

INTRODUCTION

Cost may be defined as the amount of expenditure (actual or notional) incurred on or attributable to a given item. cost represents the resources that have been or must be sacrificed to attain a particular objective. These resources can be either direct or indirect

Cost Information can be used for the following Purposes:

- The analysis of profitability of individual products, services or jobs.
- The analysis of profitability of different departments or operations.
- The analysis of cost behavior of various items of expenditure in the organization can be done.
- It is used to locate differences between actual results and expected results. Such differences can also be traced to the individual cost centre with the efficient cost system.
- It can be used in setting the prices so as to cover cost and generate an acceptable level of profit.

Costing

It means classifying recording and appropriate allocation of expenditure for the determination of the costs of goods or services and present action of suitably arranged data for the purposes of control and guidance of the management

Cost Accounting

Cost accounting system is used to record, summarize and report cost information. Some cost information is reported to external users such as shareholders and creditors in the form of income statements and balance sheets, From the cost accounting system, cost accounting information and management accounting information are segregated. Cost accounting information is used for the preparation of balance sheet and income statement whereas management accounting information is used for the purpose of helping managers in their decision making process.

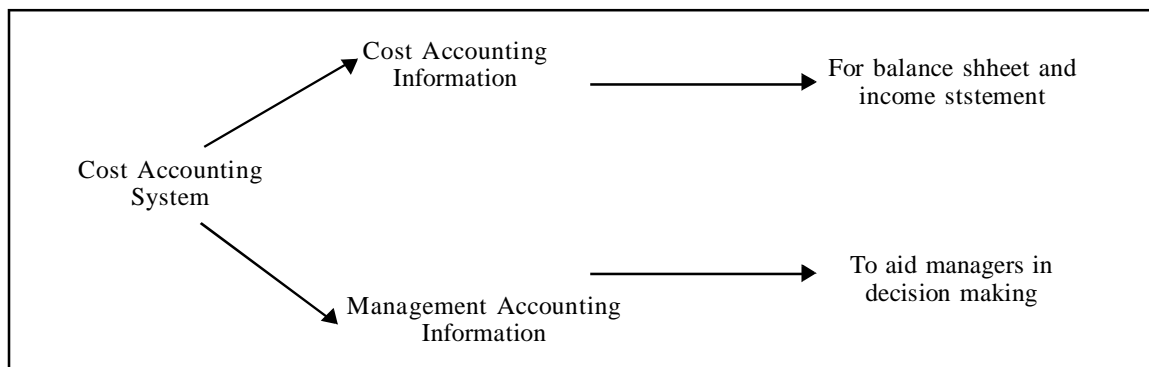


Fig. 1.1

Financial and Cost Accounting

| Sr. No | Basis | Financial Accounting | Cost Accounting |
|--------|------------------|--|---|
| 1 | Objective | Financial performance and position | Ascertain cost and cost control |
| 2 | Cost and Profits | Shows overall cost and profit/loss | Shows details for each product process, job contract, etc |
| 3 | Control/Report | Emphasis on reporting | Emphasis on control and reporting |
| 4 | Decision making | Limited use | Designed for decision making |
| 5 | Responsibility | Does not fix responsibility | Can effectively fix responsibility |
| 6 | Time frame | Focus on historical data | Focus on present and future |
| 7 | Type of reports | General reports like P&L Account Balance Sheet, Cash Statement | Can generate special reports and analysis |
| 8 | Legal need | Statutory requirement | Voluntary, except for some cases |
| 9 | Transactions | Records external transactions | Records internal and external transactions |
| 10 | Reader | Everybody | Internal management |
| 11 | Formats | Standard, as per law | Tailor made |
| 12 | Access | Everybody, except for some | Very limited access |
| 13 | Unit of value | Monetary | Monetary and physical |

TYPES OF COSTS

The bases of classifying costs are the nature of cost, function, direct/indirect variability, controllability, normality, capital/revenue, time planning and control, managerial decisions, etc. The classification of cost is done based on these factors. The concept of cost center refers to the smallest segment of activity or area of responsibility for which costs are accumulated, a cost unit is nothing but a unit of output in the production of which the costs are incurred. The techniques of costing can be classified as historical costing, absorption costing, marginal costing direct costing standard costing and uniform costing.

Different Basis for Classification of Cost

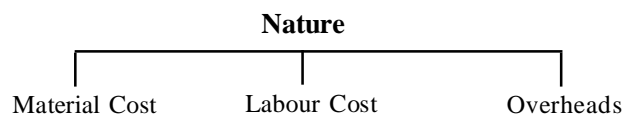
Cost classification is the process of grouping costs according to their common characteristics. A suitable classification of costs is very helpful in identifying a given cost with cost centers or cost units.

Cost may be classified according to their nature i.e., material, labour and expenses and a number of other characteristics. Depending upon the purpose to be achieved and requirements of a particular concern the same cost figures may be classified into different categories. The classification of costs can be done in the following ways:

1. By Nature of Element
2. By Functions
3. As Direct and Indirect
4. By Variability
5. By Controllability
6. By Normality
7. By Capital and Revenue
8. By Time
9. According to Planning and Control
10. For Managerial Decisions
11. Others

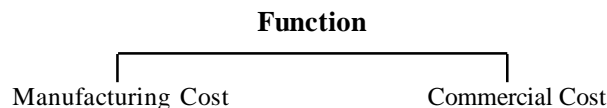
1. By Nature or Element or Analytical Classification

The cost are divided into three categories, i.e., materials, Labor and Expenses. Further Sub-classification of each element can be done, for example, material into raw material components, and spare parts, consumable stores, packing material, etc.



2. By Functions

It leads to grouping of costs according to the broad divisions of functions of a business undertaking or basic managerial activities, i.e., production, administration, selling and distribution. According to this classification cost are divided as follows:



Manufacturing and Production Cost

This category includes the total costs incurred in manufacture, construction and fabrication of units of production.

Commercial Costs

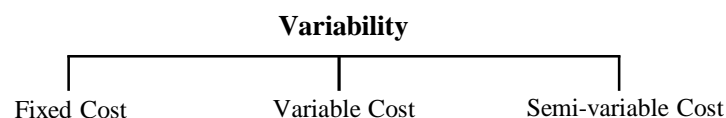
This category includes the total cost incurred in the operation of a business undertaking other than the costs of manufacturing and production. Commercial cost may further be sub-divided into (a) administrative cost and (b) selling and distribution cost.

3. As Direct and in Direct

According to this classification, total cost is divided into direct costs and indirect costs. Direct costs are those costs which are incurred for and may be conveniently identified with a particular cost center or cost unit. The common example of direct costs are materials used and labour employed in manufacturing an article or in a particular process of production. Indirect costs are those costs which are incurred for the benefit of a number of cost centers or cost units and cannot be conveniently identified with a particular cost center or cost units. Examples of indirect costs include rent of building, management salaries, machinery depreciation, etc., the nature of the business and the cost unit chosen will determine the costs as direct and indirect. For example the hire charges of a mobile crane used on site by a contractor would be regarded as a direct cost since it is identifiable with the project/site on which it is employed, but if the crane is used as a part of the services of a factory, the hire charges would be regarded as indirect cost because it will probably benefit more than one cost center or department. The distinction between direct and indirect cost is essential because the direct cost of product or activity can be accurately identified with the cost object while the indirect costs have to be apportioned on the basis of certain assumptions about their incidence.

4. By Variability

The basis for this classification is the behaviour of costs in relation to changes in the level of activity or volume of production. On this basis, costs are classified into three groups, viz., fixed variable and semivariable



Fixed (or Period) Costs

Fixed costs are those which remain fixed in total with increase or decrease in the volume of output or activity for a given period of time or for a given range of output fixed costs per unit vary inversely with the volume of production, that is, fixed cost per unit decreases as production increases and increases as production decreases. Examples of fixed costs are rent, insurance of factory building, factory manager's salary, etc., these costs are constant in total amount but fluctuate per unit as production changes. These costs are known as period costs because these are mostly dependent on time rather than on output. These costs are also termed as capacity costs.

Variable or Product Costs

Variable costs are these which vary in total directly in proportion to the volume of output. These costs per unit remain selectively consent with changes in volume of production on activity. Thus, variable costs fluctuate in total amount but tend to remain constant per unit as production activity changes. Examples are direct material costs, direct labour costs, power, supairs etc. Such costs are known as product costs because they depend on the quantity of output rather on time.

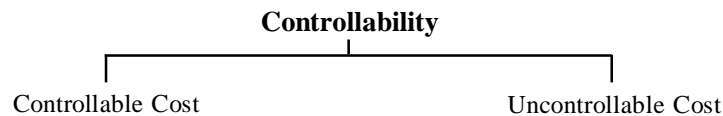
Semi-variable Costs

Semi-variable costs are those which are partly variable. For example, telephone expenses include a fixed portion of monthly charge plus variable charge according to the number of calls made thus total

telephone expenses are semi-variable. Other examples of such costs are depreciation, repairs and maintenance of building and plant etc.

5. By Controllability

On this basis costs are classified into two categories;



Controllable Costs

If the costs are influenced by the action of a specified member of an undertaking, that is to say, costs which are at least partly within the control of management they are called controllable costs. An organization is divided into a number of responsibility centers and controllable costs incurred in a particular cost centre can be influenced by the action of the manager responsible for the centre. Generally speaking, all direct costs including direct material, direct labour and some of the overhead expenses are controllable by lower level of management.

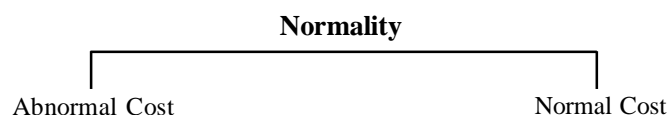
Uncontrollable Costs

If the costs are influenced by the action of a specified member of an undertaking, that is to say, which are not within the control of management they are called uncontrollable costs. Most of the fixed costs are uncontrollable. For example, rent of the building is not controllable and so is managerial salaries. Overhead cost, which is incurred by one service section or department and is apportioned to another which receives the service is also not controllable by the latter.

Controllability of costs depends on the level of management (top, middle or lower) and the period of time (long-term or short-term)

6. By Normality

On this basis, the costs are classified into two categories



Normal Cost

It is the cost which is normally incurred at a given level of output in the conditions in which that level of output is normally attained. It is not a part of cost of production.

Abnormal Cost

It is the cost which is not normally incurred at a given level of output in the conditions in which that level of output is normally attained. It is not a part of cost of production and charged to Costing profit and Loss Account.

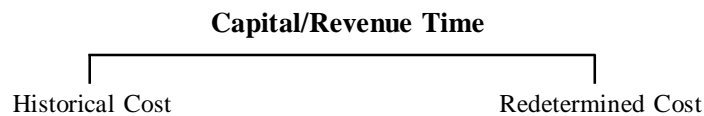
7. By Capital and Revenue or Financial Accounting Classification

If the cost is incurred in purchasing assets either to earn income or increasing the earning capacity of the business is called capital cost, for example, the cost of a rolling machine in case of steel plant.

Through the cost incurred at one point of time the benefit accruing from it are spread over a number of accounting years. Revenue expenditure is any expenditure done in order to maintain the earning capacity of the concern such as cost of maintaining an asset or running a business. Example, cost of material used in production, labour charges paid to convert the material into production, salaries, depreciation, repairs and maintenance charges, selling and distribution charges, etc. While calculating cost revenue items are considered whereas, capital items are completely ignored.

8. By Time

Costs can be classified as (i) Historical costs and (ii) Predetermined costs



Historical Cost

The costs are ascertained after being incurred are called historical costs. Such costs are available only when the production of a particular thing has already been done. Such costs are only of historical value and not at all helpful for cost control purposes.

Predetermined Costs

Such costs are estimated costs, i.e., computed in advance of production taking into consideration the previous periods, costs and the factors affecting such costs. If they are determined on scientific basis they become standard cost. Such costs when compared with actual costs will give the variances and reasons of variance and will help the management to fix the responsibility and take remedial action to avoid its recurrence in future.

