



SYLLABUS
B.B.A. III SEM
Subject – Business Costing

UNIT – I	Basics of Costing: Meaning and definition of Cost Accounting, Concepts of Cost ,Cost Object, Cost Center and Profit Center, Cost Control and Cost Reduction Classification of Costs, Overview of Cost Accounting Standards.
UNIT – II	Cost Elements: Material Cost- purchase procedure, store keeping and stock control, pricing issue of material and accounting thereof, perpetual inventory and physical stock taking, identification of slow, non-moving and fast moving items, ABC analysis, JIT system, level of inventories and economic order quantity, analysis, investigation and corrective steps for treatment of stock discrepancies – control through other means.
UNIT – III	Labour Costs – remuneration methods, monetary and non-monetary incentive schemes, payroll procedures, labour analysis and idle time, measurement of labour efficiency and productivity, analysis of non productive time and its cost, labour turnover and remedial measures, treatment of idle time and overtime.
UNIT – IV	Direct Expenses – nature, collection, classification and treatment. Overheads – nature, collection, classification, apportionment, allocation and absorption.
UNIT – V	Costing Methods: Unit Costing, Job Costing, Batch Costing, Process Costing, Contract Costing, Activity Based Costing, Target Costing, Costing for Services Sector.
UNIT – VI	Cost Accounting Systems: Accounting entries for an integrated and not integrated accounting system, Reconciliation between cost and financial profit and loss account, interlocking accounting.



Unit - 1

Terminology

Cost:-The amount of expenditure (actual or notional) incurred on, or attributable to, a specified thing or activity.

Costing -

Costing relates to the determination of cost of a product manufactured or service rendered. In order to ascertain cost, it involves system, methods and techniques of accumulation, classification and analysis of cost.

Cost Accounting: - "The process of accounting for cost from the point at which expenditure is incurred or committed to the establishment of its ultimate relationship with cost centres and cost units.

The term 'cost Accountancy' includes (i) Costing and (ii) Cost Accounting. Its purposes are (i) cost-control, and (ii) profitability-ascertainment and serves as an essential tool of the management for decision-making.

Cost Centre

Cost Centre is defined as "a location or person or place or machine or item of equipment or thing for which cost can be ascertained and used for the purpose of cost control." Cost centre can be classified as:

1. Process cost centre is one in which a specific process or a continuous sequence of operations is carried out on a regular basis.
2. Production cost centre is one in which production activity is carried where the shape of raw material is converted into a finished product.
3. Service cost centre are those which render services to the other cost centres. For examples a maintenance & repair department, store department etc.
4. Impersonal cost centre is one which consists of a location or item of equipment (or group of these).
5. Personal cost centre is one which consists of a person or group of persons.
6. Operation cost centre is one which consists of those machines and/or persons carrying out similar operations.

Profit Centre

It means a centre responsible for adopting ways and avenues to earn maximum possible profit on a product or any other activity of business, by making market surveys, suggests localities for publicity, helps to formulate sales policies and suggests to add more values to the product at the same or cheaper costs.

Cost Unit

Cost unit may be defined as "a quantitative unit of product or service in relation to which costs are ascertained."

Concept

Broadly speaking, the term 'Cost Accounting' is a combination of two words, i.e., 'COST' AND 'ACCOUNTING'

In simple words, cost may be defined as the amount of resources sacrificed or given up to achieve specific objectives, which may be the acquisition of goods or services. In other words, Cost means the amount of expenditure (actual or national) incurred on, attributable to a thing.



On the other hand, Accounting is an important service activity in business and is concerned with the collecting, recording, evaluating and communicating the results of the past events. The history of accounting development reflects its changing role in response to the changing business and social needs. It can be perceived as an information system, which has its inputs, processing methods and outputs. The usefulness of accounting lies in its capacity to provide information to various shareholders, in business so that they could arrive at the correct decisions. Though accounting has been variously defined, its commonly accepted definition as given by the American institute of certified public accountants is in terms of money, transaction and events which are, in part at least, of a financial character and interpreting the results thereof."

Meaning of Cost Accounting

The industrial revolution in England presented a challenge to the development of accounting as a tool of industrial management. Costing techniques were developed as guides to management actions. The increasing awareness on the part of entrepreneurs and industrial managers for using scientific principles of a management in the wake of scientific management movement led to the development of cost accounting. Cost accounting deals with the controlling them and evaluating productivity of the enterprise.

Cost accounting either to focused mainly on ascertainment of cost but with the advent of globalization, entry of multinationals and increase in competition and cost accountants are concentrating on cost of reduction through adopting stringent measures of cost control. Cost accounting thus has come serve the twin objectives of, (i) Cost ascertainment and (ii) Cost reduction. It is playing both service and advisory and economic decisions.

1. Ascertainment of Costs – It refers to the collection and analysis of cost and the linking up of production with the expenses at different stages of operations.
2. Controlling the costs – cost control aims at guiding the actual towards the targets, regulating the actual if they vary from the targets; and this is done through executive action. It is exercised through techniques such as standard costing, budgetary control etc.

Thus, cost accounting is a formal system of accounting for costs by means of which costs of products or services are ascertained and controlled. According to Sir Wheldon, cost accounting is "the application of accounting and costing principals, methods and techniques in the ascertainment of costs and analysis of saving or excesses as compared with previous experience of standards."

Definitions of cost Accounting

Important definitions of the term cost accounting are as under –

1. According to R.N. Carter, cost accounting is defined as, "a system of recording in accounts the materials used and labour employed in the manufacture of a certain commodity or on a particular job."
2. According to Kohler, "Cost Accounting is the branch of accounting dealing with the classification, recording, allocation, summarization and reporting of current and prospective purpose."
3. According to Nichola, "Cost Accounting is a system of cost accumulating and classification for product costing and managerial planning, control and decision-making purposes."
4. According to Sickle, "Cost Accounting is a science of recording and presenting business transactions pertaining to the production of goods and services, whereby these records become a method of measurement and a means of control."
5. According to W.W. Bigg, "Cost Accounting is the provision of such analysis and classification of expenditure as will enable the total cost of any particular unit of production to be ascertained with reasonable degree of accuracy and at the same time to disclose exactly how such total cost is constituted."



NATURE AND CHARACTERISTICS OF COST ACCOUNTING

1. Cost accounting is a special branch of accounting having its own specific significance based on double entry system.
2. It ascertains cost of products and services through the process of accumulation, classification, analysis and recording.
3. It determines the cost of incomplete work or job.
4. The extensive use of this system involves application of statistical data, control methods & techniques and determining profitability.
5. This system provides measures for control and guidance for various levels of management.
6. Helpful in decision making process.

Scope of Cost Accounting

The scope of cost accounting is very wide and includes the following –

1. Costing – It refers to the techniques and processes of ascertaining costs. It involves systems, methods and techniques to accumulation, analysis and appropriate allocation of expenditure incurred in respect of a product or service.
2. Accounting – It is the science which records and determines scientifically the cost of manufacturing goods or rendering service per unit control and guide the persons involved in the organization. It helps thus, cost accounting in the formal mechanism by which cost data are provided for ascertaining and controlling the costs of products or services.
3. Cost Control – Cost control involves the setting up of targets for expenses and production, measurement of performance through, comparison of actual with targets, to ascertain merit of the variances, analysis of variances and initiating corrective action to eliminate redundancies.
4. Budgetary Control – It is a system where by the budgets are used as a means of planning and controlling costs. Budgetary control is the establishment of budgets relating to the responsibilities of executives to the requirement of a policy and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy or to provide a basis for its revision. It involves the establishment of budget for each section of the organization, measurement of the actual performance with reference to the budgeted performance the ascertainment of deviations and taking suitable actions to remedy the defects, if any.
5. Cost audit – It is the verification of the correctness of cost accounts and to ensure adherence to the cost accounting plan. The purposes of the cost audit is to ensure that the figures as shown by cost accounts are correct and that cost accounts, cost centres and cost units have been properly defined and charged.

OBJECTS AND FUNCTIONS OF COST ACCOUNTING

- i. To ascertain the cost per unit of the different products manufactured by a business concern.
- ii. To advise management on future expansion policies and proposed capital projects.
- iii. To organize the internal audit system to ensure effective working of different departments.
- iv. To help in supervising the working of punched card accounting or data processing through computers.
- v. Provide useful data to the management for taking decisions.
- vi. To find out costing profit or loss by identifying with revenues the cost of those products or services
To provide specialized services of cost audit in order to prevent the errors and frauds and to facilitate prompt and reliable information to the management.
- vii. To organize cost reduction programmes with the help of different departmental managers.
- viii. To provide requisite data and serves as a guide to price fixing of products manufactured or services rendered.
- ix. To help in the preparation of budgets and implementation of budgetary control.



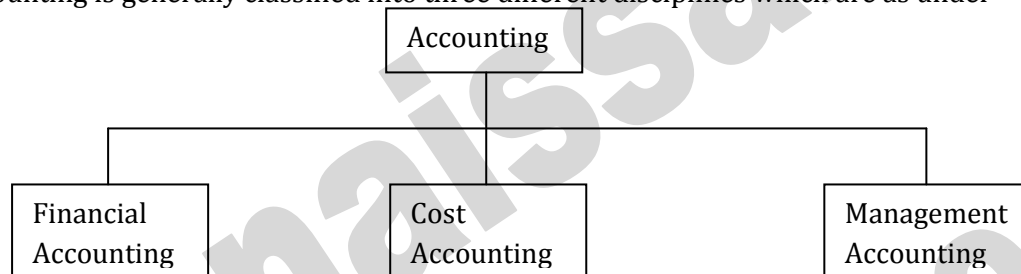
- x. To guide management in the formulation and implementation of incentive bonus plans based on productivity and cost savings.
- xi. To supply useful data to the management to take various financial decisions such as introduction of new products, replacement of labour by machine etc.
- xii. To organize an effective information system so that different levels of management may get required information at the right time in right form for carrying out their individual responsibilities in an efficient manner.

TECHNIQUES AND METHODS OF COSTING

1. Historical Costing. "The ascertainment of costs after they have been incurred." Under this method all the expenses incurred on the production are first incurred and then the costs are ascertained.
2. Standard costing. "The preparation and use of standard costs, their comparison with actual costs and the analysis of variances to their causes and points of incidence."
3. Marginal Costing. "The ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs."
4. Direct Costing. "The practice of charging all direct costs to operations, processes or products, leaving all the indirect costs to be written off against profits in the period in which they arise."
5. Absorption Costing. "The practice of charging all costs, both variable and fixed, to operations, processes or products."
6. Uniform Costing. "The use by several undertakings of the same costing principles and/or practices."

