

# 1

## Basic Concepts

### Basic Concepts

<b>Meaning of Cost, Costing and Cost Accounting</b>	<p><b>Cost:</b> The amount of expenditure (actual or notional) incurred on or attributable to a specified article, product or activity. <i>(as a noun)</i></p> <p>To ascertain the cost of a specified thing or activity. <i>(as a verb)</i></p> <p><b>Costing:</b> Costing is the technique and process of ascertaining costs.</p> <p><b>Cost Accounting:</b> The process of accounting for cost which begins with the recording of income and expenditure or the bases on which they are calculated and ends with the preparation of periodical statements and reports for ascertaining and controlling costs.</p>
<b>Cost Units</b>	It is a unit of product, service or time (or combination of these) in relation to which costs may be ascertained or expressed.
<b>Cost Centres</b>	<p>It is defined as a location, person or an item of equipment (or group of these) for which cost may be ascertained and used for the purpose of Cost Control.</p> <p><i>Types of Cost Centres:</i></p> <p>(i) <b>Personal Cost Centre:</b> It consists of a person or group of persons</p> <p>(ii) <b>Impersonal Cost Centre:</b> It consists of a location or an item of equipment (or group of these)</p>
<b>Cost Objects</b>	Cost object is anything for which a separate measurement of cost is required. Cost object may be a product, a service, a project, a customer, a brand category, an activity, a department or a programme etc:
<b>Cost Drivers</b>	A Cost driver is a factor or variable which effect level of cost. Generally it is an activity which is responsible for cost incurrence. Level of activity or volume of production is the example of a cost driver. An activity may be an event, task, or unit of work etc.
<b>Objectives of Cost Accounting</b>	<p>(i) Ascertainment of cost</p> <p>(ii) Determination of selling price</p> <p>(iii) Cost control</p> <p>(iv) Cost reduction</p>

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	<ul style="list-style-type: none"> <li>(v) Ascertainment of profit for each activity.</li> <li>(vi) Assisting management in decision making</li> </ul>
<b>Cost Control</b>	It is a process to ensure that appropriate action is taken if costs exceed a pre-set allowance (as budgeted/ estimated) or actions to be taken if costs are expected to exceed the expected levels.
<b>Cost Reduction</b>	It may be defined as the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or diminution in the quality of the product.
<b>Advantages of a Cost Accounting System</b>	<p>The Important advantages of a Cost Accounting system may include</p> <ul style="list-style-type: none"> <li>(i) Cost Determination</li> <li>(ii) Helping in Cost Reduction</li> <li>(iii) Product Profitability Analysis</li> <li>(iv) Provide information relevant for decision making</li> <li>(v) Determination of Selling price</li> <li>(vi) Cost Control and Variance Analysis</li> <li>(vii) Cost Comparison and Benchmarking</li> <li>(viii) Compliances with statutory requirements</li> <li>(ix) Identification of lacunae</li> <li>(x) Helpful in strategic decision making</li> <li>(xi) Helpful in solving linear programming problems</li> </ul>
<b>Limitations of a Cost Accounting System</b>	<ul style="list-style-type: none"> <li>(i) It may be expensive to set a proper cost accounting system</li> <li>(ii) Reconciliation is required to verify the results of both financial accounts and cost accounts.</li> <li>(iii) The same data are recorded for both cost accounting and financial reporting purpose. Hence duplication work is carried out.</li> <li>(iv) Cost accounting system is not a complete solution itself to control costs but its efficacy depends on its usage.</li> </ul>
<b>Factors to be considered before Installation of a Cost Accounting System</b>	<p>Before installing a cost accounting system, knowledge of the followings are desirable.</p> <ul style="list-style-type: none"> <li>(i) Know the objective of the organization to install cost accounting system</li> <li>(ii) Know the nature of the products and the industry in which the organization is operating.</li> <li>(iii) Know the organization hierarchy and their needs of information.</li> <li>(iv) Know the production process</li> </ul>