9. According to planning and control

Cost Accounting furnishes information to the management which is helpful in discharging the two important functions of management, i.e., planning and control. For the purpose of planning and control, costs are classified as budgeted costs and standard costs.

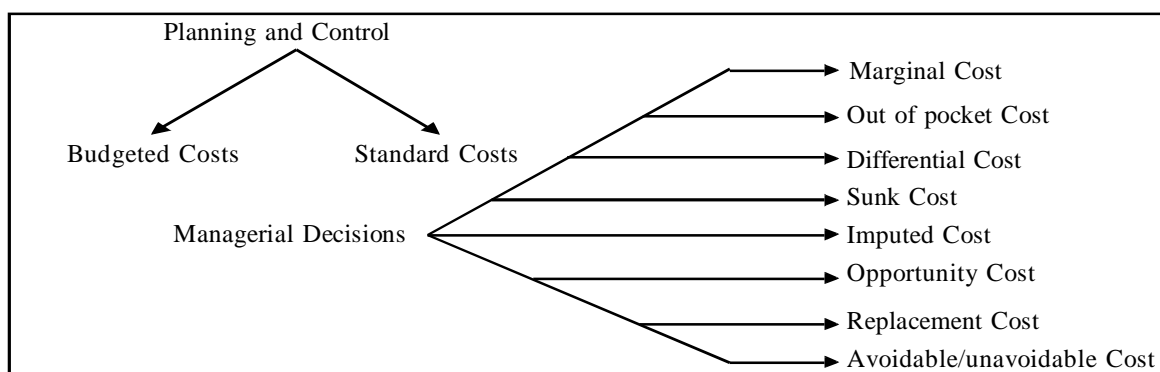


Fig. 1.2

Budgeted Cost

Budgeted costs represent an estimate of expenditure for different phases or segments of business operations, such as manufacturing, administration, sales research and development, for a period of time

in future which subsequently becomes the written expression of managerial targets to be achieved. Various budget are prepared for different phases/segments of business, such as sales budget, raw material cost budget, labour cost budget, cost of production budget, manufacturing overhead budget, office and administration overhead budget. Continuous comparison of actual performance (i.e., actual cost) with that of the budgeted cost is made so as to report the variations from the budgeted cost of the management for corrective action.

Standard Costs

The Institute of Cost and Management Accountants, London defines standard cost as “the predetermined cost based on a technical estimate for materials, labour and overhead for a selected period of time and for a prescribed set of working conditions.” Thus, standard cost is a determination, in advance of production, of what should be its cost under a set of condition

Budgeted costs and standard costs are similar to each other to the extent that both of them represent estimates of cost for a period of time in future. In spite of this, they differ in the following respects:

- Standard costs are scientifically predetermined costs of every aspect of business activity whereas, budgeted costs are mere estimates made on the basis of past actual financial accounting data adjusted to future trends. Thus, budgeted costs are projection of financial accounts whereas, standard costs are projection of cost accounts.
- The primary emphasis of budgeted costs is on the planning function of management where as, the main thrust of standard costs is on control.
- Budgeted costs are extensive whereas, standard costs are intensive in their application. Budgeted costs represent a macro approach of business operations because they are estimated in respect of the operations of a department. Contrary to this, standard costs are concerned with each and every aspect of business operation carried in department, budgeted costs are calculated for different functions of the business, i.e., production, sales, purchase, etc., whereas, standard costs are compiled for various elements of costs, i.e., materials, labour and overhead.

10. For Managerial Decisions

On this basis, costs may be classified into the following categories:

Marginal Cost

Marginal cost is the additional cost incurred if an additional unit is produced. In other words, marginal cost is the total of variable costs, i.e., prime cost plus variable overheads. It is based on the distinction between fixed and variable costs.

Out of Pocket Costs

This is that portion of the cost which involves payment, i.e., gives rise to cash expenditure as opposed to such costs as depreciation, which do not involve any cash expenditure. Such costs are relevant for price fixation during recession or when make or buy decision is to be made.

Differential Costs

If there is a change in costs due to change in the level of activity or pattern or methods of production they are known as differential costs. If the change increases the cost, it will be called incremental cost and if the change results in the decrease in cost it is known as decremental cost.

Sunk Costs

Sunk cost is another name for historical cost. It is a cost that has already been incurred and is irrelevant to the decision making process. A good example is depreciation on a fixed asset. Depreciation on a given asset is a sunk cost because the cost (of purchasing the asset) has already been incurred (when it was purchased) and it cannot be affected by any future action, though we allocate the depreciation cost to future period the original cost of the asset is unavoidable. What is relevant in this context is the salvage value of the asset not the depreciation. Thus, sunk costs are not relevant for decision making and are not affected by increase or decrease in volume.

Imputed (or notional) Costs

These costs appear in cost accounts only. For example, notional rent charged on business premises owned by the proprietor, interest on capital for which no interest has been paid. When alternative capital investment projects are being evaluated it is necessary to consider the imputed interest on capital before a decision is arrived as to which is the most profitable project.

Opportunity Cost

It is the maximum possible alternative earning that will be foregone if the productive capacity or services are put to some alternative use. For example, if an owned building is proposed to be used for a project, the likely rent of the building is the opportunity cost which should be taken into consideration while evaluating the profitability of the project.

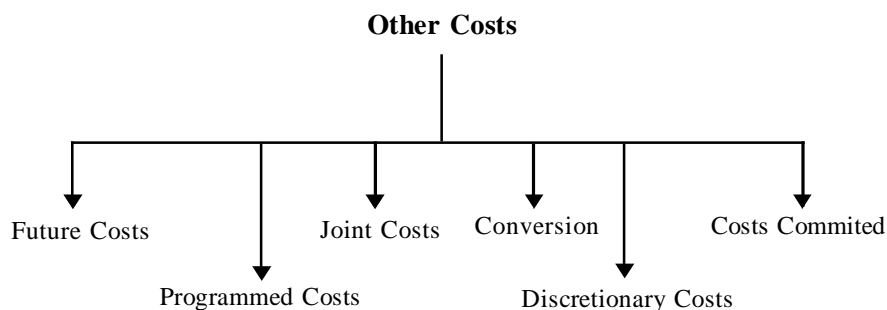
Replacement Cost

It is the cost at which there could be purchase of an asset or material identical to that which is being replaced or revalued. It is the cost of replacement at current market price.

Avoidable and Unavoidable Cost

Avoidable costs are those which can be eliminated if a particular product or department with which they are directly related to, is discontinued. For example, salary of the clerks employed in a particular department can be eliminated, if the department is discontinued. Unavoidable cost is that cost which will not be eliminated with the discontinuation of a product or department. For example, salary of factory manager or factory rent cannot be eliminated even if a product is eliminated.

Other Types of Costs



Future Cost

Are those costs that are expected to be incurred at a later date

Programmed Cost

Certain decisions reflect the policies of the top management which results in periodic appropriations and these costs are referred to as programmed cost. For example, the expenditure incurred by the company under the Jawahar Rojgar Yojana program initiated by the prime minister is a programmed cost which reflects the policy of the top management.

Joint Cost

Joint cost is the cost of manufacturing joint products up to or prior to the split-off point. Cost incurred after the split-off point is called separable cost. Joint cost is common to the processing of joint products and by-products till the point of separation and cannot be traced to a particular product before the point of split-off.

Conversion Cost

Conversion cost is the cost incurred in converting the raw material into finished product. It can be calculated by deducting the cost of direct materials from the production cost.

Discretionary Costs

Discretionary costs are those costs which do not have obvious relationship to levels of capacity or output activity and are determined as part of the periodic planning process. In each planning period the management decides on how much to spend on certain discretionary items such as advertising, research and development, employee training. These costs are amenable for alteration by the management.

Committed Cost

Committed cost is fixed cost which result from the decision of the management in the prior period and is not subject to the management control in the present on a short run basis. They arise from the possession of production facilities, equipment, an organization set-up, etc. Some examples of committed costs are: plant and equipment depreciation, taxes insurance premium and rent charges.

Cost Unit

Managers are often interested in knowing the cost of something. The 'something' for which the cost has to be ascertained is known as cost objective or cost object or cost unit. Examples of cost units include products, activities, department, number of patients treated, sales regions, etc.

For example, if a factory produces motor cars then the cost unit would be motor car because the costs are all incurred in producing motor cars.

Let us take up a more complex situation. Consider a bus operator providing bus services to the public between most of the major cities of the country. Suppose the bus operator wants to fix a cost unit, what is it?

Note that here there is no production, what is provided is a service.

Each trip between two cities may be taken as a cost unit. Alternatively cost per kilometre of travel may be taken as a cost unit. However, neither of the above cost units relates to the passenger who buys the service.

If the operator wants to fix a price to be charged to each passenger, the above cost units would have to be adjusted further.

Assume that a bus cover a distance of 700 km per day carrying 30 passengers on an average, the output is $700 \times 30 = 21,000$ passenger kilometres per day. On an average the passenger kilometres covered by each bus per week is 1,00,000. The total cost of operation per bus per week is ₹ 80,000, the cost per passenger kilometre is ₹ 0.80

$$\text{Cost per passenger kilometre} = \frac{80,000}{1,00,000} = \text{Re. } 0.80$$

The implication is that the bus operator must charge, on an average, over ₹ 0.80 per kilometre to each passenger in order to make a profit.

COST CENTERS

The smallest segment of activity or area of responsibility for which costs are accumulated. In the manufacture and sale of a product or in the rendering of a service, several activities may have to be performed. These activities are usually carried out by different departments or sections of the company. For example, in a pharmaceutical company, the raw materials may be purchased by a purchase department, stocked up in a store, processed in one or more processing departments, packed in a packing department and sold by a sales and distribution department. Hence cost statistics are conveniently accumulated for each department. In cost Accounting each department would be called a Cost Center. Typically, cost centers are departments, but in some instance, are department may contain several cost centers. For example, a machining department may contain several cost centres. For example, a machineing department may be under one foreman but it may contain various groups of machines, such as lathes, milling machines, etc.

As each department is managed by a departmental manager, the cost of a department would be a measure of how the department's manager is performing. In fact, by reporting departmental costs to the concerned manager is performing. In fact, by reporting departmental costs to the concerned managers, they will understand better the cost consequences of their actions so that departmental performance becomes more cost effective.

Charatristics of Cost Information

1. Cost accounting provides information that helps planning, control and decision making
2. Planning is future-oriented. Hence, cost information generated from historical record has to be attuned to future changes in the organization and its environment
3. Analysis and comparison of the actual and expected results indicate whether there is any need for control. Hence, costs have to be broken down into various elements and each element of cost has to be compared with a "norm" or "standard".

4. Decision making is a future-oriented activity because the impacts of current decisions are experienced in term of future costs and benefits. Decision making considers only relevant costs. But a cost that changes depending upon the alternative chosen is a relevant cost.
5. Cost data is gathered from the information about the operations to determine the costs which are related to each cost centre. The financial accounting system provides the data on expenses, and these are now treated as costs.
6. General or common costs like depreciation on factory building, have to be distributed among the various cost centres on an equitable basis
7. The costs accumulated in each cost center are then “loaded” or distributed over the cost units produced by them.

Cost Allocation

Many costs are incurred in an organization as a result of activities performed in several responsibility centers or subunits of the organization. A collection of costs to be assigned to different subunits is called a cost pool. The responsibility centers, products or services to which costs are to be assigned are called cost objects. The process of assigning the costs in the cost pool to the cost objects is called cost allocation or cost distribution.

Cost on Financial Statement

Generally Accepted Accounting Principles (GAAP) determines how costs are to be classified for financial reporting. These financial statements are for users outside the organization and the rules underlying the classification of costs for reporting in financial statements are not likely to be the rules that should be used for internal decision making. The main problem in financial reporting is determining when costs become expensed in the income statement. The calculation of the cost of a product for planning and cost control purposes may be different from the calculation of the cost of a product for financial reporting purposes.