Classification of Accounting

The accounting is generally classified into three different disciplines which are as under –



1. Financial Accounting – It deals with preparation of Trial Balance, Profit and Loss account and Balance sheet. It shows the amount of profit earned or loss suffered during a particular period.
2. Cost Accounting – It shows classification and analysis of costs on the basis of functions, processes, products, centres etc. It also deals with cost computations, cost savings, cost reduction etc.
3. Management Accounting – It deals with the processing of data generated in financial accounting and cost accounting of managerial decision-making. It also deals with application of managerial economics concepts for decision-making.

Distinction between cost Accounting and Management Accounting

The term "Cost accounting" and "management accounting" have sometimes been used synonymously by any accounts in recent years. But these two systems of accounting are not one and the same thing. Although over the years, the subject matter of cost accounting has broadened, it is, concerned mainly with the techniques of product costing procedures and related information processing. It helps the management in planning and controlling costs related to both production and distribution activities.

By nature, management accounting refers to the reporting system designed to cater to the decisional and executional needs of management. The accounting statements and reports in management



accounting are situation-specific and are prepared with respect to a specific problem, situation or decision.

The points of difference between Cost Accounting and Management Accounting are under –

1. Origin and Development – Cost Accounting owes its origin to Industrial Revolution. Financial accounting proved inadequate to satisfy the information needs (about costs) of the management. Cost accounting was evolved as a necessary adjunct of financial accounting. On the other hand management accounting owes its origin to the management consciousness of mid-twentieth century. Thus management accounting is of a more recent origin on the other hand.
2. Object – The main object of cost accounting is to determine the cost of product or a service. However, in modern times, cost control and price fixation have also come to be recognized, as important objective of management accounting is to provide meaningful information to the management for decision-making and control.
3. Nature – Cost accounting includes both presents and future. Whereas management accounting is mainly future-oriented. It primarily concerns itself with the projection of figures for future.
4. Scope – The scope of cost accounting is limited to cost ascertainment and control. It deals with cost data only. The scope of management accounting is much wider than cost accounting. It includes financial accounting, cost accounting, and tax planning a decisional accounting.
5. Utility – Cost accounting is useful both for external parties and internal management. On the other hand management accounting is meant for the internal consumption or for internal use of the management.
6. Types of Data Used – Cost accounting deals with the monetary cost of products and services. It covers only quantitative aspects. On the other hand management accounting makes use of both quantitative and qualitative data, i.e. monetary as well as non-monetary figures.
7. Principles and Format – Cost accounting follows a definite format and principles. On the other hand management accounting follows to set format and principles for reporting. The format and procedure will differ from concern to concern. In fact, the method of presentation of information depends the informational needs of the individual concern and the skill of the management accountant.

Analysis and Classification of elements of cost

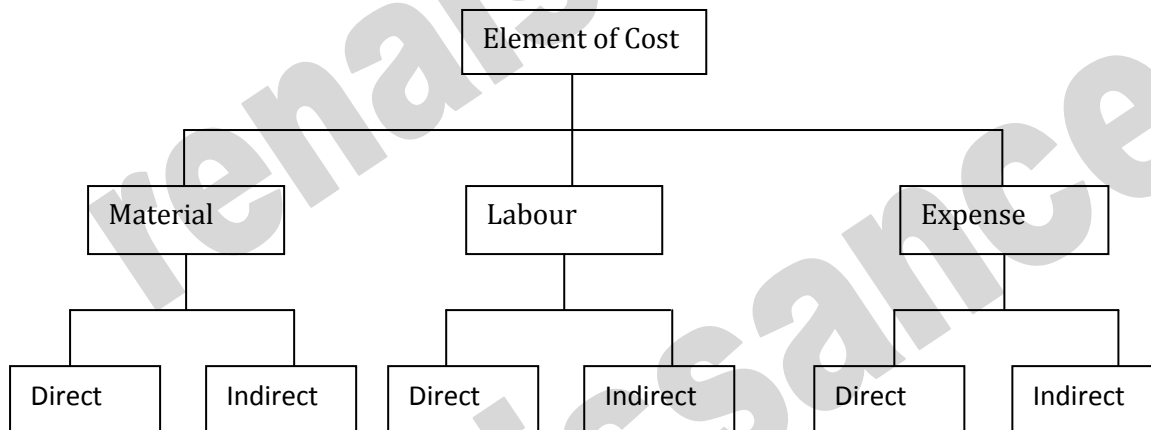
To understand the actual interpretation of the term 'COST' it is very important to understand the basic concept of elements of cost. There are three element of costing, which are as under –

1. Material – The substance from which the product is made is called 'Material'. It may be in the form of raw or a manufactures state. It can be direct as well as indirect. It may be further sub-divided as under –
 - a. Direct Material – In simple words, material which becomes an integral part of the finished product and which can be conveniently assigned to specific physical units is termed as 'Direct Material'. Its examples are as under.
 1. Components specifically purchases, produced or requisitioned from stores.
 2. Primary packing material such as carton, boxes and wrapping material etc.
 - b. Indirect Material – Material which is used or applied for the purpose of ancillary to the business and which cannot conveniently be assigned to specific physical units, is termed as 'indirect Material' such as – Printing and Stationery material, oil and wastage, consumable stores etc.
2. Labour – To convert material into finished goods, human effort are required and such efforts of human beings are known as 'Labour'. It may be further sub divided as –
 - a. Direct Labour – Any type of labour which is directly related to the production of a particular commodity is known as direct labour. It is thereof, specifically and conveniently traceable to specific products.



- b. Indirect Labour – Indirect labour refers to the labour employed for the purposes of carrying out tasks incidental to goods produced or services provided is indirect labour. Such type of labour does not alter the construction composition or condition of the product. It cannot be practically traced to specific units of output. Such as wages of storekeepers, timekeepers, directors fees, salaries of salesman etc.
- 3. Expenses – It refers to the amount/expenditure/expenses directly or indirectly required for the production of a product. It may be of two types –
 - a. Direct Expenses – It refers to the expenses directly conveniently and wholly allocated to specific cost centre or cost unit. Such as Costly of defective work incurred in connection with a particular job or contract, hiring of special type machinery for the complete particular product.
 - b. Indirect Expenses – It refers to the expenses, which cannot be directly, conveniently and wholly allocated to cost centres or cost units, such as

Elements of Cost with the help of a chart



ANALYSIS OF TOTAL COST

1. Prime Cost.- The aggregate of Direct material Cost, direct Labour Cost and Variable Direct expenses (or chargeable expenses) is the prime Cost.
2. Factory Cost.- Factory Cost is the total of Prime Cost + Factory Overheads,
3. Cost of Production.- The total Factory Cost and Office and Administration Overheads is the office Cost or Cost of Production.
4. Total Cost.= Cost of Production + Selling & Distribution Overheads.

CLASSIFICATION OF COST AND COST CONCEPT

The cost-classification is the process of grouping costs according to their characteristics.

1. **According to Elements.** The cost is classified into (i) Direct cost, and (ii) Indirect cost according to elements, viz., materials, Labour and Expenses.
2. **According to Functions.** The cost is classified into the following:
 - i. Production Cost, or Manufacturing Cost, or Factory Cost,
 - ii. Administration Cost,
 - iii. Selling Cost, and
 - iv. Distribution Cost.
3. **According to Nature.** The cost is classified into the following:
 - i. Fixed Cost is "a cost which tends to be unaffected by variations in volume of output.
 - ii. Variable Cost is "a cost which tends to vary directly with volume of output.
 - iii. Semi-fixed or Semi-variable Cost is 'a cost which is partly variable.'
4. **According to Controllability.**



- i. Controllable cost. This is a cost which can be influenced by the action of a specified member of an undertaking.
- ii. Uncontrollable Cost. It is the cost which cannot be influenced by the action of a specified member of an undertaking, such as fixed costs.
5. **According to Normality.** The cost is classified into (i) Normal cost, and (ii) Abnormal cost.
 - i. Normal cost. It is the cost at a given level of output in the condition at which that level of output is normally attained.
 - ii. Abnormal cost. It is a cost which is beyond normal cost.
6. **According to Relevance to Decision-making and Control.**
 - i. Shut-down Cost. A cost which will be required to be incurred even though a plant is closed or shut-down for a temporary period, e.g., the cost of rent, rates, depreciation, maintenance expenses etc.
 - ii. Sunk cost. A cost which has been incurred in the past or sunk in the past and is not relevant to the particular decision-making. E.g. written down book value of the plant.
 - iii. Opportunity Cost. The costs which are related to the sacrifice made or the benefits foregone are opportunity costs.
 - iv. Imputed Cost. It is a hypothetical cost required to be considered to make costs comparable. Interest on one's own capital.
 - v. Out-of-Pocket cost. A cost which will have to be paid to outsiders as against costs such as depreciation, which do not require any cash payment.
 - vi. Replacement Cost. It is the cost of replacing a material or assets, by purchase from the current market.
 - vii. Marginal Cost. Marginal cost refers to the increase or decrease in total cost caused due to increase or decrease in output by one single unit.
 - viii. Differential Cost. The change in total cost due to the change in method or technique of production or change in level of production is called differential cost.
 - ix. Standard Cost. Standard cost is a predetermined cost or estimate which is compared with the actual cost in order to determine variance and carry out an analysis of variance for cost control.
 - x. Relevant Cost. The relevant costs are those cost which aids to make specific management decisions.

7. Product Cost & Period Cost

The product cost is the total of cost that is associated with a unit of product. The cost in forming the product viz., direct material, direct labor, factory overhead constitute the product cost.

Period cost, on the other hand, are costs that tend to be unaffected by changes in level of activity during a given specific time period. E.g., Selling & distribution cost

SIGNIFICANCE OF COST ACCOUNTING

- i. It discloses the profitable and unprofitable activities in a concern and hence necessary adjustments are done.
- ii. It enables the concern to measure its efficiency and then maintain or improve.
- iii. It is helpful to the consumer by ensuring lower prices.
- iv. It is useful to the government in the form of duties paid.
- v. It discloses the relative efficiency of different workers in a concern.
- vi. Through it the exact causes of decrease or an increase in profit or loss can be detected.
- vii. It provides information upon which estimates and tenders are based.
- viii. It guides future production policies.
- ix. It helps in increasing profits by disclosing the sources of loss or waste and by suggesting such controls so that the same may not be repeated.
- x. It enables a periodical determination of profits or losses without resorting to stock taking.