	<p>(v) Synchronization of information required in different departments.</p> <p>(vi) Methods of maintenance of cost records.</p> <p>(vii) Statutory compliances and audit.</p>
<b>Classification of Costs</b>	<p>(i) By Nature or element : (a) Material Cost (b) Labour Cost and (c) Other Expenses</p> <p>(ii) By Functions : (a) Prime Cost (b) Factory/ Works Cost (c) Cost of Production (d) Cost of Goods Sold (e) Cost of Sales.</p> <p>(iii) By Behaviour : (a) Fixed Cost (b) Variable Cost and (c) Semi-variable Cost.</p> <p>(iv) By Controllability : (a) Controllable and (b) Uncontrollable.</p> <p>(v) By Normality : (a) Normal and (b) Abnormal.</p> <p>(vi) By Managerial decision making</p>
<b>Marginal Cost</b>	The amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit.
<b>Differential Cost</b>	It represents the change (increase or decrease) in total cost (variable as well as fixed) due to change in activity level, technology, process or method of production, etc.
<b>Imputed Cost</b>	These costs are notional costs which do not involve any cash outlay. Interest on capital, the payment for which is not actually made, is an example of imputed cost. These costs are similar to opportunity costs.
<b>Product Costs</b>	These are the costs which are associated with the purchase and sale of goods (in the case of merchandise inventory). In the production scenario, such costs are associated with the acquisition and conversion of materials and all other manufacturing inputs into finished product for sale. Hence, under marginal costing, variable manufacturing costs and under absorption costing, total manufacturing costs (variable and fixed) constitute inventoriable or product costs.
<b>Period Costs</b>	These are the costs, which are not assigned to the products but are charged as expenses against the revenue of the period in which they are incurred. All non-manufacturing costs such as general and administrative expenses, selling and distribution expenses are recognised as period costs.
<b>Opportunity Cost</b>	This cost refers to the value of sacrifice made or benefit of opportunity foregone in accepting an alternative course of action.
<b>Sunk Cost</b>	Historical costs incurred in the past are known as sunk costs. They play no role in decision making in the current period.
<b>Discretionary</b>	Such costs are not tied to a clear cause and effect relationship

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<b>Costs</b>	between inputs and outputs. They usually arise from periodic decisions regarding the maximum outlay to be incurred.
<b>Explicit Costs</b>	These costs are also known as out of pocket costs and refer to costs involving immediate payment of cash. Salaries, wages, postage and telegram, printing and stationery, interest on loan etc. are some examples of explicit costs involving immediate cash payment.
<b>Implicit Costs</b>	These costs do not involve any immediate cash payment. They are not recorded in the books of account. They are also known as economic costs.
<b>Methods of Costing</b>	(i) Job Costing (ii) Batch Costing (iii) Contract Costing (iv) Single or Output Costing (v) Process Costing (vi) Operating Costing (vii) Multiple Costing
<b>Job Costing</b>	In this method of costing, cost of each job is ascertained separately. It is suitable in all cases where work is undertaken on receiving a customer's order like a printing press, motor workshop, etc.
<b>Batch Costing</b>	It is the extension of job costing. A batch may represent a number of small orders passed through the factory in batch. Each batch here is treated as a unit of cost and thus costing is done separately. Here cost per unit is determined by dividing the cost of the batch by the number of units produced in the batch.
<b>Contract Costing</b>	Here the cost of each contract is ascertained separately. It is suitable for firms engaged in the construction of bridges, roads, buildings etc.
<b>Single or Output Costing</b>	Here the cost of a product is ascertained, the product being the only one produced like bricks, coals, etc.
<b>Process Costing</b>	Here the cost of completing each stage of work is ascertained, like cost of making pulp and cost of making paper from pulp. In mechanical operations, the cost of each operation may be ascertained separately; the name given is operation costing.
<b>Operating Costing</b>	It is used in the case of concerns rendering services like transport, supply of water, retail trade etc.
<b>Multiple Costing</b>	It is a combination of two or more methods of costing outlined above. Suppose a firm manufactures bicycles including its components; costing of the parts will be done by the system of job

