing. If production goes up it is clear that this concept helps management to understand the importance of capacity utilization.

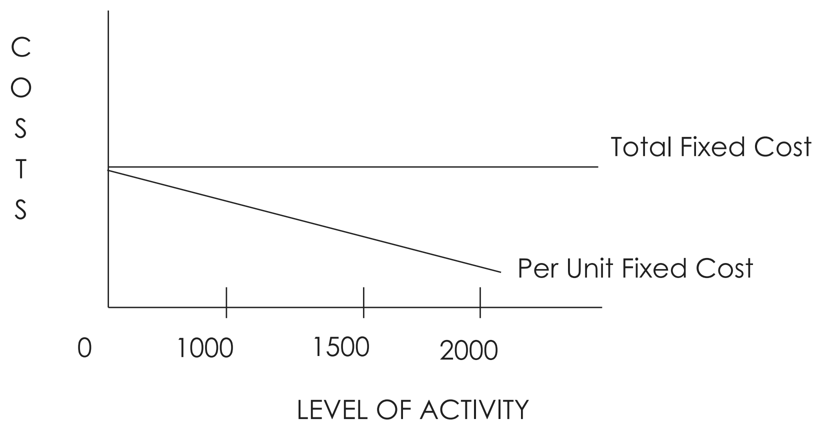
(ii) **Variable Costs** are costs that vary in direct proportion to the level of output. Any increase in the production volume will result in corresponding increase in these costs. Thus total variable costs will increase exactly in the same proportion of the volume of activity. The most common examples of such cost are material costs and costs of labour directly working on production. An interesting aspect about variable costs is that while total variable cost changes with production level, per unit cost remains the same.

(iii) **Semi-Fixed or Semi-Variable Costs** are those which change with change in activity level but not in the same proportion. In practice, the line of demarcation between fixed and variable is so thin that most of the cost items fall under this category. There cannot be exact linear relationship between most of the cost items and the levels of activity. Various statistical tools are used to establish a correlation and the degree of variability is measured.

The following example shows how perfectly variable or perfectly fixed cost would behave. Please understand these relations very well as it lays the foundation of a very popular technique of marginal costing which studies the cost-volume-profit relationship.

(a)	Level of activity		1000	1500	2000
(b)	Variable cost (say materials)		60000	90000	120000
(c)	Fixed costs (say rent)		30000	30000	30000
(d)	Per unit variable cost	(b ÷ a)	60	60	60
(e)	Per unit fixed cost	(c ÷ a)	30	20	15

This can also be shown as chart as follows:



From the view point of managerial decision making especially in the short term this classification acts as a very potent tool. It can help take decisions such as by how much should the production be increased or decreased or what will be the effect of volume changes on costs or vice versa.

E. Classification by Production Process

Based on the method of producing a product, the costs also need to be accumulated with regard thereto. Production method based classification of costs can be done as follows:

(i) **Job or Contract Costs** are associated with industries where the end product is a unique, non-standard item which is produced or built as per customer specification. Repeat production of the same item is highly unlikely. These costs are directly associated to a job or a contract which is the cost unit in these industries. The application of this method is seen in construction industry, ship building, machinery construction and projects. Most of the costs relate with an individual production order. It can be applied even in service industry.

(ii) **Process Costs** are related to production processes in industries like chemical, pharmaceuticals, fruit processing, cosmetics etc wherein raw material is input in a series of processes where different treatments are made to convert the form of raw material into a finished product. Output of one process becomes input for the next in the series.

(iii) **Operation Costs** are pertaining to performing an operation at each stage in the production process. This is a variant of process costing and finds its application in industries where large number of similar items is produced or also in industries where sub-assemblies are produced. Take case of bearing manufacturing which is assembly of inner rings, outer rings, balls and other components. Each component is produced in large quantities and then assembled to get a ball bearing.

(iv) **Service Costing** is used in the service industries and the costs are ascertained for generating services. The intention is to show cost of appropriate cost unit of a service e.g. passenger-kilometer for railways, KWH for power etc. This is generally used in hospitability, hospitals, etc.

F. Classification for decision making

The purpose of ascertaining costs is to help management in decision making process. As it involves evaluation of costs & benefits of various alternatives, costs which are relevant for a particular decision only should be considered.

(i) **Relevant Costs** are those which are relevant for situation under consideration. Costs which are future costs, involved a cash outflow and which differ between the various alternatives are called relevant costs.

(ii) **Opportunity Cost** is the benefit forgone as a result of pursuing one course of action rather than pursuing the best alternative course of action. The opportunity costs are always relevant. For, they reflect the choice of alternatives to arrive at a decision.

(iii) **Target Cost** is a product cost estimate derived from a competitive market price. The intention of target cost is to bring about continuous improvement in the cost. Consider a product the price of which is given by market. If the company wants to earn a desired profit on the product, there's no alternative but to produce it within the target cost calculated as (selling price – desired profit). It may sound simple, but achieving the results is very difficult.

(iv) **Standard Cost** is a pre-determined cost which is calculated from management's standard of efficient operations and the relevant necessary expenditure. The standard cost once established, acts as a benchmark against which the actual costs are compared. The deviation from the standard are measured, analysed and corrective actions are taken. Standards are based on scientific computations based on time & motion study, industrial engineering and other techniques. As the name suggests, it can be applied only in those industries where the products processes and operations are standardised.

(v) **Marginal Cost** is an amount by which aggregate costs change if volume of output is increased or decreased by one unit. It follows from this that the marginal cost resembles to a variable cost. If only one additional unit is to be produced, it is necessary to incur only variable costs as fixed costs do not change with the change in output levels. Thus marginal cost is also defined as cost of producing one additional unit.

(vi) **Budgeted Cost** is also a pre-determined cost like standard cost; but the later is set for a long term, whereas budgeted cost is usually for a year. The basic purpose of budgeted cost is to provide a benchmark for comparison of actual performance. The budgeted cost is like a target within which to operate.

Standard costing, budgetary controls and marginal costing are techniques used by management accountants as integral part of any performance management system in an organisation.

These different categories of cost can be interlinked. Costs could fall into more than one category simultaneously. There may be an overlapping when one tries to categorise cost as per one or more types as mentioned in preceding sections. A raw material cost is

(a) Material cost by elemental classification,

(b) Direct cost by traceability

(c) Production cost by function

(d) Variable cost by behaviour

(e) Relevant cost for decision making.

(f) Could fall into any of the types based on production process.

6.6 COST ORGANIZATION

The costing department is an important player in the entire value chain of the organisation. It has to help the CEO in bringing about improvements in processes, cost reductions, and value enhancement. As the function encompasses all functional areas of the organisation, a cost and management accountant has work along with these departments as a facilitator and not only as a critique. The involvement of this department with others can be explained with an example:

Department	**Areas contributed**
MD's or CEO's office	Preparation of strategic plan Reporting on key variances Reporting on value additions Analysis of product or SBU wise results Capacity expansion or diversification Management audit Internal control
Production	Set up costing system Generate costing reports Inventory valuation Wastage reporting & monitoring Labour time utilisation Production budgets Make or buy decisions
Sales and Marketing	Product pricing Sales budgets & forecasts Cash flow estimations Impact of sales promotion Competition analysis Bidding for tenders Accept or reject an order
Procurement	Purchase budgets Vendor analysis Economic ordering quantity Stock levels Price variances
Information technology	Cost information ERP implementation

In addition to the above, the costing department also looks after cost audit in those organisations where cost audit is compulsory. It is also evident that the role of this department is functional as well as strategic.

6.7 COSTING SYSTEM

To determine costs correctly, an organisation must install proper system of costing. There is no standard system that can suit every organisation, but it will depend on the nature of business, the nature of product or service, the management's need for costing information and cost control. Typically a costing system is comprised of the following characteristics:

(a) It lays down basic procedures and functional routines. In its traditional form, costing process aligns itself with the flow of business activity. Hence a clearly defined logical flow of business activities will make the system stronger.

(b) It starts with a proper classification of costs, determination of cost centres and cost units. This base level activity is many times ignored which may create problems at a future date.

(c) It provides basic guidelines for segregation of fixed and variable costs.

(d) It will include the logic for allocation and apportionment of indirect costs.

(e) It also provides standard reports vending out regular flow of costing information to various levels of management.

(f) The system should provide for a cost accounting manual explaining how different items of costs will be treated in an organisation.

(g) It needs to take into consideration the cost audit record rules and cost audit report rules if applicable.

(h) The system should not be closed ended, but scalable to take care of future changes in the business requirement. If not taken care of in time, this will increase the cost of system itself.

(i) These days, the system is mostly an integrated system which takes care of financial and cost accounting simultaneously as the process is automated.

6.8 COST DETERMINATION

Determination of cost is embodied in a costing method within the costing system. Cost is always determined for a cost unit. Whatever may be the cost unit, costs are accumulated and attributed to that cost unit to ascertain the total cost. In Job costing, for example, all elements of costs are identified with "a job". In case of costs that cannot be directly so identified, they are allocated or apportioned using a suitable basis. In a service organisation, the composition of cost is dominated by indirect costs. The proportion of allocated costs in the total cost in such industries is higher.

The primary record of cost is done with respect to the element and cost centre. The secondary record relates to allocation of indirect costs. The next level is to relate it to the actual cost unit. In case the cost unit is not singular, the costs are averaged out. For example, if chocolates are made in batches of a particular quantity, cost unit is normally a batch and costs are ascertained for the batch. These costs are then divided by the number of chocolate in the batch to find out cost per chocolate.

The process of determination of cost of a pre-determined cost unit can be seen in the following chart:

Particulars	Basis of identification	Production departments			Service departments		
		Stage 1	Stage 2	Final stage	Dept 1	Dept 2	Dept 3
Direct Costs:							
Direct Material	Direct identification	------	------	------	------	------	------
Direct Labour		------	------	------	------	------	------
Direct Expenses		------	------	------	------	------	------
Primary distribution of Indirect Costs							
Indirect Material	Direct or allocated	------	------	------	------	------	------
Indirect Labour		------	------	------	------	------	------
Indirect Expenses		------	------	------	------	------	------
					------	------	-----
Secondary distribution of Indirect Costs							
Apportionment of service department costs to production departments	Service rendered						
Total Cost of Production (a)		------					
Quantity of Cost Units (b)		------					
Per unit cost (a ÷ b)		------					

This is not a standard chart but only illustrative. Each organisation will form its own format depending on the need.

Accounting for Material Cost

Among all the three elements of direct cost material cost is the most significant element. The term material is a very broad term and could include:

(a) Direct material such as raw material which is converted into finished product. A product may be made out of single raw material item or multiple material items may be processed or blended together. It will also include the basic packing material without which a product cannot be stored or sold. e.g. fruit juice has to be offered either in a glass or plastic bottle or a sachet or tetra pack. Such packing material will be included as direct material as it can be easily identified with each litre of juice produced.

(b) Indirect material such as oil, grease, cleaning material, screws and nuts, secondary packing. This material does not form part of the final product. Technically even items like office supplies and stationery may be included as indirect material.

The classification of material cost into direct and indirect is important as the control mechanisms for both are different. Whereas efforts to control direct material costs will be directed to minimize the cost per unit, the indirect material costs may be controlled through other control measure. In different industries also material costs may be controlled in different ways e.g. in a chemical or pharmaceutical company the production is based on a fixed formula of mixing material, the costs are controlled through reduction in wastage and material rate negotiations.

Of late, there is an increased importance given to not only the control over physical being of a material item but also on the entire logistics of material movement. From the stage of planning till final usage of material, there are costs attached to each activity which need to be controlled. Inventory controls measures like EOQ, ABC analysis, Pareto analysis also help keeping material costs to minimum levels.

Movement of Material

The flow of material routine may involve following:

(a) Planning for material

(b) Procurement of material

(c) Receiving and Inspection of material

(d) Storage of material till it's required for production and Issue of material at various stages of production

(e) Store Records

(a) Planning for Material

There is a continuous planning required to be done for making sure that material of the right quality, right quantity at right price are made available at right time for production activity. Companies may have planning cells to look after this activity. At times, the purchase department may be involved in the planning activity with production and industrial engineering. Computer aided packages like Material Requirement Planning (MRP) are used to do errorless plan for material. Codification of material items is the pre-requisite right from planning stage for easy identification of an item. A typical plan for material will indicate item-wise requirement of quantities for the planning period which may be a year.

(b) Procurement of Material

Based on the planning done, the purchase department may start buying material either on the basis of quantities that are to be procured as per stocking policy or on the basis of specific requisitions from stores department. There could be a requisition made directly by production department as well for a specific item required for a job or contract or a process. Depending on the size of organisation and nature of business, the purchase activity could either be centralized or decentralized. The purchase requisition acts as an authority for the purchase department to buy the required material.

For non-specific items of material, the crucial decisions to be made are:

(i) How much quantity should be bought at a time?

(ii) When should the stocks be replenished?

(iii) What should be the source of supply? Should there be single or multiple sources?

(iv) How many quotations should be called for?

The aim should be to order in just the right quantities so that the situation of over-stocking or under-stocking is avoided.

Overstocking may result into

- Locking up of working capital and higher interest costs
- Locking up of storage space
- Benefits of drop in prices of material may not be available
- Increased risk of obsolescence or deterioration
- More material handling and upkeep

Under stocking, on the other hand, could lead to:

- Production holdups causing disturbances in delivery schedules
- Unfavourable price and credit terms for last minute distress buying
- Payment for idle time to workers due to production holdups

For specific items purchase actions are initiated based on purchase requisition or indent, which is a request by the generating department to purchase department to procure items as indented. These indents could be made on the basis of Bill of Material prepared by the engineering department.

The Bill of Material (BOM) lists all material items required for making a complete product unit inclusive of all components or sub-assemblies. It is easy for the purchase department to act on such advance intimation about future requirements. Internal control can be established as the material can be issued for production only as per the BOM. Thus a stores person will not issue less or more material. The specimens of BOM and purchase requisition are illustrated below. The formats may differ from company to company.

Bill of Material

Specimen Bill of Material (BOM)

Number ______ Date ___________ Job / Order Number ___________

Department Code ________________ Assembly Drawing no. _________

Part No.	Component Code	Component Description	Material Code	Gross Material Quantity	Normal Wastage	Net Material Quantity

Signed by: Engineering Head Approved by ____________

For use by Purchase Department only

Date	P.O. Number	Name of Supplier	Delivery Date	Remarks

Signed by: Buyer or Purchase Manager

Purchase Requisition

Specimen Purchase Requisition or Indent

Requisition Number _________ Date ___________ Job / Order Number ____________

Department Code __________

Sr. No.	Item Code	Description	Quantity	Units	Quantity on Hand	Remarks

Signed by: Stores-in-Charge / Planning Engineer Approved by_____________

For use by Purchase Department only				
Date	P.O. Number	Name of Supplier	Delivery Date	Remarks
Signed by: Buyer or Purchase Manager				

The purchase department may have list of approved vendors with it. It is a good practice to keep updating the new sources of supply so that running around at eleventh hour could be avoided. If there are more vendors approved for similar items it is necessary to call for quotations to get the best rates and terms of supply such as delivery, credit, quality etc. The tenders could be single tender, restricted tenders, open tenders or global tenders. After getting tenders, a comparative statement is prepared in order to provide decision maker a proper set of figures to decide. The comparison of quotations could be done in the following format.

The ranking of suppliers is done on the basis of this comparison. The lowest quotation is ranked as 'L1' which indicates a preferred supplier. It's not always selected only on price but multiple factors such as quality, previous track record, guarantees offered by them, credit granted, market standing of the supplier etc. The cost and management accountant may participate in the process of finalizing the supplier through this process.

Schedule of Quotations							
Requisition Number ______ Date ___________ Job / Order Number_________ Department Code ___________________________							
Supplier	Minimum Qty offered	Rate per Unit	Delivery Time	Delivery Terms	Credit Terms	Quality Certificates	Ranking
Signed by: Buyer					Approved by ___________________		

Once the supplier is selected and rates, quantities and other terms are finalized, a firm order is placed on the supplier. Many firms follow the policy of sending a Letter of Intent (LOI) to supplier as advance intimation and then the actual PO is issued. This is a contractual commitment for both buyer and supplier to supply and accept goods as per the terms of the PO. A specimen of Purchase Order is shown below.

Specimen Purchase Order	
To : M/s ___________________________ (name & address of supplier) PO Number ______________ Date ____________	Quotation Reference __________

Item code	Description	Quantity	Units	Rate per unit	Amount	Remarks
Add: Freight & Packing Add: Excise duty Add: VAT or CST						
				Total Amount		
Delivery: Goods to be delivered at (address of the place) Delivery date _______________ VAT form to be provided ____ Quality certificate required __ Payment terms _____________ Signed by: Authorised Signatory						

The main PO is sent to supplier and copies are given to department generating requisition (to intimate the action taken on indent to them), stores department (as advance intimation about likely date of delivery so that storage plan can be worked out) and accounts department (to intimate creation of an obligation to pay as per agreed terms and also timing of the cash outflow). The format of the PO for an imported item will be same except for the unit of currency and some other terms.

If the payment is through letter of credit (L/C), the fact is mentioned in the PO and along with the PO, LC is also opened through bank.

(c) Receiving and Inspection of Material

On or around the scheduled date, the supplier will dispatch the material and intimate the buyer of the fact of delivery. He also sends the delivery documents like VAT invoice, delivery challans, and excise gate pass, test certificates, freight receipt if paid for etc. The purchaser will inform stores department of the delivery.

The stores department will receive the material after the gate entry. It will compare the quantities sent with that of the PO quantity. In case of excess or shortage, the supplier is informed immediately. The excess may be returned back to the supplier. The stores department will prepare Goods Received cum Inspection Note (GRIN) and intimate the Quality Control (QC)department with a set of GRIN copies. The QC department will carry the routine and specific quality checks and either accept or reject the material in full or part. The accepted material is final stores at its place in the bin or yard and the inventory records are updated with this inventory received. The specimen of a GRIN is shown below:

Specimen Goods Received cum Inspection Note (GRIN)						
Received from __________ (name & address of supplier) Received at ____________ (place of Receipt)				GRIN Number ____________ Date ____________ PO Reference ____________		
Item Code	Description	Quantity Received	Quantity Accepted	Quantity Rejected	Reason for Rejection	Remarks
Prepared by ____	Received by ____		Inspected by ____		Storekeeper ____	

A copy of the GRIN after acceptance of material & invoice of the supplier is sent to accounts department for bill passing. The accounts department will check the rates charged by the supplier with the PO rates and all other terms such as freight, insurance, other certificates, VAT or CST forms and then pass the bill for payment. The payment is released based on the credit period agreed with the supplier.

In case of imported material, Bill of Entry prepared and approved by the department of customs is a very crucial document. The customs duty is charged by the customs based on this.

For cost control, the management accountant test checks the documents to see if quantities are correctly recorded in the stores ledger and whether the rejected goods are actually sent back to the supplier.

(d) Storage and Issue of Material

Once the accepted material is received, it is under the responsibility of the stores-in-charge. It is his duty to ensure that the material movement in and out of stores is done only against proper documents authorised by concerned authorities. He is responsible for proper housekeeping of the storage space to ensure that material is well protected and there is no loss due to defective storing. He also insures the stock. He takes care to avoid loss of material due to pilferage, theft or fire.

Broadly the movement of material in and out of stores will be on account of:

- Issue to production departments
- Return back from production department
- Transfer from one location to the other
- Sending material out for further processing to a sub-contractor
- Receiving back the material from sub-contractor

The material is issued to production department based on the document called as Material Requisition cum Issue Note (MRIN). This is prepared by the concerned production planning department and it acts as an authority for the store's manager to issue the material. The specimen of MRIN is shown below:

Specimen Material Requisition cum Issue Note (MRIN)

Required by __________ MRIN Number ________

(name of production location) Date ________________

Production / Job Order No _______

Item Code	Description	Quantity Required	Quantity Issued	For Cost Office		
				Rate	Value	Remark

Authorised by______ Issued by ______ Received by______ Entered & Valued by______

The stores department has no access to cost data. Hence the valuation of material issues is generally done by the costing department. Based on the valuation method chosen, the cost accountant will value it and enter in the stores ledger which records the stock.

If for some reason the material is returned back to stores by the production department a document called as Material Return Note (MRN) is prepared which is similar to that of MRIN; except that instead of quantity received and issued the columns will be named as quantity returned will appear.

In case material is transferred from one location to the other, a Material Transfer Note (MTN) is prepared which will record 'transfer from' and 'transfer to' details. The basic format will be quite similar to the above, hence not reproduced.

(e) Stores Records

Normally two set of records are maintained for the movement of goods in and out of stores department. The records are input using the documents like GRIN, MRIN, MRN and MTN which have been discussed. These records reflect an account of 'inflow', 'outflow' and 'balance in hand'. These records are:

(i) **Bin Card –** This gives a quantitative record of material movement to and from stores. This is maintained by the storekeeper. It is prepared for each material item code and presents a continuous flow of receipts, issue and closing balance of the item concerned. Ideally, these cards are attached to the bins or place where the material is actually stored. But mostly they are centrally kept in the stores department under the custody of storekeeper for ease of handling. Ideally, bin cards are to be instantly updated on an ongoing basis to avoid mismatching of stock records with the physical balance. The specimen bin card is shown below:

Specimen of Bin Card					
Item code ______________ Description ______________ Location ______________ Store Ledger Folio _______ Bin Number ______________			Normal stock level ____________ Minimum stock level __________ Maximum stock level _________ Re-order level ________________		
Date	Document number	Receipts	Issues	Balance	Remarks
Audit remarks:					

(ii) **Stores Ledger –** While the bin card gives quantitative record, the stores ledger adds the 'cost' dimension to it. The stores ledger is maintained by the costing department.

Specimen of Stores Ledger													
Item code ______________ Description ______________ Location ______________ Store Ledger Folio _______ Bin Number ______________									Normal stock level ____________ Minimum stock level __________ Maximum stock level _________ Re-order level ________________				
Date	Document Number	Receipts	Receipt			Issues			Balance			
			Qty	Rate	Value	Qty	Rate	Value	Qty	Rate	Value	Remarks
Audit remarks:												

The stores ledger is the most authentic record of stock value at any given point in time. It is of great help to a cost accountant as he can assess the various aspects of stock movements for particular categories of material items.

As bin cards are kept by stores and stores ledger (also called as stock ledger) is maintained by costing, there has to be a periodic reconciliation of both records to ensure that they match in respect of quantities of receipts, issues and balances. A cost accountant has a major role to play here, as any error in these records may directly affect the consumption figure and thereby the material cost.

Are these records kept for each and every item of material - for both direct and indirect? The answer is 'no'. The decision is based on the overall value of such items. Computer packages have made the task of keeping the stock records very easy and online. The reconciliation is also rendered unnecessary as the system automates it. At one entry point both records get simultaneously updated.

Material Cost

It is essential to keep track of material cost flow alongside the physical flow of material throughout the production activity until it is finally converted into finished product.

Material Cost Flow:

The first instance when material cost is incurred and recorded is when the material is received and accepted (through GRIN). At this stage it is important to carefully value the receipt of goods. Some of the material may be returned back to supplier. Thus, valuation of return of goods is made.

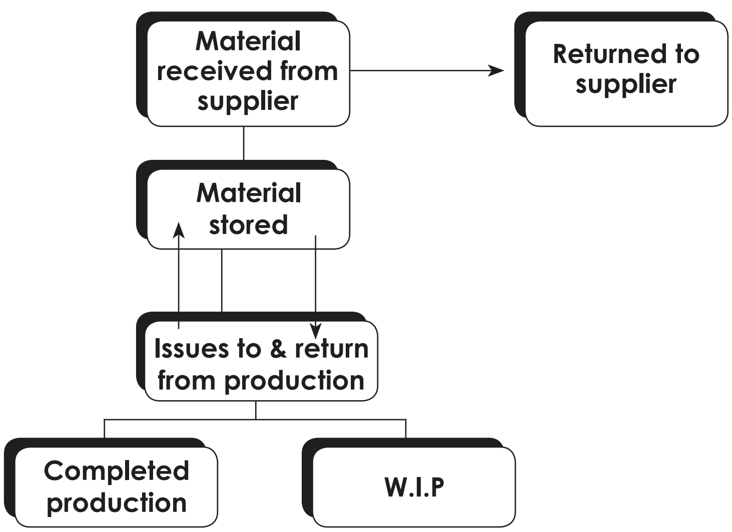
Next stage is issue of material for production. This has an effect of reducing the stock in hand and increase in the production cost (notice the double entry effect here too!). The valuation of issues is the next stage. There may be return of material from production to stores. Hence, valuation of returns to stores is essential.

When material gets converted into finished product the material cost becomes one of the elements of cost of production. During production process some material may be lost. Such losses will have to be valued. The losses may be unavoidable (such as leakage, evaporation, moisture, dusting etc.) or avoidable losses (pilferage, defective storage, careless handling, defective workmanship etc). The valuation of both types of losses is different.

Some production process may not be fully complete and material is under process. This is called 'Work in Process (WIP)'. The material cost of WIP has to be calculated.

Hence it is crucial for a cost accountant to ensure that costs are properly ascertained at each stage in the material flow, interpreted, analysed, reported and controlled; which is the main purpose of cost accounting.

The following chart depicts the material cost flow in a manufacturing concern.



Let us elaborate the mechanism of valuation of material at various stages.

(i) Valuation of Receipts

Material is received as per the terms and conditions given in the purchase order. In addition, there are added on costs such as taxes & duties, freight, packing & forwarding etc. There may be trade discount to be calculated on the basic price and then reduced from the net rate. Cash discounts if any are excluded from valuation of receipts, it being of a pure financial nature.

The foreign Purchase orders are generally given in foreign currency. The foreign suppliers' invoices are also in foreign currency. In such cases, the foreign currency of the basic price is converted into Indian Rupees. The other charges like customs duty, inland transportation etc. are in INR only. The question is what should the currency conversion rate be? Usually it is taken as the bill of entry rate.

