24.1 CLASSIFICATION OF COST

Cost is a measurement of the amount of resources used for some purpose in monetary term. It is the amount of expenditure (actual or notional) incurred or attributable to the given thing or to ascertain the cost of a given thing. Basically costing is done to achieve various objective like, to indicate time cost of job, to enable the management to obtain data which help in forming the production and sales policies in business and to exercise control on expenditure of every level. To achieve these fundamental objectives, a preliminary step is to classify the cost according to some common characteristic. Simply, classification is a systematic placement of like items together according to their common feature. Some common classifications are:

Classification according to function
According to function, cost are classified as; Manufacturing cost (also named as production cost or factory cost), administrative cost, selling and distribution cost, and Research and development cost. The content of each cost are shown ob figure 24.1.

<table>
<thead>
<tr>
<th>Manufacturing cost</th>
<th>Administrative cost</th>
<th>Selling cost</th>
<th>Distribution cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Accounts</td>
<td>Advertising</td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>Office expense</td>
<td>Salaries and commission</td>
<td></td>
</tr>
<tr>
<td>Factory rent</td>
<td>Audit fees</td>
<td>of salesman</td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>Legal expenses</td>
<td>Showroom expenses</td>
<td></td>
</tr>
<tr>
<td>Power and lighting</td>
<td>Office rent</td>
<td>Samples</td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>Director’s remuneration</td>
<td>Travel expenses, etc.</td>
<td></td>
</tr>
<tr>
<td>Stores and keeping, etc.</td>
<td>Postage, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Classification according to variability or behavior
According to variability or behavior, cost are classified as , fixed cost, variable cost and semi variable cost.

**Fixed cost** : Fixed costs are the capital expenditures which are long-term investments in fixed assets like purchase of the land, construction of building purchase of machines and equipment. These costs remain constant irrespective of the volume of production as shown in figure 24.2. Fixed cost per unit decreases when volume of production decreases and vice versa.
**Variable cost**: Variable costs are the cost which directly varies with the variation in the volume of the production like; direct material, direct wages, power, royalties, normal spoilage, commission of sales man, small tools etc. The relation of variable cost and volume of production is shown in figure 24.3.

**Semi variable cost or semi fixed cost**: These are partly fixed and partly variable, e.g. Supervision, maintenance and repair, compensation of accidents, telephone expenses, light and power, depreciation. They follow various behavior to the increase in the output volume as shown in figure 24.4 (a and b).

**Classification according to identifiably with cost units**

Costs are classified into direct and indirect on the basis of their identifiably with cost units or jobs or processes.

**Direct cost**: These are the costs, which are incurred for and may be conveniently identified with a particular cost unit, process or department e.g. cost of raw material, wage of machine operator, etc.

**Indirect cost**: These costs cannot be conveniently identified with a particular cost unit, process or department. These are rent, repairs, depreciation, managerial salaries, coal, lubricating oil, wages of foreman, etc.

**Classification according to controllability**

Cost can also be classified into controllable and uncontrollable.

**Controllable**: These are the costs, which may be directly regulated at a given level of management authority. Variable costs are generally controllable by department heads. For example, cost of raw materials may by controlled by purchasing in larger quantities.

**Uncontrollable**: These are those costs, which cannot be influenced by the specific member of an enterprise.
Fixed costs are generally uncontrollable e.g. factory rent, managerial salaries.

Special cost for managerial decision-making
Cost can also be classified according to the other requirement, generally for decision making. Some special cost for managerial decision making are; Relevant cost, Sunk cost, Differential cost, Marginal cost, Imputed cost, Opportunity cost, Replacement cost, Out of pocket cost, Future cost, and Conversion cost.

24.2 ELEMENT OF COST
A cost is composed of three elements viz., material, labor and expenses. Each of these can be direct or indirect.

Material cost: Material cost can be classified as direct material cost and indirect material cost. Direct material becomes a part of finished product like pulp in squash, flour in biscuit, clay in bricks, leather in shoes, steel in machines, cloth in garments, timber in furniture etc. Indirect material are of two types (a) Small and relatively inexpensive which may become a part of finished product e.g. pins, screw, knots, bolts or threads, etc. (b) Those, which do not physically become a part of finished product e.g. coal, lubricating oil, and grease and paper used in polishing soap, etc.

Labor cost: This is the cost of remuneration (wages, salaries, commission, bonuses, etc) of the employees of an undertaking. This is classified as direct labor cost and indirect labor cost. Direct labor cost are the cost of labors (employee) directly working on the shop floor. Like wage (remuneration) of baker, operator, helper, etc. Indirect labor cost include the cost of employee who are not directly involved on production process but are involved on the management and inspection of the process and direct labor like remuneration of Supervisor, inspector, cleaner, clerk, peon, watchman, etc.

Expenses: All the cost other than material and labor are termed as expenses. These expenses are classified as direct expenses and indirect expenses according to the allocation of cost to cost centers and cost unit. Similarly, expenses can also be classified as fixed expenses or variable expenses according to the variability with production unit.