	or batch costing but the cost of assembling the bicycle will be computed by the Single or output costing method. The whole system of costing is known as multiple costing.
<b>Techniques of Costing</b>	(i) Uniform Costing (ii) Marginal Costing (iii) Standard Costing and Variance Analysis (iv) Historical Costing (v) Direct Costing (vi) Absorption Costing
<b>Uniform Costing</b>	When a number of firms in an industry agree among themselves to follow the same system of costing in detail, adopting common terminology for various items and processes they are said to follow a system of uniform costing.
<b>Marginal Costing</b>	It is defined as the ascertainment of marginal cost by differentiating between fixed and variable costs. It is used to ascertain effect of changes in volume or type of output on profit.
<b>Standard Costing and Variance Analysis</b>	It is the name given to the technique whereby standard costs are pre-determined and subsequently compared with the recorded actual costs. It is thus a technique of cost ascertainment and cost control. This technique may be used in conjunction with any method of costing. However, it is especially suitable where the manufacturing method involves production of standardised goods of repetitive nature.
<b>Absorption Costing</b>	It is the practice of charging all costs, both variable and fixed to operations, processes or products. This differs from marginal costing where fixed costs are excluded.
<b>Coding System</b>	A system of symbols designed to be applied to a classified set of items to give a brief account reference, facilitating entry collation and analysis. Hence cost classification forms the basis of any cost coding. It helps us understand the characteristic of any cost through a short symbolized form.

**Question-1**

*Enumerate the main objectives of introduction of a Cost Accounting System in a manufacturing organization*

**Solution:**

The main objectives of introduction of a Cost Accounting System in a manufacturing organization are as follows:

- (i) Ascertainment of cost

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- (ii) Determination of selling price
  - (iii) Cost control and cost reduction
  - (iv) Ascertainment of profit of each activity
  - (v) Assisting in managerial decision making
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### Question-2

*Write short notes on any two of the following?*

- (i) *Conversion cost*    (ii) *Sunk cost*    (iii) *Opportunity cost*

#### **Solution:**

- (i) **Conversion cost:** It is the cost incurred to convert raw materials into finished goods. It is the sum of direct wages, direct expenses and manufacturing overheads.
  - (ii) **Sunk cost:** Historical costs or the costs incurred in the past are known as sunk cost. They play no role in the current decision making process and are termed as irrelevant costs. For example, in the case of a decision relating to the replacement of a machine, the written down value of the existing machine is a sunk cost, and therefore, not considered.
  - (iii) **Opportunity cost:** It refers to the value of sacrifice made or benefit of opportunity foregone in accepting an alternative course of action. For example, a firm financing its expansion plan by withdrawing money from its bank deposits. In such a case the loss of interest on the bank deposit is the opportunity cost for carrying out the expansion plan.
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### Question-3

*What is meant by cost centre?*

#### **Solution:**

It is defined as a location, person or an item of equipment (or group of these) for which cost may be ascertained and used for the purpose of Cost Control.

Cost Centres are of two types,

- **Personal Cost Centre:** It consists of a person or group of persons e.g. Mr. X, supervisor, foreman, accountant, engineer, process staffs, mining staffs, doctors etc.
- **Impersonal Cost Centre:** It consists of a location or an item of equipment (or group of these) e.g. Ludhiana branch, boiler house, cooling tower, weighing machine, canteen, and generator set etc.

In a manufacturing concern there are two types of cost centres viz., Production and Service cost centres.

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**Question-4**

*Discuss cost classification based on variability and controllability.*

**Solution:*****Cost classification based on variability***

- (a) **Fixed Costs** – These are the costs which are incurred for a period, and which, within certain output and turnover limits, tend to be unaffected by fluctuations in the levels of activity (output or turnover). They do not tend to increase or decrease with the changes in output. For example, rent, insurance of factory building etc., remain the same for different levels of production.
- (b) **Variable Costs** – These costs tend to vary with the volume of activity. Any increase in the activity results in an increase in the variable cost and vice-versa. For example, cost of direct labour, etc.
- (c) **Semi-variable Costs** – These costs contain both fixed and variable components and are thus partly affected by fluctuations in the level of activity. Examples of semi variable costs are telephone bills, gas and electricity etc.