In short the cost of material receipts should be equivalent to the landed cost i.e. cost up to the stage of storing in the factory warehouse. When we speak of the base price, the price term has great significance. For example, if the price is FOB price, it means the cost of insurance and freight is to be borne by the buyer. The CIF price is inclusive of insurance and freight up to the port. If the price is ex-works, it means complete expenses of picking up material from the factory gate of supplier will be the responsibility of the buyer. A DDU price means delivery duty unpaid. Here duty is payable by the buyer, whereas a DDP price means delivery duty paid where duty is paid by the seller. The student is advised to make himself aware of different price terms used in the national and international trade agreements.

The cost of receipts should include all items of expenses related to bringing the material to the warehouse.

(ii) Pricing of Material Issues

The material received and stored in the warehouse is intended to be used for issue to production. There will be several receipts and numerous issues of the items of material and this is an ongoing activity. Prices do fluctuate in the market as the material may be bought from different vendors, in different quantities, from different states which may result in different landed cost for the same item. Consider material 'P' is bought from 3 different suppliers as:

From A 1,000 units @ ₹ 24.50 on 1st Jan 2012

From B 700 units @ ₹ 26.00 on 4th Jan 2012 and

From C 1,250 units @ ₹ 23.75 on 7th Jan 2012

Assume 500 units are issued to production on 2nd Jan 2012 and production is complete. The answer here is simple as there is stock of 1,000 units from which 500 are issued and as this is the only lot existing, the issue cost per unit will be ₹ 24.50.

Now assume that 1,500 units were issued on the 9th of Jan 2012. What will be the material cost per unit produced? As there are 3 different rates which of them will be considered?

There could be different answers for this. It could be:

(1) Use the first lot first or

(2) Use the last lot first or

(3) Take an average of rates

(4) Try and relate the lot to production on actual basis and many more.

Whichever of such methods of valuing issue of material is used remember the following impact thereof:

* *Receipts are always valued at actual*

* *Issues are valued using one of valuation method*

* *Stock values reflect the effect of valuation of issue*

Let us see these methods in depth now.

(a) Actual Cost Method: Under this method the production made is exactly identified with the purchase lots and issues are valued at the rate of such identified purchase lot. This is possible in case of Job or contract type of companies or those executing projects. This is because each job or contract or project uses non-standard items and each item is used for specific job only. The purchase orders are made according to the project number and material is physically stored separately according to project numbers. Although effective, this method is tedious in terms of record keeping. For same item used in different projects a separate stock card according to project number will have to be used. This method is also called as 'specific cost' method.

(b) First-In-First-Out (FIFO) Method: This method assumes that the material received first is consumed first. For issue valuation, the rate of the earliest available lot is considered first and when the lot gets fully consumed, the rate of next available is taken and so on.

Benefits:

(i) The method is simple and easy to operate.

(ii) It results in valuation of closing stock at latest prices.

(iii) It can be conveniently applied if transactions are not too many.

Disadvantages: The calculations become complicated if the receipts are too many. Companies having the JIT system will face this problem more. If prices fluctuate widely, the cost of production may seem to vary, thus vitiating results.

Application: The method is applied in the industry where it is necessary to ensure the physical flow as per the principle of FIFO. In pharmaceuticals or chemical factories where the raw material has a shelf life, the principle of FIFO must be followed. Here the valuation will coincide with physical flow also.

(c) Last-In-First-Out (LIFO) Method: This method assumes that the material received last is consumed first. For issue valuation, the rate of the latest available lot is considered first and when the lot gets fully consumed, the rate of the earlier available is taken and so on. This is exactly reverse of the FIFO method.

Benefits: (i) The method is also simple and easy to operate.

(ii) It results in valuation of cost of production at latest prices.

(iii) It can be conveniently applied if transactions are not too many.

Disadvantages: The calculations become complicated if the receipts are too many. Companies having the JIT system will face this problem more. Here also if prices fluctuate widely, the cost of production may seem to vary, thus vitiating results.

Application: The method is applied in the process type of industry where material moves in lots from one process to the other and the individual identity of material is not important, e.g. oil refineries, sugar mills, flour mills etc.

What are the implications of the FIFO and LIFO method?

The choice between the two methods is quite tricky. If the prices of material are showing increasing trend or decreasing trend, what will happen to material cost and stock valuation under both methods? See the following table:

	FIFO method	LIFO method
Increasing prices:		
Material Cost	Lower	Higher
Closing Stock value	Higher	Lower
Decreasing prices:		
Material Cost	Higher	Lower
Closing Stock value	Lower	Higher

(d) Average Method: Both the above methods consider the actual costs for valuation of issues and stocks. However, both the methods are equally cumbersome if number of transactions is very large and prices fluctuate too much; which will happen in a longer term. Consider the following case:

March 1, purchased 1,500 units @ ₹ 10 per unit ₹ 15,000

March 15, purchased 1,600 units @ ₹ 30 per unit ₹ 48,000

On March 20, 1,800 units were issued to production.

The valuation of material cost and closing stock under both the methods will work out as follows:

	FIFO method	LIFO method
Material Cost	1,500 x 10 = 15,000 300 x 30 = 9,000 **24,000**	1,600 x 30 = 48,000 200 x10 = 2,000 **50,000**
Closing Stock value	1,300 x 30 = 39,000	1,300 x10 = 13,000

In average method, the actual rates are not used, but the average rates are used.

There are two methods of averaging – simple average and weighted average. Let us see how both these methods work and what their implications are:

- **Simple Average Method:** Under this method, the rates of various receipts are averaged out. The rates of various receipts are added and this total is divided by total number of receipts. The issue price is thus worked out by a simple formula:

$$\text{Issue Price} = \frac{\text{Unit prices of materials in stock}}{\text{Number of Purchases}}$$

A simple average of prices of lots available for issue is taken as 'issue price'. It is also called as moving simple average method.

Benefits: (i) The method is also simple and easy to operate.

(ii) It results in valuation of cost of production at average prices, thus reducing the fluctuations caused in the methods based on actual costs.

(iii) It can be conveniently applied if purchases are made in identical lots.

Disadvantages: The material and stock values do not reflect actual costs. Here also if prices fluctuate widely, the cost of production may seem to vary, thus vitiating results. It is difficult to verify the closing stock figure lot-wise. The method considers only rates and has no regard for the quantities held.

Application: The method is applied where prices do not vary much and it is difficult to identify each issue of material with the lots.

- **Weighted Average Method:** This method removes the limitation of simple average method in that it also takes into account the quantities which are used as weights in order to find the issue price. This method uses total cost of material available for issue divided by the total quantity available for issue.

The formula applied is:

$$\text{Issue Price} = \frac{\text{Total Cost of Materials in Stock}}{\text{Total quantity of Materials in Stock}}$$

The benefits of weighted average price are more or less similar to that of simple average method, except for the fact that use of quantities as weights refines the average mechanism to make it more equivalent.

• There are other methods of valuation of prices and these are discussed briefly as follows:

(a) **Highest in first out:** In this method the stocks are always shown at minimum value and the issues are priced at the highest rates in the available lots.

(b) **Standard price:** Irrespective of actual prices, this method considers standard price for the issue of materials. The difference between standard and actual is treated as variance.

Selection of method of pricing will depend on the following:

(a) Nature of material – if material has a shelf life then FIFO is suitable

(b) Prices of material – if prices fluctuate widely, weighted average method is useful

(c) Method of costing followed – if standard costing is used, the pricing of issues could be done at standard price

(iii) Treatment of Shortages:

We know bin card and stores ledger show the book balances. They are to be periodically compared with physical balances to ensure accuracy of stock records as well as correctness of physical control. If there are discrepancies arising between physical and book balances, the adjustment has to be done in the stock ledger. The shortage is shown as issue and is valued on the same basis as that of pricing of actual material issued. The excess is treated as a receipt.

Shortages may also arise due to a variety of reasons like:

(a) At times, it may not be possible to measure the exact quantity issued. In such case an estimate may be made.

(b) There could be differences due to theoretical weight and actual measured weight.

(c) If material is in liquid form, it may be subjected to losses due to evaporation, temperature change, moisture etc.

(d) Wastage may be caused within stores due to dusting, leakage etc.

Whatever may be the reason for shortage, it is essential to assess whether the loss is avoidable or unavoidable. If losses are inevitable or unavoidable, it is called as normal loss and the cost is spread over the balance good stock. The avoidable loss (caused due to issue deficiency or accident) is called as abnormal loss and should be costed separately. The abnormal loss should not be charged to production cost and dealt with separately.

(iv) Valuation of Returns to Stores:

When material is returned back from production department to the stores, the question of valuation arises. No doubt the returns are to be shown in the receipt column, but there is no unanimity among experts as to its valuation. Some say it should be taken back at the same price at which it was issued. The other experts say that valuation should be done at current price of the issue.

(v) Valuation of Returns to Vendors:

Material which are not accepted for quality reasons or due to non-conformity to the specifications, it will be returned back to the vendor. If the defect is spotted during initial quality check, the material is not taken in the stock ledger at all and returned as it is. If material is taken into stock, but not yet issued, then the return is valued at the same price at which the receipt is recorded. If an issued material has to be returned back, then firstly it is shown as a return from production to stores and subsequently shown as a returned to vendor. This is valued as per the system of issue pricing currently used.

(vi) Accounting for Stock Entries:

In an integrated accounting system, where cost and financial records are kept simultaneously, the entries for stock transaction are made as follows:

On receipt of material for stocking	Dr Stock of material Cr Suppliers
Receipt of material for specific jobs	Dr Job Work in Process Cr Suppliers
On issue to production	Dr Work In Process Cr Stock of material
Return from production	Dr Stock of material Cr Work In Process

(vii) Perpetual Inventory & Physical Stock Taking

Periodic checks of stock by internal auditors or cost accountants must be carried out to find out whether the procedures and rules are strictly followed. The deviation if any must be properly authorised by competent authority.

The checking of stock is a regular activity in all business organisations. Size of organisation, number of items in stock and the value of stock on an average will be the factors that will determine the system to be followed.

Periodical physical inventory is followed in most of the organisations to exercise control over physical stocks. During the exercise of physical stock taking, all receipts and issue activity is suspended for a day or two. All pending postings into bin cards and stock ledgers are updated. The material items are properly stacked up in their respective locations. An internal team is made to count material items. After counting is over, the physical balances are compared with the book balances. The discrepancies are reconciled and variances are analysed. Many companies follow this activity as a year end exercise. The internal auditors and external auditors also oversee this exercise to ensure that it is properly carried out.

However, this activity cannot be carried out too frequently. Therefore, what many companies follow is the system of perpetual inventory & continuous stocktaking. Under this system, the stock records (viz. bin cards & stores ledger) are updated after every transaction of receipt or issue, the valuation is also almost simultaneously done. *Perpetual inventory means a system of records whereas continuous stocktaking means physical checking of these records continuously with actual stocks.*

The combined process of physical stock checking and perpetual inventory typically involves following steps:

(a) The items are grouped into high value-small volume, medium value-medium volume and low value-large volume.

(b) A programme is laid down in advance for the stock check weekly, fortnightly or monthly.

(c) The observations are recorded in the remark columns of bin card and stores ledger from inventory tags which are serially numbered.

The benefits of perpetual inventory are:

(a) Physical and book balances are tallied and discrepancies are adjusted without waiting for the entire stock taking activity. It is not necessary to close down operations for annual stock taking.

(b) The stock figures can be made readily available for the purpose of monthly P & L.

(c) Discrepancies can be located in time; hence it reduces the risk of pilferage and fraud.

(d) Fixation and monitoring of stock levels becomes easy.

(e) The system enables locating slow and non-moving items.

(f) Stock details are available in time for the purpose of declarations to insurance company and banks.

(viii) Treatment of Stock Discrepancies:

We know that the actual stocks physically counted may defer from book balances for the following reasons:

Unavoidable causes	Avoidable causes
(1) Loss by shrinkage, evaporation	(1) Pilferage
(2) Gain due to moisture absorbed	(2) Breakage
(3) Material purchase by weight & issued in numbers	(3) Errors in posting
(4) Loss due to climatic conditions	(4) Improper storage
	(5) Wrong issues

The gains or losses arising out of unavoidable reasons (termed as normal loss) are adjusted to the cost of production. Normally, such losses are estimated in percentage based on the past experience and historical data and the issues to production are adjusted with such percentage. The gains or losses due to avoidable reasons (called as abnormal loss) are treated as variances and are written off to the P & L A/c.

(ix) Material Control and Inventory Control

The term material here includes all items whether direct or indirect. The control of material refers to the physical flow as well as cost flow. It refers to all managerial functions to ensure that every item of material is made available at the right time, in right quantity, at right price and also with minimum blocking of capital. The control procedures encompass through the functions of material planning, purchasing, stores, material handling within the factory and production planning, transportation logistics and usage control. Hence material control has a very wide connotation justifiably so considering a very high proportion of material cost in the total cost for manufacturing companies.

Inventory control is a part of material control. The term inventory refers to the sum of raw material, packing material, fuels, lubricants, spare parts, maintenance consumables, semi-processed items and finished goods. Inventories are kept to ensure smooth flow of business operations. The scope of inventory control related to maintaining the correct level of inventory at all times. This can be ensured through fixation of stock levels for various items, and fixation of buying quantities and buying schedules.

Many companies in advanced countries operate on the concept of 'zero inventory' based on the concept of JIT as explained later. In India also of late the efforts in this direction have started yielding results.

Objectives of Inventory Control

(a) Maximise quality of customer service by ensuring smooth supply of finished goods

(b) Optimise the cost of maintaining inventory – the cost of maintaining or carrying inventory normally refers to the interest cost on the capital blocked on the cost of inventory

(c) Optimise the cost of procuring – this refers to the cost of ordering

(d) Optimise the cost of material movements

(e) Reduce investment in inventory without affecting efficiency in production and sales. This can be achieved by maintaining proper stock levels to avoid over-stocking or under-stocking.

Techniques of Inventory Control

Broadly the techniques of inventory control can be:

(a) Controlling the buying quantities – concept of Economic Ordering Quantity (EOQ)

(b) Setting up of Stock levels – this facilitates control through early signal system for raising orders

(c) ABC analysis – ensures management by exception and more stringent control on less number of items constituting a very high value.

(d) Inventory ratios – these ratios are broad level indicators of inventory performance

(e) Perpetual inventory system – ensures record keeping controls

Cost associated with maintaining inventory are shown in the following table:

Cost of Holding i.e. possession	Cost of Purchasing i.e. acquisition	Cost of Stock outs
(a) Interest on cost of stock (b) Storage charges i.e. rent, lighting, heating, air-conditioning etc. (c) Stores staffing, equipment maintenance (d) Handling & movement costs (e) Audit, stock-taking (f) Insurance and security (g) Pilferage, deterioration & obsolescence	(a) Clerical & administrative costs associated with purchasing, accounts & receiving departments (b) Transport costs (c) Set up and tooling costs for production run	(a) Loss of contribution (b) Loss of customer goodwill (c) Cost of production stoppage (d) Labour frustrations (e) Extra costs of rush orders

Some of these terms are explained below:

Lead Time: it denotes time expressed in days, weeks, months etc. between ordering (externally or internally) and replenishment i.e. when the goods are available for use. The consideration of lead time is very crucial. Longer the lead time, more efforts will have to be made at the time of planning. Action cannot be taken at eleventh hour for the long lead time items. In short, short lead time items that are readily available need not be stocked, whereas long lead time items must be ordered well in advance.

Demand or Usage: This refers to demand for finished goods by customers or demand for raw materials by production department or even demand for stores and spares by maintenance department. This is usually expressed as number of units required demand or usage per day, week etc. Consideration of demand or usage is very crucial for setting up stock levels.

Physical Stocks: The number of units physically on hand or present at a given time. The quantity on hand cannot be ignored when new ordering is to be done.

Free Stock: This is the quantity of stock freely available for use at any point of time. This will be the quantity on hand (i.e. physical stock) plus quantity on order minus reservation if any. At times the stock quantities may be reserved for a specific production order because of its importance.

Buffer Stock: Also called as safety stock, it means an allowance that covers forecasting errors or usage during lead-time.

(x) Economic Ordering Quantity (EOQ)

This is the purchasing quantity fixed in such a way as to minimize the total cost of inventory. It basically denotes the order size. There are two components of inventory costs – cost of acquisition and cost of possession.

The cost of acquisition is also referred to as Ordering cost which is expressed as amount per purchase order. This cost includes clerical and administrative expenses in relation to purchase requisition, quotations, comparative statements and handling of purchase orders and supplier bills. If the reference is to production stocks, then this will cover production set up time costs.

The cost of possession means the cost of maintaining or carrying inventory. This is normally expressed as a percentage of the material cost. This normally covers interest, handling and upkeep, stores rent.

It is important to understand the relationship between these two categories of costs. The relationship between ordering costs and carrying costs is reverse.

So if the purchase quantity per order increases, the ordering costs will reduce but the carrying costs will increase and vice versa. The tradeoff between these two costs will represent the most economical ordering quantity.

This can be shown by way of a mathematical formula. Consider the following:

Q = Economic order quantity

A = annual demand or usage of the material item in units

O = ordering cost per order

C = cost of carrying stock of one unit for a year

It can be therefore generalized as follows:

$$Q = \sqrt{\frac{2 \times A \times O}{C}}$$

It can be therefore generalized as follows:

$$\sqrt{\frac{2 \times Annual\ requirement \times Ordering\ cost}{Carrying\ cost\ per\ unit}}$$

Limitations of EOQ

EOQ is a very powerful tool which suggests the ordering quantity which will minimize the overall inventory management costs. However, the method suffers from some limitations. These limitations emerge from the assumptions based on which this formula is worked out. These are:

(a) The ordering and carrying costs are known with certainty.

(b) The rate of consumption is uniform throughout the year.

(c) The price per unit is constant throughout the year.

(d) The replenishment of the stocks is done instantaneously i.e. the whole quantity ordered arrives at once.

(xi) Inventory Levels

Depending on the nature of each item, its cost, demand for production, lead time to get the delivery, safety stock to be maintained etc, the stock levels are computed. The stock levels help the organisation to take timely actions as reordering or replenishing. It helps to avoid stock out situations as well. The stock levels need not be fixed for all items.

While determining the annual demand or usage of the item and lead time, we normally have three estimates of thereof viz. minimum, maximum and normal. Making these estimates is a very complex job and needs expertise.

The stock levels can be set up as follows:

Re-order Level: This is the level fixed between the minimum and maximum levels. When the stocks reach this level, the storekeeper should take action for replenishing the stock and immediately place a purchase requisition. While calculating this level, one has to make a provision for maximum usage and maximum lead time. This will take care of any abnormal usage till the material is replenished. It is calculated as:

Reorder Level = Maximum Usage × Maximum Lead Time

Re-ordering Quantity: This is the economic order quantity. This is used in the fixation of stock levels as this is the most economical quantity for which orders should be placed. The formula for EOQ is already discussed.

Maximum Level: This is the level which stocks are not allowed to cross. In case it exceeds, it will cause capital blockage. While fixing the maximum level the following factors are considered:

- Maximum and minimum usage
- Lead time
- Storage facilities available

- Prices of material
- Availability of funds
- EOQ

The maximum level is computed as follows:

Maximum Level = Reorder Level + Reorder Quantity – (Minimum Usage × Minimum Lead Time)

Minimum Level: This is the level below which stocks are not permitted to fall. If a danger level is not separately set up, this level acts as an emergency button. If stock approaches this level, immediate purchase action is initiated and stocks are urgently procured to restore the stock levels back to normal.

The minimum level is below the re-order level and takes into account the normal (or average) usage and lead time. It is calculated as follows:

Minimum Level = Reorder Level - (Normal Usage × Normal Lead Time)

Danger Level: This is fixed below the minimum level. This level brings the situation almost on the brink of stock out. It s calculated as:

Danger Level = Normal Usage × Lead Time for Emergency Purchases

This situation should be avoided as far as possible, as emergency purchases will always cost more.

(xii) Inventory Turnover Ratio

This is a technique available at a very broad level. We know raw material & WIP stocks are held for use in production and finished goods are held for resale. As such there has to be a linkage between the stocks held by an oragnisation and the production and sales activity carried out by the company. This ratio indicates how fast or slow the company converts its stocks into sales. It can be calculated in two way as:

(a) Expressed as sales as number of times the inventory value: the figure indicates whether the stock is fast getting converted into sales or not. Higher the ratio, better it is. It is calculated as:

Value of inventory consumed / Average inventory held

Value of inventory consumed = Opening Stock + Purchases – Closing Stock

Average inventory held = (Opening Stock + Closing Stock) /2

(b) Expressed as number of days sales in stock: Here the stock is expressed as 'so many number of days sales' e.g. current inventory is 60 days sales. Lower the number of days sales are in inventory, better it is. It indicates that inventory is moving fast, which is a good sign. It is calculated as follows:

Number of days in a year / inventory turnover ratio

(xiii) ABC Analysis

ABC method is an analytical method of inventory control which aims at concentrating efforts in those areas where attention is required the most. It is not a control technique in the stricter sense of the term but it provides a sound basis to decide the degree of control required. It is based on the principle of "*vital few trivial many*". The ABC method uses logical bases and recommends stricter & detailed controls for the '*high value – low number items*' and relatively less stringent controls on "*low value – high volume*' items.

Generally the '*high value – low number items' are classified as "A" category and "low value – high volume items' are classified as "C" category, while "moderate value – moderate volume items" constitute "B" category.*

Different organisations may use different variables when measuring 'volume' here. These variables could be:

(a) Value of stock held on an average

(b) Value of consumption

(c) Critical nature & requirement of inventory item

(d) Availability based on seasons, restrictive production governed by law

The bifurcation of the stock items could follow the following break up:

Class	Percent of items	Percent of Value
A	10	70
B	20	20
C	70	10

Advantages of ABC Techniques:

(a) This approach enables a selective control so that efforts can be concentrated only where required.

(b) It reduces clerical and administrative costs of managing inventory.

(c) Investment in inventory can be regulated to ensure optimum utilisation of funds.

Application of ABC in deciding stock control systems could be done as follows:

For A Items: Very strict control

Very low level of safety stocks

Controlled by senior management

Rigorous follow up & planning

For B Items: Moderate control

Some level of safety stocks

Less frequent follow up

For C items: A broad level control

High safety stocks

Follow up only in exceptional cases.

(xiv) Modern Techniques of Inventory Control

The newly developed techniques are more of management control systems rather than only inventory related control mechanisms. But their application to field of inventory management is done very effectively. The basic principle of these techniques is reduction in wastage, removal of non-value adding activities and time management. Japan was mainly responsible for intruding many of these path breaking techniques. Many countries have adapted these techniques. Let us see some of these.

(a) Just in Time (JIT)

It is an approach and not a system. The approach is "inventory is a waste". This waste must be reduced to earn a better return on investment. It talks about interlocking of production process not only of an organisation but also of its suppliers and customers; so that an item should not be waiting for an action at all but directly taken to production line where the machines are already set up to process that material. Similarly, when production is finished, the item should not be waiting to be dispatched, it should be immediately loaded for shipment. The crux is the arrangement of entire logistics on an ongoing basis.

Although first adopted in Ford Motor Company in 1920s, the adoption of JIT by Toyota Corporation of Japan was so effective in the 1950s that it started getting known as a Japanese technique.

The philosophy of JIT is to reduce the throughput time (i.e. time between the first stage of production to the point where finished product is complete). There is a drastic reduction in inventory holding costs and improves productivity. The throughput time is a sum total of Added value time and non-added value time. The aim is to eliminate the non-value added time which is basically the time taken in waiting either for movement or inspection or set up.

It basically involves Just-In-Time-Purchasing and Just-In-Time-Production. The JIT purchase channelizes the purchasing in such way as to deliver the material immediately preceding the demand for material.

The JIT production applies to the production at all intermediary stages as well i.e. including parts, semi-finished goods, sub-assemblies etc. The operations are planned & scheduled with the intent of zero waiting time at all stages. The machines are kept running without stoppage.

For successful application of JIT the pre-requisites are:

- Robust computerised systems
- Perfect planning system
- Trained workers and staff
- Excellent logistics
- Transportation facilities

(b) Bar Coding and RFID Tools

The bar code is a computer generated code that stores information about the item. Bar Coding is a series of parallel vertical lines (bars and space), that can be read by bar code scanners. It is used worldwide as part of product packages, as price tags, carton labels, on invoices even in credit card bills and when it is read by scanners, a wealth of data is made available to the users and when used with GS1.UCC (Global India one Numbering Uniform Code Council Inc. USA) numbering system. The bar code become unique and universal and can be recognized anywhere in the world. Bar coding is an international concept today. It facilitates unique product identification through using international symbols/numbering system, promotes brand image and would enable timely and accurate capture of product information. This would result in wide ranging benefits including lowering of inventory costs, lower overall supply chain costs and hence reduced costs for Indian products, increasing efficiency of Indian industry and adherence to stringent quality assurance norms through product traceability.

Radio Frequency Identification (RFID) allows a business to identify individual products and components, and to track them throughout the supply chain from production to point-of-sale. It helps reduce over-stocking or under-stocking.

An RFID tag is a tiny microchip, plus a small aerial, which can contain a range of digital information about the particular item. Tags are encapsulated in plastic, paper or similar material, and fixed to the product or its packaging, to a pallet or container, or even to a van or delivery truck. The tag is interrogated by an RFID reader which transmits and receives radio signals to and from the tag.

Employee Cost

Employee cost is another important element of cost in the total cost of production. In fact for the non-manufacturing business, labour constitutes the highest proportion of the total cost, especially in service sector like banking, insurance, BPO, KPO, Consulting, financial services etc. The basic aim of management is to keep monitoring the labour productivity v/s the total labour cost to achieve the object of low per unit labour cost. Higher the productivity, lower will be the labour cost per unit. In this sense, there has to be proper control over utilisation of the work force and the salaries and wages bill for an organisation. People work all over in an organisation in various functions. In order to carry out these functions efficiently and effectively, the organisation must have good human resources policies and practices.