Product costs are identified with goods manufactured or purchased for resale. Product cost on financial statements include all manufacturing costs, i.e., direct material, direct labour and overheads. Period costs are identified with a time period rather than a product – selling, administrative and interest costs are treated as period costs for presenting in financial statements

Techniques of Costing

In addition to the different methods of costing, the following techniques are used to ascertain costs:

1. **Historical costing:** By this approach actual costs are ascertained after they have been incurred. This is a conventional method of cost ascertainment.
2. **Absorption Costing:** This approach considers all indirect manufacturing costs (also called factory overheads), fixed and variable, as inventoriable or product cost, and treats them as expense only when the products are sold.
3. **Marginal Costing :** Marginal costing differentiates between fixed and variable costs. Under marginal costing, fixed costs are not treated as part of the product cost but are treated as period costs. Marginal cost of a product is its variable cost. And the fixed costs of the period are written-off in full against the revenue of that period. This technique assists and guides

management in taking various policy decisions under different conditions of business, such as, pricing decisions in times of competition, recession, make or buy decisions, suspension or continuance of product/product department, selecting profitable product-mix etc.

4. **Direct Costing:** The ascertainment of direct costs in respect of department, process or product. This is marginal costs plus fixed cost which is directly chargeable to the department, process or product. Under absorption costing, all fixed costs – allocable or unallocable (which are apportioned) are charged to department, product, etc., which more often than not complicate decision making and therefore, direct costing is an improvement over absorption costing in decision making.
5. **Standard Costing:** The ascertainment and use of standard costs and measurement and analysis of variances. Standard cost is a scientifically pre-determined cost which is fixed in advance of production for each element of cost, viz., material, labour and overheads and actual costs are compared against the standard costs to measure the variances and for exercising control.
6. **Uniform Costing :** The use of the same costing principles, methods and/or practices by several undertakings with a view to achieving uniformity in approach and system.

Cost Treatment

- Cost Ascertainment is the process of determining actual costs after they have been incurred.
- Cost Estimation is the process of determining future costs in advance before production starts, on the basis of actual past cost adjusted for anticipated future changes.
- Cost Allocation is the process of charging the full amount of an individual item or cost directly to the cost center for which the item of cost was incurred.
- Cost Apportionment is the process of charging the proportion of common items of cost to two or more cost centers on some equitable basis.
- Cost Absorption is charging cost from cost centers to products or services by means of a pre-determined absorption rate.

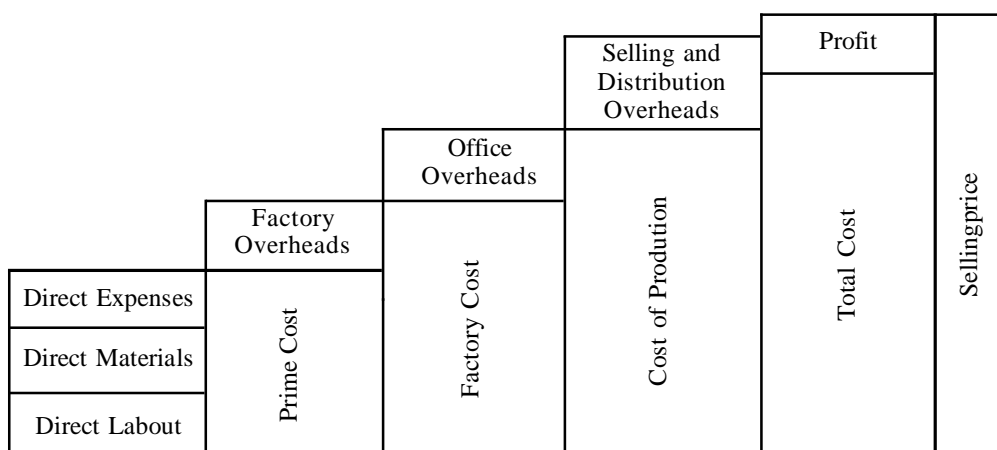


Fig. 1.2: Composition of Selling Price

Nature/Features/Characteristics of Cost

1. Cost is an expense incurred, actual or notional.
2. Cost may be notional costs also. A notional cost is a cost which is taken into consideration. Example, depreciation on fixed assets, but which is actually not paid to anyone.
3. A cost may be cash cost, example, salary paid rent paid, etc., or it may be a non-cash cost such as depreciation on fixed assets.
4. A non-cash cost does not result in actual cash outflows from the business firm; whereas a cash cost results in actual cash outflows immediately or at a later date from a business firm.
5. All costs have to be taken into account in order to determine the total costs.

Cost Object/Objective of Cost

The Objective of Cost are as follows:

1. **Determination of total cost:** To determine the total cost of manufacturing a product or providing a service.
2. **Helps to fix selling price:** On knowing the total cost, a manufacturer will be able to add the desired profit margin and fix an appropriate selling price.
3. **Helps to monitor and control costs:** Understanding the costs helps to monitor the costs periodically as well as reduce the unwanted controllable costs. Thus it helps in cost control.
4. **Helps in comparisons:** Costs help to compare the actual costs with the standard pre-determined costs and cut down any excessive costs. Thus the actual costs can be constantly compared, with the pre-determined costs.

Objectives of Cost Accounting

1. Ascertainment of cost.
2. Determination of selling price.
3. Cost control and cost reduction.
4. Ascertaining the profit of each activity.
5. Assisting management in decision making.
6. To frame various budgets.

Need/Importance/Advantages of Cost Accounting

1. **Determination of total cost:** Cost accounting helps to account for all the costs incurred in manufacturing a product or providing a service.
2. **To fix selling price:** Cost accounting helps to fix the selling price for a product/service after considering a reasonable profit margin.
3. **Cost classification:** Cost accounting helps in classifying the costs into fixed costs and variable costs; direct costs and Indirect costs, factory costs. Administration costs and selling and Distribution costs, etc.

4. **Helps to earn profits:** Cost accounting classifies the total cost into department-wise, product wise and thus helps to focus on cost reduction areas as well as profitable areas.

Importance of Cost Accounting

1. Control of material cost
2. Control of labour cost
3. Control of overheads
4. Measuring efficiency
5. Budgeting
6. Price determination
7. Curtailment of loss during the off season
8. Expansion
9. Arriving at decisions

Advantages of Cost Accounting

1. Cost reduction
2. Profit improvement
3. Helps in arriving at decisions

Uses/Benefits/Advantages of Costing

1. **Product mix:** Costing helps to determine a suitable product mix which will earn reasonable profits for the firm.
2. **Sales mix:** Costing helps in determining a suitable sales mix of the products for the firm.
3. **Price:** Costing helps in determining the total cost and thereby fix an appropriate price for the product which helps in earning reasonable returns for the organisation.
4. **Managerial decision-making:** Costing facilitates several types of managerial decision making in an organisation.

Various Decisions that a Cost and Management Accountant has to Furnish to the Management

1. Choosing the best budget when there are limiting factors restricting production or sales.
2. Make or buy decisions.
3. Accepting or rejecting orders.
4. Extra shift decisions.
5. Cost indifferent point.
6. Profit planning.
7. Differential cost analysis.
8. Adding or deleting departments (or products).
9. Exploring foreign markets.

10. Plant replacement decisions.
11. Shutdown decisions.
12. Preventive maintenance v/s Breakdown maintenance.
13. Further processing of joint products.

Cost

The Terminology of Management Accounting (CIMA) has defined cost as the amount of expenditure (actual or notional) incurred on, or attributable to, a specified thing or activity.

Costing System

A costing system is a system installed in order to trace the costs and to control and reduce the cost. A costing system serves the following purposes.

1. **Cost Ascertainment:** Costing system helps in ascertaining the costs and in profit measurement
2. **Cost Control:** Costing system helps in controlling the avoidable and unwanted costs and thereby it decreases costs.
3. **Cost Analysis:** Costing system provides information which facilitates in analysis of the costs mainly into variable and fixed costs. Such information is helpful to the management for determination of the overall policies for the entire organization.

Activity-based Costing (ABC)

Activity-based costing (ABC) is a system for assigning costs to products based on the activities they require. In this case activities means those regular actions performed inside a company. A company can use the resulting activity-based cost data to determine where to focus their operational improvement efforts.

Cost Classification

1. Direct cost can be directly identified with the finished products.
2. Indirect cost cannot be directly identified with the final product.
 1. **Activity cost pool:** accumulating the cost for the entire activity.
 2. **Driver:** is that factor which influences the particular activity cost.

Steps

1. Activity pool cost.
2. Cost driver.
3. Driver rate.
4. Apply to the product.

Advantages

1. Helps to price your product correctly.
2. Helps to analyse the whole activity under a situation.

3. It has to come from the shopfloor level and cannot be implemented by only sitting in the Board Room.
4. Unwarranted activity can be done away with.
5. Cost reduction and cost control.

Costs are Classified in ABC Analysis into 5 categories

1. **Unit level cost:** Incurred/essential for each and every unit of output/service.
2. **Batch level cost:** Costs related to a batch, e.g., material inspection and handling, production set-up.
3. **Product level cost:** Special mould for a particular product, e.g., cake.
4. **Customer level cost:** Costs to go and meeting the customers.
5. **Facility level cost:** Power, depreciation for the factory building, administrative building for those facilities that are available.

ALLOCATION OF OVERHEADS

Allocation of overheads is to assign the entire item of cost if it is directly related to a cost centre.

Apportionment of Overheads

Apportionment means distribution. To apportion means to distribute. Apportionment of overheads is distribution of overheads on an equitable basis to more than one cost centres. Overheads are to be apportioned to different cost centres based on following two principles.

- (a) **Cause and Effect:** In this case it is guided by the relationship between cost object and cost. It is a more rational method. Cause is the process or operation or activity and effect is the incurrence of cost.
- (b) **Benefits Received:** In this case overheads are to be apportioned to the various cost centres in proportion to the benefits received by them.

Primary Distribution of Overheads

Following the above two principles, basis of primary apportionment of items of production overheads is to be selected to distribute them among the cost centres. The basis of apportionment used to distribute overheads must be rational. Once the base is selected, it is to be followed consistently and uniformly. However, in circumstances such as change in technology, degree of mechanization, product mix, etc., the change in the basis for apportionment can be adopted.

Table 1.1: Primary Distribution

| Items of Overheads | Basis of Apportionment |
|-----------------------------------|------------------------|
| 1. Amenities to Employees | No. of employees |
| 2. Canteen Expenses | No. of Workers |
| 3. Depreciation | Value of assets |
| 4. Electricity | Light points |
| 5. Employer's Insurance Liability | Wages |

| | |
|-----------------------------|-----------------------------|
| 6. General Overheads | Direct Wages paid |
| 7. Insurance | Value of Stock |
| 8. Insurances | Value of Machinery |
| 9. Labour Welfare | No. of employees |
| 10. Lighting | No. of Light Points |
| 11. Lighting | Floor area |
| 12. Motive Power | Units |
| 13. Overheads | Wages |
| 14. Power | KWh |
| 15. Power | Value of Plant |
| 16. Power of Machinery | Horse power of the machines |
| 17. Rent | Area occupied |
| 18. Rent and Taxes | Area occupied |
| 19. Rent, Rates, etc. | Floor area |
| 20. Repairs and Maintenance | Value of assets |
| 21. Stores Overheads | Direct materials consumed |
| 22. Supervision | No. of workers |

Secondary Distribution of Overheads

Secondary distribution of overheads can be done by following the reciprocal basis or non-reciprocal basis.

- (1) **Reciprocal Basis:** In reciprocal secondary distribution, the cost of service cost centres are apportioned to production cost centres as well as to other service cost centres since the services rendered by certain service cost centres are also utilised by other service cost centres. In this case any one of the following three methods may be followed:

- (a) Repeated Distribution Method

Steps

- The proportion at which the costs of a service cost centres are to be distributed to production cost centres and other service cost centres are determined.
- The costs of first service cost centres are to be apportioned to production cost centres and service cost centres in the proportion as determined in step (i).
- Similarly, the cost of other service cost centres is to be apportioned.
- The process as stated in (ii) and (iii) are to be continued till the figures remaining undistributed in the service cost centres are negligible and very insignificant. Such negligible small amount left with service centre may be distributed to production cost centres.