***Cost classification based on controllability***

- (a) **Controllable Costs** - Cost that can be controlled, typically by a cost, profit or investment centre manager is called controllable cost. Controllable costs incurred in a particular responsibility centre can be influenced by the action of the executive heading that responsibility centre. For example, direct costs comprising direct labour, direct material, direct expenses and some of the overheads are generally controllable by the shop level management.
  - (b) **Uncontrollable Costs** - Costs which cannot be influenced by the action of a specified member of an undertaking are known as uncontrollable costs. For example, expenditure incurred by, say, the tool room is controllable by the foreman in-charge of that section but the share of the tool-room expenditure which is apportioned to a machine shop is not to be controlled by the machine shop foreman.
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**Question-5**

*Discuss the essential features of a good cost accounting system?*

**Solution:**

The essential features, which a good Cost Accounting System should possess, are as follows:

- (a) **Informative and Simple:** Cost Accounting System should be tailor-made, practical, simple and capable of meeting the requirements of a business concern. The system of costing should not sacrifice the utility by introducing meticulous and unnecessary details.
- (b) **Accuracy:** The data to be used by the Cost Accounting System should be accurate; otherwise it may distort the output of the system and a wrong decision may be taken.

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- (c) **Support from Management and subordinates:** Necessary cooperation and participation of executives from various departments of the concern is essential for developing a good system of Cost Accounting.
  - (d) **Cost-Benefit:** The Cost of installing and operating the system should justify the results.
  - (e) **Procedure:** A carefully phased programme should be prepared by using network analysis for the introduction of the system.
  - (f) **Trust:** Management should have faith in the Costing System and should also provide a helping hand for its development and success.
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### Question-6

*Explain:*

- (i) *Pre-production Costs*
- (ii) *Research and Development Costs*
- (iii) *Training Costs*

**Solution:**

- (i) **Pre-production Costs:** These costs forms the part of development cost, incurred in making a trial production run, preliminary to formal production. These costs are incurred when a new factory is in the process of establishment or a new project is undertaken or a new product line or product is taken up, but there is no established or formal production to which such costs may be charged.
  - (ii) **Research and Development Costs:** Research costs are the costs incurred for the original and planned investigation undertaken with a prospect of gaining new scientific or technical knowledge and understanding.  
  
Development costs are the cost incurred in applying research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production or use.
  - (iii) **Training Costs:** Costs which are incurred in and in relation to providing training to the workers, apprentices, executives etc. Training cost consists of wages and salaries paid to new trainees, fees paid to trainers, cost of materials and properties used to train the trainees, costs associated with training centre, loss suffered due to lower production and extra spoilage etc. The total cost of training section is thereafter apportioned to production centers.
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### Question-7

*Enumerate the factors which are to be considered before installing a system of cost accounting in a manufacturing organization.*

**Solution:**

Before installation of a system of cost accounting in a manufacturing organisation the under mentioned factors should be studied:

- (a) **Objective:** The objective of costing system, for example whether it is being introduced for fixing prices or for insisting a system of cost control.
- (b) **Nature of Business or Industry:** The Industry in which business is operating. Every business industry has its own peculiar feature and costing objectives. According to its cost information requirement cost accounting methods are followed. For example Indian Oil Corporation Ltd. has to maintain process wise cost accounts to find out cost incurred on a particular process say in crude refinement process etc.
- (c) **Organisational Hierarchy:** Costing system should fulfill the requirement of different level of management. Top management is concerned with the corporate strategy, strategic level management is concerned with marketing strategy, product diversification, product pricing etc. Operational level management needs the information on standard quantity to be consumed, report on idle time etc.
- (d) **Knowing the product:** Nature of product determines the type of costing system to be implemented. The product which has by-products requires costing system which account for by-products as well. In case of perishable or short self- life, marginal costing method is required to know the contribution and minimum price at which it can be sold.
- (e) **Knowing the production process:** A good costing system can never be established without the complete knowledge of the production process. Cost apportionment can be done on the most appropriate and scientific basis if a cost accountant can identify degree of effort or resources consumed in a particular process. This also includes some basic technical know-how and process peculiarity.
- (f) **Information synchronisation:** Establishment of a department or a system requires substantial amount of organisational resources. While drafting a costing system, information needs of various other departments should be taken into account. For example in a typical business organisation accounts department needs to submit monthly stock statement to its lender bank, quantity wise stock details at the time filing returns to tax authorities etc.
- (g) **Method of maintenance of cost records:** The manner in which Cost and Financial accounts could be inter-locked into a single integral accounting system and in which results of separate sets of accounts, cost and financial, could be reconciled by means of control accounts.
- (h) **Statutory compliances and audit:** Records are to be maintained to comply with statutory requirements, standards to be followed (Cost Accounting Standards and Accounting Standards).