In a manufacturing set-up where there is a larger proportion of workers and existence of trade unions, there has to be a cordial relationship between management and union to ensure motivated performance. The purpose of cost accounting for labour is two-fold viz. one to ascertain the cost and two to provide information to the management for the purpose of taking decisions with respect to labour. The decisions are in the areas of

- Manpower planning
- Recruitment
- Training & development
- Salaries, wages and benefits
- Labour productivity & efficiency
- Retention and labour turnover

In these days of growing economy and dearth of quality human resources, management of labour cost becomes very crucial.

From the view point of labour cost control, the areas where proper systems are required could be listed as:

(a) Employee attendance & time recording: In smaller organisations a manual register is maintained, where each employee has to mark his attendance. In larger organisation, electronic tools of recording attendance are used. An electronic card is swiped to record daily entry and exit. Some organisations use the finger print savvy cards as well. The good old days of time keeping office at the factory gate are no more in existence.

(b) Time booking to the cost centre and cost units: Time is recorded against the job or contract or a project so that the direct labour cost can be computed. In service industry also, time is recorded on specific activities.

(i) Direct and Indirect Labour Cost

Direct labour cost is that portion of salaries and wages which can be identified with a single cost unit. In other words when the time spent by the workers can be directly linked with a cost unit, it will be costed as direct labour otherwise it will fall under the category of indirect labour cost.

The distinction between direct and indirect labour depends mainly on whether the labour time is in sync with the cost unit or not. The direct labour cost is taken as a part of Prime Cost, whereas the indirect cost is considered as an item of overhead. Indirect worker working with production department will constitute as Production overhead, whereas those working for Administration, Selling & Distribution departments will be included in Administration, Selling & Distribution overheads.

(ii) Remuneration Methods & Incentive Schemes

The employees working in any organisation are compensated by way of salaries, wages and other benefits. These payments are made in return of the services rendered by the employees. These services could be:

- Engaging in the process of transformation of raw material into finished product or
- Supporting the process of transformation by doing other functions

The salaries, wages and statutory benefits put together are called as remuneration. The incentives are payments and benefits given to stimulate better performance or paid in return for a better performance. The incentives could be in monetary as well as non-monetary terms. While the remuneration is always individual based, incentives could be based on group performance.

Characteristics of a sound remuneration system:

(a) It should be easy to understand for everyone and easy to implement.

(b) It should provide for a reward for good work and penalty for bad workmanship.

(c) It should help keeping labour turnover within stable limits.

(d) It should be able to attract talent and retain them.

(e) It should minimize absenteeism.

(f) It should reflect a fair return to employees in consistence with efforts put in by them.

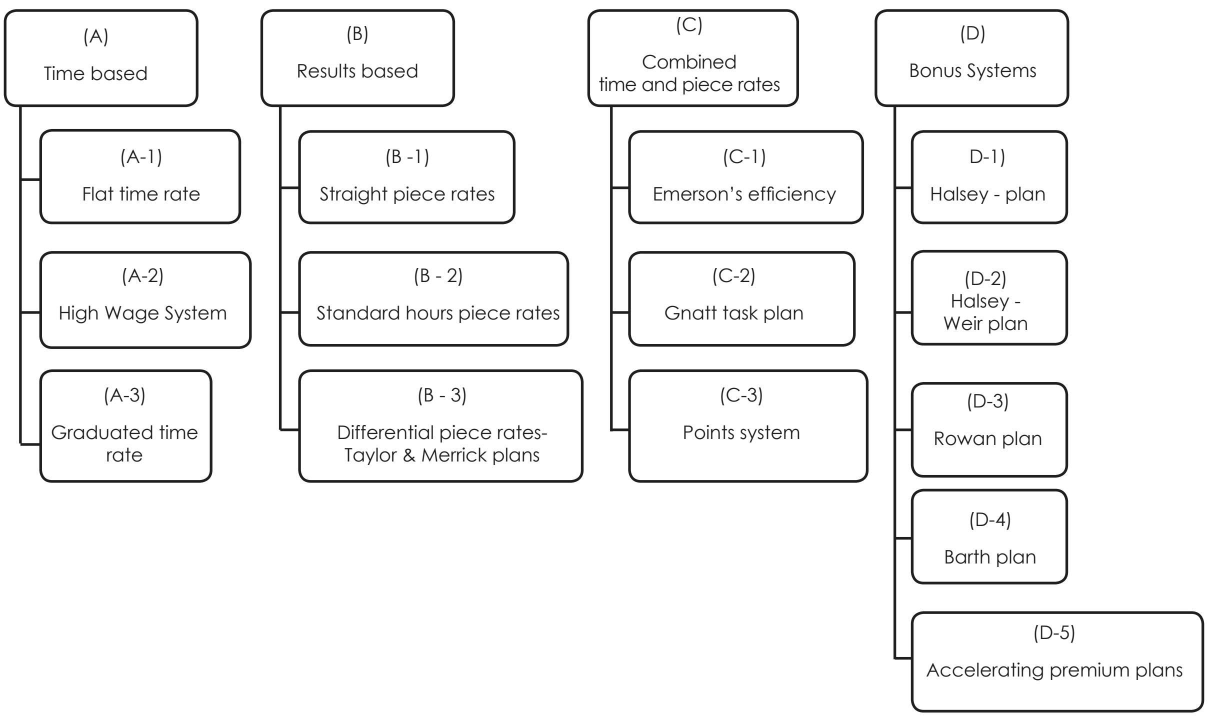
(g) It should boost productivity and performance.

(h) It should be flexible enough to factor in effects of changes in cost of living, and systems of similar companies in the same industry.

The payments could be broadly classified into

- *Those paid on the basis of time spent by an employee irrespective of output produced by him, called Time Rate.*
- *Those paid on the basis of output given by the employee irrespective of the time spent by him, called Piece Rate.*

The following chart shows the classification of various remuneration methods:



Let us see these methods in brief with regard to their logic, calculation and application.

(A) Time Based Payments : These are basically called as Time Rates. Under this method, payment is made on time basis like daily, weekly or monthly irrespective of the results achieved during the time period. These payments are in conformity with the applicable laws such as Minimum Wages Act.

The time based payments are useful in following situations:

a. Where output is not distinguishable and measurable. In other words, it's useful when there's no relationship between effort and output.

b. Where a high level of skill and quality are required.

c. Where supervision is good.

d. Where work is not repetitive

This method is very easy to understand and operate, so less clerical work is involved. But it does not motivate increased output. Advance estimation of labour cost per unit becomes difficult. It does not distinguish between efficient and non-efficient workers.

The variants of time rate are discussed below:

(A – 1) Flat Time Rate: The rates and time are fixed in advance per day, week or month. If worker work overtime, they are compensated at one and half or two times the ordinary rate. The earning therefore will vary as per the time worked.

(A – 2) High Wages System: This method the time rate is fixed at a higher level compared to the rates prevailing in the industry. This is done to attract efficient and high performance workers and also to induce them to improve productivity as they would be satisfied with high level of earnings. However, the level of performance cannot be guaranteed over a longer period and it also may not be possible to keep wages always at higher level compared to industry.

(A – 3) Graduated Time Rate: Under this method, payment consists of two portions – one based on regular time base payments and the other is linked to cost of living (e.g. dearness allowance) and merit awards. As the cost of living is taken care of, the system has an advantage. It's further enhanced by the fact that the method rewards individual merits. However, merit rating is highly subjective and thus the method is difficult to implement. It is difficult to calculate the cost of the cost unit.

It is generally observed that trade unions prefer time based payments as they do not have to guarantee output. The variations in the time based payments do not really bring in any additional benefits and they are difficult to sustain in the longer run.

(B) Results Based System (Piece Rates): These methods are based on the output linked payments to workers. The payments are fixed per unit of output irrespective of the time taken by the worker to produce a unit. The payment is simply calculated as rate per unit x units produced. These payments may be released for a period e.g. day, week or a month. The output produced by the workers during that period is multiplied by the pre-fixed rate per unit. The objective here is to induce workers to produce more and thereby increase sales. As workers get more money, they tend to produce more. Some- times under such systems, the benefits of increased output are shared between workers and the business.

This method is simple to understand and easy to operate. The workers also prefer it as they can earn more by producing more. The labour cost per unit is known in advance and hence it helps in fixation of overhead rates based on direct wages and therefore estimation of cost per unit is easy. If benefits are shared with employees, they are motivated to put in their best efforts.

The variants of piece rate system are discussed below:

(B – 1) Straight Piece Rate: This is the simplest form of payment by results. Under this a predetermined rate per unit of output is applied.

(B – 2) Standard Hour System of Piece Rate: This is the result based payment with a time dimension factored into it. A standard time is set up per unit of product. Workers are supposed to complete production of one unit within this allotted time. The rate is fixed per hour (or any other time unit). If the worker completes the job within the standard time, he is paid for the time he worked plus also for the time saved based on the time rate. If he spends more than standard time per unit of output, he is paid at this time rate for the time actually spent on the job. The formula to work out the earnings as per this method is:

When production is in excess of standard performance;

Earnings = (Actual hours worked x hourly rate per day) + Hourly rate per day x (standard hours produced – Actual hours worked)

When production is at or below standard performance;

Earnings = Actual hours worked x hourly rate per day.

However, a great care needs to be taken for fixation of time per unit of output. Also, there has to be close monitoring of quality of the performance. It has to be ensured that the worker does not compromise quality in order to show time saved.

(B – 3) Differential Piece Rates: This system is based on the logic that workers should be rewarded for higher efficiency. The earning method offers a motivation for increasing productivity. These systems are however difficult for workers to understand. There are two variants of this system. One was developed by F. W. Taylor (the father of scientific management in the early era of industrial revolution) and the other by another expert Merrick. This method tries to penalize workers when they do not perform as per standard by applying differential rates.

Taylor Plan: The payment scheme is based on fixing two or more pieces rates – a base level piece rate is used for workers who do not perform as per standard and a higher piece rate is used for workers who perform as per standard. The difference between these two rates is deliberately kept so wide that the award for efficient worker is really good and simultaneously, punishment for inefficient worker is severe.

The success of this plan depends highly on setting a standard. Any error in fixation of the differential rates could be disastrous. Also, this system does not guarantee any minimum wages. Further the piece rates and standard are to be fixed in such a way that the earnings won't fall below minimum wages as per the law in force.

Merrick Plan: The punitive element under Taylor plan was quite severe. It tends to discourage and attract average workers. Merrick modified this differential system by introducing more slabs and by removing the punitive element. He advocated that performance up to a certain level (although below standard level) should be rewarded at normal piece rate and then progressive slabs are provided to recognise above standard performance. He worked out the following formula for differential payments:

Up to 83 1/3%	at normal piece rate
Above 83 1/3% up to 100%	10% above normal piece rate
Above 100%	20% over normal piece rate

This system is not as harsh as the Taylor plan. But this also requires the standard fixation to be done very carefully.

Both these plans however put a cap on maximum earnings. So the worker will just ensure to perform at 100% or slightly above and then does not improve further as there is no additional incentive for him to do so.

(C) Combined Time and Piece Rates: The combination of time based and piece based methods of remuneration aim at combining the benefits and removing the deficiencies of both specific time based and specific piece rate systems. Basically this method has a combo offering for the workers – a time rate, a piece rate and a bonus. Essentially for workers who do not perform as per standards, there is a guaranteed time rate payment. For workers performing above standard there are piece rates with bonuses applicable for higher rewards. There are certain variants of this idea developed be experts.

(C -1) Emerson's Efficiency Plan: The main features are guarantee of daily wages regardless of performance. A standard time is set for per unit of output or a volume of output per unit of time is taken as standard. The following differential rates apply:

Below 66 2/3rd %	Paid at hourly rate
Above 66 2/3rd% up to 100%	Hourly rate plus bonus for efficiency based on step rates
Above 100% performance	Additional bonus @ 1% of hourly rate for each 1% increased efficiency.

The efficiency for this purpose is calculated as:

On time basis

Percentage efficiency = (Standard time allowed / Actual time) x 100

On output basis

Percentage efficiency = (Actual Production / Standard production) x 100

(C- 2) Gantt Task System: This combined method of remuneration is similar to the Emerson's method with a little variation. A performance standard is set for each operation or group of operations. An hourly standard rate is fixed. The worker who completes the job within allotted time gets paid for the time plus a percentage of that time. Under this system, even supervisors are covered for bonus payments. He is paid for each of his subordinates that earned individual bonuses. The computation is usually done as follows:

For output below standard level	guaranteed time rate payment
Output at standard	Time rate plus Bonus of 20% of time rate
Output above standard	Bonus of 120% of normal piece rate

This method is suitable for workmen with varying skills. It is equally attractive for less skilled workers and beginners. Also, it provides enough motivation for highly skilled worker who perform above standard as the payment after that level is linked to the output by application of piece rate at a higher rate.

(C – 3) Points System: Under this method, the performance is measured in terms of 'points saved' by the workers. Standards are also fixed in terms of points and workers are paid bonus based on the points saved, either in full or a portion thereof. There are two variants of the points system.

The Bedaux Method: The points are called as "Bs". Hence a standard performance one hour is expressed as "60 Bs". A standard number of points are specified for a job. The worker gets a time rate payment and a bonus. When the scheme was originally formed bonus was calculated at 75% of points saved. Later it was modified to 100% of points saved.

The formula is:

Time rate payment + (75% or 100%) of (points saved/60) x hourly rate

Example: The standard time is 320 Bs and the worker consumes 240 Bs to complete a job. The hourly rate is ₹ 10 per hour for an 8 hour day. Here the worker has saved 80Bs. Hence the payment based on 75% bonus will be

(10 x 8) + 75% (80/60) x 10 = ₹ 90

The Haynes Manit System: This is similar to that of Bedaux. The standard unit of time is called a Manit. Bonus is calculated on the basis of Manits saved multiplied by the value of one Manit. When the system was fixed originally, the bonus due to Manits saved was shared as 50% to workers, 10% to Supervisors and 40% was retained by the company. At present, the entire 100% is given to the workers.

(D) Premium Bonus or Incentive Systems: These are also referred to as premium bonus plans that guarantee a minimum wages per hour plus a premium for output in excess of stipulated norms.

(D -1) Halsey Plan: This was developed by Mr. F. A. Halsey. Under this method the payment for work done is related to time taken to do a job. If the time taken is equal to or more than the standard time, the worker is paid at time rate based payment. If actual time is less than the standard time, then the worker gets a bonus @ 50% of the time saved. The balance 50% is retained by the business.

The formula is:

Total earnings = (Actual hours x Hourly rate) + (Hours saved x Hourly rate)/2

Example: Standard time to do a job is 15 minutes. Hourly rate is ₹ 15. Time worked is 9 hours and output is 40 pieces.

The normal time rate wages = 9 x 15 = ₹ 135

Standard time for output of 40 units = (40 x 15)/60 = 10 hours

The time taken is 9 hours, hence 1 hour is saved. So the bonus amount will be: (1 x 15)/2 = ₹ 7.5.

Total earning will be = ₹ 135 + ₹ 7.50 = ₹ 142.50

The main disadvantage is that it takes into account only time dimension. It does not guarantee quality output. The incentive is less attractive to workers as compared to the other methods seen above as they are made to share the benefit of their productivity.

(D -2) Halsey-Weir Plan: It was developed as a modified version of Halsey plan. The bonus percentage was modified to 33 1/3% instead of 50%. The other computations are same. This was developed by G & J Weir Ltd. Glasgow. The reduction in the bonus percentage makes this plan unpopular.

(D -3) Rowan Plan: Under this method, a standard time is fixed. The worker gets time rated pay as per time worked. The bonus shared is in proportion of time saved to standard time applied to the time rated earnings. In other words, the percentage time saved is applied to time taken a payment is done for time actually taken plus the proportion of time saved. The formula for the bonus is:

(Time saved / Standard time) x Actual hours x hourly rate

Consider the example from (D -1) above, where actual time was 9 hours, standard time was 10 hours and hourly rate is ₹ 15, the payment under Rowan plan will be:

(15 x 9) + (1/10) x 9x15 = ₹ 148.50

It can be observed that the payment under Rowan plan is more than the Halsey plan. However, this may not be the case always. Let us compare the results under the two plans under various conditions.

Example: Standard time is 10 hours and time rate is ₹ 10 per hour. We will compare the incentives for the hours taken as 8, 6, 5, 4 & 3.

Hours taken	Time saved	Time rate payment @ ₹ 10	Bonus under Halsey (₹)	Bonus under Rowan (₹)	Total wages-Halsey (₹)	Total wages-Rowan (₹)
8	2	80	10	16	90	96
6	4	60	20	24	80	84
5	5	50	25	25	75	75
4	6	40	30	24	70	64
3	7	30	35	21	65	51

It can be observed that the bonus under Rowan scheme is higher till the time saved is less than 50%. If time saved is more than 50%, Halsey method is more beneficial to the workers.

(D – 4) Barth Scheme: This is also a time based payment scheme. But it does not guarantee any time rate payment. The earning is determined as follows:

Hourly rate x $\sqrt{\text{Standard time x Actual time}}$

Example: Time allowed to perform a job is 5 hours and the hourly rate is ₹ 2. If the actual time taken by A, B and C are 6, 5, and 4 respectively, the payment under Barth system will be calculated as:

For A = $2 \times \left(\sqrt{5 \times 6}\right)$ = ₹ 10.95

For B = $2 \times \left(\sqrt{5 \times 5}\right)$ = ₹ 10

For C = $2 \times \left(\sqrt{5 \times 4}\right)$ = ₹ 8.95

It can be seen that when efficiency goes above 100%, this scheme is not that attractive.

(D – 5) Accelerated Premium Plans: The most popular scheme is the equation give as below:

$y = 0.8x^2$

Where x denotes efficiency and y denotes earnings. See the following table :

Percentage efficiency	100	125	140	150
x	1	1.25	1.40	1.50
x^2	1	1.56	1.96	2.25
$y = 0.8x^2$	0.80	1.25	1.57	1.80

(iii) Group Bonus Schemes

In organisations where team work is more important, individual bonuses do not work. The team as a whole has to be motivated. Thus a plan is usually worked out whereby the bonus for increased output is declared for the teams and then shared by individual members in agreed proportion.

Such methods develop a sense of cooperation among team members. It is useful when the measurement of individual work is not possible e.g. in case of construction of dams, buildings etc. The administration of these schemes is easier as the record keeping is for a team output and not individuals.

However, it suffers from the fact that all team member are entitled for bonus irrespective of whether they contributed to the increased output or not. The sharing of bonus may be done on arbitrary basis which may lead to dissatisfaction of workers. Further amount per person may be small.

There are various schemes developed and used in different type of organisations. These are given below:

Priestman's Production Bonus: This is applicable in the manufacturing industry. A standard output for the factory as whole is set. Workers & staff are rewarded if actual output increases above this standard in the same proportion. If output does not exceed standard, then no bonus is paid, but time rate is guaranteed. This method is useful in cases of mass production and where there are no bottlenecks.

Towne Gain Sharing Plan: This scheme encourages cost reductions by supervisors and employees in general. As per this scheme, 50% of the saving resulting out of savings in cost is paid to individuals pro rata in addition to their normal wages.

Rucker Plan: In this plan, the percentage of the added value is shared among the employees. Added value is defined as "labour cost plus production overheads plus gross profit". If ratio of direct labour to value added is 80 % and the actual labour cost is 76%, then 4% of added value is distributed as bonus. The whole amount may not be distributed at once – may be 75% is released immediately and balance is kept as reserve to be used when the performance is below standard.

Scanlon Plan: It is same as Rucker plan except that the proportion of direct wages to sales value of production is taken instead of proportion of direct wages to value added.

(iv) Other Incentive Schemes

These schemes may not be directly linked to individual or group performance. The employees receive additional remuneration, shares in the company, and other perquisites. Such schemes can be divided into:

- Indirect monetary incentives viz. profit sharing & co-partnership
- Indirect non-monetary incentives that are related to working conditions, social benefits.

Profit Sharing: There is an agreement whereby the employees receive a fixed share in profits off the company. The plan has to be declared in advance so that the employees can go for it. Secondly, it has to have a relationship with profit earned by the company. The disbursement of the amount is generally done on the basis of audited accounts after the end of the accounting year. The payments could be made either in cash or deferred payments or a combination thereof.

Such sharing plans inculcate a sense of partnership among employees and keep them engaged in the company for longer time. It has a positive effect on the moral and efficiency of the employees.

Co-partnership: Under this method the ownership rights are extended to all direct and indirect employees by permitting them to buy shares in the company. This scheme is popularly called as ESOPs (employee stock options) in which every employee is allowed to purchase shares in the company at a pre-determined price which is usually lower than the market price. The management rewards the employees with long service tenure, loyalty etc. Employees become part owners of the company and therefore get motivated to earn profit for themselves. Limited companies and even private companies, co-operatives follow this practice.

Indirect Non-Monetary Schemes: These schemes aim at improving working conditions in plant and other facilities. These benefits are normally of permanent nature as facilities once provided are rarely withdrawn. The non-monetary benefits generally include:

(a) Flexible working hours

(b) Subsidised canteen facilities

(c) Educational facilities for children of employees

(d) Housing colonies

(e) Medical and hospitalization insurance

(f) Club memberships

(g) Guest house facilities at hill stations

(h) Recreation, annual events, sports and other competitions

(i) Cultural events

(v) Incentives for Indirect Workers and Employees

The employees working with service departments also contribute in furtherance of overall business objective. These employees render valuable support to direct workers by maintaining the facilities, providing administrative services such as accounts, human resources, industrial relation, utilities etc. They ensure smooth flow of activities in the business routines. As such it makes a case of indirect workers to get incentives. The incentives could be paid considering the type of activity performed by different indirect departments and their activity measurement logic could be decided separately.

The maintenance workers are normally responsible for routine inspection, preventive maintenance and breakdown maintenance and repair work. For routine inspection & preventive work, standards can be established as a basis for incentive schemes. For repair work, special awards scheme may be introduced.

For employees engaged in material handling and internal transportation, standards can be set for such activities based on time and distance.

Quality control or inspection staff may be paid on the basis of quality inspections done and this work can be standardised. There are routine checks carried while checking the conformation to the quality norms.

For office staff, generally group schemes are more suitable. This could cover even the executives and managers. Many companies follow the spot award schemes and other recognitions like executive of the month, the most customer oriented person, the most quality conscious person etc.

(vi) Payroll Procedures

The payroll procedures in any organisation must be properly set up and followed up. These procedures can be divided into:

(a) Employee records and master data updation with salaries and wages details

(b) Daily, weekly or monthly attendance recording

(c) Computation of salary, wages, allowances, incentives and bonus payable and deductions

(d) Disbursement of the salaries and wages in cash and / or through banks

(e) Accounting for payroll including provisions.

(f) Analysis of payroll costs to help in budgeting & performance measurement

In organisation where the labour force is very large number, the records and processing of payroll is computerised. Many ERP systems provide a payroll module which integrates very well with the accounting and costing modules. In smaller organisations, work may be handled in simple excel sheets. If the number of employees is very low, payroll may be manually processed and handled.

Employee Records and Master Data

For every employee a master record sheet is maintained. Every employee is given a distinct number called as employee number or ticket number. Each employee is assigned to a department which is basically a cost centre. Correct assignment of each person is essential for proper labour cost analysis into direct and indirect. The mode of payment is also indicated i.e. whether cash or cheques or direct credit to employee bank accounts.

This master sheet stores all personal details of employee and the salary details as per the terms of appointment. These salary details are used as a basis when processing the payroll every month. As and when new appointments are done, the master data must be updated before processing the payroll for that month. From control point of view only authorised persons should be allowed to update the master records of salary and wages. Internal auditor may carry out checks to ensure this.

When the salary revisions are made, this master data needs to be revised again. This revision is also carried out by authorised persons only based on sanctioned revision letters.

No alterations to this data should be permitted, without proper authorization.

The master data also stores information about compulsory statutory deductions like PF, FPF, ESIC etc.

Attendance Recording

Companies use different tools for recording employee attendance such as manual registers, swiping cards, and remote log in for offshore employees. Workers and employees may work from different locations and different cities or even states. Attendance data is updated daily at the central payroll department through computer networks. The leave cards are also input to ensure that employee leaves are properly recorded to avoid erroneous without pay days. A cutoff date is fixed during the last week of the month (generally 25th of the month) for passing on the attendance data for payroll processing. The attendance of the last week is marked as full for current month's payroll and adjustments if any are carried out in the succeeding month. The dates for which attendance is not marked and no leave is granted, are communicated to the departmental heads for authorization purpose to indicate whether they are to be treated as paid leaves or marked as without pay.

Computation of Salaries and Wages

For computing monthly payroll, a lot of information has to be collected from various departments. One of them is the attendance data and master data for new employees as explained above. This information is generally available in the HR department or payroll office. The other information is collected from the following departments:

(a) Information on piece rate related facts including standards; actual output is collected from production department for incentives and bonus calculations. This is compiled based on job cards. Variable earnings need to be computed for various groups of workers as per schemes applicable to them.

(b) Information about various deductions to be made is received from different departments.

These deductions could be for voluntary contributions to provident funds, repayment of loans for housing & other reasons, telephone charges, recovery of advances, penalties, contribution to employee welfare society etc.

(c) Accounts department provides the information on Income tax to be deducted.

(d) Calculations are to be made for allowances that are based on certain indices e.g. dearness allowances based on the declared cost of living index for the month.

Once all calculations are completed, a payroll or wage sheet is prepared which summarises employee-wise salaries & wages, Allowances, various deductions and gross and net pay for the month.

