



## Labour Costing

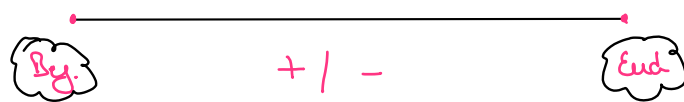
### Concept 1: Basics

- It represents human resources of org. which participate in the production.
- Direct labour ✓
- Indirect labour ✗
- Employee Cost : *lega*
- Role of Different Departments : *lega*



## Concept 2: Labour Turnover Ratio - Computation

• LTR is rate of change in composition of labour force.



$$\frac{+/-}{\text{Avg. No. of workers}} \times 100$$

Avg. no. of workers =  $\frac{\text{Workers in the beginning} + \text{Workers at the end}}{2}$

### 1. Depreciation Method

$$= \frac{\text{No. of workers departed}}{\text{Avg. No. of workers}} \times 100$$

Resigned  
↓  
deft + Discharged

### 2. Replacement Method

$$= \frac{\text{No. of workers Replaced}}{\text{Avg. No. of workers}} \times 100$$

### 3. Flux Method

Method 1 :  $\frac{\text{No. of workers departed} + \text{No. of workers Replaced}}{\text{Avg. No. of workers}} \times 100$

Method 2 :  $\frac{\text{No. of workers departed} + \text{No. of workers Replaced} + \text{No. of New Joinings}}{\text{Avg. No. of workers}} \times 100$

No. of Accessions  
↓  
Workers hired under expansion plan



## 4. Accession Method

$$= \frac{\text{No. of Accessions}}{\text{Avg. No. of workers}} \times 100$$

## 5. Lab. T/O Ratio due to new recruitment

$$= \frac{\text{No. of New Joinings}}{\text{Avg. No. of workers}} \times 100$$

## Computation of Equivalent LTR

$$\frac{\text{LTR computed for given period} \leftarrow}{\text{Days/weeks/months/quarters} \leftarrow \text{in the given period}} \times \frac{365 \text{ D} / 52 \text{ W} / 12 \text{ M} / 4 \text{ Q}}$$

## Computation of workers at the end

$$\begin{aligned} & \text{workers in the beginning} \\ & - \text{workers separated} \\ & + \text{workers replaced} \\ & + \text{No. of New Joinees} \\ & = \text{workers at the end} \end{aligned}$$



## ANSWER - 1

$$\text{Avg. No. of workers} = \frac{150 + 200}{2} = 175$$

1. Depreciation Method

$$= \frac{20 + 5}{175} \times 100$$

$$= 14.29\%$$

2. Replacement Method

$$= \frac{20}{175} \times 100$$

$$= 11.43\%$$

3. Flux Method

Variant 1

$$= \frac{(20 + 5) + 20}{175} \times 100$$

$$= 25.71\%$$

Variant 2

$$= \text{N.A. bcz new joinces data not given.}$$



## ANSWER-2

$$\text{Avg. no. of workers} = \frac{900 + 1100}{2} = 1000$$

### 1. Replacement Method

$$\sqrt{300 - 225}$$

$$\begin{aligned} \text{(a) LTR} &= \frac{75}{1000} \times 100 \\ &= 7.50\% \end{aligned}$$

$$\begin{aligned} \text{(b) Equivalent LTR} &= \frac{7.50}{31} \times 365 \\ &= 88.30\% \end{aligned}$$

### 2. Separation Method

$$\sqrt{40 + 60}$$

$$\begin{aligned} \text{(a) LTR} &= \frac{100}{1000} \times 100 \\ &= 10\% \end{aligned}$$

$$\begin{aligned} \text{(b) Equivalent LTR} &= \frac{10}{31} \times 365 \\ &= 117.74\% \end{aligned}$$

### 3. Flux Method

#### Variant 1

$$\begin{aligned} \text{(a) LTR} &= \frac{100 + 75}{1000} \times 100 \\ &= 17.50\% \end{aligned}$$

$$\begin{aligned} \text{(b) Equivalent LTR} &= \frac{17.50}{31} \times 365 \\ &= 206.05\% \end{aligned}$$



Variant 2

$$(a) \text{ LTR} = \frac{100 + (75 + 225) \times 100}{1000}$$

$$= 40\%$$

$$(b) \text{ Equivalent LTR} = \frac{40}{31} \times 365$$

$$= 470.97\%$$



## ANSWER - 3

### 1. Replacement Method

$$5\% = \frac{30}{\text{Avg. No. of Workers}}$$

$$\begin{aligned} \text{Avg. No. of Workers} &= \frac{30}{5\%} \\ &= 600 \end{aligned}$$

### 2. Depreciation Method

$$3\% = \frac{\text{Workers departed}}{600}$$

$$\begin{aligned} \text{Workers departed} &= 600 \times 3\% \\ &= 18 \end{aligned}$$