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- (i) **Information Attributes:** Information generated from the Costing system should be possess all the attributes of an information i.e. complete, accurate, timeliness, confidentiality etc. This also meets the requirements of management information system.
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### Question-8

*You have been asked to install a costing system in a manufacturing company. What practical difficulties will you expect and how will you propose to overcome the same?*

#### Solution:

The practical difficulties with which one usually confronted with while installing a costing system in a manufacturing company are as follows:

- (i) **Lack of top management support:** Installation of a costing system does not receive the adequate support of top management. They consider it as interference in their work. They believe that such, a system will involve additional paperwork. They also have a misconception in their minds that the system is meant for keeping a check on their activities.
- (ii) **Resistance from cost accounting departmental staff:** The staff resists because of fear of losing their jobs and importance after the implementation of the new system.
- (iii) **Non co-operation from user departments:** The foremen, supervisor and other staff members may not co-operate in providing requisite data, as this would not only add to their responsibilities but will also increase paper work of the entire team as well.
- (iv) **Shortage of trained staff:** Since cost accounting system's installation involves specialised work, there may be a shortage of trained staff.

To overcome these practical difficulties, necessary steps required are:

- To sell the idea to top management – To convince them of the utility of the system.
  - Resistance and non co-operation can be overcome by behavioral approach. To deal with the staff concerned effectively.
  - Proper training should be given to the staff at each level
  - Regular meetings should be held with the cost accounting staff, user departments, staff and top management to clarify their doubts / misgivings.
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### Question-9

*Distinguish between controllable & uncontrollable costs?*

#### Solution:

**Controllable costs and Uncontrollable costs:** Cost that can be controlled, typically by a cost, profit or investment centre manager is called controllable cost. Controllable costs

incurred in a particular responsibility centre can be influenced by the action of the executive heading that responsibility centre.

Costs which cannot be influenced by the action of a specified member of an undertaking are known as uncontrollable costs.

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#### Question-10

*Define Explicit costs. How is it different from implicit costs?*

#### Solution:

*Explicit costs:* These costs are also known as out of pocket costs. They refer to those costs which involves immediate payment of cash. Salaries, wages, postage and telegram, interest on loan etc. are some examples of explicit costs because they involve immediate cash payment. These payments are recorded in the books of account and can be easily measured.

*Main points of difference:* The following are the main points of difference between Explicit and Implicit costs.

- (i) Implicit costs do not involve any immediate cash payment. As such they are also known as imputed costs or economic costs.
  - (ii) Implicit costs are not recorded in the books of account but yet, they are important for certain types of managerial decisions such as equipment replacement and relative profitability of two alternative courses of action.
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#### Question-11

*Discuss the four different methods of costing alongwith their applicability to concerned industry?*

#### Solution:

Four different methods of costing along with their applicability to concerned industry have been discussed as below:

1. *Job Costing:* The objective under this method of costing is to ascertain the cost of each job order. A job card is prepared for each job to accumulate costs. The cost of the job is determined by adding all costs against the job it is incurred. This method of costing is used in printing press, foundries and general engineering workshops, advertising etc.
2. *Batch Costing:* This system of costing is used where small components/ parts of the same kind are required to be manufactured in large quantities. Here batch of similar products is treated as a job and cost of such a job is ascertained as discussed under (1), above. If in a cycle manufacturing unit, rims are produced in batches of 2,500 units each, then the cost will be determined in relation to a batch of 2,500 units.
3. *Contract Costing:* If a job is very big and takes a long time for its completion, then method used for costing is known as Contract Costing. Here the cost of each contract is

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ascertained separately. It is suitable for firms engaged in the construction of bridges, roads, buildings etc.