But generally, it could be in the following format:

Employee number	Name	Gade	Dept.	Normal hours	OT hours	Basic	HRA	DA	Allowances	Incentives & Bonuses	Award	Gross

P.F.& EPF	Prof. tax	Advances	canteen	loans	Society	ESI	Telephone	others	Total deductions	Net pay due

The pay sheet is tallied with computation sheets of all individual components of the labour cost to ensure that there are no errors. Once finalized, the pay sheet is forwarded to accounts for the purpose of accounting and disbursement. Individual pay slips are also distributed to all employees as information giving all the above details of various payments and deductions. The pay slip serves as a proof of income for employee that can be submitted to various authorities by him.

Disbursement of Salaries and Wages

On getting the pay sheet the accounts person will arrange for cash and bank funds as require. For workers to be paid in cash, he will organize the sealed envelopes with employee names written on them. The envelopes are distributed on an appointed day and employees are asked to sign a register as acknowledgement. For those to be paid by cheque, the accountant prepares the account payee cheques and distributes them the same way. For direct credits into the bank accounts of the employees, an instruction letter is written to bank, signed by authorised signatories, giving in the details of net pay amount and bank account numbers of concerned employees. In modern days, the method of directly crediting salary & wages to the bank accounts is very common and safe. Along with the salary & wages, the pay slips are also distributed.

Accounting for Payroll

The last step in the payroll routine is to pass accounting entries in books of account and also the necessary entries in the cost ledgers. There are master account codes opened for each element of salary & deductions to keep a proper track of the same. The coding is a must in case of computerised payroll.

The accounting entry is posted to various cost centres and departments. The entry passed is:

Respective salary & wages expense head Dr.

To respective deduction A/c

To salary and wages payable A/c

And

Salary & Wages payable A/c Dr.

To Cash / Banks A/c

The organisation will have to contribute to the Provident Fund (PF) and Family Pension Fund (FPF). The deductions made for the same along with companies contribution has to be paid to govt. organisation. Also the payment of profession tax and income tax needs to be made. These entries are also simultaneously passed.

Company contribution to PF A/c Dr.

Company contribution to FPF A/c Dr.

Respective deduction A/c Dr.

To Cash / Bank A/c

Analysis of Labour Costs

There has to be regular analysis of costs incurred on the workforce with regard to the compensation paid to them in various forms as well as the utilisation of the time by the workforce. As the objective of costing is to link the cost to the cost unit, the analysis of labour costs must concentrate on this objective. The linking of the cost to the jobs or contracts or processes or the respective cost units is done through the job cards which record the job / contract number on which the time is spent by the workers. The analysis is also done into direct and indirect labour cost. This is known from the departmental classification of payroll.

The total wage bill is bifurcated into to the charge to be made to WIP (for direct workers), production overheads (for indirect workers in factory), Administration overheads (indirect workers in administrative departments), Selling & distribution overheads (indirect workers in sales, marketing and distribution).

The analysis could be further drilled down to the actual cost unit number.

The cost accountant is equally interested in analyzing and reporting how the time is utilised. This analysis could revolve around total time available, idle time, overtime etc. He uses various ratios to interpret this e.g. idle time to total time, overtime to total time. He would also classify them further into normal and abnormal idle or overtime. This is discussed in the following sections.

BOOKING TO JOBS

- Time rates
- Piece rates
- Idle time & overtime

BOOKING TO OVERHEADS

- Attendence
- Idle time
- Overtime

Charge to WIP -direct workers

- Job no 1
- Job no 2 on ....

Charge to factory overhead

- Indirect workers
- Indirect staff & executives

Charge to Administration overhead

- Indirect workers
- Indirect staff & executives

Charge to Selling & distribution overhead

- Indirect workers & staff including executives

(vii) Treatment of IDLE Time

Idle time refers to the time for which workers or staff members are present on the work location, but no work is carried out. It indicates the time lost. Idle time cost refers to the salaries or wages paid for the lost time. Technically speaking, the attendance card shows the time, but it is not booked on any job card or contract card. If not properly controlled, idle time losses could become very severe and have a major impact on cost of an item. It also reflects poor efficiency.

Idle time could be caused by a variety of reasons – some are beyond control of workers while they themselves are responsible for the other reasons. *The idle time which cannot be avoided & is inevitable is termed as Normal Idle time and the idle time which caused due to reasons that are within control of management and could have been controlled through management action is called as Abnormal Idle time.*

The possible causes of normal and abnormal losses could found in situations within the organisation and those outside the organisation. These are given below:

	Normal	**Abnormal**
Internal Reasons:		
Natural Reasons	Normal breaks – tea, lunch, natural calls, walk from factory gate to place of work, normal fatigue, weekly offs, paid holidays	Workers spending extra time after lunch, not getting back to place of work

	Normal	**Abnormal**
Production Reasons	Machine set up, changing tooling, change-over from one job order to the other, preventive maintenance	Power failure, machine break down, waiting for material, waiting for instructions
Administrative Reasons	Internal meetings, gate meetings, training programmes	Strikes, lock outs, high level of attrition
External Reasons:	General power failure in the area, seasonality or economic cycles, change in govt. rules	Closure of business due to shift in demand, change in technology, migra ting workers

Whatever may be the reasons, efforts must be action oriented and these actions are:

- Keeping normal idle time to absolute minimum levels and
- Take immediate corrective actions to overcome reasons causing abnormal idle time

Analysis of Idle Time

It is therefore necessary that a continuous analysis of idle time is carried out by the cost accountant. There could be a system developed whereby the reason-wise analysis of idle time is done and reported. Analysis & reporting of idle time helps management to exercise better control on it by removing or minimizing the effect of reasons causing the loss due to idle time.

The reporting of idle time may be done at individual level and departmental level. These reports are made at frequencies depending on need of each organisation. Any unusual time loss is immediately escalated to higher levels. Reporting of idle time is done at individual level and departmental level as below:

Analysis of workers' idle time

Employee no.	Department	Hours attended	Normal idle allowance	Net hours available	Hours booked to jobs	Idle hours	% of idle to available

Similarly there could be a departmental level reporting of idle time.

Analysis of departmental idle time

Production shop	Hours planned	Hours worked	Hours lost	Idle hours			% of idle to available
				Reason1	Reason 2	etc………	

Treatment of Idle Time

In cost and financial accounting different treatments are given to the normal idle time loss and abnormal idle time loss.

(a) The loss on account of normal idle time is booked on the respective job (i.e. included in the prime cost of production of the job) through W.I.P. account. If it cannot be identified with jobs then it is taken as Factory Overheads. Normal idle time reported for indirect workers will be booked as Administration or Selling & Distribution overhead.

(b) The loss on account of abnormal idle time is directly charged to the P & L account in cost and financial books.

(viii) Overtime Cost

Working getting extended beyond normal working hours is a usual phenomenon in today's industrial world. The work pressures and need to deliver results fast, working long hours is considered as inevitable in many organisations. It could also be caused by understaffing and high attrition rates in the industry.

Hence the payment made for the overtime hours worked comprises of

- Payment made at normal rates
- Premium paid for the overtime hours

Overtime is normally permitted on by the supervisors or departmental heads. There is a form called 'request for overtime' wherein the details of job and reason for extra hours beyond normal working hours are mentioned. The reasons for overtime may be:

- Illness of some workers may force other to work extra and complete the work
- It may be at the request of customers to complete an order in quick time
- There could be receipt of more orders than planned and it may not be possible to immediately employ additional workers
- Receipt of rush orders

Treatment of Overtime Cost

(a) If overtime is worked on specific jobs at the request of the customer, the cost is booked as a direct labour cost on that job.

(b) In other cases, normal payment for overtime hours may be taken as cost of production and the premium portion is treated as overheads.

(c) If overtime is worked to recoup the lost hours due to fire, floods etc., the premium portion is charged to P & L Account.

Control of Overtime Work

(a) It should be allowed only with prior permission.

(b) It should be collected under an overtime ticket and assigned to the particular department.

(c) If it is becoming a regular feature, putting in more manpower may be considered.

(d) Periodical reporting of overtime with the reason for extra hours worked may be circulated for action by the different levels of management.

(e) The effort should be to reduce overtime as it could lead to health problems, more fatigue, quality deterioration, increase in the cost of power & electricity, other facilities, more wear and tear of machinery etc.

(ix) Labour Turnover (LT)

Very high rate of attrition is a normal phenomenon in the Indian industry today. Organisations are facing disruption in business activities due to a high employee turnover rate. On the other hand companies are finding recruitment difficult as there is a dearth of skilled manpower. Although the business entity is a going concern and a perpetual existence, the labour force may come and go.

Labour turnover is defined as "the rate of change in the average employee strength during a period". It is caused by the displacement of manpower. There are two components to labour displacement – one is separations and second recruitment. Both these may affect the turnover ratio with different severity. A high labour turnover will add to costs and also disrupt business activities.

Measurement of LT

The LT calculation results into a figure that speaks of a relationship between two sets of figures. The two figures here are – one, change in manpower and second – the number of employees. As the ratio is defined as rate of change, a simple formula for calculating the LT ratio is:

$$\text{LT Ratio} = \frac{\text{Change in Manpower}}{\text{Employee Strength}}$$

There are different connotations as to what should be taken in the numerator:

(a) Consider only separations

(b) Consider only replacements

(c) Consider a combination of separation and replacement.

Based on these there are different formulae for computing the LT as follows:

Separation Method: The LT is considered as relationship between total number of separations during the period& average manpower during the period. Mathematically, it is shown as:

$$\text{LT Ratio} = \frac{\text{Separations during a period}}{\text{Average manpower in the period}} \times 100$$

If the manpower at the beginning of the year 2012 was 2500 and at the end of 2012 was 2600, the average workforce is (2500+2600)/2 i.e. 2550. If 250 people have left the company during the year, the LT ratio is (250 / 2550) x 100 i.e. 9.80%

Accession Method: Under this method, the total accession i.e. additions is considered in the numerator. The logic is that LT affects costs and efforts for replacing the left employees. In above example, we had 2500 people in the beginning and 2600 at the end after 250 people left. The accession will be 350 (2600+250-2500). The LT ratio here will be (350/2550) i.e. 13.73%.

Replacement Method: This method recognises only replacement made in the numerator. The logic is that if there is no replacement there's no additional cost. The formula here is:

$$\text{LT Ratio} = \frac{\text{No. of Replacement during a period}}{\text{Average manpower in the period}} \times 100$$

Avoidable Separation method: According to some experts, the separations caused by reasons like retirement or death of employees cannot be included in the LT ratio. We should consider separations due to reasons that could have been avoided only. The formula here is:

$$\text{LT Ratio} = \frac{\text{No. of avoidable separations during a period}}{\text{Average manpower in the period}} \times 100$$

Flux Method: It takes into account the total displacement i.e. separations as well as accessions. So the numerator considers average of separations & accessions. The formula is:

$$\text{LT Ratio} = \frac{\frac{1}{2} \text{ x (No. of separations + No of accessions)}}{\text{Average manpower in the period}} \text{ x } 100$$

Control over Labour Turnover

Controlling the labour turnover is to diagnose the causes for the same. The causes could be classified as avoidable and non-avoidable.

Avoidable causes:

- Dissatisfaction with remuneration
- Improper working conditions
- Dissatisfied with job content
- Unhappy with personal policies on increments and promotions
- Lack of proper facilities

Unavoidable causes:

- Death, Retirement or ill health
- Domestic reasons like marriage of female workers
- Seasonal nature of business
- Shortage of resources
- Better prospects
- Physical reasons

(x) Measuring Labour Efficiency and Productivity

Organsiations today take every possible step to attract and retain good manpower. One more factor is important in the process of rewarding good employees for their performance is measurement of the performance.

Performance measurement involves the following steps:

(1) Defining the work properly – this is done though setting up the job evaluation, work study, time & motion study and other engineering methods. It is also necessary to define the complexity of the job, discipline required, degree of supervision needed.

(2) Defining the skills needed to perform a job – After defining a job, the qualities and skills needed to perform the same are listed. It also includes education, training, physical qualities, responsibility, etc.

(3) Setting up job profile – people are recruited considering the requirements defined under the above two steps. People should be given a clear cut idea of their job profile. If job profile or description is not properly defined, the employees won't be able to perform.

(4) Measurement of work done – the work done by employees must be correctly measured. The measurement must be done in comparison with the targets set in the form of Key Result Areas (KRAs) for a period.

(5) Merit rating – only measuring work is not enough to judge an employee performance. His personal qualities and development should also be tracked. Merit rating is a systematic evaluation of an employee's appraisal. It is usually done by the superior. It assesses employee on the basis of work performance, interpersonal relations, cooperation, ability to lead etc. There may be different weightages assigned to each of these factors and an overall rating is given.

Direct Expenses

The expenses represent that part of the cost which is other than material and labour. It is basically cost of facilities or services which are used as aids to production.

The expenses again could be classified as direct and indirect. In this section we will talk about Direct Expenses.

Direct expenses are those expenses (other than material & labour) which can be directly associated with a job or a process or a cost unit. They are a part of prime cost. They are also referred to as Chargeable expenses. They do not physically form part of the final product like material cost, but facilitate the output directly.

Examples of direct expenses are:

- Royalties and patent fees paid for using technology
- Hire charges for special machines, facilities, tools etc that are used in relation to a specific job or process
- Sub-contractors charges for getting some operations done by outsourcing
- Consultancy charges paid exclusively for a job
- Cost of special design, layout
- Architect's fees
- Traveling for a specific job

Certain expenses may be direct expenses for certain costs centres but they are indirect for the production departments. These do not form part of prime cost, but absorbed as overheads.

Collection of Direct Expenses

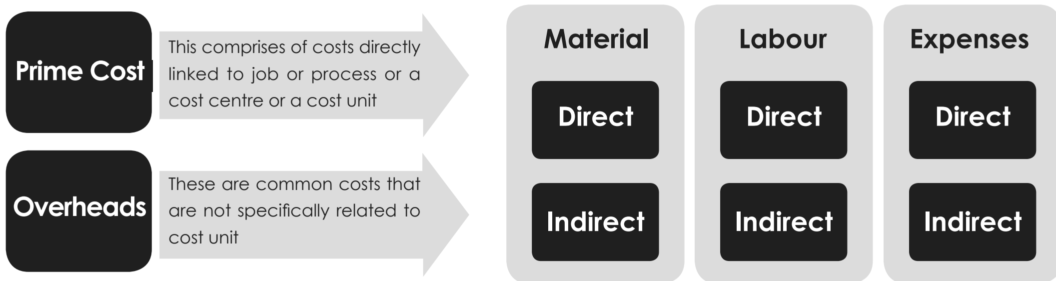
Direct expenses are collected based on the vouchers indicating the specific job or process numbers for which they are incurred or paid.

Treatment of Direct Expenses

The direct expenses are debited to the W. I. P. account of the specific job or process. In case of contracts or projects, they are debited to the specific contract or project as the case may be. In service industry, it is charged to the cost of generating service.

Overheads

The total cost of a product comprises of two basic components i.e. prime cost plus overheads. This is shown in the following chart:



It can be observed that all indirect costs form overheads. Thus, overheads comprise of all costs that cannot be directly linked to cost unit or cost object. CIMA London defines Overheads as *"expenditure on labour, materials or services which cannot be economically identified with a specific saleable cost per unit."*

There are many synonyms used for the term overheads viz. 'on cost', 'burden', 'loading', 'non-productive costs', and 'supplementary costs'. By whatever name they may be called the fact remains that they constitute the part of total cost and therefore need to be measured, analysed, controlled and saved. With increased automation of processes, the proportion of costs even in manufacturing industry attains the status of being 'indirect'. In service industry, the proportion of overheads in total cost is quite high.

Those who understand the importance of controlling overheads, improve their profits surely.

As a keen learner of the subject of costing, one must grasp the concept of overheads thoroughly. It must be remembered that the line of distinction between 'direct' and 'indirect' is very thin and subjective as well. The cost control and analysis mechanism depends on whether the costs are direct or indirect. While direct cost are controlled more by physical measures such as reduction in weight, lowering the number of hours to produce, using alternative material etc., the overheads are controlled by setting up budgets and ensuring that the actual costs are within that limits.

The understanding of overheads will be easier if the concept is studied in the following sequence:

- Classification and coding of overheads
- Collection of overheads i.e. pooling costs together for various cost centres
- Identification of overheads to cost centres
- Allocation of common overheads to the cost centres on a suitable basis
- Apportioning the service departments' overheads to production departments
- Absorbing the overheads in the unit cost of products produced in production department

(i) Classification of Overheads

The overheads are grouped in different ways to be able to understand them, properly. It may be done in following ways:

- **Based on Nature of Expense** i.e. elemental grouping into indirect material, indirect wages and indirect expenses. This classification helps the understanding of the basic nature of overhead costs.
- **Based on Functions** i.e. manufacturing or production overheads, Administration overheads and Selling and distribution overheads. The functional classification helps to understand where in the organisation the costs are incurred. This helps to fix responsibility on persons responsible for those functions and control expenses through them.

- **Based on Behaviour** i.e. fixed or variable overheads. This classification tries to answer the question "how do the overheads behave" or "what is the rate of change in overheads with respect to change in output level'. This classification helps in analyzing overheads for the purpose of decision making.

The behavioral classification cannot be used for booking of costs; it is used only for analysis and decision making. No cost can be permanently stamped as either fixed or variable.

	Indirect costs (overheads)		
Elements → **Functions ↓**	**Material**	**Labour**	**Expenses**
Factory or Production or Manufacturing or works Overheads	Nuts & bolts, consumables, lubricants, welding electrodes, cleaning materials, nails, threads, ropes etc.	Salaries & wages to foremen, supervisors, inspectors, maintenance labour, idle time etc.	Factory lighting & heating, factory rent, power & electricity, factory insurance, depreciation on machinery, repairs, etc.
Administration Overheads	Printing & stationery, office supplies etc.	Salary of office staff, managers, directors, and other administrative departments as IT, audit, credit, taxation etc.	General office rent, insurance, telephones, fax, travel, legal fees, depreciation on office assets etc.
Selling Overheads	Price lists, catalogues, mailings, advertising material such as leaflets, danglers, samples, free gifts, exhibition material etc.	Salaries of sales staff & managers, commission on sales, bonus on schemes etc.	Sales office expenses, travelling, subscription to sales magazines, bad debts, rent & insurance of showrooms, cash discount, brokerage, market research etc.
Distribution Overheads	Secondary packing, material items used in delivery vans etc.	Salaries of delivery staff such as drivers, dispatch clerk, logistic manager etc.	Carriage outwards, forwarding expenses, rent & insurance of warehouses & depots, insurance, running expenses & depreciation of delivery vans, etc.

The rate of change in overheads caused due to rate of change in the volume or output levels, will determine the degree of variability of the overhead costs. Different types of expenses show different characteristics with respect to the degree of variability. There are two extremes within which costs may change.

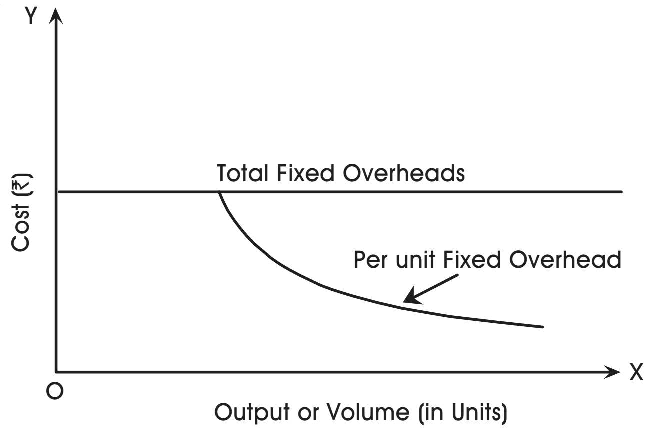
- Whatever may be the changes in the level of output, some costs do not change at all. These are called as *fixed overheads.*
- Some costs change in direct proportion to the changes in the output. These are called as *variable overheads.*
- Some costs change with the level of output, but not in the same proportion. These are called as *semi-fixed or semi-variable overheads.*

(a) Fixed Overheads:

There are those overhead costs that have no relationship with the level of activity at which a production department operates. These costs remain perfectly constant throughout the different volumes of output. These costs are many times referred to as Period costs or Policy costs. They are called as period costs because they are related to the period of time and not with the volume of activity. They are called as policy costs because they are incurred based on the decisions by the management.

Fixed Overheads – Total and per Unit

Another important feature of fixed costs is their behaviour at the total expenses level and the per unit level. We know fixed overheads in totality will be constant. But as production volumes increase, these costs will get spread over more number of units produced. Hence, the fixed overhead per unit will reduce as production rises. Similarly, fixed overheads per unit will increase on reduction in the production level.



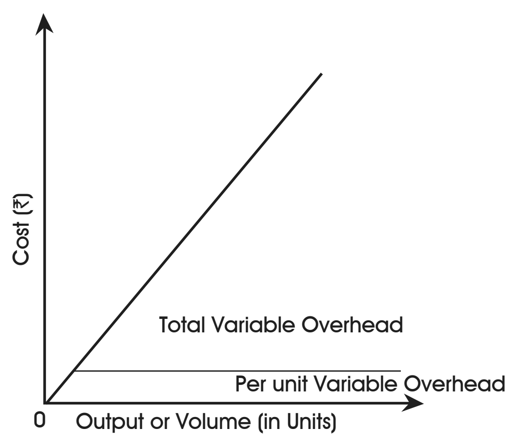
If you notice the above chart carefully, you will notice that a line parallel to 'X' axis represents the total fixed overhead costs and the curve showing descend along the 'X' axis represents per unit fixed overhead costs.

(b) Variable Overheads:

There overhead costs show a linear relationship with the change in the volume of activity. This means the expenses will go hand in hand with the change level of output. Take for example power costs. If the machine is not turned (i.e. no production) there won't be any power consumption, but more the production, more will be power consumption. Similarly, consider a chemical that is added as a catalyst for producing a drug, where the consumption will increase with level of activity. A salesmen's commission also will vary as sales increase. Hence as against the fixed overheads, the variable overheads increase as production increases and decrease as the production decreases.

Variable Overheads – Total and per Unit

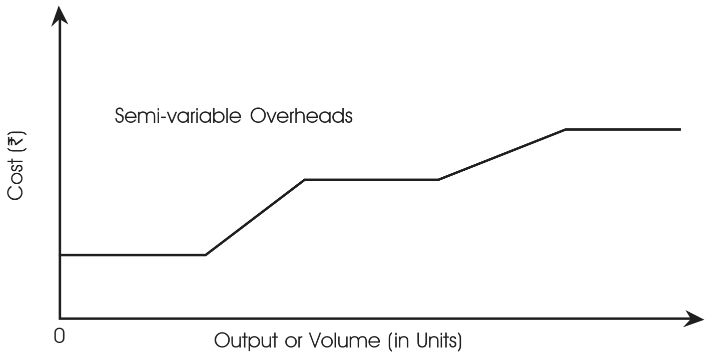
It is interesting to note that while variable costs in totality will increase, the variable overhead per unit will be constant. While variable overheads in totality change with the change in volume, but variable overheads per unit remain constant.



The above chart has shown the behaviour of the variable overheads in totality and per unit basis. If you notice the above chart carefully, you will notice that the straight line showing ascend along the 'X' axis represents total variable overheads and a line parallel to 'X' axis represents per unit variable overhead costs.

(c) Semi-fixed or Semi-variable Overheads:

There are certain items of overhead costs that do change with change in volumes, but not in the same proportion. These overheads are partly fixed and partly variable. A simple example will clear this concept. Consider a telephone expenses. It has a fixed monthly rental and the per call charges. There are certain types of overheads that are initially constant, but jump due to increase in volume and then again remain constant at the revised level. The best example is the supervision costs. Such, step-up behaviour of some overhead items is shown in the chart below.



Such type of overheads always poses problems for the cost accountant. Whether they are to be treated as fixed or variable is difficult to determine. For the purpose of accurate cost analysis, these overheads are segregated into fixed and variable. The separation of fixed and variable elements of these costs can be done by using certain statistical and other methods such as:

(1) **Graphical Method** – Expenses are plotted on a graph paper and a line that passes through maximum points is drawn and extended to meet 'Y' axis. The point at which it intersects 'Y' axis represents fixed portion of the cost and remaining is variable.

(2) **Simultaneous Equations** – This uses the straight line equation of $y = m x + c$ where y represents total cost, m is variable cost per unit, x is the level of output and c is fixed costs. The total costs at two different volumes are put into these equations which are solved for the values of m and c.

(3) **High and low Method** – The highest and lowest levels of output and costs are taken and the differential is found. This difference arises only due to variable costs. The remaining portion will be fixed costs.

(4) **Least square Method** – This statistical tool uses straight line equation and finds the line of best fit to solve the equations.

(ii) Codification of Overhead Costs

Naturewise expenses or costs are given codes under which the concerned costs are booked. For functions, cost centre concept is used. Cost Centres are also given codes. When an expense is to be booked, it is simultaneously recorded for an account code under a cost centre.

An example of these codes is given below:

Cost Centre Codes	Department Name
1100	Turning Department
1200	Grinding Department
1300	Components Manufacturing
1400	Assembly
2100	Maintenance
2200	Quality Control
2300	Stores
3100	HR & Administration
3200	Accounts

You may observe the logic in giving the codes. All codes starting with 1 are production departments, all codes starting with 2 are factory related services and all codes starting with 3 are general services. This coding helps collection of costs on functional basis and also to identify an item of expense directly to a department or cost centre.

(iii) Collection of Overheads

As we know expenses or costs are booked in costs accounts based on the source documents. These source documents are generated in departments where the transactions are generated. In the total cost determination, collection of costs is an important step. The source documents from which costs are collected are as follows:

Document	**Overhead Costs**	**Nature**
Stores Issue Note, purchase voucher	Indirect material	Consumables, lubricants etc.
Payroll sheets, Time Sheets	Indirect labour	Wages, salaries, contribution to statutory benefits, bonus, incentives, idle time
Cash Books	Indirect material, Indirect labour & Indirect expenses	All type of costs
Subsidiary records – journal	Indirect material, Indirect labour & Indirect expenses	For provisions of costs that are not actually paid for
Other reports	Indirect expenses	Depreciation, scrap, wastage etc

Collection of overheads is the process of actually identifying an item of expense or cost to a cost centre directly. Whatever cannot be directly identified needs to be allocated or apportioned on the most logical basis of distribution.