Trial and Error Method

This method is followed when the question of distribution of costs of service cost centres which are inter-locked among them arises. Firstly, gross cost of services of service cost centres are determined and then the costs of service centres are apportioned to production cost centres.

Distinguish between Direct Cost and Indirect Cost

| Direct Cost | Indirect Cost |
|---|---|
| 1. Direct cost means that cost which can be identified with and allocated to cost centres or cost units. | 1. Indirect cost means that cost which cannot be allocated but which can be absorbed by, or apportioned to cost centres or cost units. |
| 2. Those cost which can be directly identified with cost centres, production units or processes are regarded as direct costs. | 2. Those cost which cannot be identified with cost centres or cost units and therefore they are to be distributed on some equitable basis are termed as indirect costs. |
| 3. Costs which can be conveniently associated wholly with a particular unit of a final product is termed as direct costs. | 3. Costs which cannot be associated or connected with a particular unit of the final product is termed as indirect costs. |
| 4. Examples are: (a) Materials which form part of the finished product. (b) Wages payable to worker who is directly involved in production, etc. | 4. Examples are: (a) Cost of consumable stores. (b) Salaries of factory manager, supervisor, foreman. (c) Rent, rates, telephone expenses, printing and stationery expenses, etc. |

Overheads

Overheads means indirect costs. Overheads are also termed as “On costs”. Overheads is an aggregate of indirect materials, indirect labour and indirect expenses.

- (a) Factory overheads,
- (b) Administrative overheads, and
- (c) Selling and Distribution overheads

1. Factory Overheads: Also known as manufacturing overheads or production overheads or works overheads or factory burden. Factory overheads is defined as the cost of indirect materials, indirect labour and indirect expenses.

- (a) **Indirect Materials:** Refers to materials that are needed for the completion of the product but whose consumption with regard to the product is so small that it would be inappropriate to treat it as an item of direct materials.

Examples: Cotton waste, lubricants, oil, grease, hand tools, stores and spares, works stationery, cost of nails, fevicol and glue in case of furniture making, cost of buttons and thread in case of garment industry, etc.

- (b) **Indirect Labour:** Is the labour cost of production-related activities that cannot be conveniently traced to specific products via physical observation.

Examples: Salaries and wages paid to supervisors, foremen, shop clerks, general helpers, cleaners, material handlers, factory watchmen, plant guards, time-keeper, drawing and design office, tool-room department, employees engaged in maintenance work or other service work, etc.

- (c) **Indirect Expenses:** Covers all expenditure incurred by manufacturing enterprise from the time production has commenced to its completion and its transfer to the finished goods store.

Examples: Rent, rates and taxes of factory building, depreciation on factory assets, heat, light, power, plant repairs and maintenance, medical aid to workers, etc.

2. Administrative Overheads: Also known as office overheads. They are the cost of indirect materials, indirect labour and indirect expenses which are incurred in the course of administration of the enterprise. Administrative overheads includes all costs which cannot be charged either to production department or sales department. Administrative overheads includes the costs of planning and controlling the general policies and operations of a business enterprise.

- (a) **Indirect Materials:** Refers to the materials that are needed for office and administration activities.

Examples: Office stationery like pen, pencil, writing pad, computer printer cartridge, typewriter ribbon, etc.

- (b) **Indirect Labour:** Is the labour cost incurred towards office staff.

Examples: Salaries to office staff — clerks, officers, executives and manager.

- (c) **Indirect Expenses:** Covers all expenditure incurred by office. Examples: Office rent, rates, taxes and insurance, depreciation and repairs of office furniture and building, lighting of office, audit fees, directors, fees, etc.

3. Selling and Distribution Overheads: Such expenses are generally incurred when the product is in saleable condition. It covers the cost of making sales and delivering/despatching products. Selling and distribution overheads includes the cost of all indirect materials, indirect labour and indirect expenses incurred in sales and in delivering goods from warehouse to customers. Selling and distribution overheads includes:

- (i) **Selling Cost:** Refers to the cost incurred in securing orders.

- (ii) **Publicity Cost:** Represents the cost incurred in advertising and promotion.

- (iii) **Distribution Cost:** Refers to the cost incurred in warehousing saleable products and in delivering products to customers.

- (a) **Indirect Materials:** Refers to all materials that are required for selling and distribution activities.

Examples: Secondary packing materials like wooden boxes, sales stationery, advertising materials, catalogues, etc.

- (b) **Indirect Labour:** Is the labour cost related to selling and distribution activities.

Examples: Salesmen's salaries and commissions, salary to sales manager, sales clerical staff, delivery staff, wages to drivers of delivery vehicles, etc.

- (c) **Indirect Expenses:** Covers all expenditure incurred by selling and distribution department.

Examples: Advertising in newspapers, radio, T.V. and Internet, rent, rates, taxes and insurance of sales office, fuel, maintenance and depreciation of delivery vehicles, etc.

| Cost Centre | Cost Unit |
|--|--|
| 1. Cost Centre is a department, a location, a person or an equipment for which cost is ascertained. | 1. Cost unit is per unit for which costs are ascertained. |
| 2. All costs are collected cost centre wise in order to study the profitability of the respective cost centre. | 2. Cost unit is the actual output, which may be tangible or intangible as the case may be, for which costs are identified. |
| Areas of applicability | Selection of cost units |
| 1. Passenger Transport | Cost per passenger per kilometre. |
| 2. Goods Transport | Cost per tonne per kilometre. |
| 3. Restaurants | Cost per dish. |
| 4. Electricity company | Cost per kilowatts. |
| 5. Hospitals | Cost per patient/per bed/per operation. |
| 6. Hotels | Cost per guest/per room. |
| 7. Coaching classes | Cost per student. |

Cost Sheet

| Units Produced Units Sold | = xxx = xxx | | Total (`) | Per Unit (`) |
|--|----------------|-------|-------------|----------------|
| A. Direct Material: | | | | |
| Opening stock R/M | | x | | |
| + Purchase R/M | | x | | |
| + Carriage In word | | x | | |
| (-) Closing stock | | x | xx | x |
| B. Direct Wages | | | xx | x |
| C. Direct Expenses | | | xx | x |
| D. Prime Cost [A + B + C] | | | | 1 |
| E. Work Overheads/ Factory | | | | |
| Overheads/Production Overheads | | | | |
| Less: Net value of Normal Scrap of | | | | |
| Indirect Material | | | | |
| Adjustment on account of Stock of WIP: | | | | |
| Add: Opening Stock of Work-in- progress | | | | |
| Less: Closing Stock of Work-in progress | | | | |
| F. Work Cost [D + E] | | | | 1 |
| G. Add: Office and Administration Expenses | | | | 1 |
| H. Cost of Goods Produced [F + G] | | | | 1 |
| I. Adjustment on Account of Stock of | | | | |
| Finished Goods: | | | | |
| Add: Opening Stock of Finished Goods | | | | |
| Less: Closing Stock of Finished Goods | | | | |
| $\frac{\text{cost of goods produced}}{\text{No. of units produced}} \times \text{Closing Stock (Units)}$ | | | | |
| J. Cost of Goods Sold [H + I] | | | | 2 |

| | | |
|--|-------|--------|
| K. <i>Add:</i> Selling & Distribution Expenses | |2 |
| L. Cost of sales [J + K] | |2 |
| M. <i>Add:</i> Profit | |2 |
| N. Sales [L + M] | |2 |

1. These amounts are ascertained by dividing the respective total by the number of units produced,
2. These amounts are ascertained by dividing the respective total by the number of units sold.

Notes

- (i) Unless otherwise stated, closing stock of finished goods should be valued at current cost of production assuming that the first-in-first out method of inventory valuation is in use.
- (ii) Items of financial nature like Income Tax, Cash Discount, Interest on Capital/Bank Overdraft, Donations, Dividend, Preliminary Expenses/Goodwill w/o, Provision for Doubtful Debts, T/f to reserves, etc. are ignored while preparing Cost Sheet/Production Statement/Account.

Illustration 1

- (a) Define the terms -cost centre- and -cost unit', (b) Given below is a list of ten industries. Give the method of costing and the unit of cost against each industry:
 - (i) Nursing home
 - (ii) Road transport (goods)
 - (iii) Steel
 - (iv) Coal
 - (v) Bicycles
 - (vi) Bridge construction
 - (vii) Interior decoration
 - (viii) Advertising
 - (ix) Furniture
 - (x) Sugar company having its own sugarcane fields
 - (xi) Road Transport (passenger)
 - (xii) Electricity boards
 - (xiii) Canteen.

Solution

- (a) **Cost Centre:** The term cost centre is defined "as a location, person or an item of equipment or a group of these for which costs may be ascertained and used for the purposes of cost control." Cost centres can be personal cost centres, impersonal cost centres, operation cost centres and process cost centres.
- (b) **Cost Unit:** The term unit is defined "as a unit of quantity of product, service or time (or a combination of these) in relation to which costs may be ascertained or expressed. It can be for a job, batch, or product group."

| Industry | Method of costing | Unit of cost |
|---|-------------------|---------------------------------|
| (i) Nursing home | Operating | Per bed per week or per day |
| (ii) Road transport (Goods) | Operating | Per tonne Kilometer or per mile |
| (iii) Steel | Process | Per tonne |
| (iv) Coal | Single | per tonne |
| (v) Bicycles | Multiple | Each unit |
| (vi) Bridge construction | Contract | Each contract |
| (vii) Interior decoration | Job | Each job |
| (viii) Advertising | Job | Each job |
| (ix) Furniture | Multiple | Each unit |
| (x) Sugar company having its own sugarcane fields | Process | Per quintal/tonne |
| (xi) Road transport (passenger) | Operating | Per passenger-km |
| (xii) Electricity boards | Operating | Per KWH or per unit |
| (xiii) Canteens | Operating | Per dish or per meal |

Illustration 2

State which method of costing you would recommend for use in the following industries
 (a) Chemical works (b) Steel owning iron-ore mines (c) Constructional engineer (d) Cement (e) Soap
 (f) Railways (g) Shipbuilders (h) Readymade garments (i) Telephone j) Cotton Textiles (k) Hospital
 (l) Aluminium (m) Hosiery mill (n) Paper mill (o) Oil refinery (p) Furniture manufacturer (q) Meat
 packing (r) Air-conditioners (s) Baby food (t) Locomotives (u) Tyres & tubes (v) Leather (w) Pianos
 (x) Toys & novelties (y) Radio receivers.

Solution

(a) Process (b) Process (c) Contract (d) Process (e) Process (f) Operating (g) Contract (h) Batch
 (i) Operating (j) Process (k) Operating (l) Process (m) Batch (n) Process (o) Process (p) Job
 (q) Process (r) Multiple (s) Batch (t) Multiple (u) Process (v) Process (w) Batch (x) Batch (y) Multiple.

Illustration 3

Suggest the method of costing and the unit of cost against each of the following industries:
 (a) Building (b) Chemical (c) Cement (d) Automobile (e) Cable (f) Gas (g) Power (h) Brewery (i) Soft
 drinks (j) Oil extraction

Solution

Statement Showing the Method of Costing and Unit of Cost

| Industry | Method of costing | Unit of cost |
|----------------|-------------------|-------------------|
| (a) Building | Job | Per square foot |
| (b) Chemical | Process | Per tonne, per kg |
| (c) Cement | Process | Per tonne |
| (d) Automobile | Process | Each unit |
| (e) Cable | Process | Per Metre |

| | | |
|--------------------|-----------|---|
| (f) Gas | Process | Per cubic foot/metre |
| (g) Power | Operating | Per kwh/per unit |
| (h) Brewery | Process | Per dozen bottle/per gallon of drought drew |
| (i) Soft drinks | Process | Per bottle/per can |
| (j) Oil extraction | Process | Per gallon/liter/tonne |

Illustration 4**(a) Match the following**

| | |
|----------------------------|--------------------------------------|
| (i) Total fixed cost | 1. What cost should be? |
| (ii) Total variable cost | 2. Incurred cost |
| (iii) Unit variable cost | 3. Increases in proportion to output |
| (iv) Unit fixed cost | 4. Cost of conversion |
| (v) Standard cost | 5. What costs are expected to be |
| (vi) Period cost | 6. Decreases with rise in output |
| (vii) Actual cost | 7. Remains constant in total |
| (viii) Labour and overhead | 8. Remains constant per unit |
| (ix) Incremental cost | 9. Cost not assigned to products |
| (x) Budgeted cost | 10. Added value of a new product |

(b) Indicate whether the following statements are True or-False

- (i) All costs are controllable.
- (ii) Conversion cost is, equal to direct wages pus factory overhead.
- (iii) Variable cost per unit varies with the increase or decrease in the volume of output.
- (iv) Depreciation fe an but of pocket cost.
- (v) An item of cost that is direct for one business may be indirect for another.
- (vi) Fixed cost per unit remains fixed.