4. *Operating Costing*: The method of Costing used in service rendering undertakings is known as operating costing. This method of costing is used in undertakings like transport, supply of water, telephone services, hospitals, nursing homes etc.
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### Question-12

*Distinguish between Marginal Costing and Differential Costing*

**Solution:**

*Marginal Costing and Differential Costing*

**Marginal Costing** is defined as the 'Ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable costs'.

**Differential Costing** is defined as the technique of costing which uses differential costs and/or differential revenues for ascertaining the acceptability of an alternative. The technique may be termed as incremental costing when the difference is increase in costs and decremental costing when the difference is decrease in costs. The main points of distinction between marginal costing and differential costing are as below:

- (a) The technique of marginal costing requires a clear distinction between variable costs and fixed costs whereas no such distinction is made in the case of differential costing.
  - (b) In marginal costing, margin of contribution and contribution ratio are the main yard sticks for performance evaluation and for decision making whereas under differential costs analysis, differential costs are compared with the incremental or decremental revenue (as the case may be) for arriving at a decision.
  - (c) Differential cost analysis is possible in both absorption costing and marginal costing, where as marginal costing in itself is a distinct technique.
  - (d) Marginal cost may be incorporated in the cost accounting system whereas differential costs are worked out separately.
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### Question-13

*Answer any the following:*

- (i) *Explicit and Implicit Costs*
- (ii) *Period Costs and Discretionary Costs*

**Solution:**

- (i) **Explicit and Implicit cost:**

**Explicit costs**, which are also known as out of pocket costs, refer to costs involving immediate payment of cash. Salaries, wages, interest on loan etc. are examples of explicit costs. They can be easily measured.

The main points of difference between explicit and implicit costs are:

- Implicit costs do not involve immediate cash payment.
- They are not recorded in the books of account.
- They are also known as economic costs.

**(ii) Period and Discretionary costs**

There are the costs, which are not assigned to the products but are charged as expenses against the revenue of the period in which they are incurred. All non-manufacturing costs such as general and administrative expenses, selling and distribution expenses are period costs.

Discretionary costs are not tied to a clear cause and effect relationship between inputs and outputs. They arise from periodic decisions regarding the maximum outlay to be incurred. Examples are – advertising, public relations, training etc.

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**Question-14**

*Explain Profit centres and investment centres.*

**Solution:**

**Profit Centres and Investment Centres:**

**Profit Centres** are the part of a business which is accountable for both cost and revenue. These are responsible for generating and maximizing profits. Performance of these centres is measured with the volume of profit it earns.

**Investment Centres** are the profit centres with additional responsibility for capital investment and possibly for financing. These centres are concerned with earning an adequate return on investment as performance is measured by its returns on investment.

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**Question-15**

*Briefly discuss how the synergetic effect helps in reduction in costs.*

**Solution:**

Where two or more products which are following the same production pattern, consumes same materials and same set of labour skills are produced and managed together. This manufacturing synchronisation gives better efficiency in usage, production and handling of these products. Due to this synergetic effect idle time is reduced, effort is saved and in turn associated costs can also be saved.

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**Question-16**

*Discuss briefly the relevant costs with examples.*

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### Solution:

Relevant costs may be understood as expected future costs which are essential but differ for alternative course or action. Relevant costs are affected by the decision being taken by the management. A cost is relevant when it satisfies two conditions i.e. it should occur in future and it should differ among the alternative courses of action. For example, while considering a proposal for plant replacement by discarding the existing plant, the original cost and the present depreciated book value of the old plant are irrelevant as they have no impact on the decision for replacement just going to be taken place. However the expected sales value of the discarded plant is relevant, as it just goes to reduce the amount of investment to be made in the new plant and so it has an influence on the decision. Moreover, outcome of the investment is also taken into consideration for decision making.

