

**Overheads** – Overheads comprise of indirect materials, indirect employee costs and indirect expenses which are not directly identifiable or allocable to a cost object in an economically feasible way.

**A- Overheads are to be classified on the basis of functions as**

- Production overheads
- Administrative overheads
- Selling and Distribution overheads

**B- Overheads may also be classified on the basis of behavior as**

-Variable overheads comprise of expenses which vary in proportion to the change of volume of production. For example, cost of utilities etc.

-Fixed overheads comprise of expenses whose values do not change with the change in volume of production such as salaries, rent etc.

-Semi-variable overheads are partly affected by change in the production volume. They are further segregated into variable overheads and fixed overheads.

- Any items of overheads arising out of abnormal situation in business activity should not be treated as overheads. They are charged to Costing Profit and Loss Account.
- Items not related to business activities such as donation, loss / profit on sale of assets etc are also not to be treated as overheads.
- Borrowing cost and other financial charges including foreign exchange fluctuations will not form the part of overheads.

## **TREATMENT OF OVERHEADS**

**STEP 1 Analysis and collection of overheads,**

**STEP 2 Allocation and apportionment of overhead to different cost centres and**

**STEP 3 Absorption of overhead to products, services or jobs.**

**1. Collection of Overheads** - Collection of overheads means the pooling of indirect items of expenses from books of account in logical groups (cost pools) based on homogeneity in their nature and purpose.

**2. Allocation of overheads** – Allocation of overheads is assigning a whole item of cost directly to a cost centre. An item of expense which can be directly related to a cost centre is to be allocated to the cost centre.

**3. Apportionment of overhead** - Apportionment of overhead is distribution of overheads to more than one cost centre on some equitable basis.

- a) **Primary Apportionment of overhead:** When the indirect costs are common to different cost centres (production and service cost centre) these are to be apportioned to these cost centres on an equitable basis.
- b) **Secondary Apportionment of Overheads :** There are common service cost centres which provides services to the various production cost centres and other service cost centres. The costs of services are required to be apportioned to the relevant cost centres. That is to apportion the costs of service cost centres to production cost centres on an equitable basis.

Following three methods may be followed for Secondary Apportionment of Overheads:

- I. Repeated Distribution Method
- II. Trial & Error Method
- III. Simultaneous Equation Method

**4. Absorption of overheads** - Absorption of overheads is charging of overheads from cost centres to products or services by means of absorption rates for each cost center.

$$\text{Overhead absorption Rate} = \frac{\text{Total overheads of the cost centre}}{\text{Total quantum of base (eg-machine hours, labour hours)}}$$

Absorption rate is usually calculated by following methods based on their respective bases-

#### **Percentage method**

- 1) Direct material cost % method
- 2) Direct labour cost % method
- 3) Prime cost % method

#### **Hour Rate method**

- 1) Machine Hour Rate
- 2) Direct Labour Hour Rate

#### **Production Unit method**

## **OVER-ABSORPTION AND UNDER-ABSORPTION OF OVERHEADS**

- If absorbed overhead is less than the Actual overhead, it is under-absorption of overheads. Reason may be production less than normal or rise in price of overhead.
- If absorbed overhead is more than the Actual overhead, it is over-absorption of overheads. Reason may be production more than normal or fall in price of overhead.

## **MACHINE HOUR RATE**

STEP 1 calculate *Effective Working Hour* for the period given

STEP 2 Bifurcate the cost elements in *Standing Charges* and *Machine Expenses*

STEP 3 Calculate total cost for each cost element for the given period

STEP 4 Sum up the cost for each cost element in *Standing Expenses* and divide it by Effective Working Hour to get standing expenses per machine hour

STEP 5 Divide the cost for each cost element in *Machine Expenses* by Effective Working Hour to get cost per machine hour for each cost element in machine expenses, and sum it up to get *machine expenses per machine hour*

STEP 6 Sum up the Standing expenses per machine hour and machine expenses per machine hour to get *machine hour rate*