ADVANTAGES OF COST ACCOUNTING

To the Management

1. Action against unprofitable Activities
2. Facilities Decision Making
3. Inventory Control
4. Budgetary Control
5. Facilitations cost control
6. Prevents Fraud
7. Tool of Management Control
8. Measuring rods
9. Future Prospects

B. To the Employees

1. Sound Wage Policy
2. Security of Job
3. Distinction between Efficient and Inefficient Workers

C. To the Creditors

Bankers, creditors, investors etc., can have a better understanding of the firm as regard the process and prosperity, before they offer financial leading.

D. To the Government

1. For government wage tribunals, for deciding the state subsidy to industry.
2. In the preparation of national plans, economic development etc.
3. Cost audit is important and industries have to keep books of accounts to show the utilization of materials, labour and other costs.

E. To the Public

1. Removes all types of wastages and inefficiencies.
2. Facilities the customers to pay fair price.
3. Development and prosperity of industries will create employment opportunities.

CHARACERTISTICS OF A GOOD COSTING SYSTEM

1. Accuracy
2. Equity
3. Simplicity
4. Elasticity
5. Comparability
6. Promptness
7. Observation and Resulting
8. Periodical Result
9. Reconciliation with Financial Accounts

Specimen of Cost sheet – There is no fixed form of cost sheet, but in order to make it more useful, it is generally presented in a tabular form. Usually there are columns in the cost sheet – first column for the particular second for the total cost and third for the cost per unit for the current period. Cost sheet may also have to additional columns showing total cost and per unit cost for a preceding period.



A specimen of a cost sheet is given below –

M/S _____ ABC Co. Ltd. _____
 Cost sheet /Cost Statement
 For the period ending _____
 (Output _____ Units)

Particulars	Detail Rs.	Total Rs.	Per Unit Rs.
Opening Stock of Raw Material	+		
Add: Purchases of Raw Material	+		
	—		
	?		
Less: Closing Stock of Raw Material	-		
	—		
	?		
Add: Direct Expenses/ Labour	+		
	—		
	?		
Prime Cost			
Add: Factory Overheads:			
Works Costs			
Add: Office and Administrative Overheads:			
Cost of Production			
Add: Office and Distribution Overheads:			
Cost of Sales			
Profit			
Sales			

Items in the cost sheet

- Stock of raw materials** – Stocks of raw materials is used to calculate the cost of raw materials consumed. For computation of the raw material consumed, the value of opening stock of raw-materials added to and the value of closing stock of raw-materials is deducted from the value of materials purchased.
- Work-in-Progress** – Work-in-Progress means incomplete part of work or product. It is also known as semi-finished goods. Usually such goods bear proportionate share in factory overheads besides the cost of raw-materials consumed and direct wages. The treatment of stock of work-in-progress depends upon the basis of valuation of it. Thus it can be treated in any of the following ways –
 - When it is valued at prime cost – The opening stock and closing stock of work in progress shall be adjusted in the cost sheet, while computing the prime cost.
 - When it is valued at work cost – the opening stock and closing stock of work in progress are adjusted in the cost sheet, while computing the factory cost of goods manufactures during the accounting periods.
 - When prime cost and factory overheads components are given separately – In this case prime cost components shall be adjusted while calculating prime cost and factory overhead components shall be adjusted while calculating factory cost.
Usually the work-in-progress is valued ay works cost.
- Stock of Finished Goods** – In a cost sheet, the opening stock of finished goods is added to and closing stock of finished goods is deducted from the cost of production to find out the cost of goods sold.
- Treatment of the Cost of Rectifying the Defective Production** – Sometimes the production may not be, perfect as the saleable product but is capable of being rectified and brought to the



required degree of perfection provided some additional expenditure is incurred. The defective production may be unavoidable (normal) or abnormal. The additional cost incurred rectify the normal defective production is treated as abnormal loss and charged to costing profit and loss account.

5. **Sale of Scrap** - It is an incidental residue from certain types of materials used in the production, usually of small amount and low value, recoverable without further processing. The realizable value (i.e.) saleable value) of scrap may be deducted from the works cost.



UNIT - II

Material cost

Introduction to Material/Stock Control

The main object of cost accounting is cost control. This can be achieved by effective control over elements of cost. There are three elements of cost. Material cost, labour cost and expenses. Out these, material cost is the largest single item of expenditure and it has largest single item of expenditure and it has large portion of the total cost of an organization. It is true, in modern time that cost reduction is concerned with possible reduction in overheads. However, in majority of business overheads has only a fraction of direct material cost, so the importance of material control cannot be overlooked. If the material control is inadequate or if there is a lack of material control, it will result in loss due to wastage, theft, obsolescence, delay in production or locking up of working capital.

Concept of Material Control

Material cost constitutes a major part of the total cost of production. Therefore, proper accounting and control over materials purchase, consumptions and inventories are important for effective management of business. The basic aim of material control is the purchasing of materials, at reasonable price their proper storage and their efficient use of consumption.

Definition of Material Control

The term 'material control' means, "The regulation of the functions of an organization relating to the procurement, storage and usage of materials in such a way as to maintain an even flow production without excessive investment in material stock.

Objectives of Material Control

1. Maintenance of Even Flow of Production – The basic objective of material control is to develop a system which ensures availability of the required quantity of material at the proper time so that the flow of production may be maintained evenly.
2. Prevention of Excessive Investment in Material – In general, more than 50% cost of a product belongs to material involved in it. Hence, there is huge investment of funds in material by manufacturing concerns. If the investment is not made systematically, the scarce resources would not be utilized in an optimum manner. Therefore, materials control is essential.
3. There should not be Shortage of Material – It is the basic objective of material control that the production should not suffer due to shortage of material. The material should be purchased in right quantity so that production may run smoothly. The delay or stoppage in production due to non-availability of material is very costly and results in loss of profits.
4. No Over-Stocking – Investment in material must be kept as low as possible, considering the production requirements and the financial resources of the business. Over stocking of material locks up capital and causes high storages thereby resulting in adverse effect on profits.
5. Economy in Purchasing – The purchasing of materials is highly specialized function. By purchasing materials at the most favourable price, the purchaser is able to make a valuable in cost.
6. Proper Quality – While purchasing materials, due consideration should be given to the quality. It is no use of purchasing materials of inferior quality or very superior quality. For each type of product, there is a particular type quality of materials which is needed and that quantity alone should be purchased.
7. Minimum Wastage – In order to minimize the loss of materials, proper storage conditions must be provided to different types of material. Losses of materials occur due to deterioration, obsolescence, pilferage and theft, evaporation, obsolescence, pilferage and theft, evaporation etc. All round efforts should be made to keep these losses at the minimum.



8. Information about Materials – Not only those materials should be available when required, but there should be also a system to give complete and up to date accounting information about the availability of material. Sometimes inadequate information about availability of materials may cause new purchases to be made of material already in stock.

Essentials of Material Control

The objectives of materials control can be achieved by the effective material control. The following are the requisites for an effective material control.

1. There should be proper co-ordination and co-operation between various department e.g. purchasing department, Stores department, Accounting department, Inspection department etc.
2. There should be proper classification and codification of materials.
3. Material should be purchased only when it is required and properly authorized.
4. Material requirements should be properly planned.
5. The perpetual inventory system should be operated so that up to date information is available about the quantity of material in stock.
6. Adequate records should be introduced to control materials during production and the quantities manufactured for stock.
7. The storage of all materials should be well planned subject to adequate safeguards and supervision.
8. The various stock levels like minimum, maximum etc. should be fixed for each item of material.
9. Purchases of materials should be controlled through budgets.
10. An efficient system of internal audit and internal check should be operated so that all transactions involving materials are checked by reliable and independent persons.

Organization for Materials Control

Material control is achieved through an effective organization structure which defines authority and responsibility and provides a system of check. The size of the company, number of items purchased, weight and unit value of items and time required to manufacture a product will influence the organizational requirements in material control system. Following are the general requirements of organized system for material control.

1. Centralized purchasing under the direction and authority of a competent purchasing executive.
2. Use of standard printed forms reporting all steps in the acquisition and use of materials.
3. Communication between sales, production and purchasing departments regarding all changes which may influence materials requirements.
4. Establishing and operating a system of internal checks so that all transactions involving checks so that all transactions involving materials, suppliers and equipments purchased are checked and approved by a number of properly authorized persons. Proper storage of all material and supplies.

Techniques of Inventory Control

1. **ABC Analysis Technique:** - It is a value based system of material control where materials are classified according to their value, A, B and C, so that costly and valuable materials are given greater attention and care.
 - 'A' items are high value items which consist of only a small percentage of total items handled and hence require tight control.
 - 'B' items are medium value materials which should be under normal control procedures
 - 'C' items are low value materials which represent a large number of items and require economical control procedures, and least attention.



- 2. **Determination of Stock Levels:** - To avoid under stocking and overstocking, maximum, minimum and reorder levels are fixed. Maximum Level: - It indicates the maximum quantity of inventory item which can be stored at any given time

$$\text{Maximum Level} = \text{Minimum Stock} + \text{Economic Order quantity}$$

Or

$$= \text{Reorder Point} + \text{Reorder quantity} -$$

$$[\text{Minimum Consumption} \times \text{Minimum reorder Period}]$$

- i. Minimum Level: - It indicates the minimum quantity of stock that should always be maintained so that there is no risk of stoppage of production.

$$\text{Minimum Level} = \text{Reorder Point} - [\text{Average Consumption} \times \text{Average re-order period}]$$

- iii. Re-order Level or Re-order Point: - This is that level of material at which purchase requisition is initiated for fresh supplies.

$$\text{Re-order Level} = \text{Maximum consumption} \times \text{Maximum Re-order period}$$

- iv. Danger Level: - It is that level at which normal issued are stopped and materials are issued for important jobs only.

$$\text{Danger Level} = \text{Normal consumption} \times \text{Maximum re-order period under emergency condition}$$

- v. Average stock Level:= $2 \times [\text{Minimum Level} + \text{Maximum Level}]$

Or

$$\text{Minimum Level} + \frac{1}{2} \times [\text{EOQ or re-order quantity}]$$

3. **Economic Order Quantity**

EOQ [Economic or order quantity] or Re-order quantity: - EOCs is that size of the order which gives maximum economy in purchasing any material and ultimately contributes towards maintaining the material at optimum level and at minimum cost. While setting EOQ, two types of costs are considered

- a. Ordering cost: - Cost of placing orders.
- b. Carrying Cost: - Cost of holding stock in storage

$$\text{EOQ} = \sqrt{\frac{2AO}{C}}$$

where A= annual consumption in units, O = ordering cost per order,

C = storage or carrying cost as a percentage of inventory.