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### Question-17

State the method of costing and the suggestive unit of cost for the following industries

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|-------------------------|---|
| (a) Transport           | (b) Power   |
| (c) Hotel               | (d) Hospital                                      |
| (e) Steel               | (f) Coal  |
| (g) Bicycles            | (h) Bridge Construction                           |
| (i) Interior Decoration | (j) Advertising                                   |
| (k) Furniture           | (l) Brick-works                                   |
| (m) Oil refining mill   | (n) Sugar company having its own sugarcane fields |
| (o) Toy making          | (p) Cement  |
| (q) Radio assembling    | (r) Ship building                                 |

### Solution:

	Industry	Method of Costing	Suggestive Unit of Cost
(a)	Transport	Operating Costing	Passenger k.m. or tonne k.m.
(b)	Power	Operating Costing	Kilo-watt (kw) hours
(c)	Hotel	Operating Costing	Room day
(d)	Hospital	Operating Costing	Patient-day
(e)	Steel	Process Costing/ Single Costing	Tonne
(f)	Coal	Single Costing	Tonne
(g)	Bicycles	Multiple Costing	Number
(h)	Bridge Construction	Contract Costing	Project/ Unit

(i)	Interior Decoration	Job Costing	Assignment
(j)	Advertising	Job Costing	Assignment
(k)	Furniture	Job Costing	Number
(l)	Brick Works	Single Costing	1000 units/ units
(m)	Oil refining mill	Process Costing	Barrel/ Tonne/ Litre
(n)	Sugar company having its own sugarcane field	Process Costing	Tonne
(o)	Toy Making	Batch Costing	Units
(p)	Cement	Single Costing	Tonne/ per bag
(q)	Radio assembling	Multiple Costing	Units
(r)	Ship Building	Contract Costing	Project/ Unit

**Question-18**

State the types of cost in the following cases:

- (i) Interest paid on own capital not involving any cash outflow.
- (ii) Withdrawing money from bank deposit for the purpose of purchasing new machine for expansion purpose.
- (iii) Rent paid for the factory building which is temporarily closed
- (iv) Cost associated with the acquisition and conversion of material into finished product.

**Solution:**

**Type of costs**

- (i) Imputed Cost
- (ii) Opportunity Cost
- (iii) Shut Down Cost
- (iv) Product Cost

**Question-19**

Distinguish between product cost and period cost.

**Solution:**

**Product Cost vis-à-vis Period cost**

**Product costs** are those costs that are identified with the goods purchased or produced for resale. In a manufacturing organisation they are attached to the product and that are included in the inventory valuation for finished goods, or for incompleting goods. Product cost is also known as inventoriable cost. Under absorption costing method it includes direct material,

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direct labour, direct expenses, directly attributable costs (variable and non variable) and other production (manufacturing) overheads. Under marginal costing method Product Costs includes all variable production costs and the all fixed costs are deducted from the contribution.

**Periods costs** are the costs, which are not assigned to the products but are charged as expense against revenue of the period in which they are incurred. General Administration, marketing, sales and distributor overheads are recognized as period costs.

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### Question-20

Define the following:

- (a) *Imputed cost*
- (b) *Capitalised cost*

#### Solution:

- (a) *Imputed Cost:* These costs are notional costs which do not involve any cash outlay. Interest on capital, the payment for which is not actually made, is an example of Imputed Cost. These costs are similar to opportunity costs.
  - (b) *Capitalised Cost:* These are costs which are initially recorded as assets and subsequently treated as expenses.
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### Question-21

What is Cost accounting? Enumerate its important objectives.

#### Solution:

Cost Accounting is defined as "the process of accounting for cost which begins with the recording of income and expenditure or the bases on which they are calculated and ends with the preparation of periodical statements and reports for ascertaining and controlling costs."