(iv) Production Overheads

As we know production overheads (also called as manufacturing overheads, works overheads or works on-cost), include all factory indirect costs that cannot be directly linked to production units. The question arises for all such factory on-costs as to how exactly should we associate the same to the cost unit. As there is no direct link, it will have to be in the form of an equitable charge per unit of production.

The process of accounting and linking of production overheads is as follows:

(a) Departmentalisation

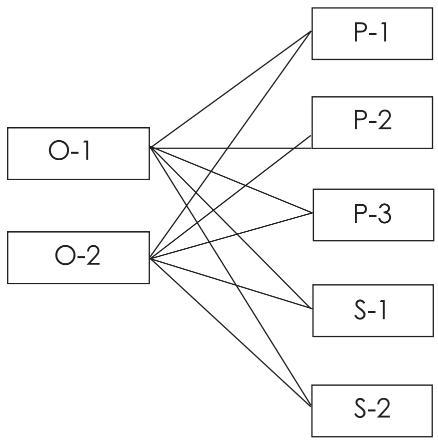
(b) Classification and Collection of overheads

(c) Allocation and Apportionment of costs

(d) Distribution of service centre costs to production departments

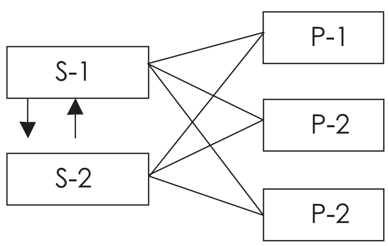
(e) Absorption of production department costs to cost units

In practice however, it is not so lengthy due to use of computerised systems. Carefully, see the chart below.



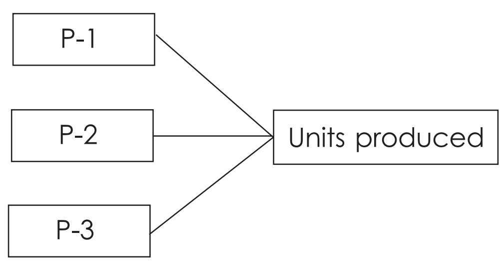
Here O-1 & O-2 are two items of expenses, P-1, P-2, & P-3 are production departments and S-1 and S-2 are production related services departments. This is the process of identification of costs to departments

At the next stage, we take S-1 and S-2 total costs and load it on to P-1, P-2 and P-3 on some suitable basis. This is shown below.



Please carefully note the arrows between S-1 and S-2. This indicates one service department giving service to other service department! Maintenance department may give services to stores. Such services must be re-apportioned

Once this is done, the last step is to absorb the totals of each production department on to the units produced by them. See the following chart.



(a) Allocation of Production Overheads

While identifying the overheads to various departments, it must be made sure that

- the cost is incurred due to action executed by that department and
- Exact amount of overhead is known. This may be found from the source documents.

(b) Apportionment of Production Overheads:

Some overheads are not caused by the departments neither the exact cost for that department is known, such expenses need to be prorated or apportioned to various departments on a suitable basis. The basis for apportionment is normally predetermined and is decided after a careful study of relationships between the base and the other variables within the organisation. The Cost Accountant must ensure that the selected basis is the most logical. A lot of quantitative information has to be collected and constantly updated for the purpose of apportionment. A general example of various bases that may be used for the purpose of apportionment is shown below:

Overhead Item	Basis
Rent of Building	Floor space occupied by each department
General Lighting	No. of light points in each department
Telephones	No. of extensions in a department
Depreciation of Factory Building	Floor space
Material Handling	No. of trips made

This allocation and/or apportionment is called as Primary Distribution of Overheads.

(c) Secondary Distribution of Production Overheads:

After the primary distribution is over, the next step is to re-distribute the service department costs over the production departments. This also needs to be done on some suitable basis, as there may not be a direct linkage between services and production activity. Hence the loading of service costs onto the production departments is necessary. This process is called secondary distribution of overheads.

The basis for secondary distribution is dependent on

- The nature of service given e.g. it may be maintenance department or stores
- Measurement of service based on surveys or analysis
- General use indices

Here are some examples of the bases that can be used to distribute cost of different service departments:

Service department	Basis
Quality control	No. of inspections done
Maintenance	No. of maintenance calls or Material usage for maintenance or Time spent on maintenance
Stores	Indirect material cost or No. of issue slips or Quantity of material issued or Value of stock handled
Canteen, welfare	No. of workers
Internal transport	No. of trucks or trolleys used or Tonne-miles consumed
Payroll office	No. of labour hours
Purchase office	No. of purchase orders or Value of material purchased

Again this is not an exhaustive list and could differ from company to company. Many times percentage estimation is also done for such distribution if the service cannot be measured on the basis of any of the above bases. Such arbitrary method should be avoided as far as possible.

Methods of Secondary Distribution

I. **Direct distribution method:** This method is based on the assumption that one service department does not give service to other service department/s. Thus between service departments there is no reciprocal service exchange. Hence under this method, service costs are directly loaded on to the production departments.

II. Step Distribution Method: It recognises that a service department may render service to the other service department, but does not receive service from it. In such situation, cost of that service department will be distributed first which render services to maximum number of other service departments. After this, the cost of service department serving the next large number of departments is distributed. This process is continued till all service departments are over. Because it is done in steps, it is called as Step method of distribution.

III. Reciprocal Service Method: This method takes the fact that service departments may actually give as well as receive services from and to the other service departments on reciprocal basis. Such inter-departmental exchange of service is given due weight in the distribution of the overheads. There are two methods used for distribution under this logic. One is called Repeated Distribution method and the other Simultaneous Equation Method.

(i) Repeated Distribution Method: This is a continuous distribution of overhead costs over all departments. This is continued till the figures of service departments become 'nil' or 'negligible'.

(ii) Simultaneous Equations Method: Under this method, simultaneous equations are formed using the service departments' share with each other. Solving the two equations will give the total cost of service departments after loading the inter-departmental exchange of services.

IV. Trial and Error Method

Under this method, the principle of repeated distribution method should be followed for the cost of service department and then total of each service department is transferred to production department as per required basis.

Limitations of Apportionment :

If an approximate data is used for analysis, control and decision- making, it may cause erroneous results. Thus one has to be careful in relating the cost data to cost centre or cost unit. In other words, almost all overheads are period costs and hence an attempt to link it to cost unit will always be arbitrary. As such, the traditional methods of allocation and apportionment are often challenged by many in the industry. The techniques like marginal costing owe their origin to such limitations of traditional costing.

(d) Absorption of Production Overheads:

Once the steps of primary and secondary distribution are carried out, what we get is total indirect costs of production departments. The next step is to assign these totals to the individual product units. The absorption of overhead enables a cost accountant to recover the overhead cost spent on each product department through each unit produced. Overhead absorption is also known as levy or recovery of overheads.

In general, the formula for overhead absorption rate is give as:

$$\text{Overhead rate} = \frac{\textit{Amount of overhead}}{\textit{Number of units of the base}}$$

It's a common practice to determine the rate in advance. Such rates are known as predetermined rates. The predetermined rates are calculated using the budgeted or standard overhead costs for the production departments as divided by the budgeted or standard number of units of the base. Actual costs as well as output may fluctuate from one period to other, and hence the recovery rates also will fluctuate. In order to even out the rates throughout the year and to use data for decision making, pre-determined rates are used quite commonly.

There are different ways of absorbing overheads using different types of denominators. These are discussed below:

(i) Production Unit Method: The concept here is to average out the total overheads on total units produced.

(ii) Percentage of Direct Wages: Under this method, overhead for a job is recovered on the basis of a predetermined percentage of direct wages. This method is used when the component of direct wages is higher. This method is useful if the direct labour hours can be standardised and the labour rates do not fluctuate too much. However, this method ignores the contribution made by other resources like machinery. The method also ignores the fact that there may be different types or grades of workers and each may cost differently. It also sidelines the fact that most of the production overheads are time-related.

(iii) Percentage of Direct Material Cost: Here the absorption rate is expressed as a material cost is very high and that of labour cost is comparatively negligible. It is useful if material grades and rates do not fluctuate too much. However, many overhead items bear no relationship with material cost, and also the fact of time dimension of overheads is not taken into account by this method.

(iv) Percentage of Prime Cost: This method combines the benefits of direct wages and direct material cost methods as we know prime cost means direct material plus direct wages plus direct expenses. This method could be used when prime cost constitutes a major proportion of the cost and the rates of material & labour are stable. It is needed that the product made is standard product.

(v) Direct Labour Hour Rate: Under this method, the absorption rate is calculated by dividing the overhead amount by the actual or predetermined direct labour hours. This is extremely useful when the production is labour intensive. This method is superior to the earlier ones, because it recognizes the time factor. The data related to labour hours has to be properly collected or estimated. The labour hour rate may be calculated as a single rate or different for different groups of workers.

(e) Machine Hour Rate:

In the days of mechanised production processes, the most relevant rate to be applied is the machine hour rate. This is the rate calculated by dividing the actual or budgeted overhead cost related to a machine or a group of machines by the appropriate number of machine hours. These hours could be actual hours or budgeted hours.

A machine hour rate may be calculated using only those overheads which are directly related to the machine e.g. power, fuel, repairs, maintenance, depreciation etc. These expenses are totaled and then divided by the hours to compute the rate. This is called as *ordinary machine hour rate*. Whereas, if costs not related to machine are also included (e.g. supervision, rent, lighting, heating etc.) for the rate calculation, such rate is called as Composite machine hour rate.

While calculating machine hour rate, the wages paid to machine operators may be added to the total costs. This is because these operators directly wok on the machines & thus related to machine operation. At times a factory may have more than one similar machines simultaneously working. In such case, *a group machine hour rate* may be calculated.

Choice of Method of Absorption Rate Calculation

Which of the methods should be used for calculating the overhead absorption rates could be based on the following:

(i) The method should bear a logical relationship with items of overhead and the base used.

(ii) It should suit the type of industry and conditions prevailing therein. One cannot use a direct labour hour rate in a fully automated factory.

(iii) It should take into account the nature of overheads. If more proportion of overheads is time related, the method focusing on hours should be used. In case of more percentage of indirect material, a material cost based system has to be used.

(iv) The data needed by a method should be available on a regular basis.

(f) Over or Under Absorption of Production Overheads:

If overhead rates are based on the actual data i.e. actual costs and actual base, then the sum of total overheads absorbed in all units produced will match with the total overheads incurred. But if the absorption rate is a pre-determined rate based on budgets or estimates which could be different from the actual, then it may result into either over-absorption or under-absorption of overheads.

How does one deal with the situation of over or under absorption. There are three ways to handle it:

(i) Write-off (in case of under absorption) or write back (in case of over-absorption) to the P & L Account. This treatment is valid if most of the overhead items are related to time.

(ii) Carry forward to the next period through a reserve account. This method is not recommended on the logic that it is inconsistent with accounting standards.

(iii) Use of supplementary rates to adjust the effect to the cost of sales, finished stocks and Work in Process stocks. This sounds logical as it does not carry forward the unabsorbed or over absorbed overheads to the next accounting period entirely. It aims at splitting the total effect between the cost of sale (which is charged to current year's profits) and stocks (which get carried forward to the next year).

(g) Reporting and Control of Production Overheads:

Overheads being indirect costs need a different approach for control. The pre-requirements for controlling production overheads are:

(i) Correct departmentalisation of the factory.

(ii) Correct classification according to variability, and functions.

(iii) Proper quantitative data maintenance such as hours, number of requisitions, repair calls, idle time etc.

(iv) Proper selection of overhead distribution method and absorption rate method.

(v) A comprehensive reporting of actual costs and comparison with budgets or standards.

(h) Administration Overheads:

As per the functional classification, administration overheads comprise of those indirect costs which are related to the general administrative function in the company. Such functions are related to policy formulation, directing the organisation and controlling the operations of the company.

Administration overheads are incurred for the benefit of organisation as a whole. Controlling them is difficult for they do not vary with most of the variables viz. production or sales. Photocopying of documents is a major cost which is not related to either production or sales – it's just the habit of people. The size as well as control over these overheads depends largely on decisions of management. Organisations growing very fast face the problem of controlling administrative overheads. Multi-location set up leads to duplication of many administrative costs.

(1) Collection and Absorption of Administration Overheads:

The collection of overheads is done firstly by nature of the expenses through the chart of accounts process. These expenses are booked under respective departments. The administrative departments in an organisation could be:

Corporate office

Finance and Accounts

Company Secretary

Human resources

Legal

General Administration

The overheads that are common to all these departments are apportioned on some suitable basis e.g. in the following manner:

Office rent, rates & taxes	Floor space
Depreciation on office building	Floor space
Legal fees	No. of cases handled
Salaries of common staff	Ratio of salaries of departments
Typist pool	No. of documents typed

Absorption of the administrative overheads into cost units is very difficult. Many times it is advised that these overheads may not be absorbed into product units because of the difficulty and non-relevance of them with production activity. Normally, the administrative overheads are totaled together and then using a suitable basis, a rate of recovery is arrived at to absorb the same. It could be mostly a percentage of Works cost or Factory cost. Based on the principle of '*charging what the traffic can bear*', the absorption could be on the basis of a percentage of gross profit. Whatever method selected, it will be arbitrary and could lead to erroneous conclusions. A cost accountant has to use all the experience and history of the organisation before he selects a particular method to adopt.

(2) Treatment of Administration Overheads

There are three different ways of treating the administration overheads:

(i) Apportion between Production and Selling & Distribution Functions: The absorption of administration overheads would happen through production and selling overheads. This means these overheads lose their identity. The problem is of course, selection of basis to divide these overheads over the two principal functions of production and selling.

(ii) Transfer to P & L Account: This method agrees that administrative costs are all time based costs and as such bear no relation what is produced or what is sold. These are mainly of fixed nature. Hence there is no point in dividing them further to be included in the cost of production or cost of selling. They should be simply charged to the P & L account. However, this may lead to undervaluation of stocks.

(iii) Treating as a separate addition to Cost of Production & Sales: In this method, administration is treated as a separate function and is added as a separate line in the cost computation sheet for a job or an order. Here again, the basis for inclusion as a part of cost of a job is a difficult choice. Generally, a percentage of factory cost is taken as a basis. A care needs to be taken to ensure that the administration overheads are charged equitably to cost of sales, FG stock and WIP as well.

(3) Controlling Administration Overheads

Given the nature of these expenses, they cannot be controlled at the lower level of management. They can be better controlled by top management as they pertain to formulating policy and directing the organisation. The first step in the control mechanism is proper classification of expenses & departmentalisation. The actual expenses are collected for each department and then compared with a bench mark. Deviation are analysed and causes for increase are mitigated by fixing responsibility on the departmental head.

The control benchmarking can be done with respect to:

- Figures of the previous year. Expenses could be compared with the figures of previous year and increase or decrease are analysed. However, comparison with previous year may not help as the condition may have totally changed from one year to the other.
- Use of budgets. Budgets are estimates for the current year, and they take into account the changed conditions. They also built in the year's complete plan which would factor all changes in the cost structure. It is advisable to compare budgeted overheads with actual for control purpose.
- Use of standards. Although very scientific, this method is difficult to operate. Administrative activities (being very subjective) cannot be standardised. On a certain level it can be applied e.g. the time taken to process a voucher by accountant can be standardised, or time taken for processing a payment could be standardised.

(i) Selling and Distribution Overheads (S & D):

As the name suggests these are overheads incurred for handling post-production activity. The purpose of these activities is to make sure that the products are sold & distributed and secure orders from customers;

distribution refers to the physical movement of products through various channels of distribution so that the products reach ultimate customers. Many organisations club these functions as one function called as 'marketing' and as such the S & D overheads can be called as 'Indirect Marketing Costs'.

A consumer product needs heavy expense on advertising. A sale to institutions rather than individual customers needs a different selling effort. Distribution costs will increase if the spread of the market is large. Some activities cannot be advertised at all such as a doctor, a cost accountant.

(1) Collection and Absorption of S & D Overheads

While classifying the S & D costs are properly bifurcated and coded accordingly. This could be done by having separate account codes for:

Selling Overheads

- Advertising
- Sales commission
- Travelling expenses
- Communication
- Exhibition
- Market survey
- Selling material such as leaflets, pamphlets, posters, danglers, price lists, catalogues etc.
- Free samples
- Credit & collection costs
- Bad debts

Delivery Expenses

- Transportation vehicle related expenses
- Warehousing and storage at different places
- Depreciation and maintenance

Depending upon the size of the organisation, there may be a proper departmentalisation of the S & D activities. The departments could be:

- Sales head office
- Sales regional offices
- Depots
- Direct selling department
- Dealers management
- Credit and collection (commercial)

The costs are collected through various source documents under the above heads and for the above departments. For absorption, the basis to be used will have practical difficulties, as one will have to look for a relationship between the expenses and the cost unit. Some expenses like sales commission, shipping costs, and direct selling expenses can be absorbed directly. The other expenses can be absorbed on the basis of either sales value, cost of goods sold, gross profit or number of units sold. Out of these the sales value method is the most commonly used.

(2) Control over S & D Expense

The S & D expenses are related to sales and distribution activity which is externally focused. The extent of these expenses depend mainly on external factors like consumer profile, changing habits, technology improvements etc. Controlling these expenses does not mean capping them. It aims at increasing the effectiveness of these expenses e.g. getting maximum sales per rupee of S & D expenses. For control purpose, a great care should be taken to ensure correct classification and collection of S & D overheads. The collected expenses must be analysed to assess the effect of them on sales. Such analysis could be done as follows:

(i) Analysis of sales and S & D expenses by geographical locations – This could be regions, zones, domestic and international etc.

(ii) Analysis by type of customers - This could be done as institutional, government, retail etc.

(iii) Analysis by products or services – This may be done as range of products, the application of products, brands etc.

(iv) Analysis by salesmen

(v) Analysis by channel of distribution – This analysis pertains to wholesalers, retailers, commission agents etc.

The analysis of sales, profits and S & D expenses on the basis of above factors will give a good insight into the performance as well as control over expenses. All these three parameters may be compared with

- Previous year
- Budget for the current year or
- Standards for the current year

(3) Treatment of Special Items

After Sales Service: This relates to services rendered after a product is sold. If the service is rendered during the warranty period, it is normally free of cost. The cost of in-warranty service is treated as S & D overhead and accounted for accordingly. The services provided after expiry of warranty period, are normally charged to the customer. In such cases, the actual cost incurred on such service is collected as per element in the routine way and treated as cost of production of the service.

Packing Costs: Packing may refer to primary packing and secondary packing. Primary packing is the minimum necessary without which a product cannot be handled. Liquid products must either have bottles or sachets. This packing is considered as direct material cost. These bottles may be further kept in bigger boxes or cartons for ease of transportation. This packing cost is treated as S & D overhead.

Advertising Expenses: The advertising could be done for different purposes. There could be a recruitment ad, which is booked under personnel department and treated as administration overhead. At times there could be a corporate advertisement to be booked under the corporate office and treated as administration overhead. If a product specific advertisement is done, it is treated as selling cost.

Market Research: Many times organisations appoint professional bodies or conduct by themselves a study of potential market for their products. This study is aimed at finding the customer needs, their habits, changing market for the products, technological changes in the product, competition etc. This is treated as S & D cost.

Bad Debts: We know bad debts refer to customers who do not pay money after having purchased the product. This situation arises after the sale is done. Many experts say that bad debt is not an item of expense but it's a financial loss and thus should be excluded for the purpose of costing. However, normal bad debts may be considered as selling expense and included in the cost. An exceptional case like bankruptcy of a big institution may be excluded from cost.

Tool Set up Costs: if the set up is related to specific product or a job, such cost may be treated as a direct cost of the job. But if the set is related to different products, it may be charged as a part of factory overheads.

Carriage and Freight: These are paid for transporting of material. If these are incurred for incoming material, it is included in the cost of material and treated as material cost – either direct or indirect. If it is paid for transportation of finished goods, it is treated as a distribution cost.

Illustration 1.

Classify the following items of costs using different classification criteria.

(a) Repairs to machinery
(b) Factory rent
(c) Freight inward
(d) Directors fees
(e) Direct wages
(f) Free samples
(g) Office stationery

Solution:

Item	**Element**	**Function**	**Traceability**	**Behaviour**
Repairs to machinery	Expense	Production	Indirect	Semi-fixed
Factory rent	Expense	Production	Indirect	Fixed
Freight inward	Material	Production	Direct	Variable
Directors fees	Expense	Administrative	Indirect	Fixed
Direct wages	Labour	Production	Direct	Variable
Free samples	Material	Selling	Indirect	Fixed
Office stationery	Expense	Administrative	Indirect	Fixed

Illustration 2.

Specify the method of determination of costs and the cost units for the following industries.

Oil

Chemicals

Canteen

Aerated water

Printing

Hospital

Telephone service

House-building

Insurance

Ready- made garments

Solution:

Oil – Process Costing Method – a liter or a barrel

Chemicals – Process Costing – kg for solids, liters for liquids or cu ft for gases

Canteen – Operating Costing – a meal

Aerated water – Unit or Batch Costing – a bottle or a barrel

Printing – Job Costing – a printing job

Hospital – Operating Costing – a patient bed

Telephone service – Multiple Costing – a call per unit of time

House building – Contract Costing – a dwelling unit or a building

Insurance – Operations Costing – a claim

Ready-made garments – Batch Costing – a batch of shirts or clothing

Illustration 3.

A company manufactures and retails clothing. Classify the following costs into :

Direct material

Direct labour

Direct expenses

Indirect production expenses

Research and development costs

Administration costs

Selling & distribution costs

Finance costs

(1) Lubricant for sewing machines

(2) CD for office computer

(3) Maintenance contract for office photocopier

(4) Telephone rental & metered calls

(5) Interest on bank overdraft

(6) Performing rights society's charge for broadcasting in factory

(7) Market research for product launch

(8) Wages of security guards at factory

(9) Carriage on basic raw material purchased

(10) Royalty payable on number of products produced

(11) Road license fees for delivery vans

(12) Parcels sent to customers

(13) Cost of advertising products on television

(14) Audit fees

(15) Chief Accountant's salary

(16) Wages of operators in cutting department

(17) Cost of painting slogans on delivery vans

(18) Wages of storekeeper in material stores

(19) Wages of fork-lift truck driver

(20) Developing a new product in laboratory

Solution:

Direct Material – 9

Direct Labour – 16

Direct Expenses – 10

Indirect Production Costs – 1, 6, 8, 18, 19

Research & Development Costs – 20

Selling & Distribution Costs – 7, 11, 12, 13, 17

Administration Costs – 2, 3, 4, 14, 15

Finance Costs – 5

Illustration 4.

A company purchased 1200 kg of raw material @ ₹20 per kg. from a supplier. A trade discount of 20% on above price was applicable. Total freight paid was ₹240 and insurance was 2.5% on the net present value paid by the purchaser. Calculate the total cost of material purchased and the per kg material cost.

Solution:

Particulars	(₹)	(₹)
Basic Cost @ ₹20 per kg for 1200 kg	24,000	
Less: Trade Discount @ 20%	(4,800)	19,200
Add: Other Charges		
Freight	240	
Insurance @ 2.5% on 19,200	480	720
Total Cost		19,920

The total cost of 1,200 kg is ₹19,920 therefore the cost per kg will be ₹16.60.

Illustration 5.

Match the following expenses with suitable basis.

Expenses
Rent
Repair
Depreciation
Lighting
Supervision
Fire Insurance for stock
ESI Contribution
Power

Particulars (Basis)
Area sq feet
No. of workers
Wages
Value of plant
Stock value
Horse power of plant

Solution:

Expenses	**Basis**
Rent	Area sq feet
Repair	Value of plant
Depreciation	Value of plant
Lighting	Area sq feet
Supervision	No. of workers
Fire Insurance for stock	Stock value
ESI Contribution	Wages
Power	Horse power of plant

Illustration 6.

A company imported mechanical seals and the following information is available:

1000 pieces were received at the CIF Mumbai price of $30 per piece. Customs duty was paid @ 12% on invoice value after converting it at ₹ 38 to a dollar. Clearing charges were ₹1800. Freight of ₹1400 was paid by the company for transporting the material from Mumbai port to the factory site. Find the total landed cost of 1000 seals.

Solution:

Particulars	₹
Basic Cost Price (1,000 x 38 x 30)	11,40,000
Add: Customs Duty @ 12%	1,36,800
Clearing Charges	1,800
Transportation	1,400
Total landed cost of 1,000 seals	12,80,000

Illustration 7.

A firm's basic rate is ₹3 per hour and overtime rates are one half times for evenings and double rate for weekends. Following details have been given:

Hours Recorded	Job X
Normal time	480
Evening Time	102
Weekend	10

Calculate labour cost chargeable to the job under the following circumstances:

(a) Where overtime is worked occasionally to meet production requirements

(b) Where overtime is worked at the customer's request to expedite the supply.

Solution:

(a) If overtime is occasionally worked for production requirements, then the normal rates should be charged to the job and the premium portion should be treated as production overheads.

Hours Recorded	Job X
Total hours worked	592
Charged to job @ 3 per hour	₹1776

(b) If overtime is worked at the request of customers, then the entire cost of additional time worked (including the premium) must be charged to the job.

Hours Recorded	Job X
Normal time	480
Evening Time	102
Weekend	10
Charged to job:	
Normal time @ ₹3 per hour	₹1440
Evening Time @ ₹4.5 per hour	₹459
Weekend Time @ ₹6 per hour	₹60
Total	₹1959

Illustration 8.