Solution**(a) Correct matchings are indicated as below**

- (i) Total fixed cost, remains constant in total.(7)
- (ii) Total variable cost; increases in proportion to output.(3)
- (iii) Unit variable cost, remains constant per unit.(8)
- (iv) Unit fixed cost, decreases with rise in output.(6)
- (v) Standard cost, what cost should be.(1)
- (vi) Period cost, cost not assigned to products.(9)
- (vii) Actual cost, incurred cost.(2)
- (viii) Labour and overhead, cost of conversion.(4)
- (ix) Incremental cost, added value of a new product.(10)
- (x) Budgeted cost, what costs are expected to be.(5)

(b) (i) False, (ii) True, (iii) False, (iv) False, (v) True, (vi) False.

Illustration 5

Indicate whether the following materials are direct or indirect with reference to the final product:

- (a) Oil used for lubricating machines,
- (b) Wire for making electric motors,
- (c) Bottles used for tilling in a soft drink,
- (d) Gunny bags used for filling in sugar,
- (e) Ingots used by a foundry making castings,
- (f) Cushion seats to be fixed in a passenger car.
- (g) Sugarcane used for making sugar.
- (h) Speakers in a radio set.
- (i) Paper used for printing a book.
- (j) Nails used in a shoe.
- (k) Milk used for making ice-cream.

Solution

Direct materials: (b), (c), (d), (e), (f), (g), (h), (i), (j) and (k)

Indirect materials: (a)

Illustration 6

State whether the following items should be classified as direct or indirect labour:

- (a) Overtime premium paid for specific jobs.
- (b) Wages paid to piece workers,
- (c) Wages paid to maintenance workers,
- (d) Directors' fees.
- (e) Salesmen's Commission.
- (f) Salaries paid to sweepers.

Solution

Direct wages- (a) and, (b)

Indirect wages (c), (d), (e) and (f).

Illustration 7

A manufacturer has shown an amount of ₹ 16,190 in his books as 'Establishment' which really includes the following expenses:

| | |
|--|-------|
| | ~ |
| 1. Agents' commission | 5,750 |
| 2. Warehouse wages | 1,800 |
| 3. Warehouse repair | 510 |
| 4. Lighting of office | 70 |
| 5. Office salaries | 1,130 |
| 6. Directors' remuneration | 1,400 |
| 7. Travelling expenses | 760 |
| 8. Rent, rates and insurance of warehouses | 310 |
| 9. Rent, rates and insurance of office | 230 |
| 10. Lighting of warehouse | 270 |
| 11. Printing & Stationary | 1,500 |
| 12. Trade magazine | 70 |
| 13. Donation | 150 |
| 14. Bank charges | 100 |
| 15. Discount allowed | 1,970 |
| 16. Bad debts | 170 |

From this information, prepare a statement showing in separate totals (a) Selling Expenses) Distribution Expenses, (c) Administration Expenses, and (d) Expenses which you would disregard estimating costs.

Solved Problems

Illustration 1

(MU, BMM, April 2003)

Classify the following items into direct and indirect cost.

Solution

| Items | Classification |
|--|----------------|
| (i) Carriage expenses on raw material | Direct Cost |
| (ii) Advertisement expenses | Indirect Cost |
| (iii) Office rent | Indirect Cost |
| (iv) Packing expenses | Indirect Cost |
| [NOTE: Primary Packing Material- Direct Cost Secondary Packing Materials - Indirect Cost] | |
| (v) Workers' wages | Direct Cost |
| (vi) Raw material charges | Direct Cost |
| (vii) Depreciation on Furniture | Indirect Cost |
| (viii) Legal expenses | Indirect Cost |

Illustration 2*(MU, BMM, April 2004)***Classify the following items of cost and justify the same**

- (a) Indirect wages
- (b) Carriage outwards
- (c) Depreciation of delivery vans
- (d) Raw material purchased
- (e) Foreman's wages
- (f) Directors fees
- (g) Free samples
- (h) Heat, light and power
- (i) Consumable stores
- (j) Direct expenses

Solution

| Costs | Traceability | Functional | Behavioural |
|-----------------------------------|---------------------|-------------------------------|--------------------|
| (a) Indirect Wages | Indirect Cost | Factory Cost | Fixed Cost |
| (b) Carriage Outwards | Indirect Cost | Selling and Distribution Cost | Fixed Cost |
| (c) Depreciation of Delivery Vans | Indirect Cost | Selling and Distribution Cost | Fixed Cost |
| (d) Raw Material Purchased | Direct Cost | Factory Cost | Variable Cost |
| (e) Foreman's Wages | Indirect Cost | Factory Cost | Fixed Cost |
| (f) Directors Fees | Indirect Cost | Administration Cost | Fixed Cost |
| (g) Free Samples | Indirect Cost | Selling and Distribution Cost | Fixed Cost |
| (h) Heat, Light and Power | Indirect Cost | Factory Cost | Semi-variable Cost |
| (i) Consumable Stores | Indirect Cost | Factory Cost | Fixed Cost |
| (j) Direct Expenses | Direct Cost | Factory Cost | Variable Cost |

Illustration 3*(MU, BMM, Oct. 2004)***Classify the following items into direct and indirect cost:**

- (i) Carriage outwards ` 8000
- (ii) Cost of raw materials ` 1,2000
- (iii) Depreciation on office furniture ` 4000
- (iv) Advertising expense ` 7500
- (v) Factory rent ` 6000
- (vi) Salesman's commission ` 2000

Solution

- | | |
|---------------------|--------------------|
| (i) Indirect Cost | (ii) Direct Cost |
| (iii) Indirect Cost | (iv) Indirect Cost |
| (v) Indirect Cost | (vi) Indirect Cost |

Illustration 4*(MU, BMM, April 2005)***Classify the following items on the basis of cost:**

- (a) On the basis of functions:
- | | |
|-------------------------|-----------------------|
| (i) Legal expenses | (ii) Packing expenses |
| (iii) Rent of warehouse | (iv) Fuel and oil |
- (b) On the basis of traceability to product:
- | |
|-----------------------------|
| (i) Office cleaning |
| (ii) Freight inward charges |
| (iii) Factory supervision |
| (iv) Raw materials imported |
- (c) On the basis of relation to change in the volume of activity:
- | |
|---------------------------------------|
| (i) Factory insurance |
| (ii) Direct labour |
| (iii) Depreciation of office building |
| (iv) Showroom expenses |

Solution

- (a) On the basis of functions: [Factory, Office and Administration and Selling and Distribution Expenses]

| | |
|-------------------------|--------------------------------|
| (i) Legal expenses | Office and Administration Cost |
| (ii) Packing expenses | Selling and Distribution Cost |
| (iii) Rent of warehouse | Selling and Distribution Cost |
| (iv) Fuel and oil | Factory Cost |

- (b) On the basis of traceability to product: [Direct/Indirect Cost]

| | |
|-----------------------------|---------------|
| (i) Office cleaning | Indirect Cost |
| (ii) Freight inward charges | Direct Cost |
| (iii) Factory supervision | Indirect Cost |
| (iv) Raw materials imported | Direct Cost |

- (c) On the basis of relation to change in the volume of activity: [Fixed/Variable/Semi-fixed/Sem-variable]

| | |
|---------------------------------------|---------------|
| (i) Factory insurance | Fixed Cost |
| (ii) Direct labour | Variable Cost |
| (iii) Depreciation of office building | Fixed Cost |
| (iv) Show room expenses | Fixed Cost |

Illustration 5*(MU, BMM, April 2006)***Classify the following**

- (a) On the basis of functions:
- (i) Sales stationery expenses.
 - (ii) Salaries of administrative staff.
 - (iii) Heat and light.
 - (iv) Foremen's wages.
- (b) On the basis of traceability to product:
- (i) Legal expenses.
 - (ii) Cost of buttons and thread in a garment manufacturing firm.
 - (iii) Overtime paid to workers.
 - (iv) Income Tax.
- (c) On the basis of behaviour to change in activity:
- (i) Directors fees.
 - (ii) Office cleaning.
 - (iii) Overtime paid to workers.
 - (iv) Repairs and maintenance.

Solution**(a)**

| | |
|------------------------------------|-------------------------------------|
| (i) Sales Stationery Expenses | Selling and Distribution Overheads |
| (ii) Salaries Administrative Staff | Office and Administrative Overheads |
| (iii) Heat and Light | Works/Factory Overheads |
| (iv) Foremen's Wages | Works/Factory Overheads |

(b)

| | |
|---|---|
| (i) Legal Expenses | Indirect Cost |
| (ii) Cost of Buttons and Thread in a Garment Manufacturing Firm | Indirect Cost |
| (iii) Overtime Paid to Workers | Direct cost |
| (iv) Income Tax | Finance expense; it must be ignored in costing. |

(c)

| | |
|--------------------------------|---------------|
| (i) Direct Fees | Fixed Cost |
| (ii) Office Cleaning | Fixed Cost |
| (iii) Overtime Paid to Workers | Variable Cost |
| (iv) Repairs and Maintenance | Variable Cost |

Illustration 6**1. Classify the following on the basis of****(a) Functions:**

- (i) Salesmen's salary
- (ii) Office rent

- (iii) Factory watchmans wages
- (iv) Printing and stationery expense

(b) Traceability to product:

- (i) Depreciation of office furniture
- (ii) Cost of speakers in a radio set
- (iii) Paper used for printing a book
- (iv) Bottles used for filling in soft drink

(c) Relation to change in quantity/volume:

- (i) Purchase commission at the rate of one per cent
- (ii) Office rent
- (iii) Cost of milk used in making ice cream
- (iv) Managers salary

Solution

(a)

- (i) Selling and Distribution Overheads
- (ii) Office and Administration Overheads
- (iii) Works/Factory Overheads
- (iv) Office and Administration Overheads

(b)

- (i) Indirect Cost
- (ii) Direct Cost
- (iii) Direct Cost
- (iv) Direct Cost

(c)

- (i) Variable Cost
- (ii) Fixed Cost
- (iii) Variable Cost
- (iv) Fixed Cost

Illustration 7

Classify the following items on the basis of cost

(a) On the basis of functions:

- (i) Trade Fair Expenses
- (ii) Lawyer's Fees
- (iii) Fuel and Oil
- (iv) Market Research Expenses

(b) On the basis of traceability to the product:

- (i) Customs duty on purchases
- (ii) Bank charges
- (iii) Carriage expenses on Raw materials
- (iv) Secondary Packaging material

(c) On the basis of relation to change in the level of activity-

- (i) Telephone charges of ₹ 1,500
- (ii) Factory Insurance
- (iii) Depreciation of plant
- (iv) Cost of raw materials

Solution**(a)**

- (i) Selling and Distribution Cost
- (ii) Office and Administration Cost
- (iii) Works or Factory Cost
- (iv) Selling and Distribution Cost

(b)

- (i) Direct Cost
- (ii) Indirect Cost
- (iii) Direct Cost
- (iv) Indirect Cost

(c)

- (i) Semi-fixed Cost
- (ii) Fixed Cost
- (iii) Fixed Cost
- (iv) Variable Cost

Illustration 8

Classify the following items on the basis of traceability to product

- (i) Cost of cotton in textile industry.
- (ii) Carriage expenses for raw material.
- (iii) Cost of gunny bags in cement manufacturing unit.
- (iv) Factory security staff wages.