4. **VED Analysis Method**

- 5. **Perpetual Inventory system and system of store verification:** - Perpetual Inventory aims at devising the system of records by which the receipts and issues of material stores may be recorded immediately at the time of each transaction and the balance may be brought out so as to show the up-to-date position. This system is operated by: -

- a. Reconciliation of stock bin cards and stores ledger accounts
- b. Physical stock verification which is of two types: -
 - i. Periodic stock verification & (b) continuous stock verification

Control Ratios

Inventory turnover Ratios: - This tells us how many times in a year is are used up and replaced. The greater the stock turnover, the more efficient is the stock policy. It indicates the rate of consumption, i.e. whether materials are moving fast or slowly. A high stock turnover ratio indicates fast moving materials and a low ratio indicates slow moving materials.

- i. Stock Turnover Ratio = $\frac{\text{Cost of Materials consumed during the period}}{\text{Average stock of materials during the period}}$

$$\frac{\text{Value of Finished Stock sold in the period}}{\text{Value of Average stock held during the period}}$$



ii. Finished Stock Turnover Ratio =

iii. Inventory Turnover in terms of days = $\frac{\text{Days of the period}}{\text{Stock Turnover Rate}}$

Or

$\frac{\text{Value of Average x Days of the period}}{\text{Material consumed}}$

iv. Input – Output Ratio: - This is the ratio of raw material put into manufacture and standard raw material content of the actual output. The formula is

$\frac{\text{Input Units}}{\text{Output units}} \times 100$

Treatment of material Wastage/ Losses

1. Material Losses may be normal as well as Abnormal.

Normal Loss: - Which has to be incurred and is unavoidable e.g., evaporation in case of liquid materials, loss due to loading and unloading of materials, etc.

Abnormal Loss: - which arises due to inefficiency in operations or mischief, e.g., theft, pilferage, breakage, fire etc.

Accounting Treatment: - In order to absorb normal material losses in cost, the rates of usable materials in stock are inflated so that such losses are covered. Normal material loss is transferred to factory overhead.

Abnormal material losses are charged to Costing profit and loss account.

2. **Waste:** - It is that part of basic raw material which is lost in processing and has no recovery value

Accounting: - If it is normal, the cost will be absorbed by the good production and if it is abnormal, then it is transferred to Costing profit and loss account.

Pricing of Materials Issued

1. Cost Price Methods: -

- i. First-in-First-Out Methods – FIFO
- ii. Last in first Out Method – LIFO
- iii. Highest in First Out Method – HIFO
- iv. Base stock Method
- v. Specific Price Method.

2. Average rate Method: -

- i. Simple Average Method
- ii. Weighted Average Method

3. Market Price Method: -

- i. Replacement Price Method.
- ii. Realizable Price Method.

4. National Price Method: -

- i. Standard Price Method.
- ii. Inflated Price Method.



UNIT - III labour Cost

Introduction

In modern industry, labour cost is one of the significant elements of cost. Labour remuneration is a complex problem which is directly linked with labour productivity.

Labour cost accounting is primarily the responsibility of the Cost Accounting Department. For accomplishing this function it is necessary to collect labour costs which in turn depend upon the wage rates and the system of wage payment prevailing in the organization. Although labour remuneration is a complex problem and there is no single solution which may be acceptable by both the workmen and management. There are a number of methods of remunerating labour. The features of each of which differ from those of the other.

Systems of Wage Payment

There are two basic systems of wage payment –

1. Time wages method
2. Piece wages method

Premium Bonus Plans

Under the time-rate bases, any additional production above normal levels benefits the employer, whereas with the piece-rates system the benefit goes to the employee (apart from indirect benefits to the employer). Bonus plans have been developed to produce a compromise, in that any savings are shared between employer and employee. The following are the principal schemes under premium bonus plans:

Halsey Premium Plan

Total Wages = (Time taken x Rate per hour) + 50% (Time saved x Rate per hour)

Rowan Plan

Bonus = $\frac{\text{Time Taken}}{\text{Time allowed}} \times \text{Time saved} \times \text{Time rate}$

Total Earnings = (Time Taken x Rate Per hour) + $\left(\frac{\text{Time Saved}}{\text{Time Allowed}} \times \text{Time Taken}\right) \times \text{Rate per hour}$

Differential Piece Rate Plans

Under differential piece rate plans, the following incentive plans are used –

1. Taylor Differential Piece Rate System
2. Merrick Differential Piece-Rate system
3. Gantt Task Bonus Plan

Labour Turnover

The term labour turnover indicates the extent to which employees leave an organization. It is normally measured as a ratio of the number of persons leaving in a period to the average number of workers. For example, if 40 persons leave a company in a year and the average number on the pay role is 200, labour turnover may be expressed as 20% and may be calculated as:

$\frac{\text{No. of employees leaving}}{\text{Average no. employed}} \times 100$



Measurement of Labour Turnover

1. Separation Method – In this method, only the number of workers leaving the organization is considered without reference to the replacement. For example, if the average number of workers during the year were 5,000 and the number leaving is 500, the turnover ratio will be –
2. Replacement Method – Under this method, the turnover ratio is calculated by dividing the number of workers replaced by the average number of workers pay roll during the same period. Suppose if only 400 workers replaced in the above example, the turnover rate will be-



Unit IV

Direct Expenses

Concept of Overhead

The term 'overhead' may be defined as the operating cost of a business enterprise which cannot be charged directly to any specific job or product. Overhead is the aggregate of indirect materials, indirect wages and indirect expenses. These expenses are compulsory to be incurred, however they can be directly measured to specific activity, units or production. **For example**, depreciation on factory building is not a direct cost of producing specific units because the benefit of building is taken by all. The same is applicable in case of rent, insurance, property tax, maintenance expenses, etc.

Definition

1. "It is an aggregate of indirect materials, indirect wages and indirect expense."
- C.I.M.A. London
2. Overhead costs are the operating costs of a business enterprise which can not be traced directly to a particular unit of output.
- Blocker and Weltmer

5.3 overhead- Fixed, Semi-variable and variable

1. Fixed Overheads.
2. Semi-variable Overheads.
3. Variable costs.

These can be described in brief as follows:

Classification According to Functions

On the basis of functions, overheads can be classified as under"

1. Production Overhead.
2. Administration Overhead.
3. Selling Overhead.
4. Distribution Overheads.

Methods of Absorption

1. Percentage on Direct Materials



$$\frac{3,00,000}{2,50,000} \times 100 = 120\%$$

2. Percentage on Direct wages

$$\frac{\text{Factory overhead}}{\text{Direct labour cost}} \times 100$$

3. The Prime Cost Basis

$$\frac{\text{Factory Overhead}}{\text{Prime cost}} \times 100$$

4. Unit of Production

$$\frac{\text{Factory overhead}}{\text{Units of production}} \times 100$$

5. LABOUR Hour/Production Hour Rate

$$\frac{\text{Factory overhead}}{\text{Direct labour hours}} \times 100$$

Allocation of Expenses

Expenses	basis of Allocation
1. Factory Rent	Floor area
2. Lighting	Floor area / Light points
3. Repairing	Value of plant
4. Depreciation on Machine	Value of plant
5. Power	H.P. of machines
6. Depreciation on Building	Floor area
Note- If machine hour are also given, the basis for allocation of depreciation and power will be:	
(a) Depreciation on machine	value of plant x machine hours
(b) Power	H.P. of machines x machine hours
7. Supervision expenses	No. of workers
8. Indirect Wages	Direct wages



9. Other Overheads	Direct wages
10. Insurance of Workers	Direct wages
11. Labour Welfare Expense	No. of workers
12. Sundries	Direct wages
13. Miscellaneous Expenses	Direct wages
14. Amenities to Staff	No. of workers
15. General Overheads	Direct wages
16. Indirect Materials	Direct materials

Note: Direct materials and direct wages of service departments are also taken as over-heads.

OVERHEAD COSTING

Accounting for overheads

Overheads are those indirect, operating costs of a business enterprise which cannot be traced directly to any specific product, job, or process because they cannot be directly attached or marked to any specific activity or cost centre.

Overhead Accounting involves: -

- A. Classification, Codification & Collection of overheads
- B. Allocation, Apportionment and absorption of overheads.

A. Classification of Overheads

1. Elements wise Overheads
 - i. Indirect Material – e.g. Consumable stores, loose tools, etc.
 - ii. Indirect Labour – e.g. Salary of foremen, store-keeper, supervisors, etc.
 - iii. Indirect Expenses – e.g. Factory rent lighting, heating, insurance, administration, and selling & distribution expenses.
2. Function-wise Classification
 - i. Production or Manufacturing Overheads: - E.g. Indirect material Indirect labour & indirect expenses
 - ii. Administration overheads: - Audit fees, postage and telephone
 - iii. Selling & distribution overheads: e.g. Advertising, showroom expenses, traveling expenses, etc.
3. Classification According to Behaviour or Variability
 - i. Fixed Overheads are those which tends to be unaffected by variation in the volume of output.
E.g. rent and rates, managerial salaries.
 - ii. Variable Overheads are those which tends to vary in direct proportion to changes in the volume of output. E.g. indirect material, indirect labour.
 - iii. Semi Variable overheads are those which are partly fixed and partly variable? E.g. depreciation, repairs & maintenance, telephone etc.
4. Classification According to controllability
 - i. Controllable Cost: - Which Can be controlled by the action of a specified members of the department e.g. variable cost
 - ii. Uncontrollable Costs: - Which cannot be controlled by the action of specified members of the undertaking. E.g. fixed cost.



