

MODULE-IV

OVERHEAD COST

CLASSIFICATION OF OVERHEAD

Classification is defined by CIMA as, the arrangement of items in logical groups having regard to their nature (subjective classification) or the purpose to be fulfilled (objective classification). In other words, classification is the process of arranging items into groups according to their degree of similarity. Accurate classification of all items is actually a prerequisite to any form of cost analysis and control system.

Classification is made according to the following basis:

1. Functions
2. Elements and
3. Behaviour

• Classification according to functions:-

1. **factory overheads:-** Factory overheads is the total indirect costs associated with manufacturing activities usually it starts with purchasing of materials and ends with all factory expenses incurred.
2. **Administration overheads :-** Its is the indirect expenses witch are incurred at the office premises.
3. **Selling and distribution overheads :-** it refers to those expenses witch are associated with the marketing and selling activities.

it refers to total indirect cost associated with the distribution of finished products ,beginning with packed goods available for and ending with making reconditioned returnable empty container if any available for re-use.

- Classification according to elements:-
 1. Indirect materials :- It includes under materials which cannot be identified in the production .Ex; fuel, small tools etc.
 2. Indirect labor :- Labor charges those materials ,which cannot be allocated to a particular unit of cost are called indirect labour.Ex:general indirect labour ,salary of storekeeper, wages for maintenance workers.
 3. Indirect expenses :-Indirect expenses are expenses which cannot be allocated but which can be absorbed by cost or cost units.Ex:Training expenses, depreciation of plant ,machinery and buildings etc.

- **Classification based on behavior :-**

- 1 . **Fixed overheads** : Overhead Which tends to remain unaffected by the fluctuations in the value of productions or output during a period of time is known as fixed overheads .
Ex- rent,salaries,insurance etc.
2. **Variable overheads** :- Overheads in accordance with the increase in decrease in the volume production or volume is called variable overheads .there is a linear relationship between the variable overheads and output.
3. **Semi-fixed or semi variable overheads:-** this represents partly fixed and party variable overheads. that is it remains constant up to a certain level and them variant at a constant rate up to the next level

ALLOCIATIO OF OVERHEADS

Allocation means the allotment of the entire items of cot to the cost centers or cost unit the nature of the expenses can easily be identified and allocated to a cost centre.

Ex- salary paid to the office staff is allocated to the administration department.

APPORTIONMENT OF OVERHEADS

Allotment of proportions of items of cost to cost centers or cost units are called apportionment. This is done in the case of those items of overheads which cannot be allocated to a particular department.

For Example:- light cannot be allocated to a department only since it is shared by all production departments. It has to be proportionally allocated to the various departments on the basis of area.

● Principles of apportionment :-

- **Use or service:-** The overhead should be apportioned on the basis of use received by a particular department. the greater the amount of service or use received by a department the grater the share of an item of overheads to be apportioned to that department.
- **Survey or analysis :-** According to the exiting conditions overheads are proportioned on the basis of survey
Ex- a supervise two department x and Y giving 60 % of this time in department x and 40% of this time in department Y.
- **Ability to pay :-** Here the apportioned is made in the ability to pay. thus higher the revenue of a particular department ,higher shall be proportionate charge for the servies.

ABSORPTION OF FACTORY OVERHEADS

absorption according to ICMA is the allotment of overhead to cost units it is the charging of overheads to individual products or units .the term overhead rate refers to the rate of which the overheads are to be charged to different cost units .it may be in the form of percentage or a rate per unit.

❖ Actual overheads rate :-

This is calculated by dividing the overheads expenses incurred during the accounting period by the actual quantum.

❖ Pre- determined overheads rate :-

It is determined in advance of the actual production and is calculated by dividing the budgeted overhead expenses for the accounting period by the budgeted base for the period.

$$\text{pre -determined overhead rate} = \frac{\text{Budgeted overhead for the period}}{\text{Base for the period}}$$

❖ Blanket rate :-

When a single overhead rate is computed for the factory as a whole it is called single or blanket rate .it is calculated as follows.

$$\text{Blanket rate} = \frac{\text{Overhead cost for the entire factory}}{\text{Base for the period}}$$

❖ Multiple rate :-

When different rate computed for each production for each department ,service department, cost center, each product or product line ,then the rate is calculated as follows :

Overhead rate =

$$\frac{\text{overhead cost allocated and apportioned to each cost center}}{\text{corresponding base}}$$

Pre-requisites of a good absorption rate

- 1) it must be flexible
- 2) it should facilitate comparison
- 3) capable of being used anytime
- 4) it should be according to the nature of the product.
- 5) it should involve minimum clerical effort

METHODS OF ABSORPTION

The following are the methods used for overheads absorption :

- 1) Production units
- 2) percentage on direct wages
- 3) percentage on direct material cost
- 4) direct labour hours
- 5) percentage on prime cost
- 6) machine hour rate.

This is the process of charging to the product or the output of a production cost centre all the overhead expense which have been allocated and apportioned to it.

MACHINE HOUR RATE

Machine hour rate is a rate which is calculated by dividing the budgeted or estimated overhead or labour and overhead cost attributable to a machine or a group of similar machines by the appropriate number of machine hours. The machine hour rate may be ordinary machine hour rate or composite machine hour rate.

To compute the machine hour rate first the overhead expenses are to be departmentalized. Each machine or a group of machines in a department should be regarded as a cost center on some equitable basis. then the machine hour is determined by dividing total overhead by machine hours.

CALCULATION OF MACHINE HOUR RATE

The following steps are required to be taken for calculation of machine hour rate:

1. each machine or a group of similar machine should be treated as a cost centre.
2. specific overheads like depreciation repairs and maintenance, insurance etc. shall be directly allocated to the machine.
3. general overheads like rent, lighting, lubricating oil, consumable stores etc. are apportioned on some equitable basis.
4. the wages of machine operator should not be included in machine expenses. if it is included then the machine hour rate is called comprehensive machine hour rate.
5. The cost of any reserve equipment such as spare motors or spare-machine should be included in the machine expenses.

- Advantages of machine hour rate :-
 1. it determines the working condition of the machinery.
 2. it spots out the idle time.
 3. the efficient performance of the machinery can be highlighted.
 4. the book value of the machine as on the date of sale can be easily determined .
 5. it highlights the importance of automation when compared with manual operations.



THE END