Direct expenses are those expenses, which are specially incurred in connection with particular job. These include; traveling expenses in securing a particular contact, cost of patent and royalties, experimental cost, cost of special drawing, designing and layout, carriage paid for material, purchased for a specific job etc. Indirect expenses include all indirect cost other than indirect material and indirect labor. These cannot be directly identified with a particular job, process or work order and are common to cost units and cost centers. Examples are rent, depreciation, lighting and power, advertising, insurance, carriage etc. Fixed expenses are those cost that tend to remain relatively constant regard less of the volume of production like taxes of land and building, depreciation arising from time, rent etc. Variable expenses are those cost which tend to vary directly with the volume of the production like royalties paid on a volume basis, depreciation arising from use etc.

24.3 TYPES OF COST
The classification and element of cost are deal under heading 24.1 and 24.2, however for specific purpose, cost are grouped in various manner. These grouping of cost are dealt under this topic as types of cost. Some major costs are prime cost, overhead cost, factory cost. Finally selling price can be determined from analyzing these costs.

Prime cost: Prime cost is the aggregation of direct material, direct labor and direct (variable) expenses. Prime cost is limited in its use to the manufacturing divisions of a business concern.

Overhead cost: These cost are also known as indirect costs, overheads, oncost and burden. These are the all expenses other than direct cost. This include cost of indirect material, indirect labor, and such other indirect expenses including services, as cannot conveniently be charged direct to specific cost unit. Overhead cost are further divided as production and manufacturing overhead, office and administration overhead, selling and distribution overhead and research and development overhead.

Production and manufacturing overhead: It consists of all indirect expenses incurred by the concern from the receipt of the production order until its completion, i.e., it being ready for dispatch to the customer. This includes indirect labor, indirect expenses, and indirect expenses (factory rent, plant depreciation, wage of cleaner, repair of factory building etc).
Office and administrative overhead: It consists of expenses incurred in the direction, control and administration of an enterprise. Some major overhead costs are: office rent, salaries and wage of clerk, directors and general managers remuneration, insurance, legal cost, rates and taxes, postage and telephones, audit fees, bank charge etc.

Selling and distribution overhead: Selling overhead consists of expenses in order to maintain and increase the volume of sales. It covers all expenses (direct or indirect) which are necessary to persuade consumers to buy. Some examples are: advertising cost, salaries and commission of sales personnel, travelers and agents cost, rent of sales rooms and offices, consumer service and service after sales, etc. Distribution overhead covers all expenses concerned with transporting products to customers and storing them when necessary. Examples are: warehouse charge, cost of transporting goods thereto, loading and unloading charge, upkeep and running of delivery vehicles, salaries of clerks and laborers, depreciation, etc.

Research and development overhead: R&D overheads depend on the nature of product or service being produced. It is proportional size and activity of R&D department.

Factory cost: Factory costs include prime cost plus factory (production or manufacturing) overhead. It is also called work cost.

Cost of production: It include factory cost and administrative overhead. This is also called production cost or manufacturing cost.

Total cost: Total cost is the summation of cost of production and selling and distribution overhead.

Selling price: Selling price is a summation of total cost and profit (or loss)

24.4 METHOD (TECHNIQUE, PROCESS) OF COSTING

Methods or type of costing refers to the technique or process employed in the ascertainment of costs. Several method has been designed to suit the needs of different industries. The method of costing to be applied in a particular concern depends upon the type and nature of industry. Basically, there are two methods of costing viz. Job order costing and Process costing. All other method costing are variations of either job costing or process costing which will be discussed ion brief on the coming paragraphs.

Job order costing: This method applies where work is undertaken to customer's special requirement. Cost unit in job order costing is taken to be a job or work order, for which cost are separately collected and accumulated. A job, big or small, comprises a specific quantity of a product to be manufactured as per customer's specification. The industries where these methods are used include printing press, repair shops, interior decorators, painters, etc.

Contract costing (terminal costing): This is a variation of job costing and therefore principle of job costing applies to this method. The difference between job and contract costing is that, job is small and contract is big. It is well said that a contract is big job and job is small contract. The cost unit here is a financial year. Contract costing is most suited to construction of building, dams, bridges, roads, etc.

Process costing: As distinct from job costing, this method is used in mass production industries manufacturing standardized products in continuous process. Costs are accumulated for each process or department. The finished product of one process is passed to next process as raw material (input). Textile mill, chemical works, food industries, etc, use this type of costing technique.

Operation costing: This is nothing but a refinement and more detailed application of process costing. A process may consist of a number of operation and operation costing involves cost ascertainment for each operation instead of a process.

Operating costing: This method is used in undertaking which provide service instead of manufacturing products like transport undertaking, railways, airways, shipping companies, hotels, hospitals, etc. The cost units are passenger, kilometer, tonnage, kilometer, room per day, etc.

Very common terminologies frequently use in this chapter is cost centers and cost unit. Cost centers are a person, location or equipment (or a group of these) for which cost may be ascertained and used for the purpose of cost control. Cost unit is a unit or quantity of products, service or time (or a combination of these) in relation to which cost may be ascertained.