### 3. Flux Method

$$10\% = \frac{18 + \text{Workers Joined}}{600}$$

$$18 + \text{Workers Joined} = 600 \times 10\%$$

$$\begin{aligned} \text{Workers Joined} &= 60 - 18 \\ &= 42 \end{aligned}$$

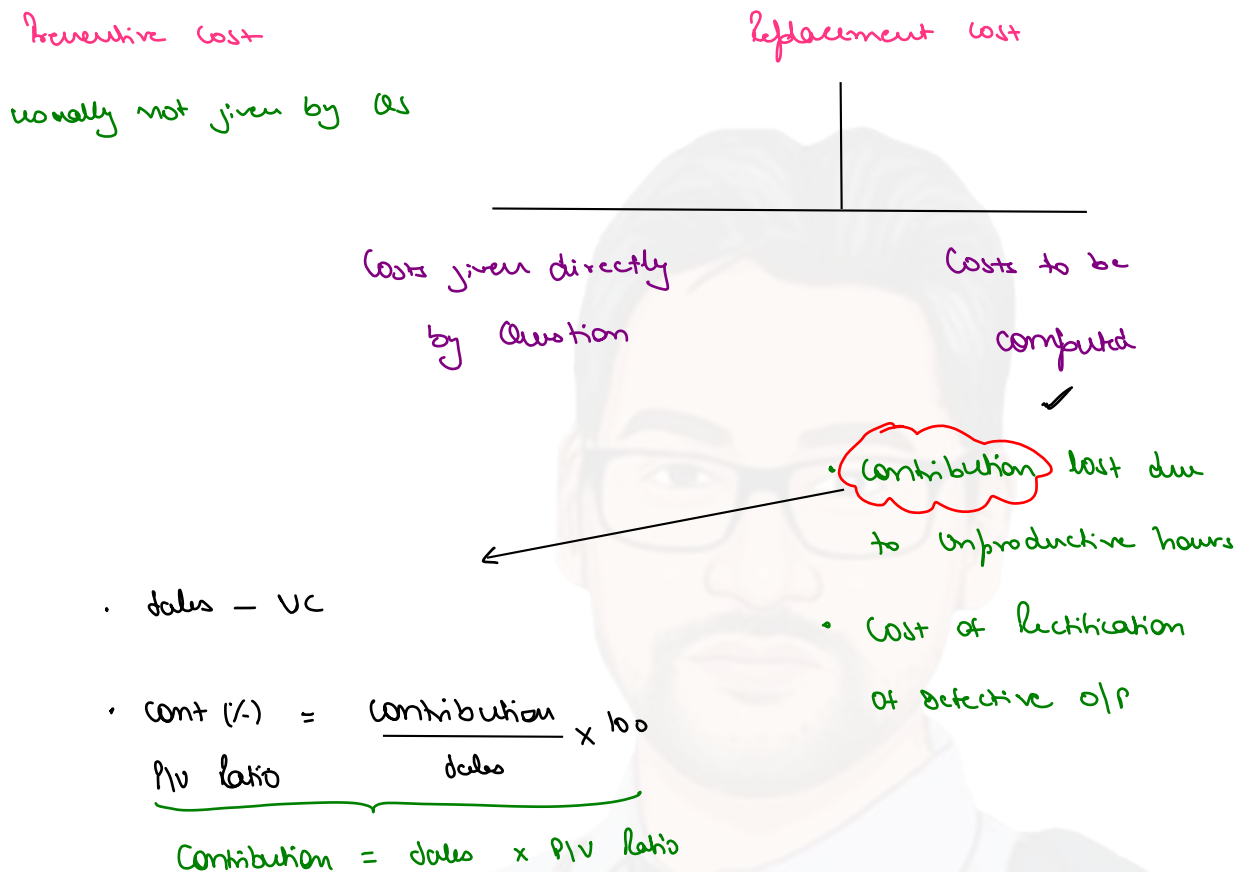
(a) Workers benefited & joined = 42

(b) Workers left & discharged = 18

(c) Additional: No. of New Joinees = 42 - 30  
= 12



## Concept 3: Labour T/O Ratio - Monetary Impact



Statement showing profit foregone due to labour turnover

Sl. No. Particulars

Write all the costs one by one

₹ Amt.