Departmentalization of overheads: -This is the problem of (allocation and apportionment of overheads to production and service department)

Cost allocation: - The allotment of whole items of cost to cost centers or cost units is called cost allocation.

Apportionment of cost: - Where the expense is common and related to various cost centers or units, then it is to be allotted to different cost centers on an appropriate basis. This process is called Apportionment.

Primary distribution of overheads: - This is the process of allocation and apportionment of different items of overheads to all the departments.

Secondary distribution of overheads: - This is the process of re-distribution of the overheads cost of service department among the production department.

Methods: -

- i. Direct Redistribution
- ii. Simultaneous equation method
- iii. Step ladder method
- iv. Repeated Distribution method

Objectives of Departmentalization

- 1. Ensures greater accuracy in cost ascertainment.
- 2. Control of overhead cost
- 3. Use of different methods of absorption
- 4. Valuation of work-in-progress
- 5. Cost of service departments can be ascertained
- 6. Accurate forecasting and estimation and decision making.

Common Bases of Apportionment of Overheads

Direct Allocation	Consumable stores, specific expenses
Floor Area of Department	Rent and other building expenses, lighting & heating,
Direct Labour hours or Direct wages or No. of workers	Supervision, Administration Compensation to workers, Holiday Pay, ESI & PF contribution, fringe Benefits. Labour welfare expenses, Time Keeping, canteen Expenses.
Capital values of building or plant:-	Depreciation, insurance charges, rent, repairs & maintenance etc.
Light Points	Lightning expenses
Kilowatt hours/ Machine hours	Electric power
Wight or volume of material or value of materials	Material handling, stores overheads
Technical estimates	Power, light, internal transport, managerial salaries etc.

Absorption of overheads

Absorption means distribution of overhead expenses allotted to a particular department over the units produced in that department. So charging of overheads to cost units is called absorption of overheads.

Determination of overhead rates



1. Actual Rate – $\frac{\text{Actual overhead}}{\text{Actual Base}}$

2. Predetermined Rate – $\frac{\text{Budgeted Overheads}}{\text{Budgeted Base}}$

3. Standard Rate – $\frac{\text{Standard Overhead}}{\text{Standard Base}}$

4. Blanket Rate – $\frac{\text{Total overheads for the factory}}{\text{Total quantity of the entire factory}}$

Under Absorption and over Absorption of overheads

Under Absorption: - If the amount absorbed on predetermined rates is less than the overheads actually incurred, it is called under absorption or under recovery.

Over Absorption: - If the amount absorbed is more than the actual overheads, it is known as over absorption or over-recovery.

Causes of Under/Over Absorption of overheads

- Error in estimating overheads
- Error in estimating quantum of production
- Actual hours worked may be more or less than those anticipated.
- The basis upon which factory overheads are recovered from production may no longer be correct on account of changes in prices of materials or wage rates.
- WIP may not have been charged with its share of overhead cost accounts.
- Seasonal fluctuations in overheads from time to time.
- Unanticipated changes in methods of production and production capacity.

Accordinging Treatment of Under/Over Absorption

- Writing off to costing P & L A/c:** - This is used when account of under or over absorption is quite negligible or when under absorption is due to abnormal factors like idle capacity, defective planning, etc.
- Absorption in the subsequent year:** - Here the under or over absorption amount is transferred to Overhead Reserve Account or Suspense Account for carry over to the next accounting year.
- Application of supplementary Rates:** - Where the amount of under or over absorption is significant, a supplementary overhead absorption rate is calculated by dividing the under or over absorbed amount by the actual base. Adjustment is made in the cost of :
 - Work in progress
 - Finished stock
 - Cost of sales

In case of under absorption, the over head is adjusted by a positive rate, since the amount is to be added. Over absorption is adjusted by a negative rate, since the amount is to be deducted.

Methods of Absorption of overheads

- Direct Material Cost Method
- Direct Labour Cost Method
- Direct Labour Hour Method
- Prime Cost Method
- Machine Hour Rate Method
- Production Units Method or Rate Per Unit of Output.

MACHINE HOUR RATE

Machine hour rate is cost of running a machine for one hour. It is different for different types of machine.

An actual or pre-determined rate of cost apportionment or overhead absorption which is calculated by dividing the cost to be apportioned or absorbed by the number of hours for which a machine or machines are operated or expected to be operated.



Comprehensive machine hour rate – when the direct wages of machine operators are included in machine hour rate, it is known as comprehensive machine hour rate.

Bases of apportionment of different overhead to machines

S.No.	Expenses	Basis
1.	Fixed Charges Rent and Rates	Floor area occupied by each machine including the surrounding space.
2.	Heating and lighting	The number of points used plus cost of special lighting or heating for any individual machine, alternatively according to floor area occupied by each machine.
3.	Supervision	Estimated time devoted by the supervisory staff to each machine.
4.	Lubricating oil and consumable stores	On basis of past experience
5.	Insurance	Insurable value of each machine
6.	Miscellaneous expenses	Equitable basis depending on facts
1.	Variable Expenses Depreciation	Cost of machine less residual value spread over its working life.
2.	Power	Actual consumption as per meter reading
3.	Repairs	Cost of repairs spread over its working life.

Advantages

1. It helps in analyzing the comparative efficiency of machine and comparing the overheads charges in various departments.
2. It expresses the quantitative analysis of time and cost of operating of each machine.
3. Managerial decision making is facilitated regarding use of manual labour in place of machines.
4. This is the most scientifically correct way of analyzing production overheads.
5. The cost analysis prepared here is more reliable for management to make decisions.
6. This method provides necessary information for estimating cost of production, laying down standards and estimating selling price of output.
7. This method can be very effective in valuing the cost of in operational machinery if the costs are bifurcated into fixed and variable.

Disadvantages

1. Those costs are not at all considered which are not in consideration with hours of operation of machinery.
2. If manual labor is also equally important part of cost then the results of cost estimation will be misleading.
3. Because of calculating the hours of operation separately for this method the whole process seems to be costly.
4. If the production programmes is not pre-decided then estimation of operating hours becomes difficult.
5. Blanket overhead rates cannot be used here therefore this method becomes more expensive.



UNIT 5

Unit or Output Costing (Cost Sheet)

Introduction

The term 'unit or single output' costing is a simple method of ascertaining cost per unit where there is only one or uniform product. It is applied where the process of manufacturing is simple and the product is also single. In other words, unit cost system is used in the business where a single or a few standard products are made and the objective of costing system is to find out the cost per unit of that product.

Features of Unit Costing

1. Determining Cost of Product
2. Preparation of Cost sheet
3. Calculation of Percentage
4. Guide to Management

Tender Price or Quotation

Sometimes producers and manufactures are required to calculate estimated cost of their product. For example, a building contractor is required to show the estimated cost of building which is proposed to be constructed. Similarly, quotation are invited by various companies who may give order in large quantity. For the purpose of calculating estimated cost or tender price, producer is required to prepare estimated cost sheet.

CONTRACT COSTING

It is one of the methods of cost accounting. This method is used in such industries where work is performed on contract basis. Contract costing is a part of specific order costing method where work is performed as per requirement or specification of the customer or contractee. Contract costing is also known as "terminal costing" or construction costing. It is used in civil engineering works such as road making, building construction, dam construction, bridge construction etc. Here the work is not done within the four walls of the factory, but outside the factory which is called site.

Terminology used in contract costing:

1. **Contractor and contractee** - the person under the terms of agreement, promises to complete a particular work is called contractor. The person whom such promise is given is called contractee.
2. **Contract price** - it is the consideration given to contractor for the construction work. Normally contract price of every contract is based on the cost involved in the contract.
3. **Work in progress** - Entire work done before the stage of completion of contract is work-in-progress. In other words when the contract is not completed till the end of accounting year the architect is required to value the work in progress. Such work in progress is classified into two parts - (a) Work certified (b) Work uncertified.
 1. **Work certified** - that part of work-in-progress which has been approved or certified or authenticated and valued by the expert called certifier or a valuer, is known as work certified.
 2. **Work uncertified** - it is that part of work-in-progress which has not been approved by the expert.
4. **Retention money and cash ratio** - payment by the contractee is always linked to the value of the work certified. Generally the monthly, quarterly or annual payments are a percentage of work certified, e.g. 70 or 90 percent or any other percentage agreed upon between the contractor and the contractee. At the completion of contract the entire balance amount is paid



to the contractor. Some contractees pay interest on retention money. Retention money serves as a security with the contractee. It may be adjusted against the defective work found later.

5. **Escalation, de-escalation or reserve clause** - This clause is generally provided in long term contracts with a view to protecting both the contract and the contractee against fluctuations in the prices of inputs to the contract mainly material and labour.
6. **Cost plus contracts** – cost plus contract is a contract in which the contract price is not fixed at the time of entering into the contract. The contract price is determined by adding a specified amount of percentage of profit to the cost allowed in the contract.

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Contract A/c

Date	Particulars	Amount	Date	Particulars	Amount
	To Material purchased	-----		By Material/Plant transferred to other contract	-----
	To Material issued from stores	-----		By material/plant returned to stores	-----
	To plant issued	-----		By cash a/c [material or plant sold]	-----
	To plant purchased	-----		By P&L a/c Material/plant stolen or destroyed	-----
	To Direct Labour	-----		By material/Plant in hand or at site	-----
	To Indirect labour	-----		(If contract is completed)	
	To Direct Expenses	-----		By Contractee's A/c	
	To Indirect Expenses	-----		By P & L A/c (Loss)	-----
	To Supervision Charges	-----		(If contract is incomplete)	
	To Sub contract cost	-----		By W.I.P. A/c	-----
	To cost of extra work done	-----		W.C.	-----
	To P & L A/c (Profit on sale)	-----		.....	-----
	(If contract is completed)	-----		W.U.C	-----
	To P & L A/c (Profit)	-----		.....	-----
	(If contract is completed)	-----		By P & L A/c (Loss)	-----
	To Balance c/d (Total Profit)	-----			-----
		-----			-----
	To P & L A/c			By Balance b/d	
	To W.I.P. A/c (Reserve)				

WORK - IN - PROGRESS A/c

Date	Particular	Amount	Date	Particular	Amount
	To Contract A/c			By Contract A/c (Reserve)	.....
	W.C.			By Bal. C/d	.....
	W.U.C. ....	.....		