The standard hours for a job are 100 hours. The job has been completed by S in 60 hours and by D in 95 hours. The factory has a bonus system applicable to job based on the percentage of time saved as compared to standard hours. The rate of pay is ₹1 per hour. Calculate the total earnings of them based on the following table of the incentive scheme and also the rate of earnings per hour for them.

% of time saved	Bonus
Saving up to 10%	10% of time saved
From 11% to 20%	15% of time saved
From 21% to 40%	20% of time saved
From 41% to 100%	25% of time saved

Solution:

Particulars	**S**	**D**
Standard Hours	100	100
Actual Hours	60	95
Hours saved	40	5
% of time saved to standard	20%	10%
Bonus hours	8	0.5
Total hours for payment	68	95.5
Total earnings @ ₹1 per hour	68	95.5
Rate of earnings per hour	1.133	1.005

Illustration 9.

When will be bonus paid as per Halsey plan be equal to bonus paid as per Rowan plan?

Solution:

Bonus paid under Halsey plan is given by the formula

(Hours saved x Hourly rate)/2

And bonus under Rowan plan is given by the formula

(Hours saved / Standard time) x Actual hours x Hourly rate

If we want them to be equal, we must show that the formulae are equal to each other i.e.

(Hours saved x Hourly rate)/2 = (Hours saved / Standard time) x Actual hours x Hourly rate

½ = Actual hours / standard time

Or, Actual hours = ½ of standard time

So when the time saved is 50% of standard, bonus under both these methods will be same.

Illustration 10.

A company has a group incentive system for direct as well as indirect workers. For any production in excess of standard rate fixed at 10000 tonnes per month (25 days), a general incentive of ₹10 per tone is paid in aggregate. The total amount of payable to each group is determined on the basis of an assumed percentage of such excess production being contributed by it viz. 70% by direct workers, 10% by inspection staff, 12% by maintenance staff and 8% by supervisors.

From the following particulars for the month, work out the production bonus earned by each group. Actual working days were 20, Production was 11000 tonnes.

Solution:

No. of days worked in the month = 20 days

Standard production for 20 days = (10000/25) x 25 = 8000 tonnes

Actual production during the month = 11000 tonnes

Production in excess of standard =(11000 – 8000) = 3000 tonnes.

Category	General	Incentive	
	%	Tonnes	Amount (₹)
Direct Workers	70%	2,100	21,000
Inspection Staff	10%	300	3,000
Maintenance Staff	12%	360	3,600
Supervisors	8%	240	2,400
		3,000	30,000

Illustration 11.

In 365 days a company follows 2 holi holidays, 3 diwali holidays, 2 days for Christmas and all Sundays as weekly offs. It works for 8 hours a day for 5 days and 4 hours on Saturday. The machine room works on a 90% capacity and the normal maintenance time is assumed to be 10%. The total estimated cost for 40 machines is ₹ 72,57,000. Calculate the machine hour rate.

Solution:

Total number of days in a year	365
Less: Holidays (3+2+2)	7
Less: Sundays	52
Less: Saturdays	52
Net days	254
Number of hours available full days (254 x 4)	2,032
Add: 4 hours on Saturdays (52 x 4)	208
Total available hours	2,240
Hours at operating capacity @ 90%	2,016

Less: Normal maintenance time @ 10%	202
Net hours available per machine	1,814
Total cost for 40 machines	₹72,57,000
Cost per machine	₹1,81,425
Hours per machine	1,814
Machine hour rate	₹100 per hour

Illustration 12.

Based on the following information calculate the supplementary overhead rate and its distribution.

Overhead incurred	₹1,50,000
Overhead recovered	₹1,00,000
Cost of sales	₹10,00,000
Finished Goods	₹8,00,000
Work in process	₹7,00,000

Solution:

Here, the overheads under-absorbed are ₹ (1,50,000 - 1,00,000)= ₹50,000.

Total of cost of sales, finished goods & WIP = ₹(10,00,000+8,00,000+7,00,000) = ₹25,00,000.

The supplementary rate will be = ₹50,000 /₹25,00,000 = 0.020

This will be distributed as:

₹20,000 to cost of sales (i.e. 10,00,000 x 0.02)

₹16,000 to Finished Goods stock (i.e. 8,00,000 x 0.02)

₹14,000 to WIP (i.e. 7,00,000 x 0.02)

Illustration 13.

A group bonus scheme is in place whereby each worker gets paid a bonus on the excess output over the standard hourly output of 250 pieces in addition to their normal hourly rate earnings. The excess over standard is expressed as a percentage and 2/3rd of such percentage is shared with workmen and is applied on the notional hourly rate of ₹6 considered only for bonus calculation. The total hours worked for the week is 984 and the output is 2,81,000. Work out the amount of bonus for the week.

Solution:

Standard output for 984 hours (984 x 250) =2,46,000

Actual output in 984 hours = 2,81,000

Excess output during the week =(2,81,000 - 2,46,000)=35,000

Excess a percentage of Standard = (35,000/2,46,000)x 100 = 14.228%

Percentage entitled for bonus (2/3rd of 14.228%) i.e. 9.485%

Notional rate for bonus is ₹6. So bonus will be 9.485% of ₹6 i.e. ₹0.569 per hour.

Total bonus amount will be (984 x 0.569) = ₹560.

Illustration14.

Following transactions are given in the books of a company for the month of March 2014.Write up a stores ledger using FIFO method and show the break-up of value of closing stock.

March 1	Opening balance 500 units @ ₹6 per unit
March 5	Purchased 100 units @ ₹7 per unit
March 7	Issued 400 units

Solution:

Date		Receipts			Issues			Balance	
	Qty	Rate (₹)	Value (₹)	Qty	Rate (₹)	Value (₹)	Qty	Rate (₹)	Value (₹)
March1							500	6	3,000
March5	100	7	700				500	6	
							100	7	3,700
March7				400	6	2,400	100	6	
							100	7	1,300

Illustration 15.

Following transactions are given in the books of a company for the month of March 2014.Write up a stores ledger using LIFO method and show the break-up of value of closing stock.

March 1	Opening balance 500 units @ ₹6 per unit
March 5	Purchased 100 units @ ₹7 per unit
March 7	Issued 400 units

Solution:

Date		Receipts			Issues			Balance	
	Qty	Rate(₹)	Value(₹)	Qty	Rate(₹)	Value(₹)	Qty	Rate(₹)	Value(₹)
March1							500	6	3,000
March5	100	7	700				500	6	
							100	7	3,700
March7				100	7	700			
				300	6	1,800	200	6	1,200

Illustration 16.

Following transactions are given in the books of a company for the month of March 2014.Write up a stores ledger using Simple Average method and show the break-up of value of closing stock.

March 1	Opening balance 500 units @ ₹6 per unit
March 5	Purchased 100 units @ ₹7 per unit
March 7	Issued 400 units

Solution:

Date		Receipts			Issues			Balance	
	Qty	Rate (₹)	Value (₹)	Qty	Rate (₹)	Value (₹)	Qty	Rate (₹)	Value (₹)
March1							500	6	3,000
March5	100	7	700				500	6	
							100	7	3,700
March 7				400	6.5	2,600	200		1,100

The average rate is calculated as follows:

Issue on 7th March – (6+7)/2=6.5

Illustration 17.

Following transactions are given in the books of a company for the month of March 2014.Write up a stores ledger using Weighted Average method and show the break-up of value of closing stock.

March 1	Opening balance 500 units @ ₹6 per unit
March 5	Purchased 100 units @ ₹7 per unit
March 7	Issued 400 units

Solution:

Date		Receipts			Issues			Balance	
	Qty	Rate(₹)	Value(₹)	Qty	Rate(₹)	Value(₹)	Qty	Rate(₹)	Value(₹)
March 1							500	6	3,000
March 5	100	7	700				600	6.17	3,700
March 7				400	6.17	2,468	200	6.16	1,232

Weighted Average after 1st receipt = (3,700/600) = 6.17 which is used for the next issue.

Illustration 18.

A manufacturing company uses 200 units of a steel pipe every month. The pipes are bought from a supplier on a regular basis. The cost of placing and receiving one order is ₹ 100. The cost of carrying is ₹ 12 per unit. Find out the EOQ.

Solution:

We know EOQ is given by

$$Q = \sqrt{\frac{2 \times A \times O}{C}}$$

Here, A = 200 × 12 i.e. 2400, O = 100 and C = 12. Replacing these variables in the formula we get -

$$Q = \sqrt{\frac{2 \times 2400 \times 100}{12}}$$

Therefore Q = 200 units.

Sometimes, calculating the cost of carrying per unit is not possible, hence it is expressed as a percentage of the material cost.

Let us see an example.

Illustration 19.

Calculate the EOQ from the following information, and show the quantity where carrying cost and ordering cost put together is the minimum.

Annual requirement	:	5000 units
Ordering cost	:	₹ 60 per order
Price per unit	:	₹ 100
Inventory Carrying cost	:	15% on average inventory

Solution:

Here an important point must be noted. Carrying cost is not given per unit, and we will have to calculate it. We know price per unit is ₹ 100. Hence carrying cost per unit is 15% of ₹ 100 i.e. ₹ 15 per unit. Now putting the values of various variables in the formula, we get EOQ as:

$$\text{Interest } Q = \sqrt{\frac{2 \times \text{Annual requirement } \times \text{ Ordering Cost}}{\text{Carrying cost of per unit}}}$$

$$Q = \sqrt{\frac{2 \times 5000 \times 60}{15}}$$

Therefore Q = 200 units

It can be seen that calculating the EOQ is simple when the formula is understood. But we know that the EOQ is the quantity where the carrying cost and ordering cost put together is the minimum. This can be verified in the following table:

Order quantity (Q)	No of orders (A/Q)	Ordering cost (₹) (A/Q) x O	Carrying cost (₹) Q/2 x C	Total cost (₹)
50	100	6000	375	6375
100	50	3000	750	3750
200	**25**	**1500**	**1500**	**3000**
250	20	1200	1875	3075
500	10	600	3750	4350
1000	5	300	7500	7800

You can see from the table that at the ordering quantity of 200, the total cost of managing inventory is the minimum. Remember carrying cost has to be applied to average inventory which is taken as Q/2 at each level e.g. for the first case Q is 50, so carrying cost will be 50/2 x 15 i.e. ₹ 375

Illustration 20.

From the following particulars about an item of material of a manufacturing company, calculate the best quantity to order.

Ordering quantities (tonnes)	Price per tonne (₹)
Less than 250	6.00
250 but less than 800	5.90
800 but less than 2,000	5.80
2,000 but less than 4,000	5.70
Above 4,000	5.60

Annual requirement of the material is 4,000 tonnes. Stock holding costs are 20% p.a. and the delivery cost per order is ₹ 6.00.

Solution:

In this case, the exact price of the material is not available, as it varies with the quantities. The best quantity can be worked out as follows:

Order quantity (Q)	No of orders (A/Q)	Ordering cost (A/Q) x O (₹)	Price per unit (₹)	Carrying cost Q/2 x C (₹)	Ordering + Carrying cost (₹)	Basic Cost for 4000 unit (₹)	Total Cost (₹)
200	20	120	6.00	120	240	24,000	24,240
250	16	96	5.90	148	244	23,600	23,844
800	**5**	**30**	**5.80**	**464**	**494**	**23,200**	**23,694**
2,000	2	12	5.70	1,140	1,152	22,800	23,952
4,000	1	6	5.60	2,240	2,246	22,400	24,646

We have selected the ordering quantities at the end of the each range, except for the first choice 200 tonnes which is random. In this example we must take the cost of item also, as the prices for each level of quantity is different. Normally we ignore this because the prices at all levels are same.

Based on the above table, the best quantity to order is 800 tonnes at a time as the total cost is the minimum of ₹ 23,694/-.

Illustration 21.

Two components X and Y are used as follows:

Normal usage	50 units per week each
Minimum usage	25 units per week each
Maximum usage	75 units per week each
Reorder quantity	X – 400 units and Y – 600 units
Lead time	X – 4 to 6 weeks and Y – 2 to 4 weeks

Calculate reorder level, maximum level, minimum level and average stock level

Solution:

Reorder level = Maximum usage x Maximum lead time

For X = 75 x 6 = 450 units

For Y = 75 x 4 = 300 units

Maximum level = Reorder level + Reorder quantity – (Minimum usage * Minimum lead time)

For X = 450 + 400 – (25 × 4) = 750 units

For Y = 300 + 600 – (25 × 2) = 850 units

Minimum level = Reorder level – (Normal usage * Normal lead time)

For X = 450 – (50 × 5) = 200 units

For Y = 300 – (50 × 3) = 150 units

Average level = (Maximum level + Minimum level) / 2

For X = (750+200) / 2 = 475 units

For Y = (850+150) / 2 = 500 units

Illustration 22.

Rare engineering manufactures a product called as 'Unique'. The following data is collected for the year:

(a) Monthly demand for Unique – 1000 units
(b) Cost of placing order – ₹ 100
(c) Annual carrying cost – ₹ 15 per unit
(d) Normal usage per week – 50 units
(e) Minimum usage per week – 25 units
(f) Maximum usage per week – 75 units
(g) Reorder period is 4 to 6 weeks.

Calculate various stock levels.

Solution:

In this case the re-order quantity is not given. The same will be calculated as EOQ form the given information as:

Annual usage = 1000 × 12 = 12000 units

Ordering cost per unit = ₹ 100 and Carrying cost per unit = ₹ 15

$$EOQ = \sqrt{\frac{2 \times 12000 \times 100}{15}}$$

Thus EOQ = 400 units

Now the stock levels are calculated as follows:

Reorder level = Maximum usage x Maximum lead time

= 75 x 6 = 450 units

Maximum level = Reorder level + Reorder quantity – (Minimum usage x Minimum lead time)

= 450 + 400 – (25 x 4) = 750 units

Minimum level = Reorder level – (Normal usage x Normal lead time)

= 450 – (50 x 5) = 200 units

Average level = (Maximum level + Minimum level) / 2

= (750+200) / 2 = 475 units.

Illustration 23.

From the following information for 2 items A and B, calculate inventory ratios.

	Material A (₹)	Material B (₹)
Opening stock	10,000	9,000
Purchases during year	52,000	27,000
Closing stock	6,000	11,000

Assume 365 days in a year.

Solution:

Inventory consumed	=	Op stock + Purchase – Cl stock
For A	=	10,000 + 52,000 – 6,000 = 56,000 Units
For B	=	9,000 + 27,000 – 11,000 = 25,000 Units
Average stocks	=	(Op stock + Cl stock) / 2
For A	=	(10,000 + 6,000) = 8,000 Units

For B	=	(9,000 + 11,000) /2 = 10,000 Units
Inventory turns	=	Inventory consumed / Average inventory
For A	=	56,000 / 8,000 = 7 times
For B	=	25,000 / 10,000 =2.5 times

Item A has a higher conversion rate hence it is moving faster than item B.

Inventory turnover period = 365 / inventory turns

For A	=	365 / 7 = 52 days
For B	=	365 / 2.5 = 146 days

A is in stock for lesser number of days before getting consumed than B. Hence A is fast moving than B.

Illustration 24.

Precision Bearings have committed to supply 24,000 bearings to a motor manufacturer on an annual basis on a steady basis. The estimated cost of set up per run of bearing manufacturing was ₹ 324 and the holding cost was 10 paise per month per bearing. What would be the optimum run size for bearing manufacture? If the company chooses to have a run size of 6,000 bearings what would be its implications?

Solution:

As the supply of bearing is to be made on a steady basis, the most economical run size can be given by the EOQ model. The variables given for computation of the run size are:

A = 24,000 units

O = ₹ 324 (here ordering cost in usual EOQ formula will be replaced by set up cost)

C = ₹ 0.10 per month i.e. ₹ 1.2 per year.

Economic run size $=\sqrt{\dfrac{2\times 24000\times 324}{1.2}}$

Hence the answer is 3600 units is the run size where the Total Cost of managing inventory will be (Set up Cost + Carrying Cost) will be the least. Now, if we need to find out the implication of choosing 6000 bearings as the run size, we should compare the total cost for these two run sizes. This is shown below:

Run size	3,600 bearings	6,000 bearings
Number of runs (24,000/run size)	(24,000/3,600)=6.67	(24,000/6,000)=4
Set up costs ₹ 324 × (no of runs)	2,160	1296
Carrying cost @ ₹ 1.2 per bearing p.a.	(3,600/2)x1.2 = 2160	(6,000/2)x1.2 = 3,600
Total Cost	4,320	4,896

It is clear that Precision Bearings will have to spend ₹ 576 more if it chooses 6,000 bearing as the batch size.

Illustration 25.

M/s Kailash Pumps uses about 75,000 valves per year and the usage is fairly equally spread throughout the year. The valve costs ₹ 1.50 per unit and inventory carrying cost is 20% pa.

The cost to place an order and process delivery is ₹ 18. It takes 45 days to receive stocks from the date of order and minimum stock of 3,250 valves is desired. You are required to determine.

(a) Economical order quantity and the number of orders in a year.

(b) The reorder level

(c) The economic order quantity if the valve price changes to ₹ 4.50 each per piece.

Solution:

$$EOQ = \sqrt{\frac{2 \times 75000 \times 18}{20\% \; of \; ₹ 1.50}} = 3000 \text{ units}$$

Number of orders = 75,000/3,000 i.e. 25

(a) Reorder level: it will be the minimum desired level plus normal usage quantity. Normal usage can be assumed to be (75,000/12) i.e. 6,250 as the consumption is evenly spread over 12 months and normal lead time is given as 45 days i.e. 1.5 months.

= Minimum Stock + (Normal Usage × Normal Lead Time)

= 3,250 + (6,250 * 1.5)

= 12,625 pieces

(b) EOQ if the unit valve price is ₹ 4.50

$$EOQ = \sqrt{\frac{2 \times 75000 \times 18}{20\% \; of \; ₹ \; 4.50}} = 1732 \text{ units}$$

Illustration 26.

A company had 500 workers on its roll on 1st April 2012 and 600 on 30th June 2012. During the quarter, 5 workers left, 20 were discharged and 75 workers were recruited. Of these 10 workers were recruited as replacements for people leaving, while the rest were for expansion. Calculate the labour turnover rate under (a) Flux Method, (b) Replacement Method and (c) Separation Method

Solution:

The average number of people working = (500+600)/2 = 550

Labour Turnover Rate under Flux Method

$$\text{LT Rate} = \frac{\frac{1}{2} \text{ x (No. of separations + No. of accessions)}}{\text{Average manpower in the period}} \text{ x 100}$$

LT Rate = [½ (5+20+10)]/550 x 100

= 3.18%

Labour turnover rate under Replacement method

$$\text{LT Rate} = \frac{\text{No. of Replacement during a period}}{\text{Average manpower in the period}} \text{ x 100}$$

= (10/550)x100

= 1.82%

Labour turnover rate under Separation method

$$\text{LT Rate} = \frac{\text{No. of separations during a period}}{\text{Average manpower in the period}} \text{ x 100}$$

= 25/550×100 = 4.54%

Illustration 27.

The summary as per primary distribution is as follows:

Production departments A- ₹ 2,400, B- ₹ 2,100 & C- ₹ 1,500

Service departments X – ₹ 700, Y- ₹ 900

Expenses of service departments are distributed in the ratios of:

X dept. A- 20%, B- 40%, C- 30% and Y- 10%

Y dept A- 40%, B- 20%, C- 20% and X- 20%

Show the distribution of service costs among A, B and C under (i) Repeated Distribution Method and (ii) Simultaneous Equations Method.

Solution:

(i)

Particulars	Production departments (₹)			Service departments (₹)	
	A	B	C	X	Y
As per primary distribution	2,400	2,100	1,500	700	900
Service dept.					
X Service dept.	140	280	210	(700)	70
Y Service dept.	388	194	194	194	(970)
X Service dept.	38.8	77.6	58.2	(194)	19.4
Y Service dept.	7.76	3.88	3.88	3.88	(19.4)
X Service Dept.	0.776	1.552	1.164	(3.88)	0.388
Total	2,975.336	2,657.032	1,967.244	0	0.388

It can be noticed that the undistributed balance in service department (y) is very negligible and thus can be ignored for further distribution.

(ii)

In the above, service dept X gives 10% of its service to Y and receives 20% of Y's service.

Let 'x' be the total expenses of dept X (its own + share of Y) and

'y' be the total expenses of dept Y (its own + share of X)

This can be expressed as:

'x' = 700 + 20% of 'y' and

'y' = 900 + 10% of 'x'

i.e. $x = 700 + 0.2y$ and

$y = 900 + 0.1x$

Multiplying both equations by 10, we get

$10x = 7000 + 2y$ i.e. $10x - 2y = 7000$ and

$10y = 9000 + x$ i.e. $-x + 10y = 9000$

Now multiplying 2nd equation by 10, and then adding the two equations we get,

$98y = 97000$

Thus y = 990 and x = 898

Based on this we distribute the service department costs as below:

Particulars	Total (₹)	Production Departments (₹)		
		A	B	C
As per primary distribution				
Service dept X (90% of 898)	6,000	2,400	2,100	1,500
Service dept Y (80% of 990)	808	180	359	269
Total	792	396	198	198
	7,600	2,976	2,657	1,967

You can notice that the final answers under both methods are same. The simultaneous equation method is quick to apply and hence more in use.

Illustration 28.

Consider a factory operates on 8 hour day basis and time rate is ₹ 8 per hour. Standard production is fixed at 600 units per week of 40 hours. The bonus slabs based on efficiency levels are fixed as below:

Efficiency levels	Bonus %
66 2/3% to 75%	1%
76% to 80%	2%
81% - 85%	4%
86% - 95%	10%
96% to 100%	20%

Additional bonus of 1% is payable for each 1% improvement in efficiency above 100%.

Solution:

The following table shows earnings of different worker under this plan.

Worker	Production per week	Efficiency %	Bonus %	Bonus Amount (₹)	Total wages @ ₹ 320 + Bonus	Cost per unit
A	390	65%	-	-	320.00	0.82
B	400	67%	1%	3.20	323.20	0.81
C	460	77%	2%	6.40	326.40	0.71
D	500	83%	4%	12.80	332.80	0.67
E	550	92%	10%	32.00	352.00	0.64
F	580	97%	20%	64.00	384.00	0.66
G	600	100%	20%	64.00	384.00	0.64
H	620	103%	23%	73.60	393.60	0.63

It is clear from the above that as efficiency goes up workers get handsomely rewarded and the organisation also benefits from increased production. This can be evident from reduction in per unit labour cost as output goes up.

Illustration 29.

The standard departmental overhead rate is fixed at ₹15 per machine hour. Based on the following information, work out the activity level at which this rate has been fixed.

Activity level (hours)	Overhead Costs
6,000	₹1,20,000
8,000	₹1,44,000
10,000	₹1,68,000

Solution:

For segregating fixed and variable portion of overheads let us take the highest and lowest set of figures from given data as follows:

Activity level (hours)	Overhead Costs
6,000	₹1,20,000
10,000	₹1,68,000
4,000 (Difference in hours)	₹48,000(Difference in overhead costs)

This means for 4,000 additional hours ₹48,000 is the incremental overhead cost. This must be the variable portion @ 12 per hour. If we take the base of 6,000 hours, the fixed element is calculated as:

Total overheads at 6,000 level	₹1,20,000
Less: Variable overhead(6,000 x 12)	₹72,000
Fixed overhead	₹48,000

Now, the overhead rate is fixed at ₹15, out of which ₹12 is variable. So ₹3 must be the fixed element. Total fixed overheads are ₹48,000.

Illustration 30.

Consider the following data pertaining to the production of a company for a particular month :

Opening stock of raw material	₹ 11,570
Closing stock of raw material	₹ 10,380
Purchase of raw material during the month	₹ 1,28,450
Total manufacturing cost charged to product	₹ 3,39,165

Factory overheads are applied at the rate of 45% of direct labour cost.

What is the amount of factory overheads applied to production ?

Solution:

Raw material used	= Op. Stock + Purchases – Cl. Stock
	= ₹ 11,570 + ₹ 1,28,450 – ₹ 10,380 = ₹ 1,29,640
Manufacturing cost	= Raw material used + Direct labour + Factory overhead
₹ 3,39,165	= ₹ 1,29,640 + Direct labour + 45% of Direct labour
1.45 Direct labour	= ₹ 2,09,525
Direct labour	= ₹ 1,44,500
The amount of factory overhead	= 45% of ₹ 1,44,500 = ₹ 65,025

Illustration 31.

Calculate the normal and overtime wages payable to a workman from the following data:

Days	Hour worked
Monday	8
Tuesday	10
Wednesday	9

Thursday	11
Friday	9
Saturday	4

Normal working hours 8 per day. Normal rate ₹5 per hour. Overtime rate upto 9 hours in a day at single rate and over 9 hours in a day at double rate. Or upto 48 hours in a week at a single rate and over 48 hours at double rate whichever is more beneficial to the workman.

Solution:

Scheme I

Days	Hours worked	Wages Payable
Monday	8	(8 x ₹5)=₹40
Tuesday	10	(9 x ₹5)+(1 x ₹10)=₹55
Wednesday	9	(9 x₹5)=₹45
Thursday	11	(9 x ₹5)+(2 x₹10)=₹65
Friday	9	(9 x₹5)=₹45
Saturday	4	(4 x ₹5)=₹20
	51	₹270

Scheme II

Wages payable = (48 x ₹5) + (3 x ₹10) =₹270

Illustration 32.

Calculate the total wages earned by a workman for a working day of 8 hours under Halsey and Rowan plans:

Standard production per hour	20 units
Actual production of the day	200 units
Wage rate per hour	₹30

Solution:

(i) Standard time = 200/20 =10 hours.

(ii) Total wages of workman in Halsey scheme:

Total wages = (Actual time x wages rate) + 50% (Standard Time – Actual Time) x wage rate

$$= 8 \times ₹30 + \frac{50}{100}(10 - 8) \times ₹30$$
$$= ₹\ 270$$

(iii) Total wages in Rowan plan:

$$\text{Total wages} = (\text{Actual time x wage rate}) + \left[\frac{\text{Standard time - Actual time}}{\text{Standard time}}\right] \text{x Actual Time x wage rate}$$

$$= 8 \times ₹30 + \left[\frac{10-8}{10}\right] \times 8 \times ₹30$$

$$= ₹\ 288$$

Illustration 33.