Solution

- (i) Direct Cost
- (ii) Direct Cost
- (iii) Direct Cost
- (iv) Indirect Cost

Illustration 9

Classify the following on the basis of behaviour to change in level of activity

- (i) Office insurance charges
- (ii) Customs duty on raw materials
- (iii) Cost of raw material
- (iv) Managers salary

Solution

- (i) Fixed Cost
- (ii) Variable Cost
- (iii) Variable Cost
- (iv) Fixed Cost

Illustration 10

Classify the following on the basis of functions

- (i) Salesmens' salary
- (ii) Printing and stationery
- (iii) Exhibition expenses
- (iv) Depreciation on furniture.

Solution

- (i) Selling and Distribution Cost
- (ii) Office and Administration Cost
- (iii) Selling and Distribution Cost
- (iv) Office and Administration Cost

Illustration 11

(A) Classify the following items into Direct and Indirect Cost

- (i) Advertisement
- (ii) Overtime wages
- (iii) Productive wages
- (iv) Carriage inward

(B) Classify the following items into Fixed Cost or Variable Cost or Semi-fixed Cost Semi-variable Cost

- (i) Managers salary ` 24,000
- (ii) Direct labour ` 8,250
- (iii) Sales travelling expenses ` 600
- (iv) Electricity expenses ` 9,000

(C) Classify the following items into Factory Overheads, Office and Administration Overheads and Selling and Distribution Overheads

- (i) Depreciation to delivery van
- (ii) Bank charges
- (iii) Counting house wages
- (iv) Drawing office salary

Solution

(A)

- | | | |
|-------|------------------|---------------|
| (i) | Advertisement | Indirect Cost |
| (ii) | Overtime wages | Direct Cost |
| (iii) | Productive wages | Direct Cost |
| (iv) | Carriage inward | Direct Cost |

(B)

- | | | |
|-------|---------------------------------|--------------------|
| (i) | Managers salary ` 24,000 | Fixed Cost |
| (ii) | Direct labour ` 8,250 | Variable Cost |
| (iii) | Sales travelling expenses ` 600 | Fixed Cost |
| (iv) | Electricity expenses ` 9,000 | Semi-variable Cost |

(C)

- | | | |
|-------|------------------------------|-------------------------------------|
| (i) | Depreciation to delivery van | Selling and Distribution Overheads |
| (ii) | Bank charges | Office and Administration Overheads |
| (iii) | Counting house wages | Office and Administration Overheads |
| (iv) | Drawing office salary | Factory Overheads |

Illustration 12

(A) Classify the following items into Direct and Indirect Cost

- (i) Cost of cotton in a textile unit
- (ii) Lighting and heating
- (iii) Postage
- (iv) Carriage inwards

(B) Classify the following items into Fixed or Variable or Semi-Variable Cost

- (i) Direct Material
- (ii) Phone Charges
- (iii) Foremen's Wages
- (iv) Works Managers Salaries

(C) Classify the following items into Factory or Office and Administration or Selling and Distribution Cost

- (i) Office Rent ` 600
- (ii) Audit Fees ` 1,200
- (iii) Depreciation of Delivery Van ` 400
- (iv) Salesmen's Commission ` 850

Solution

(A)

- | | |
|--------------------------------------|---------------|
| (i) Cost of cotton in a textile unit | Direct Cost |
| (ii) Lighting and heating | Indirect Cost |
| (iii) Postage | Indirect Cost |
| (iv) Carriage inwards | Direct Cost |

(B)

- | | |
|------------------------------|--------------------|
| (i) Direct Material | Variable Cost |
| (ii) Phone Charges | Semi-Variable Cost |
| (iii) Foremen's | Wages Fixed Cost |
| (iv) Works Managers Salaries | Fixed Cost |

(C)

- | | |
|--|--------------------------------|
| (i) Office Rent ` 600 | Office and Administration Cost |
| (ii) Audit Fees ` 1,200 | Office and Administration Cost |
| (iii) Depreciation of Delivery Van ` 400 | Selling and Distribution Cost |
| (iv) Salesmen's Commission ` 850 | Selling and Distribution Cost |

Illustration 13

(a) Classify the following items into Direct and Indirect Cost

- (i) Cost of Fruits in a Fruits Juice Manufacturing unit
- (ii) Factory Rent and Rates
- (iii) Carriage Outwards
- (iv) Cost of Nails and Fevicol in Furniture Making Unit

(b) Classify the following items into Fixed or Variable or Semi-variable Cost

- (i) Indirect Material ` 600
- (ii) Telephone Charges ` 750
- (iii) Foremen's Wages ` 1,200
- (iv) Factory Electricity ` 920

(c) Classify the following items into Factory or Office and Administration or Selling and Distribution Cost

- (i) Running Expenses of Delivery Van
- (ii) Depreciation of Factory Plant

- (iii) Storekeeper's Salary
- (iv) Insurance

Solution**(a)**

- | | |
|---|---------------|
| (i) Cost of Fruits in a Fruits Juice Manufacturing Unit | Direct Cost |
| (ii) Factory Rent and Rates | Indirect Cost |
| (iii) Carriage Outwards | Indirect Cost |
| (iv) Cost of Nails and Fevicol in Furniture Making Unit | Indirect Cost |

(b)

- | | |
|--------------------------------|--------------------|
| (i) Indirect Material ` 600 | Fixed Cost |
| (ii) Telephone Charges ` 750 | Semi-variable Cost |
| (iii) Foremen's Wages ` 1,200 | Fixed Cost |
| (iv) Factory Electricity ` 920 | Semi-variable Cost |

(c)

- | | |
|--------------------------------------|--------------------------------|
| (i) Running Expenses of Delivery Van | Selling and Distribution Cost |
| (ii) Depreciation of Factory Plant | Factory Cost |
| (iii) Storekeeper's Salary | Factory Cost |
| (iv) Insurance | Office and Administration Cost |

Illustration 14**(A) Classify the following items into Direct and Indirect Cost**

- (i) Cost of oil seeds in a oil manufacturing unit ` 500
- (ii) Legal expenses ` 790
- (iii) Carriage inwards ` 120
- (iv) Cost of buttons and thread in case of garment making ` 430

(B) Classify the following items into Fixed or Variable or Semi-Fixed Cost

- (i) Direct Labour
- (ii) Electricity Expenses
- (iii) Sales Travelling Expenses
- (iv) Auditors Fees

(C) Classify the following items into Factory or Office and Administration or Selling and Distribution Costs

- (i) Running Expenses of Delivery Van
- (ii) Depreciation
- (iii) Storekeeper's Salary
- (iv) Insurance

Solution**(A)**

- | | | |
|-------|--|---------------|
| (i) | Cost of oil seeds in a oil manufacturing unit ` 500 | Direct Cost |
| (ii) | Legal Expenses ` 790 | Indirect Cost |
| (iii) | Carriage Inwards ` 120 | Direct Cost |
| (iv) | Cost of buttons and thread in case of garment making ` 430 | Indirect Cost |

(B)

- | | | |
|-------|----------------------|-----------------|
| (i) | Direct Labour | Variable Cost |
| (ii) | Electricity Expenses | Semi-fixed Cost |
| (iii) | Sales Travelling | Fixed Cost |
| (iv) | Auditors Fees | Fixed Cost |

(C)

- | | | |
|-------|----------------------|--------------------------------|
| (i) | Machine Depreciation | Factory Cost |
| (ii) | Advertising | Selling and Distribution Cost |
| (iii) | Foreman's | Factory Cost |
| (iv) | Office Salaries | Office and Administration Cost |

Illustration 15**Classify the following**

- (i) On the basis of functions:
 - (a) Audit Fees.
 - (b) Depreciation of Plant Machinery.
 - (c) Show Room Rent.
 - (d) Printing and Stationery.
- (ii) On the basis of traceability to product:
 - (a) Factory Staff Salary.
 - (b) Telephone Charges.
 - (c) Carriage Outwards.
 - (d) Direct Wages.
- (iii) On the basis of behaviour to change in activity:
 - (a) Insurance.
 - (b) Raw Materials Purchased.
 - (c) Rent of Office Building.
 - (d) Supervisor's Salary.

Solution**(i)**

| | |
|---|-------------------------------------|
| (a) Audit Fees | Office and Administration Overheads |
| (b) Depreciation of Plant and Machinery | Works/factory Overheads |
| (c) Show Room Rent | Selling and Distribution Overheads |
| (d) Printing and Stationery | Office and Administration Overheads |

(ii)

| | |
|--------------------------|---------------|
| (a) Factory Staff Salary | Indirect Cost |
| (b) Telephone Charages | Indirect Cost |
| (c) Carriage Outwards | Indirect Cost |
| (d) Direct Wages | Direct Cost |

(iii)

| | |
|-----------------------------|---------------|
| (a) Insurance | Fixed Cost |
| (b) Raw Materials Purchased | Variable Cost |
| (c) Rent of Office Building | Fixed Cost |
| (d) Supervisors Salary | Fixed Cost |

Illustration 16**Classify the following****(i) On the basis of functions:**

- (a) Audit Fees
- (b) Depreciation of Plant Machinery
- (c) Showroom Rent
- (d) Printing and Stationery

(ii) On the basis of traceability to product:

- (a) Factory Staff Salary
- (b) Telephone Charges
- (c) Carriage Outwards
- (d) Direct Wages

(iii) On the basis of behaviour to change in activity:

- (a) Insurance
- (b) Raw Materials Purchased
- (c) Rent of Office Building
- (d) Supervisor's Salary

Solution**(i)**

- | | |
|---------------------------------------|-------------------------------------|
| (a) Audit Fees | Office and Administration overheads |
| (b) Depreciation of Plant & Machinery | Works/factory Overheads |
| (c) Show Room Rent | Selling and Distribution Overheads |
| (d) Printing and Stationery | Office and Administration Overheads |

(ii)

- | | |
|--------------------------|---------------|
| (a) Factory Staff Salary | Indirect Cost |
| (b) Telephone Charages | Indirect Cost |
| (c) Carriage Outwards | Indirect Cost |
| (d) Direct Wages | Direct Cost |

(iii)

- | | |
|-----------------------------|---------------|
| (a) Insurance | Fixed Cost |
| (b) Raw Materials Purchased | Variable Cost |
| (c) Rent of Office Building | Fixed Cost |
| (d) Supervisors Salary | Fixed Cost |

Illustration 17*(MU, BMM, Oct. 2008)***(a) Classify the following items on the basis of traceability to product**

- (i) Bottles for Soft Drink Production
- (ii) Customs Duty on Raw Material
- (iii) Watchman's Wages
- (iv) Cost of Patents and Patterns

(b) Classify the following items on the basis of their behaviour to change in level of activity

- (i) Cost of Raw Material
- (ii) Office Rent
- (iii) Sales Commission
- (iv) Supervisors Salary

(c) Classify the following items on the basis of functions

- (i) Exhibition Expenses
- (ii) Telephone-Fax Charges
- (iii) Advertising Expenses
- (iv) Printing and Stationery

Solution**(a)**

- | | | |
|-------|------------------------------------|--|
| (i) | Bottles for Soft Drink Production. | Direct Cost |
| (ii) | Customs Duty on Raw Material. | Direct Cost |
| (iii) | Watchman's Wages. | Indirect Cost |
| (iv) | Cost of Patents and Patterns. | Not Applicable, since it is Fixed Assets |

(b)

- | | | |
|-------|-----------------------|---------------|
| (i) | Cost of Raw Material. | Variable Cost |
| (ii) | Office Rent. | Fixed Cost |
| (iii) | Sales Commission. | Fixed Cost |
| (iv) | Supervisors Salary. | Fixed Cost |

(c)

- | | | |
|-------|--------------------------|-------------------------------|
| (i) | Exhibition Expenses | Selling and Distribution Cost |
| (ii) | Telephone-fax Charges | Administration Cost |
| (iii) | Advertising Expenses. | Selling and Distribution Cost |
| (iv) | Printing and Stationery. | Administration Cost |

Illustration 18**(a) Classify the following items of cost on the basis of functions**

- (i) Maintenance Expenses on Machinery
- (ii) Trade Fair Expenses
- (iii) Audit Fees
- (iv) Showroom Expenses

