

Cost Accounting Labour Numerical Question Notes

Cost Accounting Labour Numerical Question Notes :- *In This post we are updated to most important numerical question of cost accounting chapters name is Labour and here you can find theory notes of cost accounting important theory and important question and other chapters links.*

Labour

Q. 8. Find out wage per hour based on the following information :

Name	:	Sohan
Wages per year	:	Rs. 2,400
Annual Bonus @	:	20% of wages
Employer's contribution to P. F.	:	@ 10% on wages
Employer's contribution to E. S. I.	:	@ 5% on wages
Total leave permitted during the year	:	60 days
Cost of labour welfare activities including canteen subsidy :		
Rs. 8,000		
No. of workers		200
Normal idle time		80 hours
Working days per annum		320 days of 8 hours.
How will you treat, if Sohan had lost 60 hours on some days on account of failure of power supply ?		

Solution.

Total Labour Cost for the Year		Effective Hours per Annum
	Rs.	
Wages	2,400	Total working days
Bonus (20% of Rs. 2,400)	480	320
		(-) Leave (in days)
		60

Note: Normal idle time of 80 hours has been deducted from total working hours 2,080 and total labour cost have been spread over effective working hours 2,000.

Q.9. Calculate the Normal and Overtime Wages payable to a workman from the following data :

Days	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total
Hours worked	8	10	9	11	9	7	54

Normal working hours are 8 hours per day and normal rate is Rs. 0.50 per hour. Overtime rates are : upto 9 hours in a day at single rate and over 9 hours in a day at double rate or upto 48 hours in a week single rate and over 48 hours at double rate whichever is more beneficial to the workman.

Solution. NORMAL WAGES AND OVERTIME WAGES ACCORDING TO FIRST ALTERNATIVE

Days	Hours Worked	Normal Hours	Overtime Hours		Normal wages	Overtime wages	Total wages
			Single rate @ 50 paise per hour	Double rate @ Re. 1 per hour			
Monday	8	8	—	—	Rs. 4.00	Rs. —	Rs. 4.00
Tuesday	10	8	1	1	4.00	1.50	5.50
Wednesday	9	8	1	—	4.00	0.50	4.50
Thursday	11	8	1	2	4.00	2.50	6.50
Friday	9	8	1	—	4.00	0.50	4.50

Q.10. An analysis of the time card of a worker on a machine shows, that of the total 48 hours, he worked 45 hours (including 4 hours overtime) on production and that 3 hours was idle time due to machine breakdown.

The rate of wage is rupee one per hour, but overtime is paid at 100 percent extra.

You are required to allocate the total wages paid to the worker between 'Direct' and 'Indirect' labour.

Solution. STATEMENT SHOWING TOTAL WAGES

	Rs.
Wages for 44 hours @ Rs. 1 per hour	44.00
Overtime wages for 4 hours @ Rs. 2.00 per hour	8.00
Total Wages	<u>52.00</u>

Direct Wages : for 45 hours @ Rs. 1.00 = Rs. 45.00

(Time spent on production)

Indirect wages : Overtime wages for 4 hours @ 1.00 = Rs. 4.00

(to be included in factory overhead)

Wages for Abnormal Idle Time = 3 hours @ 1.00 = Rs. 3.00

Charged to Costing P & L A/c (treated as abnormal loss)

Q.11. There were 8,000 workers in a factory on 1st January, 2014. New entrants in service during the year were 400 and leavers were 200. Calculate Labour Turnover Rate.

Solution.

No. of workers in the beginning = 8,000

$$(c) \text{ By Flux Method} = \frac{\text{No. of Separations} + \text{No. of Replacements}}{\text{Average No. of workers}} \times 100$$

$$= \frac{200 + 400}{8,100} \times 100 = \frac{600}{8,100} \times 100 = 7.40\%$$

Q. 12. What earnings will a workman receive under the following incentive schemes if he executes a piece of work in 120 hours as against 150 hours allowed to him. His hourly rate is 25 paise and he gets a dearness allowance of Re. 1 per day of 8 hours worked in addition to his wages :

(a) Halsey Premium Plan, 50% bonus to workers; (b) Rowan Premium Plan; and (c) Emerson Efficiency Plan.

Solution.

(a) **HALSEY PLAN**

	Rs.
Normal Wages @ 25 paise per hour for 120 hours	30.00
D.A. for 15 days @ Re. 1 per day of 8 hours	15.00
<i>Bonus:</i>	45.00

Time allowed	Time taken	Time saved
150 hours	120 hours	30 hours

Bonus @ 25 paise per hour for half the time saved	
= Rs. $\left(0.25 \times 30 \times \frac{50}{100} \right)$	3.75

(c)

EMERSON EFFICIENCY PLAN

Rs.

Normal Wages including D.A. as per (a) above

45

Bonus:

$$\text{Efficiency Percentage} = \frac{\text{Time allowed}}{\text{Time taken}} \times 100 = \frac{150}{120} \times 100 = 125\%$$

$$\text{Rate of Bonus up to } 100\% = 20\%$$

$$\text{Rate of Bonus from } 101\% \text{ to } 125\% (125 - 100) = 25\%$$

$$\text{Total Bonus Percentage} = 45\%$$

$$\text{Amount of Bonus} = 45\% \text{ of Normal wages} = 30 \times \frac{45}{100} = \text{Rs. } 13.50$$

$$\begin{aligned} \therefore \text{Total wages} &= \text{Normal wages} + \text{Amount of bonus} \\ &= 45 + 13.50 = \text{Rs. } 58.50 \end{aligned}$$

Note: No. of working days has been calculated as follows:

$$\text{Working Days} = \frac{\text{Total actual hours}}{\text{Daily working hours}} = \frac{120}{8} = 15 \text{ days}$$

Q. 13. A worker takes 9 hours to complete a job on daily wages and 6 hours on a scheme of payment by results. His day rate is Rs. 1.50 per hour, the material cost of the product is Rs. 18.00 and the overheads are recovered at 150% of the total direct wages. Calculate the cost of the product.

(ii) **Halsey Plan :**

$$\begin{aligned}\text{Total Wages} &= (\text{Actual time taken} \times \text{Wage rate}) + \\ &\quad 50\% (\text{Time saved} \times \text{Wage rate}) \\ &= (6 \times 1.50) + \frac{1}{2} (3 \times 1.50) \\ &= 9.00 + 2.25 = \text{Rs. } 11.25\end{aligned}$$

(iii) **Rowan Plan :**

$$\begin{aligned}\text{Total Wages} &= (\text{Actual Time taken} \times \text{Wage rate}) + \\ &\quad \left(\text{Time taken} \times \frac{\text{Time saved}}{\text{Standard Time}} \times \text{Wage rate} \right) \\ &= (6 \times 1.50) + \left(6 \times \frac{3}{9} \times 1.50 \right) \\ &= 9.00 + 3.00 = \text{Rs. } 12.00\end{aligned}$$

Overhead

Q.14. X Ltd. has three production departments A, B and C and one service department 'S'.

The following particulars are available for one month having 25 working days of 8 hours each day. All departments work all days with full attendance :

Expenses	Total	Service Deptt. S	Production Deptt. A	Production Deptt. B	Production Deptt. C
Power & Lighting	Rs. 1,100	Rs. 240	Rs. 200	Rs. 300	Rs. 360