2 hours allowed to a worker to produce 5 units and wages has been paid @ ₹ 25 per hour. In a 48 hours week the worker produced 170 units.

You are required to calculate the total earnings and effective hourly rate of earnings of the worker under the following incentive wage systems:

(i) Halsey 50 per cent system

(ii) Rowan system

(iii) Emerson's efficiency system

(iv) Barth system

Solution:

Standard output for a week $= \frac{48}{2} \times 5 = 120$ units

Actual output of a week = 170 units

Time allowed for actual output $= \frac{170 \times 2}{5} = 68$ hours

Time saved = 68 – 48 = 20 hours

(i) Halsey 50% System:

Total Earnings = (Hrs. worked x Hourly rate) + Time saved x 50% x Hourly rate

$$= (48 \times ₹\,25) + \left[\frac{20 \times 50 \times ₹25}{100}\right]$$

= ₹ 1,450

Effective hourly rate of earnings:

₹ 1,450 ÷ 48 = ₹ 30.21 per hour

(ii) Rowan System:

$$\text{Total Earnings} = (\text{Hrs. worked} \times \text{Hourly rate}) + \frac{\text{Time Taken}}{\text{Time Allowed}} \times \text{Time saved} \times \text{Hourly rate}$$

$$= (48 \times 25) + \left[\frac{48}{68} \times 20 \times ₹25\right]$$

= ₹ 1,552.94

$$\text{Effective hourly rate} = \frac{₹1,552.94}{48}$$

= ₹ 32.35 per hour

(iii) Emerson's Efficiency System:

Efficiency Percentage = (Actual Output/Standard Output) x 100

= (170/120) x 100

= 141.67%

Total Earnings:

Time wages = 48 x ₹ 25		₹ 1,200
Bonus {100% @ (20% + 41.67%) or 61.67% of 1,200}		₹ 740.04
Total Earnings		₹ 1,940.04

Effective hourly rate $= \dfrac{₹1,940.04}{48}$

= ₹ 40.42 per hour

(iv) Barth System:

Total Earnings = Hourly rate x $\sqrt{\text{Standard hours x Actual hours}}$

= ₹ 25 x $\sqrt{68 \times 48}$

Effective hourly rate of earnings = $\dfrac{₹1,428.28}{48}$ = ₹ 29.76 per hour.

Illustration 34.

Calculate the machine-hour rate to recover the overhead expenses indicted below:

	Per hour	Per annum
Electric Power	75 P	
Steam	10 P	
Water	2 P	
Repairs		₹ 530
Rent		₹ 270
Running hours		2,000
Original cost	₹ 12,500	
Book value	₹ 2,870	
Present replacement value	₹ 11,500	
Depreciation (on original cost)		7.5% per annum

Solution:

Computation of Machine Hour Rate

Fixed Charges:	
- Repairs	530
- Rent	270
- Depreciation (12,500 x 7.5%)	937.5
Total Fixed Charges	1,737.5
Effective hours.	2,000
Fixed Charges per hour.	0.87
(+) Variable charges per hour	
- Steam	0.10
- Water	0.02
- Power	0.75
Machine Hour Rate	1.74

Illustration 35.

From the following details of stores receipts and issues of material, prepare stores ledger for November,2014, using weighted average method of valuing issues.

Nov 1	Opening stock 2,000 units @ ₹5 each
Nov 3	Issued 1,500 units
Nov 4	Received 4,500 units @ ₹6 each
Nov 8	Issued 1,600 units
Nov 9	Returned back 100 units by production to stores from lot issued in Nov 3rd.
Nov 11	Returned to supplier 200 units received in lot on Nov 4th.

Solution:

Stores ledger for the month of November, 2014

Date		Receipts			Issues			Balance	
	Qty	Rate(₹)	Value(₹)	Qty	Rate(₹)	Value(₹)	Qty	Rate(₹)	Value(₹)
Nov 1							2,000	5	10,000
Nov 3				1,500	5	7,500	500	5	2,500
Nov 4	4,500	6	27,000				5,000	5.90	29,500
Nov 8				1,600	5.90	9,440	3,400	5.90	20,060
Nov 9	100	5.00	500				3,500	5.8743	20,560
Nov 11				200	6.00	1,200	3,300	5.8667	19360

Illustration 36.

Calculate the machine hours. The machine is operated for three shifts of 7 hours each for 300 working days in a year of which 300 hours will be used for normal repairs.

Solution:

Computation of machine hours

No. of days operated in the year(A)	300
Shifts per day(B)	3
No. of hours per shift(C)	7
Total available hours (A X B X C)	6,300
Less: Normal repair hours	300
Net machine hours	6,000

Study Note - 7

PREPARATION OF COST STATEMENTS

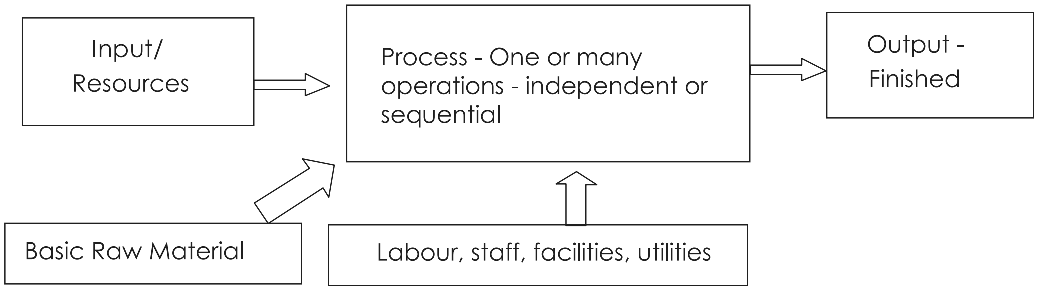
This Study Note includes

7.1 COST STATEMENTS - INTRODUCTION

Measurement of costs is the first step in the process of control simply because you cannot control unless you measure. Measurement of cost would mean different when applied to different industries.

The cost has to be measured with respect to the cost centres first and then at a broader level with respect to the cost unit. The journey towards the aim of determining cost of a product or service may take various routes. But the logic is same i.e. collect all relevant costs in the process of converting raw material into finished product and accumulate the total costs.

To put in simple words, to generate any product or service, resources are needed called as inputs. Theses inputs are used in a process of conversion. The end result is the output which could either be a product or a service. The resources consume costs. While determining total cost of resources, the costs of all resources used (directly or indirectly) in the process are accumulated. This requires establishing the relationship between the resource and the product or service.



The process of accumulating costs will differ according to the nature of business and the activities carried out. The common way to accumulate costs is to prepare cost sheets.

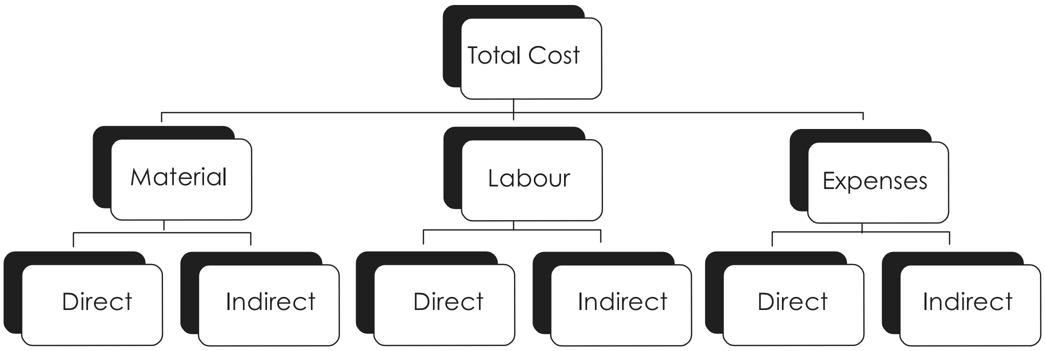
7.2 COST ACCUMULATION

The logic of cost accumulation is to track costs in the same sequence as the resources get used. See the following flow of activities:

- Raw material & other material are purchased and stored
- The material is used up in process of conversion
- People or machines work upon the material while in the process
- The process results into some products that are finished

The cost data needs to be collected along this whole chain that ends when a final product is produced. The cost accumulation is done based on the source documents which are used in booking the costs. Depending upon the type of business, a cost unit is determined for which costs must be accumulated.

For the purpose of convenience, a cost tree in the following format explains the composition of costs:



All the direct element of cost together make Prime Cost. Sequentially, Production Overheads are added to get Factory Cost or Works Cost. Then Administration Overheads are added to the Factory Cost to get Cost of Production. Once the product is ready for sale, the Selling and Distribution Overheads are added to get Cost of Sales or Cost of Goods Sold. When this is deducted from Sales Revenue we get Profit or Loss.

Process of accumulation of cost comprises of:

- Identification of costs to the cost centres or departments.
- Apportionment of service costs to production costs.
- Absorption of costs into cost units.

7.3 COST COLLECTION

Cost collection is the process of booking costs against a particular cost account code under a particular cost centre or directly under a cost unit, as the case may be. Source documents are used to generate the record of the costs incurred or to be incurred. These source documents are properly authorised and numbered. They act as the primary source of entry.

Costs are collected under the following heads:

Material Costs: These costs are identified with cost unit with the help of 'Stores Issue Summary'. In case of Job Costing, there will be job-wise summary prepared on the basis of 'Material Issue Notes'. In case of Contracts, the summary will be made contract-wise. At times instead of procuring & storing material, it may be procured and directly used on contract site. 'Purchase Invoice' may be the basis to capture such Direct Material Costs. In case of Process Industry, the material is issued to different processes. Here, the costs input to a process may be collected based on the cost of materials processed in the previous process. A process- wise Summary of Material Issues is maintained. Some material may get added to a process but may not become part of final product. The cost of such material is apportioned on the output of that process. The Indirect Material Costs may be gathered on the basis of Consumable Issues, Scrap Reports, Standard Parts List etc. Care should be taken to account for material losses. Normal Material Losses are to be apportioned to the good units produced, whereas, Abnormal Losses should be excluded from computation of cost of good units and should be directly taken to P & L Account.

Labour Cost: Salaries and Wages Summary prepared after the monthly payroll run is the main basis for labour cost collection. The summary shows department-wise break up, so that the Direct Labour Cost of production department is separately known and that for the cost of other indirect departments is also available to be charged as overheads. In case of contracting business, labour force is usually dedicated to various sites. The cost of labour used on different contracts can be found based on wages sheet maintained for each contract site. In addition, the Idle Time Reports, Overtime Reports are used for booking of the costs of idle time & overtime. In case labourers are common to various Jobs or Contracts or Processes, an estimate of the time that they spend on each of them is made and the costs are allocated accordingly.

Expenses: Accounting entries in Cash Book or Journal Proper help to collect the expenses. Direct expenses which are Job or Contract or Process specific may be collected on the basis of vouchers. The indirect expenses are collected and then apportioned in a summarised form using Apportionment Sheets.

Collection of Budgeted Costs: The cost calculation for the selected cost unit could be either of Actual Cost or Budgeted Cost. While Actual Costs are collected on the basis of documents explained above, the Budgeted Costs are computed using the standard Bill of Material, and predetermined overhead rates. For budgeted direct material, a Bill of Material is prepared for each product (including sub-assemblies). This is a quantitative estimate. Based on the estimates a budgeted material price is considered to value the material cost. Estimated labour hours are costed using estimated labour hour rates. Pre-determined overheads are also computed considering the base selected for absorption. Thus an estimate of total cost with full composition may be made.

Cost Accountant & Cost Data Collection: The Cost Accountant must play a pivotal role in ensuring that the process of cost data collection is very strong. The cost analysis and reporting will not be useful for managerial decision-making if the data collection process is wrong. Presence of a strong and robust Costing System is needed to ensure comprehensive data collection process. The costs account may carry out periodical checks to evaluate the system and also may do the internal audit. He can use all his expertise in the process of establishing cost estimates which will help in decision making.

Cost data collected must be reported in proper format to make it more informative and meaningful. As can be understood, the report must serve the purpose for which it was sought. A complete Cost Sheet may not be always necessary. The Production Manager may require the Cost of Production only. The Cost Report should be able to give this figure separately broken up into all its elements. The sales and marketing cost may be given for each channel of distribution, customers, regions etc. in addition to the product-wise break up.

7.4 COST SHEET FORMATS & PREPARATION

Meaning: A Cost Sheet is a statement which shows the break-up of costs, it is a document which provides for the assembly of the detailed cost of a cost centre or a cost unit.

Uses of the Cost Sheet

(a) Presentation of Cost information.

(b) Determination of Selling Price.

(c) Ascertainment of profitability.

(d) Product-wise and Location –wise Cost Analysis.

(e) Inter-firm and Intra-firm Cost comparison.

(f) Preparation of Cost Estimates for submitting tenders / quotations.

(g) Preparation of Budgets.

(h) Disclosure of operational efficiency for Cost Control.

Broadly there can be three elements of costs:

(a) Material:

This is the cost of commodities and materials used by the organization. It can be direct or indirect. Direct material indicates that material which can be identified with the individual cost centre and which becomes an integral part of the finished goods.

Indirect Material indicates that material which cannot be identified with the individual cost centre. This material assists the manufacturing process and does not become an integral part of finished goods.

(b) Labour:

This is the cost of remuneration paid to the employees of the organization. It can be direct or indirect.

Direct Labour Cost indicates that labour cost which can be identified with the individual cost centre and is incurred for those employees who are engaged in the manufacturing process.

Indirect Labour Cost indicates that labour cost which cannot be identified with the individual cost centre and is incurred for those employees who are not engaged in the manufacturing process.

(c) Expenses:

This is the cost of services provided to the organization (and the national cost of assets owned). It can be direct or indirect.

Direct Expenses are those expenses, which can be identified with the individual cost centres. Indirect Expenses are those expenses, which cannot be identified with the individual cost centres.

For the proper interpretation and presentation of cost, the term overheads may be further classified as below:

(a) Factory Overheads (Also termed as production/work/manufacturing overheads.)

(b) Office and Administration Overheads.

(c) Selling and Distribution Overheads.

Factory Overheads:

These overhead consist of all overhead costs incurred from the state of procurement of material till the stage of production of finished goods.

Office and Administration Overheads:

These overhead consist of all overhead costs incurred for the overall administration of the organization.

Selling and Distribution Overheads:

These overhead consist of all overhead costs incurred from the stage of final manufacturing of finished goods till the stage of sale of goods in the market and collection of dues from the customers.

Specimen Cost Sheet

Period from………….. **To…………** **Cost Units …………**		
Cost items	**Amount (₹)**	**Amount (₹)**
Direct Material		
Opening Stock	xxxxxx	
Add: Purchases	xxxxxx	
Add: Incidental charges	xxxxxx	
Less: Closing Stock	xxxxxx	xxxxxx
Direct Labour		xxxxxx
Direct Expenses		xxxxxx
PRIME COST		**xxxxxx**
Add: Production Overheads	xxxxxx	
Add: Opening Work in Process	xxxxxx	
Less: Closing Work in Process	xxxxxx	xxxxxx
FACTORY COST OR WORKS COST		**xxxxxx**
Add: Administrative Overheads		xxxxxx
COST OF GOODS MANUFACTURED		**xxxxxx**
Add: Opening Finished goods stock	xxxxxx	
Less: Closing Finished goods stock	xxxxxx	xxxxxx
COST OF FINISHED GOODS SOLD		**xxxxxx**
Add: Selling & Distribution Overheads		xxxxxxx
COST OF GOODS SOLD		**xxxxxx**

Important Components of Cost Sheet

1. Cost Sheet has reference to the Job or Contract or a Batch of Production or a Service undertaken to be rendered. If the completion of the job at hand relates to more than one accounting period, it is better that separate columns are provided to mention figures for those period. The Job or Batch reference should also be mentioned on the header.
2. If there is an estimate made for the costs, a separate column must be provided for estimated costs against which the actual costs should be plotted to get ready comparison. This will make Cost Sheets more user-friendly and meaningful.
3. In certain cases, material may not form any significant portion of the Total Cost and as such may be treated as an overhead item. In such cases, the Prime Cost will mainly constitute as labour and other expenses.
4. Treatment of raw material stocks should be carefully understood. As the costs are to be linked to the units produced, the material consumption, completion of earlier period's semi- finished goods and the finished goods sold needs to be properly computed. It is computed as followings:-

Raw Material Consumed: Opening Stock + Purchases – Closing Stock

It also should include all charges incidental to purchase of goods like carriage, insurance, customs duty etc which is directly associated with the incoming material.

We know that the stocks are always valued at cost or market price whichever is less. This norm has to be applied to the rates of all the items of material in stock, and then the total valuation of stock is done.

The normal losses on account of material shortages must be included in the cost of raw material consumed. Care should be taken to remove the abnormal losses there from.

5. The cost of WIP stocks is adjusted specifically after adding Factory Overheads. Why adjusted? And why at that stage only? Please note that Cost Sheet is prepared for a period of time for a cost unit. At the beginning of that period, if the job has been carried forward from the previous period, there may be some partly finished work that is carried forward. At the same time there may be partly finished production at the end of current period. These stocks must be adjusted to reflect the cost consumed during the current period.

6. Similarly, the adjustment for the opening and closing stocks of finished goods should be done. This has to be done after the stage of Cost of Production.

7. One could have separate columns for Total Costs and per unit costs side by side. This will help to have a quick glance at the per unit figures.

8. Interest and Finance charges to be included in Cost of Sales though not in Cost of Production. Interest and Finance Charges are element of Cost and such Costs are also assigned to products before arriving at margin by products.

Estimated Cost Sheet

Sometimes, a cost sheet is prepared for a future period on the basis of an estimated information. It is simply to know the price which will be quoted for goods that are produced and sold. However, the following points must carefully be considered before preparing an estimated cost sheet.

(a) The cost of the previous period should be taken as base.

(b) Changes, if any, in price of raw materials, labour and chargeable inputs i.e., direct expenses, should be computed on the basis of previous years' level.

(c) Similarly, the rate of recovery of overhead should be computed on the basis of previous years' level.

(d) If there is any change in the above rates, the same should be taken into consideration.

(e) The profit should be estimated on the basis of percentage of total cost or total sales or any other suitable basis.

(f) With the amount of estimated total cost, estimated profit should be added to find out the estimated selling price or the quoted price of the product.

Illustration 1.

From the following information, find out purchases.

Raw material consumed = ₹26,500.

Closing Stock = ₹4,500

Opening Stock = ₹3,000

Solution:

We Know, Raw Material Consumed = Opening Stock + Purchases – Closing Stock.

Purchases = Raw Material Consumed + Closing Stock – Opening Stock

= ₹ (26,500 + 4,500 – 3,000)

= ₹28,000.

Illustration 2.

Prime Cost = ₹33,500. Depreciation = ₹1,500. Factory rent is 200% of Depreciation.

Find out the Factory Cost.

Solution:

Particulars	₹
Prime Cost	33,500
Add: Factory Overheads:	
Depreciation	1,500
Factory Rent (₹1,500 x 200%)	3,000
Factory Cost	38,000

Illustration 3.

Cost of Sales = ₹37,416. Advertisement Expenses = ₹600. Discount on sales = 50% of Advertisement Expenses. Find Cost of Goods Sold.

Solution:

We Know, Cost of Goods Sold + Selling and Distribution Overheads = Cost of Sales.

Both Advertisement Expenses and Discount on sales together constitutes Selling and Distribution Overhead

Particulars	₹
Cost of Sales	37,416
Less: Selling and Distribution Overheads	
Advertisement Expenses	600
Discount on sales(50% of ₹600)	300
Cost of Goods Sold	36,516

Illustration 4.

Factory Cost is ₹3,95,000. Find Office and Administration overheads cost which is 7.315% of factory cost.

Solution:

Office and Administration Overheads = 7.315% of Factory Cost = 7.315% of ₹3,95,000 = ₹28894.25.

Illustration 5.

Gross Factory Cost = ₹58,000. Net Factory Cost = ₹54,000.Opening stock of work-in- progress is ₹8,000. Find closing stock of work-in-progress.

Solution:

Net Factory Cost = Gross Factory Cost + Opening Stock in WIP – Closing Stock in WIP

₹54,000 = ₹58,000 + ₹8,000 – Closing Stock in WIP

Closing Stock in WIP = ₹66,000 - ₹54,000 = ₹12,000

Illustration 6.

Prime Cost is ₹41,000. Direct labour cost consists of skilled labour ₹6,000 and unskilled labour ₹2,000. Variable works overhead is 100% of direct wages and fixed works overhead is 60% of direct wages. Sale of scrap is ₹1,800. Find works cost.

Solution:

Particulars	₹
Prime Cost	41,000
Works Overhead:	
Add: Variable 100% direct wages	8,000
Add: Fixed 60% direct wages	4,800
Less: Sale of scrap	(1,800)
Works Cost	52,000

Illustration 7.

From the information, prepare a statement showing expenses which you would disregard in estimating costs.

Rent, rates and insurance of office ₹2500, Bad Debt ₹200, Discount Allowed ₹300, Bank Charges ₹100 and Donations ₹150.

Solution:

Expenses excluded from estimating cost	₹
Donations	150
Discount Allowed	300
Total	450

Illustration 8.

Calculate the amount of direct material if:

Prime cost = ₹50,000. Direct labour = 70% of prime cost.

Solution:

Prime Cost = ₹50,000.

Direct Labour = 70% of prime cost = 70% of ₹50,000 = ₹35,000.

Direct Material = ₹ (50,000 – 35,000) = ₹15,000.

Illustration 9.

Direct materials cost is ₹ 80,000. Direct labour cost is ₹ 60,000. Factory overhead is ₹ 90,000. Beginning goods in process were ₹ 15,000. The cost of goods manufactured is ₹ 245,000. What is the cost assigned to the ending goods in process?

Solution:

Particulars	₹
Direct Material	80,000
Direct Labour	60,000
Prime Cost	1,40,000
Add: Factory Overhead	90,000
Add: Opening WIP	15,000
Less: Closing WIP	-
Cost of goods manufactured (given)	2,45,000

As cost of goods manufactured is given as ₹2,45,000 so there will be no closing goods in process.

Illustration 10.

Given data that:

Finished goods Opening Inventory	₹ 30,000
Finished goods Closing Inventory	₹ 50,000
Cost of goods sold	₹ 1,90,000

What will be the value of Cost of Production?

Solution:

We Know, Cost of Goods Sold = Cost of Production + Opening stock of finished goods – Closing stock of finished goods.

Particulars	₹
Cost of Goods Sold	1,90,000
Add: Closing Stock of finished goods	50,000
Less: Opening stock of finished goods	(30,000)
Cost of Production	2,10,000

Study Note - 8

FUNDAMENTALS OF MANAGEMENT ACCOUNTING

This Study Note includes

8.1 Marginal Costing-Introduction
8.2 Concept of Contribution, P/V Ratio and Break even Point
8.3 Concept of Margin of Safety (MOS)
8.4 Cost - Volume - Profit Relationship (CVP Analysis)
8.5 Application of Marginal Costing for Decision Making

8.1 MARGINAL COSTING - INTRODUCTION

The **CIMA** terminology defines marginal costs as 'the amount at any given level of output by which the aggregate costs change due to change in the volume of activity by one unit'

Here, the change in the level of output would mean either increase or decrease by 1 unit.

It can be observed that when decisions about the volume of activity are to be made the manager must understand the impact of such decision on the costs. He would rather concentrate on the variable costs and try to control them, as none of his decisions would influence the fixed costs.

Now let us see the definition of marginal costing.

Marginal costing is defined as 'the ascertainment, by differentiating between fixed and variable costs, of marginal costs and of the effect of changes in the volume of output.'

It comprises of the asecrtainment of marginal cost for the purpose of understanding the effect of changes in the level of output. This technique advocates charging of vairable costs to cost units and fixed costs for the period to the profit and loss account.

If we compare the presentation of the cost statement under the traditional absorption costing and marginal costing it will be as follows:

Absorption Costing	Marginal Costing
Prime cost = (Direct material + Direct labour + Direct expenses)	
Factory cost = Prime cost + Absorbed factory overheads	
Cost of Production = Factory cost	Variable cost = Prime cost + Variable portion of production, admininstration and S & D overheads
+ Administration overheads	Fixed portion of production, administration and S & D overheads charged to P & L
Cost of sales = Cost of production + S & D overheads	

The fixed costs are delinked from the per unit costs and treated as total directly against the profits for the period. So the profit under both techniques is computed diffferently.

Two very crucial aspect about the marginal costing technique are:

(a) the stocks are valued at marginal costs i.e. no loading of fixed overheads on the stocks

(b) There is no over or under absorption of overheads

The income statements under both absorption costing and marginal costing should be noted carefully. The profit figure shown under absorption costing and marginal costing are different because of the above named two reasons. First, it is clear that the stocks under margianl costing are valued at lesser cost as only variable costs are loaded on unsold units, and there is no loading of fixed overheads.

Another reason is the over or under absorption of overheads under absorption costing.