CONTRACTEE'S A/c

Date	Particular	Amount	Date	Particular	Amount
1st yr Dec.31	To Balance c/d	.....	1st yr Dec.31	By Cash	.....
2nd yr June 30	To Contract A/c	.....	2nd yr Jan.01	By Bal. b/d	.....
				By Cash	.....



			June 30		
	

BALANCE SHEET

As on 31st December x x x 1

		By W.I.P. A/c -----	
		- Cash Received -----	-----

Rules regarding Transfer of profit - to Profit & Loss A/c

(A) If contract is completed -

The whole amount of Profit or Loss will be transferred to P & L A/c

(B) If contract is incomplete

(i) In case of Loss: The whole amount of Loss will be Trans to P & L A/c

(ii) In case of Profit:-

(a) If the value of W.C. is less than 1/4th of the contract price - Nil

(b) If the value of W.C. is 1/4th or more than it but less 1/2 of the contract price

$$= \text{Total Profit} \times \frac{1}{3} \times \text{Cash Received} / \text{W.C.}$$

C) If the value of W.C. is 1/2 of the contract price or more than it

$$= \text{Total Profit} \times \frac{2}{3} \times \text{Cash Received} / \text{W.C.}$$

In Case of Loss

The excess of debit over the credit items of the contract account is the loss. This loss is to be transferred to Profit & Loss A/c

Important Points while Preparing Contract A/c

- The expenses incurred on contract are written on the debit side of contract A/c for e.g., Material, Labour, Direct expenses, Indirect expenses, Subcontract cost etc.
- If any material loss or theft in a contract, it should be recorded in the credit side of Contract A/c as in the name of Profit & Loss A/c.
- If any material and plant sold in the contract the sales price is written on the credit side of Contract A/c and then calculated the profit of loss and it is transferred to P & L A/c. If profit is there, it should be appeared on the debit side of P & L A/c, and loss should be appeared on the credit side of P & L A/c
- Material at site, plant at site, stores at site should be written on the credit side of Contract A/c
- If only depreciation of plant is given in the sum, then depreciation is written on the debit side of Contract A/c
- If work certified amount is not given in the sum, then, following formula is used for calculating work certified amount -

$$\text{Work Certified} = \frac{\text{Cash received} \times 100}{\% \text{ of cash received}}$$
- Depreciation is calculated by following formula when rate of depreciation is not given -

$$\text{Per hour Rate} = \frac{\text{Cost of plant}}{\text{Estimated working life of plant}}$$



$$\text{Per hour Rate} = \frac{\text{Cost of plant} - \text{Scrap value}}{\text{Estimated working life of plant}}$$

Job Costing

Job costing is that part of cost accounting which finds cost of material, produced under a specific order. There goods are produced for immediate delivery for each job costing, the cost is calculated separately for each job order because every work order differs from person to person.

Thus, job costing is that method of cost accounting where cost is determined according to quantity of product, special material equipment, labour and expenses required to fulfill the order.

Job accounting has the following features

1. It differs order to order.
2. It is based on intermittent production and not continuous.
3. In job costing method, each job is treated as a separate cost unit.
4. In job cost, the final cost of production Is ascertained after the completion of the job.

Objects of Job Costing

1. Job costing helps to find out the profit or loss job wise.
2. Job costing helps to management to recognise profitable or non profitable job work.
3. Costing of old job helps to ascertain the cost of same type of new job work.
4. actual cost is compared to standard cost in job costing method which helps to control the cost in case of repeat job order.

PROCEDURE OF JOB COSTING

The following procedure is adopted in case of job costing method -

1. **Job Number** - First of all each job is given a separate number for its identification.
2. **Production order** - Production order is a written order given to for men to start the job. In this order job number, quantity to be produced design, specific requirement time etc. are mentioned.
3. **Job Cost Sheet**— A separate job cost sheet is prepared for each job. This job cost sheet carries the details of expenditure incurred on that particular job.
4. **Completion Certificate** - After completion the job. The production department sends the job completion certificate and a copy of job cost sheet to costing department.

Difference between Contract Costing and Job Costing

The difference between these two may be cleared as follows-

S.No	Bases of Difference	Contract	Job Costing
1	Nature or work	It is related to contraction generally	It is related to production process.
2	Amount and Time	Contract is having huge amount and longer period	Job is related for shorter period and small amount.
3	Sub contractor	In case of contract work	The subcontractor may be contracted and their cost will be part of contract costing.
4	Industry	Contract costing method is used in contraction industry e.g., Road	It is applied in industries which manufacture products or provide



			services against specific orders such as printing press, furniture makers general engineering concerns etc.
5	Work site	In the contract work is done out the work shop generally. Place of contraction is the work site/work shop.	Here works is completed in the workshop only
6	Determination of profit or loss	In this method profit or loss is also determined on incomplete contract	In this method profit or loss is calculated after the completion of job
7	Nature of Expenses	Most of the expenses under contract costing are direct in nature.	In Job costing expenses may be direct and indirect both.

Batch Costing

Meaning

There are some such products whose cost of production can be calculated unit wise (for an individual unit). For example bolts nuts, pins, screw bread, biscuits, etc. In such a case firms which are producing these products, use the batch costing method in batch costing each batch of production is treated as an separate job work and cost is determined accordingly.

Procedure of Costing

Batch costing does not differ from job costing in respect of accounting procedure. Like job costing each batch is given a separate number and cost sheet is prepares. The overheads are distributed by a proper method.

In this method cost of plant and its setting is treated as fixed overheads and it is distributed among the batched by the proper methods.

Economic Batch Quantity

In this method that quantity of product is calculated which make the cost of batch economical or least? Thus, economic batch quality is that best possible size of output which gives that minimum cost and maximum product.

To calculate the economic batch quantity the following two types of cost are considered –

1. Setting cost of plant.
2. Cost of shortage – Rent of warehouse, insurance expenses, interest on borrowing

$$\text{Economic Batch Quantity} = \sqrt{\frac{2 \times U \times S}{C}}$$

U = No. of units to be produced in a year

S = Set up cost per batch

C = Carrying costs per units



PROCESS COSTING

Definition:

Some important definitions of process costing are as under –

“Process cost accounts are applied to concerns which produce a commodity that has to go through several processes and which requires to know the cost of each process”.

– **Charles.**

“Process costing is used to ascertain the cost of each stage of manufacture where material is passed through various operations to obtain a final product to result, with by products in many cases at different stages.

- **Lunt and Ripley**

Application of process costing –

Process costing is employed in the following types of industries –

- 1) Food processes industries, e.g., flour mills, meat products, milk dairy, confectionaries, fruits and vegetables processing etc.
- 2) Other industries involving a sequence of processes, e.g., paper mills, cement works, coke works, canning factory, textile manufacture, cartoon making, etc.
- 3) Metallurgical industries, e.g., iron and steel, aluminum, wire drawing and netting and polishing, alloy production etc.
- 4) Chemical industries, e.g., drugs and pharmaceuticals, paints soap making, production of sugar, molasses and alcohol, breweries, distilleries, oil refining, etc.

Salient features/essential characteristics of process costing –

- 1) The cost per unit produced is the average cost which is calculated by dividing the total process cost by the number of units produced.
- 2) Some loss of materials in processes (due to chemical reaction, evaporation, etc.) is unavoidable.
- 3) The production is continuous and the final product is the result of a sequence of processes.
- 4) Processing of raw materials may give rise to the production of several products. These several products produced from the same raw material may be termed as joint products or by-products.
- 5) The products are standardized and homogeneous.
- 6) Costs are accumulated process-wise.
- 7) The sequence of operations or processes is specific and pre-determined.
- 8) The finished product of each but last process becomes the raw material for the next process in sequence and that of the last process is transferred to the finished goods stock.

Advantages / uses/ need of process costing –

Main uses of process costing are as follows –

- 1) System of standard costing can be applied with ease in case of process accounts.
- 2) Valuation of inventory of work-in-process of different processes and finished products is facilitated by process accounts.
- 3) Cost of individual processes as well as of finished products can be ascertained at short intervals.
- 4) Make or buy decisions for different processes can be taken in the light of costs at different processes. For example, in case of textile manufacture if the cost at weaving process is higher than the price at which plain cloth can be purchased from outside, the company may decide to buy plain cloth from outside and perform the process of printing only. If weaving costs are lower, the weaving process is also performed.
- 5) Effectiveness at each process is determined on the basis of costs incurred at individual process.
- 6) Since output at each process is homogeneous, average cost per unit can be easily calculated.



- 7) Separate cost ascertainment for each process has motivational impact. Employees at the process resulting in cost economies can be rewarded, and those not performing up to the mark can be reprimanded.
- 8) Cost control is facilitated as it is ascertained as to where excessive cost has been incurred and where wastages and scraps are high.

Limitations of process costing –

Major limitations of process costing are –

- 1) Process costs throw light on efficiency level of entire group of people working at a process, not on the efficiency of individuals.
- 2) Determination of cost at processes is by itself not sufficient for cost control, make or buy decisions or for motivational measures.
- 3) In case production at a process is not homogeneous as in the case of foundries making casting of different sizes, shapes and of different qualities involving different alloys, the average per unit cost based on total output and total cost at a process will be misleading.
- 4) Process costs are historical costs and suffer from all weaknesses of such costs.
- 5) Valuation of inventories where there is work-in-progress at processes, involves lot of estimation.
- 6) Determination of cost of by-products and joint-products is also a mere estimation.

Principles of process costing –

The following principles should be followed for ascertaining costs at processes –

- 1) Output of one process is transferred to the next process and that of final process is transferred to finished goods account.
- 2) Cost per unit at processes is ascertained at the end of each specified period, e.g., on monthly or quarterly basis.
- 3) All normal losses should be charged to the output at the processes. However, cost per unit must never be influenced by abnormal gains and losses.
- 4) Each process is taken as a cost centre, i.e., all direct and indirect costs are assigned to processes on appropriate basis.
- 5) In case of by-products and joint-products, their share in joint costs should be carefully estimated and credited to the main process.
- 6) In case there are incomplete units at the process at the beginning and at the end of the period, equivalence of incomplete units is determined.

Normal and Abnormal losses:

Normal Process Loss: That amount of loss which cannot be avoided because of the nature of material or process is normal process loss. Such a loss is quite expected under normal conditions. It is caused by factors like chemical change, evaporation, withdrawals for tests or sampling, unavoidable spoiled quantities etc.

