

# Overheads

## 1. Overheads

It is the total of indirect material, indirect labour and indirect expenses.

## 2. Steps for Overheads

- (A) Estimation and Distribution
- (B) Recovery Rate
- (C) Under or Over Recovery

## 3. Types of Department

- (A) Production Department – Involved in manufacturing of goods or services
- (B) Service Department – Help production department in performing their services

## 4. Distribution

- (A) Allocation
- (B) Apportionment

# Overheads

## Overheads Distribution

Primary Distribution

Allocation & Apportionment

Direct distribution method or  
Non-reciprocal method

Distribute on the basis given in  
question or go by the nature of  
department

Secondary Distribution

Step-Distribution method

(1) Distribute on the basis give in  
question or  
(2) First distribute dept. giving  
maximum service

Reciprocal method

(1) Repeated distribution method  
(2) Simultaneous Equation Method  
(3) Trial & Error Method

# Overheads

## 6. Overheads Distribution Statement

Particulars	Basis	Production Department		Service Department	
		A	B	X	Y
Direct cost	Allocation	NA	NA	✓	✓
Identified Cost	Allocation	✓	✓	✓	✓
Common Cost	Apportionment	✓	✓	✓	✓
<b>Total</b>		✓	✓	✓	✓
Cost of Dept. X	Apportionment	✓	✓	(✓)	✓
Cost of Dept. Y	Apportionment	✓	✓	✓	(✓)
<b>Total</b>		✓	✓	<b>Nil</b>	<b>Nil</b>

# Overheads

## 7. Points to Remember

- a) Read question carefully because all details will be in question only.
- b) Direct costs of production department are not to be shown while preparing statement of overhead distribution.
- c) Only direct costs of service department are to be shown while preparing statement of overhead distribution.
- d) If no method is specified for secondary distribution then it is preferred to follow simultaneous equation method.
- e) Under repeated distribution method, distribute till the expenses of service department becomes zero.
- f) Fixed expenses are apportioned on the basis of normal capacity.
- g) Variable expenses are apportioned on the basis of actual capacity.
- h) Under direct distribution method, expenses of service department will be distributed only to production departments irrespective of the fact whether they provide service to each other or not.
- i) In case of **Step Distribution Method**:

# Overheads

## 7. Points to Remember

### (i) In case of **Step Distribution Method**:

- This method is to be applied only if specifically provided in question.
- Once expenses of a particular department are distributed and becomes '0' then there should not be any other amount shown in that particular department column.
- If way of distribution is provided in question then always follow that e.g. first distribute expenses of A then B, C and D.
- If no way is provided then first distribute the expenses of department which is providing maximum % of service to other service departments and so on.

# Overheads

## 8. Recovery Rate

Rate at which overheads are recovered/absorbed/charged

$$\text{Recovery Rate} = \text{Pre-determined absorption rate} = \frac{\text{Budgeted overheads}}{\text{Budgeted recovery base}}$$

## 9. Type of Recovery Rate

$$\text{(A) Direct Material Cost \% Method} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Material Cost}} \times 100$$

$$\text{(B) Direct Labour Cost \% Method} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Labour Cost}} \times 100$$

$$\text{(C) Direct Prime Cost \% Method} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Prime Cost}} \times 100$$

$$\text{(D) Unit Cost Method} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Production Units}}$$

$$\text{(E) Labour Hour Rate Method} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Labour Hours}}$$

$$\text{(F) Machine Hour Rate Method} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Machine Hours}}$$

# Overheads

## 10. Machine Hour Rate

It is applied in case of capital intensive units.

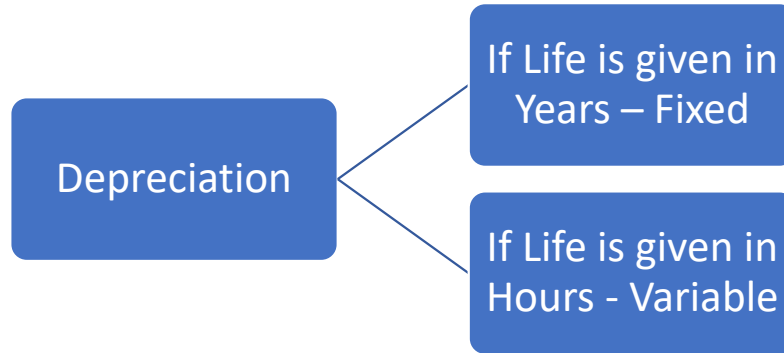
All overheads are divided into Fixed/Standing Charges and Variable/Running Charges

Particulars	Amount
<b>Fixed or Standing Expenses</b>	
Rent	✓
Insurance	✓
Salary	✓
Depreciation (if fixed)	✓
<b>Total (A)</b>	✓
<b>Variable or Running Charges</b>	
Power or electricity	✓
Depreciation (if variable)	✓
<b>Total (B)</b>	✓
<b>Total cost (A + B)</b>	✓
<b>Effective Machine Hours</b>	✓
<b>Machine hour Rate</b>	✓

# Overheads

## 11. Points to Remember (PTR)

(A)



(B) Effective Machine Hours = Total Machine Hours – Idle Hours

(C) Normal Idle Time – Hours during which work is not done e.g. maintenance, setup, lunch etc.

(D) Unless otherwise provided, following points are to be assumed for setup hours:

- No electricity or power is used during set-up hours
- These hours are considered to be un-productive

# Overheads

<b>Productive</b>	<b>Power Usage</b>	<b>Effective Hours</b>	<b>Power Hours</b>
Yes	Yes	Include	Include
Yes	No	Include	Exclude
No	Yes	Exclude	Include
No	No	Exclude	Exclude

# Overheads

## 12. Dual Recovery Rate/ Two-tier Machine Hour Rate

It is to be used in following situation:

- (A) When question mention to use
- (B) Job charge is for separation and operation separately

In this case set-up hours are considered to be productive

For FC per machine hour – Use total hours (Production + Set-up)

FC per machine hour will remain same for both i.e. operation and set-up

VC will be computed separately for both production and set-up.

# Overheads

## 13. Type of Recovery Rate

$$(A) \text{ Departmental recovery rate} = \frac{\text{Overheads of department}}{\text{Base value of department}}$$

$$(B) \text{ Blanket or plant-wise recovery rate} = \frac{\text{Overheads of Factory}}{\text{Base value of Factory}}$$

# Overheads

Recovered OHs =  $RR \times \text{Actual Base Value}$   
Actual Overheads = data from question

Actual OHs > Recovered OHs

Under Recovered OHs

Actual OHs < Recovered OHs

Over Recovered OHs

# Overheads

## Treatment of Overheads

Due to defective planning or factory inefficiency

Amount charge to P&L

Under Recovery

Costing P&L A/c Dr.

To OHs Control A/c

Over Recovery

OHs Control A/c Dr.

To Costing P&L A/c

Due to seasonal Nature of business

No Entry required

Balances are carried forward to next period

Due to change in price level

Under Recovery

Cost of Sales A/c Dr.

FG ledger control A/c Dr.

WIP ledger control A/c Dr.

To OHs Control A/c

# Overheads

## 15. Supplementary Rate

$$\text{Supplementary rate} = \frac{\text{Under/Over Recovery}}{\text{Equivalent units of FG}}$$