Absorption Costing

Sales		xxxx
Less :		
Direct Material	xxxx	
Direct Labour	xxxx	
Direct Expenses	xxxx	
Prime Cost	xxxx	
Add : Factory Overheads	xxxx	
Factory Cost	xxxx	
Add : Administration Overheads	xxxx	
Cost of Production	xxxx	
Add : S & D Overheads	xxxx	
Cost of Sales		xxxx
Profit/(Loss)		xxxx

Marginal Costing

Sales		xxxx
Less :		
Direct Material	xxxx	
Direct Labour	xxxx	
Direct Expenses	xxxx	
Prime Cost	xxxx	
Add : Variable Factory Overheads	xxxx	
Add : Variable Administration Overheads	xxxx	
Add : Variable S & D Overheads	xxxx	
Total Variable Cost		xxxx
Contribution (Sales - Variable Cost)		xxxx
Less : Fixed Factory Overheads	xxxx	
Fixed Administration Overheads	xxxx	
Fixed S & D Overheads	xxxx	(xxxx)
Profit/(Loss)		xxxx

8.2 CONCEPT OF CONTRIBUTION, P/V RATIO AND BREAK EVEN POINT

Contributions:

Contributions is the excess of sales over variable cost. Naturally, total contributions is determined by multiplying the per unit contribution to the volume of sales. We know that the amount of contribution to be contributed at first towards fixed overheads and if fixed overheads are recovered then next towards profit. If contributions is found to be higher, there will be profits as fixed overhead remains constant. If any firm wants to increase its contribution it must have to increase the volume of sales or to reduce marginal cost or to increase per unit selling price.

Contributions is marginally represented as

S-V=C or, C=F+P where C = Contribution

S = Total Sales

V = Total Variable cost

F = Total Fixed Cost

P = Total Profit

From the above, we can say

S - V = C = F+P

Or, C - F =P

The very basic idea of profit can be expressed as

Profit = Sales – Cost

Normally the assupmtion here is that the cost per unit can be easily computed. But we know the difficulty in apportioning costs that are not related directly to every unit of production. Therefore, under Marginal Costing Costs are divided into Variable Costs and Fixed Costs. With this distinction the above equation can be re-written as

Profit = Sales – (Variable Cost + Fixed Cost)

Because the marginal costing technique believes in differentiating costs into fixed and variable, we may write the above equation as

Profit = Sales – Variable Cost - Fixed Cost i.e. Profit + Fixed Cost = Sales – Variable Costs

This is called as the basic equation of marginal costing.

Profit Volume Ratio (P/V Ratio)

Profit Volume Ratio is the ratio of Contributions to sales i.e.,

P/V Ratio = $\frac{C}{S} = \frac{S-V}{S}$ or $\frac{F+P}{S}$ Where, C = Contribution

S = Sales

F = Fixed Cost

P = Profit

V = Variable cost

This ratio is expressed in turn of percentage. It is also known as contribution margin ratio. It express the relationship between sales and contribution.

An important feature of the P/V ratio is that it remains constant at all levels of output.

P/V ratio may be expressed as

$$\text{P/V ratio} = \frac{\text{Sales} - \text{Variable Cost}}{\text{Sales}} \times 100 = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

$$\text{P/V ratio} = \frac{\text{Change in Profits}}{\text{Change in Sales}} \times 100$$

Limitations of P/V Ratio:

(a) It pre-supposes a linear relationship between volumes and costs. In actual terms it is hardly the case.

(b) Segregation of fixed and variable portion of the costs is a very difficult task.

(c) It helps take decisions only in the short run, as fixed costs are subject to changes beyond the relevant range.

Break-Even Point:

Break-Even Point reveals the quantity or volume of sales at which no profit or no loss is made i.e., total cost is equal to total selling price or where contribution is equal to fixed cost.

If the production is increased beyond this level, there will be profit and vice-versa.

Hence for any manager knowing this threshhold level of sales is very crucial in making decisions. The break even point may be expressed in two ways:

(a) In terms of quantity

$$\text{BEP (in units)} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

This shows that the total fixed costs are recovered in so many units of output which has a certain contribution per unit.

(b) In terms of amount

$$\text{BEP (in amount)} = \frac{\text{Fixed Cost}}{\text{PV Ratio}}$$

The technique of marginal costing is based on the three fundamental concepts of Contribution, PV ratio and Break Even Point. It helps a Cost Accountant to measure the Cost-Volume- Profit relationship. In decision-making this relationship is very important as it helps management concentrate only on the things that vary or change and ignore things that are not going to affect the decision.

8.3 CONCEPT OF MARGIN OF SAFETY (MOS)

Margin of safety indicates the gap between the sales level (which is above breakeven) and the BEP level. A business will always like to have a very higher level of margin of safety. Higher margin of safety will always indicate the soundness of the business. It will mean that the breakeven point is much below the actual sales level, so that a small drop in the sales may not result into an immediate loss. Actually, a high PV ratio and a high margin of safety are indications of a very efficiently run business.

Mathematically,

Margin of Safety = Tota Sales – BEP sales

$$\text{Margin of safety} = \text{Sales} - \frac{\text{Fixed Cost}}{\text{P/V Ratio}}$$

$$\text{Margin of safety} = \frac{(\text{Sales x P/V Ratio})\text{- Fixed Cost}}{\text{P/V Ratio}}$$

Also

$$\text{Margin of safety} = \frac{\text{Contribution- Fixed Cost}}{\text{P/V Ratio}} = \frac{\text{Profit}}{\text{P/V Ratio}}$$

The expressions of sales, variable cost, fixed costs, contribution, profit, PV ratio, BEP level, Margin of safety are inter-related and the ability of a cost accountant to use these relationships effectively to aid management in decision making is always an asset. Please observe the logical deduction of the mathematical formulae of these relationships.

Use of P/V ratio, BEP and MOS

The concepts of PV ratio. Breakeven and margin of safety are very useful in decision making. It can help management in the following situations:

1) It helps in revising the selling prices. If the PV ratio is lower, it can be improved either by improving the selling price or reducing the variable cost by efficient use of men, material and machines.
2) If the company is having more than one product having different PV ratios, the overall PV ratio can be improved by concentrating on the product with a higher PV ratio.
3) The BEP level is very useful in early stages of business. A newly started business will start making profits after the initial high fixed costs are recovered. This will happen only when the volumes start increasing. The knowledge of BEP level will help management to take steps to take volumes beyond that level to earn profit.
4) The PV ratio helps management in estimating profits at various volumes of business without indulging into long drawn calculations. This happens because PV ratio is constant at same prices and different volumes and fixed cost are same.
5) The margin of safety helps management to fight complex business situations. If the business is facing recession and higher volumes can be achieved only on reduction in selling prices, then the knowledge of margin of safety will enable the decision maker to decide the best possible price reduction.

8.4 COST- VOLUME-PROFIT RELATIONSHIP (CVP ANALYSIS)

The main aim of marginal costing is to study the impact on sales and profits of the changes in the volume of activity. It will not only explain this relationship in retrospect, but also help management to simulate the cause and effect relationship for the purpose of future forecast. Volume of sales is subject to fluctuations, which in turn leads to changes in profits. Profit is the result of interplay between costs, volume and selling prices. The manager's effectiveness lies in his capability to predict the future profits. He can do it effectively by understanding the dynamic interplay between the costs, volumes and profits. When we talk about future, a manager may be confronted with many decision situations, a few of them are mentioned below:

(a) How much should be the sales volume for a desired level of profits?

(b) How will the changes in selling price affect the future profits?

(c) What impact will the changes in cost have on profits?

(d) What should be the optimum sales mix?

The CVP analysis is useful for the management in following decision situations

1. Profit planning & selection of profit mix
2. Resource utilisation for getting the best result. We know resources are limited and can be put to multiple uses. CVP analysis helps management to decide how to use the limited resources to maximise the profits.
3. It presents information to enable performance evaluation of different product lines or channels of distribution.
4. It helps to decide whether additional business is to be taken or not at prices lower than usual
5. Management can decide whether to produce a component in house or buy it from outside
6. It helps to decide whether or not to close a particular line of business.

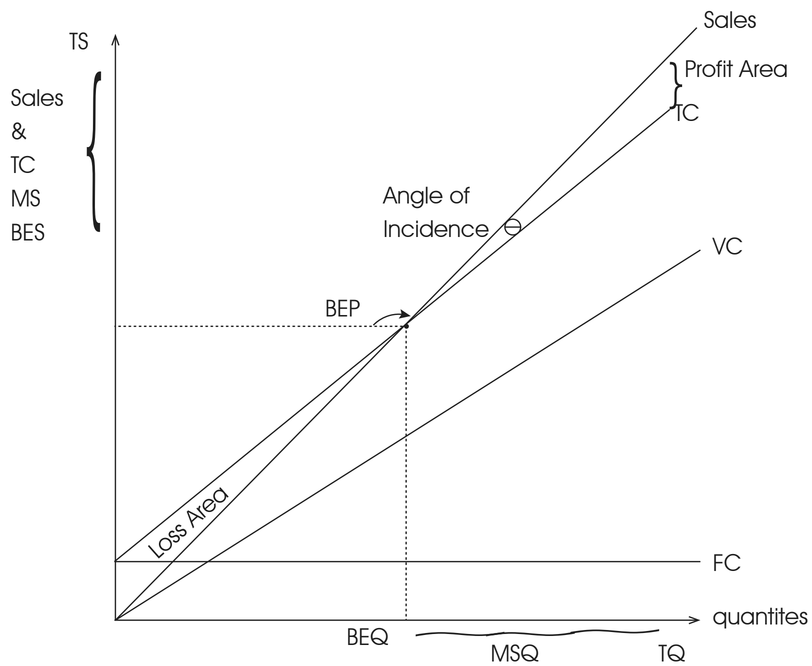
The CVP relationship can be expressed in two ways:

(a) Mathematical formulae – Please refer to the various formulae discussed in the earlier sections.

(b) Graphical methods – Graphical presentations can be done through the following charts

- Break-Even Chart
- Profit-Volume Charts

Break-Even Chart : The BEP chart presents the basic relationship between cost, volume and profit. They show the break-even point, and also the profit or loss at different volumes of activity. The volume of output is shown on the x-axis and the costs & revenues are shown on the y-axis. The BEP chart shows the lines for sales, total costs and the fixed costs. The point, at which the Total sales and Total cost lines intersect, is the BEP level.



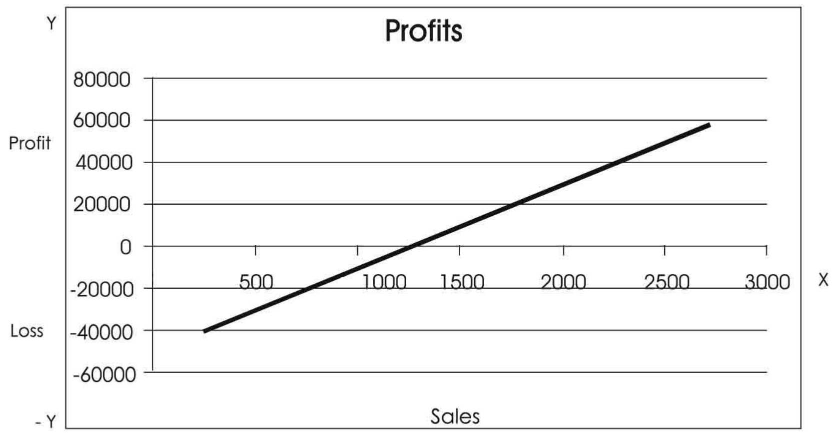
As you can see the breakeven point is shown at the point of intersection of the TS and TC lines. See that for the volumes below this level, the TS line is below the TC line indicating the situation of loss.

The gap between the TS and TC line shows the profit. The angle formed by the TS and TC line is called as angle of Incidence. Wider this angle, larger will be the profits.

The main limitation of this chart is that it only reflects the break even sales level. Looking at the graph can not readily tell the figure of profit at various volumes. From this angle, this is a static chart and therefore has limited usage.

Profit-Volume Chart: This graph shows the profits at various volumes of business. Again, the x-axis represents volumes and profits are shown on the y-axis. The PV graph overcomes the difficulty of the BEP chart in that it clearly shows the profits at various volumes of output and the trend line can be established from the chart quite easily. This chart has a better predictability than the BEP chart. The point at which the profit line touches the x-axis is the break even volume. A figure below x-axis indicates loss, whereas the figures above the x-axis denote profits.

Again taking the figures from the table shown in the PV chart is shown as below. You can see the profit line intersects the x-axis at the volume level of 1250 which is the break even sales level. The angle formed by the profit line and x-axis represents the angle of incidence.



8.5 APPLICATION OF MARGINAL COSTING FOR DECISION MAKING

Decision making is a very important factor in every firm. Decision making means choosing or selecting a course of action from a given set of alternatives. Application of marginal costing plays a very significant role in this regard particularly for managerial decisions. These are explained below:

(a) Fixation of selling price;

(b) Make or buy decision;

(c) Shut-Down or Continue decision;

(d) Selection of most profitable mix;

(e) Problems of Limiting factor;

(f) Accepting additional orders and Exploring foreign market;

(g) Diversification of products; and

(h) Alternative courses of action;

These are explained below:

(A) Fixation of Selling Price

The techniques of marginal costing is very useful in fixation of selling prices of product, particularly in case of a multi-product company as the fixed overhead, under the circumstances, is not an one. We should always remember while fixation of a selling price that selling price must cover the total cost plus a certain amount of profit. During trade depression or acute competition or exploring foreign markets, pricing of the product may be fixed at below the total cost for some time. The price should be fixed in such a manner that the same will cover the managerial cost plus a certain amount of fixed overhead. After sometime when condition of the market improves, in that case, price should be fixed at that one which must cover a certain amount of margin although margin depends on many factors, say, nature of product, demand and supply, degree of depressions etc. If selling price is fixed at below marginal cost, the firm will suffer a loss for the balance of marginal cost plus fixed expenses. If selling price is equal to marginal cost, there will not be any contribution and hence, the loss will arrive for fixed overhead.

(B) Make or Buy Decisions

Every firm has to face a problem relating to a component or a part, whether the same should be provided by the company itself with the organizations or the same should be purchased from outside suppliers. Decisions depends on the comprising the market price of the component and the marginal cost of producing the component by the company. Needless to say that if outside market price is more in comparison with the marginal cost of the component, then it is profitable to purchase the component. The illustrating point is that if that is any unused capacity, the comparison between the two units be very helpful. But if the production is carried on at its full capacity, in that case, this decision Should be taken into consideration after adding opportunity cost of the component. In short, if the marginal cost of the component is lower than the purchase price it may be suggested to produce that article is the factory itself.

Moreover, these are certain other factor which may influence or affect "Make of Buy" during, viz, (a) Nature of Profit; (ii) Plant Capacity; (iii) Profit Maximization; (iv) Specialization etc.

(C) Shut-down or continue decision:

Sometimes, it becomes necessary to stop production due to: (i) lack of funds; (ii) shortage or irregular supply of raw materials; (iii) labour troubles etc. This shut down is practically temporary in nature and start its function as soon as condition improves in this situation absorption costing will not help us due to the part covered by fixed overhead. But marginal costing may help us in this regard. If a certain amount is available from contribution, it is advisable to continue production. Because certain amount of fixed assets will be recovered. But, if it is totally closed down, entire amount of fixed overhead shall have to be foregone by the firm. So, whether a firm should be shut down or be continued depends on contribution. If contribution is more than the difference between the fixed cost at its normal level and fixed cost at its shut down level, then continuing with the product is advisable.

(D) Selection of Most Profitable Mix

Sometimes the management of the firm faces problems regarding the best method of production amount alternatives, or, to decide which product will give maximum profit. Here, technique of marginal costing will help us a lot for determining the best method of production among alternatives or to decide which product will give maximum profit. For this purpose, we are to compute contribution at first under various product-mix. Naturally, the product which represents the highest contribution will be selected/ given highest priority and vice-versa.

(E) Problem of Limiting Factor:

Limiting factor are key factor is the fact that sets a limit to the total activity of a firm and which influences budgets as well as production capacity. For example, a firm may have all the available resources except that the same is unable to procure the full quantity of materials which are required for production purpose. Here, material is the key factor or limiting factor . This is very important while preparing budgets for production and sales also.

Thus, there may be different key factor viz. (a) Material (Non- availability of supply); (b) Labour (shortage of skilled labour); (c) Plant (limited capacity due to lack of capital and space or shortage of supply), (d) Sales (Inadequate Warehousing facilities); and (e) Management(shortage of efficient executives) etc.

In order to maximize profit a firm must concentrate to use all its available resources for this purpose of production and to sell the maximum quantities of the said products which must present maximum contribution. Although, we know that key factor does not create any permanent problem and which can be tackled after considering some special decisions, yet, analysis of contribution which is based on key factor can help such to earn maximize profit. In short, any limiting factor selection of product must depend on the pairs of contribution per unit of a limiting factor.(Although it is applicable if there is only one key factor). The higher the contribution per unit of limiting factor, the more profitable is the product. Thus, profitability is measured by:

$$\textbf{Profitability} = \frac{\text{Contribution}}{\text{Key/Limiting factor}}$$

(F) Accepting Additional Orders and exploring Foreign Market:

Sometimes the firm is not working at his full capacity, there remains more spare capacity which can be used for carrying extra revenue or extra contribution, although at present capacity is used without increasing the fixed overheads, existing fixed cost per unit will decrease by the additional production which earn extra contribution. No doubt, there will increase the amount of total profit i.e. fixed overheads are fully recovered. For this purpose, the firm may accept additional order from outsiders or explore foreign markets to boost up its sells.

(G) Diversification of Products

Sometimes a firm may introduce a new product in the market along with the existing one to capture increased market share. Whether the said new product will be a profitable one or not depends on the contribution per unit of a product and the fixed overhead. Usually, fixed overhead is recovered against the existing products, so the cost of new products will include only the marginal/ variable cost. As such, whatever will be the contribution the same will be treated as revenue. But, if any extra fixed overhead has to be incurred for such new product, the same must carefully be considered. Whenever the question of diversification of product will arise, it may be assumed that there will not be any additional fixed cost. Whether, the diversification of product is profitable or not, it depends on its contribution. If there is negative contribution, question of diversification of product should not arise.

(H) Alternative Course of Action

If there are more alternative course of action regarding the manufacture of a product, the management has to face a decision-making problem. The problem can be solved by the application of Marginal costing. The solution of such a problem depends on the contribution. In short, the alternative which will present highest contribution should be selected and vice – versa i.e. the alternative which will yield lowest contribution will be rejected.

Illustration 1.

From the following data, calculate break-even point(BEP):

Selling price per unit	₹40
Variable cost per unit	₹30
Fixed Overheads	40,000

If sales are 20% above BEP, determine the net profit.

Solution:

$$\text{Break Even Point} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}} = \frac{40,000}{10} = 4,000\text{units}$$

Particulars	₹
Sales (4800 x ₹40)	1,92,000
Less: Variable Cost (4,800 x ₹30)	(1,44,000)
Contribution	48,000
Less: Fixed Cost	(40,000)
Profit	8,000

Illustration 2.

From the following data, ascertain profit:

Sales	₹2,00,000
Fixed Cost	₹40,000
BEP	₹1,60,000

Solution:

$$\text{BEP} = \frac{\text{Fixed Cost}}{\text{P / V Ratio}}$$

$$₹1,60,000 = \frac{₹40,000}{\text{P / V Ratio}}$$

P/V Ratio = 25%

Particulars	₹
Sales	2,00,000
Less: Variable Cost (75%)	1,50,000
Contribution	50,000
Less: Fixed Cost	40,000
Profit	10,000

Illustration 3.

The P/V Ratio of D Ltd. is 50% and margin of safety is 40%. You are required to calculate the fixed cost if sale volume is ₹2,50,000.

Solution:

Sales = ₹2,50,000. Margin of Safety = ₹1,00,000. Break Even Sales = ₹1,50,000.

$$\text{Break Even Sales} = \frac{\text{Fixed Cost}}{\text{P / V Ratio}}$$

Fixed Cost = ₹1,50,000 x 50% = ₹75,000.

Illustration 4.

Product A has a P/V ratio of 24%. Fixed operating costs directly attributable to Product A during the quarter II of the financial year 2013-2014 will be ₹2,70,000. Calculate the sales revenue required to achieve a quarterly profit of ₹90,000.

Solution:

P/V ratio = 24%

Quarterly fixed costs = ₹2,70,000.

Desired Profit = ₹90,000.

Sales revenue required to achieve desired profit = $\dfrac{\text{Fixed Cost} + \text{Desired Profit}}{\text{P / V ratio}} = \dfrac{2,70,000 + 90,000}{24\%}$

= ₹15,00,000.

Illustration 5.

From the following data, compute margin of safety:

Sales	₹25,00,000
Fixed Cost	₹7,50,000
Profit	₹5,00,000

Solution:

Contribution = Fixed Cost + Profit = ₹12,50,000.

P/V ratio = 50%

Break Even Sales = $\dfrac{\text{Fixed Cost}}{\text{P / V ratio}} = \dfrac{7,50,000}{50\%}$ = ₹15,00,000.

Margin of safety = Actual Sales – Break Even Sales

= ₹(25,00,000 – 15,00,000) = ₹10,00,000.

Illustration 6.

From the following information, find out marginal cost:

Sales	₹80,000
Fixed Cost	₹20,000
Loss	(₹22,000)

Solution:

Contribution = Profit + Fixed Cost

= (₹22,000) + ₹20,000

= (₹2,000)

Variable Cost = Sales – Contribution

= ₹80,000 – (₹2,000)

= ₹82,000.

Illustration 7.

Ascertain the units to be sold to earn a profit of ₹1,00,000 from the following data.

Fixed Cost ₹3,00,000. Variable cost per unit ₹30; Selling price per unit ₹50.

Solution:

Let x be the number of units to be sold for desired profit

Sales – Variable cost = Fixed Cost + desired profit

Or, 50x -30x = ₹3,00,000 + ₹1,00,000

Or, 20x = ₹4,00,000

Or, x = ₹4,00,000/20 = 20,000 units.

Illustration 8.

From the following particulars find out P/V ratio:

Sales	₹1,00,000
Fixed Cost	₹15,000
Net profit	₹10,000

Solution:

$$P/V = \frac{\text{Contribution}}{\text{Sales}}$$

Hence, Contribution = Fixed Cost + Profit

Or, contribution = ₹15,000 + ₹10,000 = ₹25,000

Or, $P/V = \frac{₹\ 25,000}{₹\ 1,00,000}$ = 25%.

Illustration 9.

From the following particulars find out sales:

Profit ₹15,000. Fixed Cost ₹15,000. P/V ratio= ¼.

Solution:

To find out sales required for a profit of ₹15,000.

Contribution = Fixed Cost + Profit = ₹15,000 + ₹15,000 = ₹30,000.

$$P/V = \frac{\text{Contribution}}{\text{Sales}}$$

Or, ¼ = ₹30,000/ Sales

Or, Sales = ₹1,20,000.

Illustration 10.

From the following information, find out BEP if selling price is reduced by 20%.Fixed Expenses ₹8,000. BEP ₹20,000.

Solution:

$$BEP = \frac{\text{Fixed Cost}}{\text{P / V Ratio}}$$

So, $P/V\ \text{ratio} = \frac{\text{Fixed Cost}}{\text{BEP}}$ = ₹8,000/₹2,000 = 40%

Present selling price will be ₹(100 – 20) = ₹80.

Marginal cost per unit is ₹60 (i.e. 100-40) considering old P/V ratio.

New P/V ratio = $\frac{₹80 - ₹60}{₹80}$ = 25% or ¼.

So, BEP = $\frac{₹8,000}{\frac{1}{4}}$ = ₹32,000.

Illustration 11.

A company maintains a margin of safety of 25% on its current sales and earns a profit of ₹ 30 lakhs per annum. If the company has a profit volume (P/V) ratio of 40%, find current sales amount.

Solution:

Margin of safety = Profit/ P/V Ratio

= ₹30/0.40 = ₹ 75 lakhs

0.25 of sales = ₹ 75 lakhs

Hence, Sales = 75/0.25 = ₹ 300 lakhs

Illustration 12.

In two consecutive periods, sales and profit were ₹ 1,60,000 and ₹ 8,000 respectively in the first period and ₹ 1,80,000 and ₹ 14,000 respectively during the second period. If there is no change in fixed cost between the two periods find P-V ratio.

Solution:

$$\frac{\text{Changes in profit}}{\text{Change in sales}} = \text{P/V Ratio}$$

$$= \frac{14,000 - 8,000}{1,80,000 - 1,60,000}$$

$$= \frac{6,000}{20,000}$$

= 0.30 or 30%

Illustration 13.

Determine whether it is wise to continue production from the particulars given below:

Fixed Cost ₹ 1,00,000, Marginal Cost ₹12 per unit, Selling price ₹13 per unit, units sold 50,000.

Solution :

Total Cost = Fixed Cost + Marginal Cost

= ₹1,00,000 + (50,000 x ₹12)

= ₹7,00,000

Cost per unit= ₹7,00,000/50,000 units = ₹14

Selling price = 50,000 units × ₹13= ₹6,50,000

So, selling price does not cover total cost. Even the production should not be discontinued since it will minimize loss. If the production is discontinued, loss will be ₹1,00,000 but if it continues, the loss will be ₹ (6,50,000 – 7,00,000) = ₹(50,000).

Illustration 14.

The market price of a component in the open market is ₹11.50 but the cost structure of the component is:

Particulars	₹
Material	5.50
Labour	3.50
Other variable cost	1.00
Depreciation on fixed assets	2.50
Total	12.50

Should you make the component?

Solution:

Statement showing the marginal cost of component

Particulars	₹
Material	5.50
Labour	3.50
Other variable cost	1.00
Total	10.00

The marginal cost of the component is ₹10.00 and market price is ₹11.50. So, the component should be manufactured.

Illustration 15.

State which product you would recommend to manufacture where labour time is the key factor.

Particulars	Product A	Product B
Direct Material	₹20	₹10
Direct labour @ ₹3 per hour	6	9
Direct Overhead @ ₹4 per hour	8	12
Selling price	90	100
Standard time	2 hrs.	3 hrs.

Solution:

Particulars	Product A (₹)	Product B (₹)
Selling Price	90	100
Less: Variable Cost		
Direct Materials	20	10
Direct Labour	6	9
Variable overheads	8	12
Contribution	56	69
Contribution per labour hour	₹28 ₹56/2	₹23 ₹69/3

When labour hour is the key factor Product A, should be recommended as its contribution per labour hour is greater than that of Product B.

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