Abnormal Process Loss: This type of loss consists of loss due to carelessness, machine break down, accident, use of defective material etc. Thus in cases due to abnormal factors it represents a loss which is over and above the normal loss.

Accounting Treatment of normal loss:

It is a fundamental costing principle that the cost of normal losses should be borne by the good production. Normal loss is generally determined as a percentage of input. Sometimes such a loss is due to cost of weight, say due to evaporation or a chemical action. Since such a wastage is not physically present, obviously it cannot have any value.



However when normal loss is physically present in the form of scrap it may have some value, i.e. it may be sold at some price. Whenever scrapped material has any value, it is credited to the process account. This illustrated below.

Accounting Treatment of Abnormal Process Loss

It is been stated earlier that abnormal loss is due to carelessness, accidents, machine, breakdown and other abnormal reasons. Unlike normal loss, abnormal loss is not absorbed by good production, rather it is transferred to costing P & L a/c. This is because if the cost of abnormal loss were to fall upon the good production the cost there will fluctuate and the information provided would be misleading. In order to overcome this and also to disclose the cost of abnormal loss, the following procedure may be adopted :

- Allow for normal loss in the manner described earlier.
- After considering normal loss, find out the cost per unit that process. This is done by the following formula process.

$$\text{Cost per unit} = \frac{\text{Total cost} - \text{value of normal loss}}{\text{Units introduced} - \text{normal loss units}}$$

- Multiply the cost per unit (calculated as above) by the number of units of abnormal loss. This gives the total value of abnormal loss.
 - Credit the relevant process account with the quantity and value of abnormal loss.
 - The balance figure in the process account is the cost of good units produced in the process. This can also be found by multiplying cost per unit with the number of good units produced.
 - Open Abnormal loss account and debit it with the quantity and value of abnormal loss shown in the process account sale proceed from abnormal loss are credited to abnormal loss account. Any balance left in this account is net loss and transferred costing P & L a/c.
- Fifty units are introduced into a process at a cost of rupee one each. The total additional expenditure incurred by the process is Rs. 30 of the units introduced 10% are normally spoiled in the spoiled in the course of manufactures these possess a scrap value of Rs. 0.25 each. Owing to an accident, only 40 units are produced. You are required to propose (i) Process a/c and (ii) abnormal loss a/c.

Abnormal Gain or Effectiveness -

The normal process loss represents the loss that would be expected under normal conditions. It is an estimated figure. The actual loss may be greater or less than the normal loss. If the actual loss is greater than normal loss, it is known as abnormal loss. But if actual loss is less than normal loss, a gain is obtained which is termed as abnormal gain or effectiveness. The value of abnormal gain is calculated in a manner similar to abnormal loss. It is shown on the debit side of the Process Account and credit side of the Abnormal Gain Account. Like abnormal loss, it is ultimately transferred to Costing Profit and Loss Account.

Joint and By Products

Joint products: The term joint products are used for two or more products of almost equal economic value which are simultaneously produced from the same manufacturing process and the same raw material. Joint products thus represent two or more products separated in the course of processing each product being in such proportion as the main product.

Characteristics:

- Joint products are produced from the same raw material by natural proportion.



- (b) They are produced simultaneously by a common process.
- (c) They are comparatively of almost equal value.
- (d) Joint products may be saleable after separations or may be further processed by incurring additional costs to make them stable or an improved product.

A classic example of joint products as given above is found in oil refining, where items like petrol diesel, naphtha, kerosene etc. are produced from the crude oil. Other example are in flour mill where joint products are hides, canned meat, fertilizers etc. The joint product is also used to describe various qualities of the same product, as for example many grades of coal which may be produced in coal mining.

Examples of Joint Products

Industry	Joint Products
1. Oil Refining	Petrol, Diesel, Kerosene grase lubricating oils.
2. Dairy	Skimmed Milk, butter
3. Meat processing	Meat, Hides
4. Mining	Several metals from the same or example copper, silver, zinc etc.

By Product:

By products are products of relatively small value which are incidentally and unavoidably produced in the course of incidentally and unavoidably produced in the course of manufacturing the main product. For example in sugar mills the main products is sugar. But bagasses and molasses of comparatively smaller value are incidentally produced and thus are by products, other examples of by products are oil cake produced in the extraction of edible oil, cotton seed produced cotton textile industry etc. These by products are unavoidably produced and are of secondary value. The sales value of these by products is much less as compared to the main product is much loss as compared to the main product. For example sales value of byproducts bagasse and molasses is much less than that of the main products sugar.

By Products may be :

- (a) Those sold in their original form without further processing.
- (b) Those which require further processing

Distinctions between Joint Products By Products.

A product may be treated as a joint product in one business & the same product may be treated as byproduct is another business. However the following factors should be considered to determine if a product is a joint product as a byproduct.

- (a) Relative sales value: If the sales value of all the products all more or less equal they all treated as joint products. If however there are wide differences in the relative sales values of products, the product with the greater sales value is treated as the main products & the products of lower value are treated as by products.
- (b) Objective of manufacture : If the objective of manufacturing is product A, they unwanted products B & C be treated by products.
- (c) Policy of Management : The management may decide to treat a particular product as the main product & the other product as by products. Alternatively it may choose to treat all product as joint products.



Examples of By Products:

Industry	Joint Products
1. Sugar	Bagasse Molasses
2. Butter textile	Cotton seed
3. Edible oil	Oil cake
4. Meat	Bones
5. Rice mills	Husk.

Distinction between Joint Product and By Product –

The point of distinction of Joint products and by products is a question of commercial importance, business objectives, profit pattern, certainty of market, necessity of further process etc.

The important features distinguishing Joint Products and by products are –

- 1) Joint products are the products of equal economic importance, while by products are of lesser economic importance.
- 2) Joint products are produced from same input and process whereas by products are produced from wastage, scarp and discarded material of the main process.
- 3) Joint products are not produced incidentally but by products emerge incidentally also.
- 4) Joint products have significant impact on total cost at the point of separation, whereas by products have little impact on total cost.
- 5) Joint products require further processing, while the byproduct generally do not require to be processed any further.

Joint Expenses –

There are certain industries where products are simultaneously produced and the same are referred to joint products. Expenses incurred are also joint in this case.

Joint in this case means that the products from the same basic raw material. Examples may include oil industry, gasoline, fuel oil, lubricants, crude oil etc.

The aim of analyzing joint expenses is to –

- i) Correct collection, compilation and classification of process cost.
- ii) Determine profit or loss on each line of manufacture.
- iii) Determine the pattern of production and the most profitable product mix.
- iv) Study the effect on cost and profits due to increase or decrease in production of joint products in order to fix prices.
- v) Determine the profitability of selling joint products and by-products as they come out at the split off point and maximize profit through marginal contribution analysis.

When accounting for joint products, the products are not identifiable as different individual products until a certain stage of production known as the split off point. All costs incurred before the split off point are called joint products costs. Joint costs should be shared properly otherwise valuation will be difficult.

Average Unit Cost Method –

In this method, the total costs are assessed, yielding an average unit cost with one net profit for the total operation. It is applicable where processes are common and inseparable for joint products and where the resultant products can be expressed in some common unit.



Physical Unit Method -

A physical base such as raw material weight, linear measure volume etc. is applied in apportioning pre-separation point costs to joint products. For example, if there is 40% beef in product X and 60% beef in product Y, 2/10 of the cost upto separation point will be charged to X and 6/10 to Y. It is not a good method in areas for instance one product is a gas and another is liquid.

Survey Method -

In this method all the important factors e.g. volume, selling price, technical side, marketing process etc. affecting costing are ascertained by means of extensive survey. Point values or percentage are given to individual products according to their relative importance and costs are apportioned on the basis of total points. These ratios should be revised from time to time depending on the factors affecting production and sales.

Contribution (Gross Margin) Method -

In this method the marginal cost of the joint cost is apportioned on the basis of weight or quantity of each product and fixed cost on the basis of marginal contribution made by each of the products. The method provides useful information for taking decision on maximization of profits by rearrangement of products and sales mix.

Market Value Method -

This is the most popular method of apportioning expenses that are joint. The joint costs are split into the ratio of selling price of each individual products and the costs are based on these ratios.

Oil Crushing, Refining and Finishing Process -

1. Crushing process
2. Refining process
3. Finishing process

Crushing Process -

In this process raw material i.e. oil seeds or coconut or copra or kernels etc. are used. Other expenses of the process are debited, sale of bags or sacks is credited. Oil cakes or oil residue are sold as a by-product is also credited. The output is crude oil transferred as input in the next process. There are may be loss in weight in the process.

Refining Process -

Crude oil from crushing process is debited, other materials, wages and overheads of the process are debited. Loss weight if any, is credited. The output is refined oil. Fats and residual oil may be obtained as by products which are credited. The output being refined oil is transferred to the next process i.e. finishing process.

Finishing Process -

Refined oil obtained from refining process is debited. Other materials, wages and overheads of the process are debited. Sale of by product and loss in weight are credited. Sundry sales of finished oil are also credited. The balance of this process is credited as cost of production of refined oil. Cost of drums or barrels or tins for storage of refined oil is also debited to find out cost of stored finished oil.



If sale of finished oil is given in the question, then finished Stock A/c should be opened after finishing process A/c and in such a case cost of goods transferred from Finishing Process A/c, Cost of Packing material and sale of Finished oil are shown in Finished Stock A/c and the profit or loss is transferred to Profit & Loss A/c.

Inter-Process Profit -

Generally, the output of one process is transferred to another on cost basis. Similarly, goods manufactured in the final process are also transferred at cost to Finished Stock A/c. But sometimes it is desirable by a manufacturing concern to value goods processed by each process at a price corresponding to the market price of comparable goods. Thus profit or loss made by each process is revealed and the efficiency of a process is not affected by the efficiency or inefficiency of a previous process. The market price of the goods processed being generally higher than the cost of the process, each process account will show some profit. This profit is termed as inter-process profit.

Advantages of Inter Process Profit -

1. **Introducing of Working Efficiency of Process** - In this case, a process is doing well maintaining profits or loss is utilized by this method. It knows that process is working at loss and to remove default of this process and default gets by attempts of remove difficulties of that process, finished stock is treated as cheaper rate from markets and finished production of that process.
2. **Compare to other Process** - Transfer of cost including profits and compare to different process, cost is deficit by trying cost less product by that working efficiency increased.
3. **Confidential of Real Profits** - Cost transfer with profit to next process. Profits are confident in every cost plus profit in process.
4. **Decision to do Work by Self** - Trader may acknowledge of any cost of production of process transfer to contractor which production will be effected in surplus or deficit.