\_\_\_\_\_

\_\_\_\_\_



## ANSWER-4

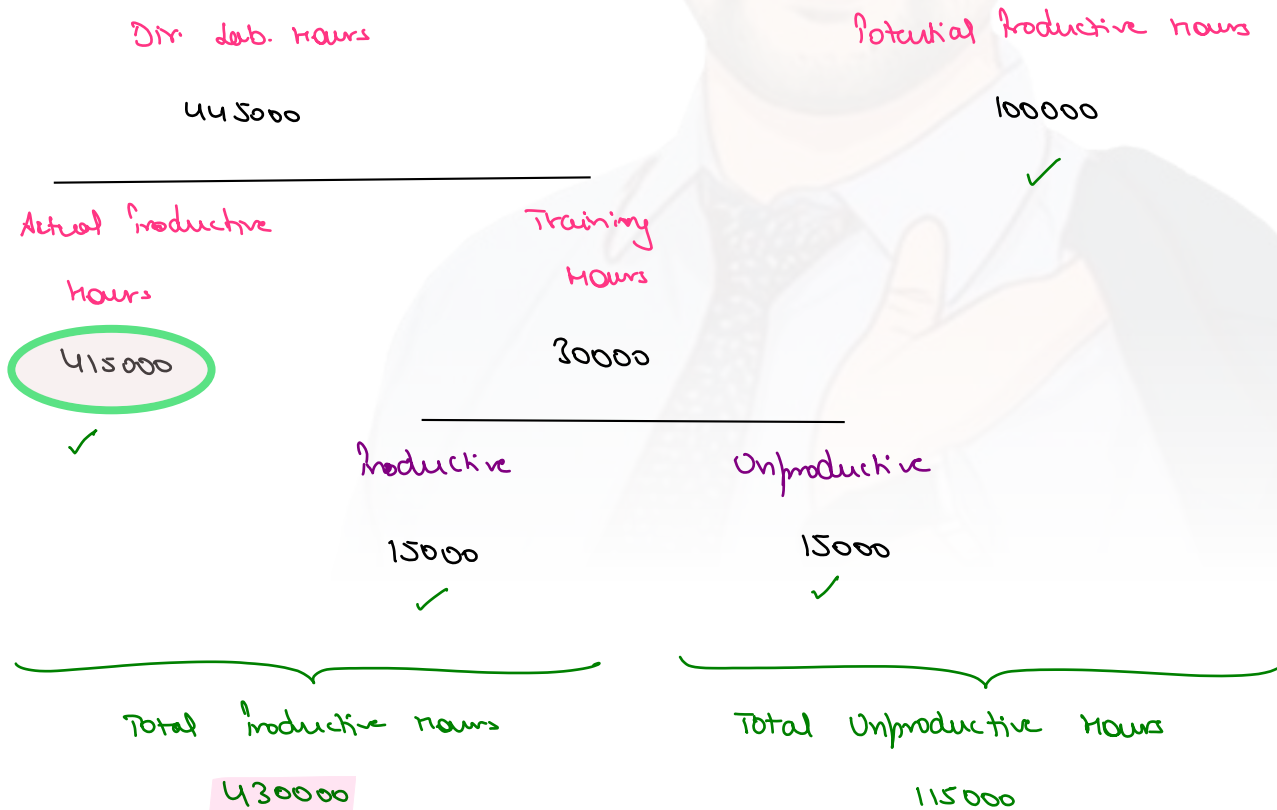
Statement showing Profit foregone last year due to Labour Turnover

Particulars	Amt. (₹)
1. Settlement cost	43820
2. Recruitment cost	26740
3. Selection cost	12750
4. Training cost	30490
5. Contribution lost due to unproductive hours (WN 1)	444130
	<u>557930</u>

### Working Notes

(1) (a)

### Analysis of hours





$$\begin{aligned} \text{(b) Total Contribution} &= \text{Sales} \times \text{PIV Ratio} \\ &= 83,03,200 \times 20\% \\ &= 16,60,660 \text{ ₹} \end{aligned}$$

$$\begin{aligned} \text{Contribution/ Prod. Hour} &= \frac{16,60,660}{430000} \\ &= 3.862/- \end{aligned}$$

$$\begin{aligned} \text{Cont. lost due to Unproductive Hours} &= 115000 \times 3.862 \\ &= 4,44,130 \text{ ₹} \end{aligned}$$



## ANSWER-5

Statement showing Profit lost by Zyoti Ltd. due to increased labour turnover during the year 2014-15.

Sl. No.	Particulars	Amt. (₹)
1.	Settlement cost	183480
2.	Recruitment cost	156340
3.	Training cost	113180
4.	Cost of Rectification of defective O/P (WN 1)	15000
5.	Contribution lost due to unproductive hours (WN 2)	432000
		<hr/>
		9,00,000

### Working Notes

- (1)
- Training hours = 50000
  - Productivity = 60%
  - Productive hours =  $50000 \times 60\% = 30000$
  - Production in 30000 hours =  $\frac{20000}{10} = 2000$  Units
  - Defective O/P =  $2000 \times 20\% = 400$  Units
  - Cost of Rectification =  $400 \times 25 = 10000$  ₹

- (2)
- Contribution Unit =  $180 \times 20\% = 36$  ₹
  - Unproductive hours = Training Unprod. hours + Potential hrs. lost due to delay
  - =  $20000 + 100000$
  - = 120000



$$\cdot \text{ possible production} = \frac{120000}{10} = 12000$$

$$\cdot \text{ contribution lost} = 12000 \times 36 \\ = 432000 \text{ ₹}$$