(b) Classify the following items of cost on the basis of behaviour to change in volume of activity

- (i) Carriage inward
- (ii) Overtime paid to workers
- (iii) Depreciation of office furniture
- (iv) Rent of warehouse

(c) Classify the following items of cost on the basis of traceability to product

- (i) Cost of Fruits in a Fruit Juice Manufacturing Unit
- (ii) Customs Duty on Raw Materials
- (iii) Cost of Nails in a Furniture Manufacturing Unit
- (iv) Factory Supervision

Solution

- (a)
- | | | |
|-------|-----------------------------------|---------------------------------|
| (i) | Maintenance Expenses on Machinery | Works/Factory Cost. |
| (ii) | Trade Fair Expenses | Selling and Distribution Cost. |
| (iii) | Audit Fees | Office and Administration Cost. |
| (iv) | Showroom Expenses | Selling and Distribution Cost. |
- (b)
- | | | |
|-------|----------------------------------|---------------|
| (i) | Carriage Inward | Variable Cost |
| (ii) | Overtime Paid to Workers | Variable Cost |
| (iii) | Depreciation of Office Furniture | Fixed Cost |
| (iv) | Rent of Warehouse | Fixed Cost |
- (c)
- | | | |
|-------|--|----------------|
| (i) | Cost of Fruits in a Fruit Juice Manufacturing Unit | Direct Cost. |
| (ii) | Customs Duty on Raw Materials | Direct Cost. |
| (iii) | Cost of Nails in a Furniture Manufacturing Unit | Indirect Cost. |
| (iv) | Factory Supervision | Indirect Cost. |

QUESTIONS FOR SELF-PRACTICE**(i) Theory Questions**

- Describe in brief Classification of Overheads.
- Which are the different ways by which the cost can be analysed?
- Explain the essentials of classifications of cost in cost accounting.
- How is the cost analysed?
- Explain the essential of classifications of cost in cost accounting.
- Explain Fixed and Variable cost.
- What is cost? How would you classify cost?
- What is meant by elements of cost and divisions of cost?
- Give examples of each of factory overheads and office overheads.
- What are chargeable expenses? Give three examples.
- What do you understand by variable cost, fixed cost and semi-variable cost?
- Distinguish between product cost and period cost.
- Write short notes on:
 - Controllable Cost.
 - Conversion Cost.
 - Avoidable Cost.

(ii) Short Notes

1. Classification of costs.
2. Direct and indirect cost.
3. Manufacturing overheads.
4. Classification of costs on the basis of behaviour.
5. Selling overheads.
6. Classification of costs on the basis of nature.
7. Classification of costs on the basis of function.
8. Classification of costs on the basis of variability.

(iii) Exercises

- (1) **Classify the following items on the basis of cost:** On the basis of functions [i.e., Factory, Office and Administration and Selling and Distribution Expenses].
 - (a) Advertising Expenses.
 - (b) Income Tax.
 - (c) Dividend Paid.
 - (d) Factory Repairs and Renewals.
 - (e) Sales Commission Paid.
 - (f) Office Staff Salary.
 - (g) Provision for Bad Debts.
- (2) **Classify the following items on the basis of cost:** On the basis of functions [i.e., Factory, Office and Administration and Selling and Distribution Expenses].
 - (a) Commission of Travelling Agent,
 - (b) Gas and Water.
 - (c) Carriage Outward.
 - (d) Travelling Expenses.
 - (e) Delivery Van Expenses.
 - (f) Goodwill Written Off.
 - (g) Discount Allowed.
 - (h) Dividend Received.
 - (i) Preliminary Expenses Written Off.
- (3) **Classify the following items on the basis of cost:** On the basis of functions [i.e., Factory, Office and Administration and Selling and Distribution Expenses].
 - (a) Bank Interest.
 - (b) Factory Electricity.
 - (c) Factory Rent and Insurance.
 - (d) Office Computer Purchased.

- (e) Interest on Capital.
 - (f) Power.
 - (g) Neon Sign Expenses.
 - (h) Showroom Expenses.
 - (i) Indirect Wages.
- (4) Classify the following items on the basis of cost:** On the basis of functions [i.e., Factory, Office and Administration and Selling and Distribution Expenses].
- (a) Factory Expenses.
 - (b) Power and Fuel.
 - (c) Interest on Loan.
 - (d) Depreciation on Machinery.
 - (e) Depreciation on Factory Building.
 - (f) Depreciation on Delivery Van.
 - (g) Depreciation on Office Premises.
 - (h) Depreciation on Office Furniture.
- (5) Classify the following items on the basis of cost:** On the basis of functions [i.e., Factory, Office and Administration and Selling and Distribution Expenses].
- (a) Salary of Sales Department.
 - (b) Lighting and Heating.
 - (c) Repairs and Upkeep of Factory.
 - (d) Rent of Warehouse.
 - (e) Salaries.
 - (f) Telephone.
 - (g) Factory Rent and Rates.
 - (h) Legal Charges,
- (6) Classify the following items on the basis of cost:** On the basis of functions [i.e., Factory, Office and Administration and Selling and Distribution Expenses].
- (a) Showroom Expenses.
 - (b) Machinery Purchased.
 - (c) Factory Wages.
 - (d) Agents Commission.
 - (e) Plant Maintenance.
 - (f) Bonus to Staff.
 - (g) Showroom Expenses.
 - (h) Packing Expenses.
 - (i) Insurance of Factory Assets.

- (7) **Classify the following items on the basis of cost:** On the basis of traceability [i.e., Direct or Indirect Cost].
- (a) Audit Fees.
 - (b) Unproductive Wages.
 - (c) Salesmen Salary and Commission
 - (d) Stationery.
 - (e) Carriage Inward.
 - (f) Carriage Outward.
 - (g) Depreciation on Office Furniture.
 - (h) Royalty on Production.
- (8) **Classify the following items on the basis of cost:** On the basis of traceability to product [i.e., Direct or Indirect Cost].
- (a) Purchase of Raw Material.
 - (b) Direct Wages.
 - (c) Chargeable Expenses.
 - (d) Wages Paid to Labourers.
 - (e) Income Tax.
 - (f) Managers Salary.
 - (g) Commission on Sales.
 - (h) Direct Labour.
- (9) **Classify the following Items on the basis of cost:** On the basis of traceability to product [i.e., Direct or Indirect Cost].
- (a) Customs Duty on Purchases.
 - (b) Cost of Direct Materials Consumed.
 - (c) Direct Expenses.
 - (d) Expenses of Sales Branch.
 - (e) Office Lighting.
 - (f) Works Transport Expenses.
 - (g) Works Telephone Expenses.
 - (h) Auditors Fees.
 - (i) Bank Charges.
- (10) **Classify the following items on the basis of cost:** On the basis of traceability to product [i.e., Direct or Indirect Cost].
- (a) Raw Material.
 - (b) Stores.
 - (c) Indirect Labour.
 - (d) Direct Labour.

- (e) Wages.
 - (f) Materials Used.
 - (g) Factory Overheads.
 - (h) Office Overheads.
- (11) Classify the following items on the basis of cost:** On the basis of traceability to product [i.e., Direct or Indirect Cost].
- (a) Selling and Distribution Overheads.
 - (b) General Expenses.
 - (c) Direct Wages.
 - (d) Carriage on Materials.
 - (e) Cost of Special Designs.
 - (f) Printing and Stationery.
 - (g) Special Dye.
 - (h) Unproductive Wages.
- (12) Classify the following items on the basis of cost:** On the basis of traceability to product [i.e., Direct or Indirect Cost].
- (a) Productive Wages.
 - (b) Octroi Duty on Purchase.
 - (c) Discount on Purchase.
 - (d) Import Duty on Purchase of Raw Material.
 - (e) Warehouse Expenses.
 - (g) Overtime Wages to Productive Labourers.
 - (h) Depreciation of Showroom Assets.
 - (i) Subscription to Trade Journals.
- (13) Classify the following items on the basis of cost:** On the basis of relation to change in the volume of activity [i.e., Fixed/variable/semi-fixed or Semi-variable].
- (a) Salary to Works Manager.
 - (b) Insurance on Machinery.
 - (c) Power.
 - (d) Raw Materials.
 - (e) Advertisement.
 - (f) Electricity.
 - (g) Telephone.
 - (h) Rent and Rates.

(14) Classify the following items on the basis of cost: On the basis of relation to change in the volume of activity [i.e., Fixed/variable/semi-fixed or Semi-variable].

- (a) Administrative Expenses
- (b) Office Salaries
- (c) Productive Wages
- (d) Depreciation
- (e) Legal Charges
- (f) insurance of Office Equipments
- (g) Consultants Fees

(15) Classify the following items of cost:

(a) Direct and Indirect Costs

- (i) Raw Materials
- (ii) Carriage Inwards
- (iii) Carriage Outwards
- (iv) Inspection Charges
- (v) Factory Power
- (vi) Salesmen Commission
- (vii) Advertising and Publicity

(b) Functional Basis

- (i) Fuel of delivery vehicle
- (ii) Painting of factory premises
- (iii) Depreciation of office typewriter
- (iv) Carriage outwards
- (v) Rent of showroom
- (vi) Factory supervision
- (vii) Audit fees

(c) Behavioural Pattern

- (i) Electricity
- (ii) Wages paid to productive staff
- (iii) Carriage inwards
- (iv) Rent
- (v) Consultants fees
- (vi) Sugarcane in sugar manufacturing industry

(16) Classify the following items of cost into:

- (a) Material Labour and Expenses
- (b) Direct and Indirect Costs
- (c) Variable and Fixed Costs
- (d) Factory, Administration and Selling and Distribution Costs
 - (i) Interest on Loan
 - (ii) Bank Charges
 - (iii) Directors Fees
 - (iv) Transfer Fees
 - (v) Interest on Deposits
 - (vi) Depreciation on Bank Assets
 - (vii) Office Expenses
 - (viii) Bad Debts
 - (ix) Goodwill Written Off
 - (x) Miscellaneous Expenses

(17) Classify the following items of cost into:

- (a) Material, Labour and Expenses
- (b) Direct and Indirect Costs
- (c) Variable and Fixed Costs
- (d) Factory, Administration and Selling and Distribution Costs
 - (i) Office Rent
 - (ii) Commission to Deposit Collection Agent
 - (iii) Salary to Office Staff
 - (iv) Insurance Premium
 - (v) Reinsurance Premium
 - (vi) Printing and Stationery
 - (vii) Interest on Overdraft
 - (viii) Sundry Expenses
 - (ix) Discount on Bills Discounted
 - (x) Lease Rentals

(18) Classify the following items into Direct and Indirect Cost:

- (a) Advertisement
- (b) Overtime Wages
- (c) Productive Wages
- (d) Carriage Inward

- (19) Classify the following Items into Fixed cost or Variable cost or Semi-fixed cost Semi-variable cost:**
- (a) Managers Salary ` 24,000
 - (b) Direct Labour ` 8,250
 - (c) Sales Travelling Expenses ` 600
 - (d) Electricity Expenses ` 9,000
- (20) Classify the following items into Factory Overheads, Office and Administration Overheads and Selling and Distribution Overheads:**
- (a) Depreciation to Delivery Van
 - (b) Bank Charges
 - (c) Counting House Wages
 - (d) Drawing Office Salary
- (21) Cost Classification: Traceability Basis:**
- (a) Primary Packaging Material
 - (b) Import Duty on Raw Materials
 - (c) Office Rent
 - (d) Octroi Duty on Materials
 - (e) Factory Cleaning
 - (f) Administration Managers Salary
 - (g) Advertising Expenses
 - (h) Lease Rent of Premises
 - (i) Cost of Printing Photographs For a Photography Studio
 - (j) Cost of Sugarcane in a Sugar Manufacturing Firm
- (22) Cost Classification: Cash Cost and Non-cash Cost:**
- (a) Depreciation
 - (b) Salary and Wages
 - (c) Maintenance Charges
 - (d) Rent
 - (e) Goodwill Written Off
 - (f) Preliminary Expenses Written Off
 - (g) Direct Materials
 - (h) Discount Allowed
 - (i) Bad Debts
 - (i) Electricity Charges