Limitations of Inter Process Profit -

1. **Imaging Profit** - We cannot tell real profits to inter process profits, this is only imaginary profits. Its main reason that is not sale in fact to transfer of goods in inter process.
2. **Difficulty in Calculation of Real Profit** - In this method, unrealized profits is calculated for the calculation of real profits become its calculation is very difficult.
3. **Unrealised Profit** - Opening stock and closing stock is taking to all the method, unrealized profit is included in that process in which book profits and real profits is not a acknowledge.

Computation of Inter-Process Profit -

Under this method, the output of first process after charging certain profit is transferred to second process and the output of second process after charging certain profit is again transferred to third process. But in every process there remains certain stock which includes the part of profit of previous process. Thus profit included in the stock by previous process, is known as unrealized profit. Therefore, at the end of year the amount of profit included in the closing stock should be computed and the provision for unrealized profit should be made from the amount of total profit.

It is essential for calculation of unrealized profit for reserve -

1. In this first method, closing stock is not make of reserve of unrealized profit.
2. Calculation of profit of transfer of goods by an cost of $\frac{1}{4}$ or 20/80 or 25%.



3. Calculation of reserve of unrealized profit by method for closing stock difference of its called unrealized profit –

Unrealised profit = Value of closing stock – Cost of closing stock

OR

$$\text{Cost of closing stock} = \frac{\text{Stock} \times \text{Cost Amount}}{\text{Total Amount}}$$

Activity-Based-Costing (ABC)

Introduction

The concept of Activity Based Costing (ABC) was introduced in the last decades of 20th century. The traditional cost accounting methods were designed around 1870 to 1920. In those days, industries were labour-intensive. There was no automation. The product variety was small and the overhead costs I companies were comparatively low. However, in the last few decades, particularly in 1980s, the situation changed rapidly. The traditional cost accounting system has been called 'enemy of production' and the question is raised whether it is an asset or liability?

Steps used to Apply Costs to Products

1. Choose Appropriate Activities
2. Trace Cost to Activities
3. Determine Cost Drivers for Activities
4. Estimate Application rate for each Activity Driver
5. Applying Costs to Products

Limitations of ABC

1. It is based on historical costs while for planning decisions, future costs are more relevant.
2. ABC does not classify costs into variable and fixed costs. For many short run decisions, it is important to identify variable costs.
3. ABC is as accurate as the quality of cost drivers.
4. ABC is costly than traditional methods.

Target Costing

Introduction

It is well-known that customers are not only quality-conscious but they are cost-conscious also. They want good quality products but at affordable prices. Whenever we watch TV, we observe a lot of advertisement offering quality product at reasonable price like '**Happy price menu of McD, 'Big Bazar-Isse sasta or kahi nahi', etc.**, Since consumer is the king in today's cut throat competitive world, a different approach in the field of product costing is developed recently known as 'target costing'.

Stages Involved in Target Costing

Following 4 stages are involved in target costing:

Stage 1: Determine the target price which the customers will be prepared to a for the product.

Stage 2: Deduct the target profit margin from the target price to determine the target cost.

Stage 3: Estimate the actual cost of the product.

Stage 4: If the estimated actual cost exceeds the target cost, investigate the ways of bringing down the actual cost to target cost.

Costing for Service Sector

Introduction



Service sector companies are those which provide services or intangible products to their customers. The types of services that may be provided by service sector are of diverse nature. So, they have their own requirements in respect of cost accounting treatment but the general principles of costing relating to manufacturing sector also apply to service sector.

Characteristics of Service Sector

1. Labor intensive
2. Per unit cost is difficult to define
3. No physical product
4. Perishable
5. Cost of a service product are determined by customer behavior

Costing Methods Used in Service Sector

1. Job Costing Method
2. Process Costing Method
3. Customer Costing Method

Various statements of Unit costing

1. Units or Output Costing – costing information is presented in the form of a statement known as cost sheet or cost statement. Sometimes production account may also be prepared.
2. Cost sheet – Cost sheet is a periodical statement, which is prepared in tabular form on weekly, fortnight, monthly or quarterly basis. It is defined by I.C.M.A., London as, “A statement, which provides for the assembly of the detailed cost of a centre a cost unit.”
3. Statement of Cost and Profit – Usually in a statement of cost, cost per unit is not shown. In some statements of cost, the proportion of each elements to total cost is shown in a separate column, in addition to total cost.
4. Production Account – When a cost sheet is prepared in the form of account, it is known as production account. It is based on double Entry system of financial accounting.

Unit or Output Costing -

This method is also known as single costing. Under this method, no separate set of book is generally required. Costing information is presented in the form of a statement known as cost sheet or cost statement. Sometimes production account may also be prepared. The cost of the production per unit is arrived at by dividing the total cost of production during a given period by the total number of units produced. The cost of production includes direct materials, direct labour, direct expenses, factory overheads and office and administrative overheads. The total cost per units is arrived at by dividing the cost of sales (or total cost) during a given period by the total number of units is arrived by adding the selling and distribution overheads to cost of goods sold.

Suitability of Unit costing – This method is applied where there are only one or few products, which are identical and capable of being expressed in simple quantitative units. For example, radios, cameras, bricks, pens, cement, mines, quarries, etc.

Cost sheet

Cost sheet is a periodical statement, which is prepared in tabular form on weekly, fortnightly, monthly or quarterly basis. it is defined by I.C.M.A, London as, “A statement, which provides for the assemble of the detailed cost of a centre a cost unit.” The total cost is analyzed into prime cost, factory cost, office cost (or cost of production) and total cost (or cost or sales). The cost sheet generally shows the total cost per unit of the product manufactured during the period. Cost sheet, being a memorandum statement, does not form part of the double entry cost accounting records.

The cost sheet may be prepared on the basis of actual data (Historical cost sheet) or estimated data (Estimated Cost Sheet). Usually, a cost sheet contains the following –



1. Value of raw materials consumed – Cost of raw materials consumed is ascertained after making adjustments for the opening stock and closing stock of raw materials. The expenses incurred on purchase of material are ascribed to the cost of materials.
2. Cost of direct labour – Direct labour employed in production should be identified separately. This can be easily done with the help of time and job cards.
3. Direct expenses – Direct expenses should be separately identified, as they are part of prime cost.
4. Prime cost – It consists of costs of direct material, direct labour, and direct expenses. It is also known as direct cost. Basis cost, first stage cost or flat cost.
5. Factory cost – It comprises prime cost and in addition works or factory overheads which includes cost of indirect material, indirect labour and indirect expenses relating to production or factory. This cost is also known as works costs of manufacturing cost.
6. Cost of production – It comprises of factory cost and office and administration overheads. This is also termed as cost of production.
7. Total cost – It comprises of cost of production and selling and distribution overheads. It is also termed as cost of sales/cost of goods sold.

Objectives of Preparing Cost sheet –

Cost sheet is prepared for the use of management. Basic objectives for preparing cost sheet are –

1. To ascertain the cost of production and each component, in total as well as per unit
2. To compare the costs for any two periods and
3. To fix the selling price of the product.



UNIT-VI
RECONCILIATION

Reconciliation of cost accounting and financial accounting Profit

A statement prepared to reconcile the difference between the profits as shown by cost book and financial books for a particular accounting period is called "reconciliation statement".

Reconciliation of these cost and financial accounts means tallying the profits revealed by the two sets of books. Reconciliation is aimed to find out the reasons for disagreement of two profits.

Reasons for Disagreement in Profit -

A number of reasons may be attributed to the disagreement between the costing and financial profit. The chief ones may include -

- 1. Items shown only in Financial Accounts
2. Items shown only in Cost Accounts
3. Estimation of Indirect Expenses
4. Differences due to different basis of Stock Valuation and Depreciation
5. Abnormal Losses and Gains

Methods of reconciliation

Reconciliation can be done by any one of the following two methods -

- 1. By preparing reconciliation statement.
2. By Preparing memorandum reconciliation statement.
1. By preparing reconciliation statement - as bank reconciliation statement is prepared to reconcile the difference in cash book and pass book. Similarly on the same ground a reconciliation statement is prepared to reconcile the difference between the profit as shown by financial books and cost books.

SPECIMEN OF RECONCILIATION STATEMENT

Table with 3 columns: Description, Amount, and Balance. Rows include Profit as per Cost books, Add: (i) Expenses overcharged in cost books, (ii) Incomes not included in cost books, (iii) Under valuation of closing stock in cost books, (iv) Over valuation of opening stock in cost books, Less: (i) Expenses undercharged in cost books, (ii) Expenses and losses shown in financial books but not in cost books, (iii) Over valuation of closing stock in cost books, (iv) Under valuation of opening stock in cost books, Profit as per Financial Books.



Memorandum Reconciliation Account

To Loss as per books	.....	By Profit as per books	.....
To Direct expenses undercharged in cost books	.....	By Direct expenses overcharged in cost books	.....
To overheads undercharged in cost books	.....	By overheads overcharged or over recovered in cost books	.....
To expenses or losses not included in cost books	.....	By expenses or losses included only in cost books	.....
To Items of profit/gain/or income shown or included only in cost books	.....	By Items of profit/gain/or income not shown or recorded in cost books	.....
To over valuation of closing stock in cost books	.....	By over valuation of opening stock in cost books	.....
To Over valuation of closing stock in cost books	.....	By Under valuation of closing stock in cost books	.....
To profit as per financial books (Bal. Fig)		By Loss as per financial books (Bal. Fig)	

Difference between reconciliation statement memorandum reconciliation statement

Basis	Reconciliation statement	Memorandum reconciliation statement
Nature	It is statement	It is an account
Sides	There are two sides plus and minus	There are two sides debit and credit
Items to be added	They are recorded in plus column	They are debited to the account
Items to be deducted	They are recorded in minus column	They are credited to the account
Total	Total of both sides are recorded	Only higher total is recorded
Difference of total	It is recorded below the total	It is recorded above the total
Side of difference	The difference is recorded in the column of higher total.	The difference is recorded in the column of lower total.
Popularity	It is more popular.	It is less popular