The main objectives of the cost accounting are as follows:

- (a) *Ascertainment of cost:* There are two methods of ascertaining costs, viz., Post Costing and Continuous Costing. Post Costing means, analysis of actual information as recorded in financial books. Continuous Costing, aims at collecting information about cost as and when the activity takes place so that as soon as a job is completed the cost of completion would be known.
- (b) *Determination of selling price:* Business enterprises run on a profit making basis. It is thus necessary that the revenue should be greater than the costs incurred. Cost accounting provides the information regarding the cost to make and sell the product or services produced.
- (c) *Cost control and cost reduction:* To exercise cost control, the following steps should be observed:
  - (i) Determine clearly the objective.

- (ii) Measure the actual performance.
  - (iii) Investigate into the causes of failure to perform according to plan;
  - (iv) Institute corrective action.
- (d) *Cost Reduction* may be defined "as the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or diminution in the quality of the product."
- (e) *Ascertaining the profit of each activity*: The profit of any activity can be ascertained by matching cost with the revenue of that activity. The purpose under this step is to determine costing profit or loss of any activity on an objective basis.
- (f) *Assisting management in decision making*: Decision making is defined as a process of selecting a course of action out of two or more alternative courses. For making a choice between different courses of action, it is necessary to make a comparison of the outcomes, which may be arrived under different alternatives.

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#### Question-22

*Cost of a product or service is required to be expressed in suitable cost unit. State the cost units for the following industries:*

- (i) Steel
- (ii) Automobile
- (iii) Transport
- (iv) Power

**Solution:**

Industry	Cost Unit
(i) Steel	Tonne
(ii) Automobile	Numbers
(iii) Transport	Passenger Kilo-meter/ Tonne Kilo-meter
(iv) Power	Kilo-watt hour (Kwh)

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#### Question-23

*Distinguish between cost control and cost reduction.*

## 1.18 Cost Accounting

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**Solution:**

**Difference between Cost Control and Cost Reduction**

Cost Control	Cost Reduction
1. Cost control aims at maintaining the costs in accordance with the established standards.	1. Cost reduction is concerned with reducing costs. It challenges all standards and endeavours to better them continuously
2. Cost control seeks to attain lowest possible cost under existing conditions.	2. Cost reduction recognises no condition as permanent, since a change will result in lower cost.
3. In case of Cost Control, emphasis is on past and present	3. In case of cost reduction it is on present and future.
4. Cost Control is a preventive function	4. Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved	5. Cost reduction has no visible end.

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### Question-24

*Explain the following:*

- (i) *Explicit costs*    (ii) *Engineered costs*

**Solution:**

- (i) **Explicit Costs** - These costs are also known as out of pocket costs and refer to costs involving immediate payment of cash. Salaries, wages, postage and telegram, printing and stationery, interest on loan etc. are some examples of explicit costs involving immediate cash payment.
- (ii) **Engineered Costs** - These are costs that result specifically from a clear cause and effect relationship between inputs and outputs. The relationship is usually personally observable. Examples of inputs are direct material costs, direct labour costs etc.
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### Question-25

*Identify the methods of costing for the following:*

- (i) *Where all costs are directly charged to a specific job.*
- (ii) *Where all costs are directly charged to a group of products.*
- (iii) *Where cost is ascertained for a single product.*
- (iv) *Where the nature of the product is complex and method cannot be ascertained.*

**Solution:**

Sl. No.	Method of Costing
(i)	Job Costing
(ii)	Batch Costing
(iii)	Unit Costing or Single or Output Costing
(iv)	Multiple Costing

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**Question-26**

*What is a Cost Driver? Give one example of cost drivers for each of the following business functions:*

- (i) *Procurement*
- (ii) *Research and Development*
- (iii) *Customer service*

**Solution:**

A cost driver is a factor or variable which effect the level of cost. In other words, it is an activity which is responsible for cost incurrence. In the context of Activity Based Costing (ABC) a cost driver denotes the factor which links activity resource consumption to the product output.

Examples of cost drivers in the business functions in the value chain are:

- (i) Procurement: Number of Purchase Order, Number of Suppliers, Number of items procured and volume of purchases (in quantitative terms)
  - (ii) Research and development : Number of research projects, personnel hours on a project, technical complexities of the projects.
  - (iii) Customer service: Number of service calls, number of products serviced, hours spent in servicing of products.
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