(23) Classify the following items of Costs:**(a) Direct and Indirect Costs:**

- (i) Productive Wages
- (ii) Unproductive Wages
- (iii) Customs Duty on Purchase of Raw Materials
- (iv) Machinery Repairs
- (v) Printing and Stationery
- (vi) Oil Seed in Oil Manufacturing Unit
- (vii) Office Administration Expenses

(b) Function Wise:

- (i) Office Rent
- (ii) Factory Electricity
- (iii) Depreciation of Factory Assets
- (iv) Showroom Lighting
- (v) Delivery Van Maintenance
- (vi) Office Cleaning Expenses
- (vii) Foreman's Wages

(c) Behavioural Pattern:

- (i) Raw Material
- (ii) Telephone
- (iii) Commission on Purchase
- (iv) Repairs
- (v) Pest Control Charges
- (vi) Cotton in Cotton Textile Industry

(24) Classify the following items of cost:**(a) Direct and Indirect Costs:**

- (i) Raw Materials
- (ii) Carriage Inwards
- (iii) Carriage Outwards
- (iv) Inspection Charges
- (v) Factory Power
- (vi) Salesmen Commission
- (vii) Advertising and Publicity

(b) Functional basis:

- (i) Fuel of Delivery Vehicle
- (ii) Painting of Factory Premises
- (iii) Depreciation of Office Typewriter
- (iv) Carriage Outwards
- (v) Rent of Showroom
- (vi) Factory Supervision
- (vii) Audit Fees

(c) Behavioural Pattern

- (i) Electricity
- (ii) Wages Paid to Productive Staff
- (iii) Carriage Inwards
- (iv) Rent
- (v) Consultants Fees
- (vi) Sugarcane in Sugar Manufacturing Industry

(25) Classify the following items of costs based on Traceability to the Product:

- (i) Bottles used for Filling Soft Drinks
- (ii) Paper used for Printing a Book
- (iii) Gunny Bags used for Filling in Sugar
- (iv) Speaker in Radio Set

(26) List the following items of Expenses on Functional Basis:

- (i) Wastes and Scrap
- (ii) Floppy Discs for General Office Computer
- (iii) Market Research Undertaken Prior to New Product Launch
- (iv) Foreman's Salary

(27) Classify the following items of expenses on Behavioural Pattern:

- (i) Office Stationery
- (ii) Carriage Inwards
- (iii) Milk used for Making ice-cream
- (iv) Telephone Expenses of Showroom

(IV) Multiple Choice Questions**(1) Prime Cost is also termed as:**

- (a) Indirect Cost
- (b) Direct Cost
- (c) Factory cost
- (d) Overheads

- (2) **Direct Costing is also termed as:**
- (a) Marginal Costing
 - (b) Break-even Point
 - (c) Indirect Costing
 - (d) Profit and Loss Analysis
- (3) **CPU stands for:**
- (a) Cost Profit Unit
 - (b) Cost Per Unit
 - (c) Central Processing Unit
 - (d) Controlling Profit Universally
- (4) **Which of the following person is directly associated with Cost Accounting?**
- (a) Finance Manager
 - (b) Financial Accountant
 - (c) Auditor
 - (d) Cost Accountant
- (5) **Semi-variable Cost is a type of cost classification based on:**
- (a) Manufacturing Function-wise
 - (b) Variability
 - (c) Non-controllable
 - (d) Traceability
- (6) _____ **is a process of accounting for costs.**
- (a) Auditing
 - (b) Financial Accounting
 - (c) Cost Accounting
 - (d) Management Accounting
- (7) **Salesmen's incentives is an example of _____ overheads.**
- (a) Administration
 - (b) Works
 - (c) Factory
 - (d) Selling and Distribution
- (8) **The aggregate of all direct costs is termed as _____ costs.**
- (a) Works
 - (b) Prime
 - (c) Total
 - (d) Production

- (9) The abbreviation “EOQ” stands for _____
- (a) Emergency Ordered Quantity
 - (b) Economic Order Quality
 - (c) Economic Order Quantity
 - (d) Everyday Ordering Quantity
- (10) As per _____ method of stock valuation it is assumed that the latest lots are used up first.
- (a) LIFO
 - (b) FIFO
 - (c) Simple Average
 - (d) Weighted Average

Multiple choice questions. Select the right answer.

- (1) Product cost means
- (i) Variable cost
 - (ii) Fixed cost
 - (iii) Prime cost
 - (iv) Indirect cost
- (2) Notional cost is also known as
- (i) Imputed cost
 - (ii) Opportunity cost
 - (iii) Out of pocket cost
 - (iv) Variable cost
- (3) Cost which can be identified with the output is called as
- (i) Product cost
 - (ii) Direct cost
 - (iii) Fixed cost
 - (iv) Variable cost
- (4) Cost of designing is
- (i) Production cost
 - (ii) Indirect cost
 - (iii) Direct material
 - (iv) Direct charges
- (5) Interest on capital is
- (i) Imputed cost
 - (ii) Sunk cost
 - (iii) Direct cost
 - (iv) Indirect cost

- (6) Payment to other parties is called as
- i) out of pocket cost
 - ii) book cost
 - iii) future cost
 - iv) postponable cost
- (7) Cost which is relevant for decision-making is
- (i) relevant cost
 - (ii) past cost
 - (iii) opportunity cost
 - (iv) imputed cost
- (8) Overheads which are incurred in connection with factory are
- (i) factory overheads
 - (ii) office overheads
 - (iii) selling overheads
 - (iv) prime cost
- (9) Cost which does not require current cash payment is
- (i) book cost
 - (ii) product cost
 - (iii) cash cost
 - (iv) opportunity cost
- [Ans. (1 - i), (2- i), (3 - i), (4 - iv), (5 - i), (6 - i), (7 - i), (8 - i), (9 -I)]*

(V) Objective Questions

State whether the following Statements are True or False.

1. Direct cost cannot be allocated to the cost unit.
2. Indirect cost can be allocated to the cost unit.
3. Marginal cost is variable cost.
4. Overheads are direct cost.
5. Direct material is an indirect cost.
6. Conversion cost is equal to direct wages and factory overheads.
7. Interest on capital is an imputed cost.
8. Fixed cost changes according to the level of activity.
9. Lubricants are direct materials.
10. Packing charges are distribution cost.
11. Trial run cost is called as pre-production cost.

12. Replacement cost is the cost of replacing an asset.
13. Relevant cost helps the manager in taking a right decision.
14. Depreciation is a book cost.
15. Maintenance of building is a postponable cost.

[Ans. True: (2, 3, 6, 7, 10, 11, 12, 13, 14, 15). False: (1, 4, 5, 8, 9)]

(VI) State whether the following statements are TRUE or FALSE. Give Reason in one sentence only

- (1) Variable cost per unit varies with the increase in the volume of output.
- (2) Depreciation is a non-cash cost.
- (3) Fixed cost per unit remains constant.
- (4) Freight on raw materials purchased is an indirect cost.
- (5) A cost statement is also termed as cost sheet.
- (6) Material accounts for a major portion of cost of production in a manufacturing concern.
- (7) Labour turnover can be reduced.
- (8) Break-even point helps to break the costs into variable and fixed costs.
- (9) Indirect costs are termed as overheads.
- (10) There is no difference between a costs sheet and an income statement.

(VII) Match the following

Column 'A'

- (1) Wages of machine operator
- (2) Wages of foreman
- (3) Overheads
- (4) Semi-finished Goods
- (5) Apportionment

Group A

- (1) Direct material
- (2) Marginal Cost
- (3) Overheads
- (4) Relevant Cost
- (5) Opportunity Cost
- (6) Sunk Cost
- (7) Book Cost
- (8) Direct Expenses
- (9) Staff Salary

Column 'B'

- (a) Direct costs
- (b) Indirect Labour
- (c) Distribution
- (d) Direct Labour
- (e) Work in progress
- (f) Indirect costs

Group B

- (i) Variable Cost
- (ii) Indirect Cost
- (iii) Benefit forgone by selection of one alternative
- (iv) Cost actually incurred
- (v) Direct Cost
- (vi) Important for decision-making
- (vii) Depreciation
- (viii) Administrative Cost
- (ix) Sales Commission
- ix) Cost of Drawings

[Ans. (1 - v), (2 - i), (3 - ii), (4 - vi), (5 - iii), (6 - iv), (7 - vii), (8 - x), (9 - viii)]

QUESTIONS FOR SELF-PRACTICE

(I) Theory Questions

- (1) Describe in brief Allocation of Overheads.
- (2) Describe in brief Apportionment of Overheads.
- (3) What are the basic elements of cost?
- (4) Which are the different ways by which the cost can be analysed?
- (5) Explain the essentials of classifications of cost in cost accounting.
- (6) What is the relevance of “cost” in cost accounting?
- (7) How is the cost analysed?
- (8) State the limitations of financial accounting and explain in brief the techniques available in cost accounting for overcoming the limitations.
- (9) Explain the benefits of Cost Accounting.
- (10) Explain the essential of classifications of cost in cost accounting.
- (11) Explain Fixed and Variable Cost.
- (12) Distinguish between Direct and Indirect Cost.
- (13) Define the term direct cost and indirect cost.
- (14) What are factory overheads, administrative overheads and selling and distribution overheads? Give two examples of each.
- (15) Distinguish between Fixed and Variable Cost with two examples for each.

(II) Short Notes

- (1) Benefits of Costing
- (2) Cost
- (3) Direct Cost
- (4) Indirect Cost
- (5) Elements of Cost
- (6) Uses of Cost Accounting
- (7) Variable Cost
- (8) Cash Cost
- (9) AS-2
- (10) Methods of Costing
- (11) Differential Cost Analysis
- (12) Direct and Indirect Cost
- (13) Manufacturing Overheads

- (14) Advantages of Cost Accounting
- (15) Selling Overheads
- (16) Sunk Cost
- (17) Relevant and Irrelevant Cost
- (18) Period Cost
- (19) Differential Cost
- (20) Standard Cost
- (21) Incremental Cost
- (22) Historical Cost
- (23) Future Cost
- (24) Cost Accounting
- (25) Nature of Cost
- (26) Costing and its Uses
- (27) Advantages of Costing
- (28) Uses of Cost Accounting
- (29) Advantages of Cost Accounting
- (30) Need for Cost Accounting

(III) Answer in one or two sentences

- (1) What is a Cost Centre?
- (2) Give Two Examples of Variable Cost.
- (3) What is Sunk Cost?
- (4) What is Historical Cost?
- (5) Define Controllable Cost Giving one Example.
- (6) What is the Purpose of Establishing Standard Cost?
- (7) What is a Cost Object?
- (8) Define Differential Cost.
- (9) Are Sunk Cost Relevant to Future Decisions?
- (10) What is Marginal Cost?
- (11) Distinguish Between Historical Cost and Future Cost.
- (12) What is Relevant Cost?
- (13) Explain Sunk Cost with an example.
- (14) What is the Utility of Standard Cost?

- (15) What is Incremental Cost?
- (16) All irrelevant Costs are Sunk Costs.” Examine the Statement.
- (17) Give an Example of an Uncontrollable Cost.
- (18) What is the Significance of Opportunity Costs?
- (19) What are Historical Costs?
- (20) What is the Relevance of Standard Costs?
- (21) Why Does a Firm Need to calculate Opportunity Costs?
- (22) Are Irrelevant Costs Always Sunk? Why?
- (23) Distinguish between a Cost Centre and a Cost Unit.
- (24) Give two Examples of Factory Overheads.
- (25) Differential Cost.
- (26) Standard Cost.
- (27) Historical Cost.
- (28) Marginal Cost.
- (29) Relevant Cost.
- (30) Irrelevant Cost.
- (31) Explain Fixed Cost.
- (32) Explain Selling Overheads.
- (33) Explain Relevant and Irrelevant Cost.
- (34) What is Standard Cost?
- (35) Sunk Cost.
- (36) Relevant Cost.
- (37) Standard Cost.
- (38) Irrelevant Cost.
- (39) Future Cost.
- (40) Incremental Cost.

