

## LABOUR COST

Q.1 The following information relates to week ending 31<sup>st</sup> March 2018 for two employee namely Mr. Raj (Lecturer) and Mr. Raju (Non-teaching) in the educational coaching institution

Particulars	Raj	Raju
Hours Worked	48	54
Daily Working Hours	8	8
Nos of Working Days in a week	6	6
Flat Time Rate Per Hour	₹ 500	₹ 250
Overtime Rate Per Hour	₹ 200	₹ 50
Number of Lecture during	10	10
Average Number of Students	100	

- (i) Calculate the wages of the two workers for the week.
- (ii) Calculate Per Lecture Cost
- (iii) Calculate Cost per Students
- (iv) Which is Direct Cost and Which is Indirect Cost.

Q2. (Piece Rate with Graduated Time Rates)

Calculate the wages of Mr. Rajaram for the month of February, 2018 in the following cases:

- a) He is paid ₹ 5 per unit on the basis of actual units produced by him or ₹ 4,500 per month whichever is higher.
  - (i) If his production during the month is 1,200 units.
  - (ii) If his production during the month is 800 units.
- b) He is paid guaranteed wages according to time rate which is ₹ 3,000 p.m. plus ₹ 3 per unit piece rate for units produced above the required minimum output of 20,000. His actual production during the month is 22,000 units.
- c) He is paid ₹ 5 per unit plus a fixed dearness allowances of ₹ 500 per month. He has produced 1,200 units during the month.

Q.3 . (Time Rate and Piece Rate)

During one week of workman, X manufactured 200 articles. He receives wage for a guaranteed 44 hour week at the rate of Rs 1.50 per hour. The estimated time to produce one article is 15 minutes and under incentive scheme the time allowed is increased by 20%.

Calculate his gross wages under each of the following methods of remuneration:

1. Time Rate
2. Piece Work with a Guaranteed Weekly Wage.
3. Rowan Premium Bonus.
4. Halsey Premium Bonus, 50% to workman.

Q4 .(Normal Idle Time)

'X' an employee of ABC Co. gets the following emoluments and benefits:

- a) Basic Pay Rs 1,000 p.m.
- b) Dearness allowance Rs 200 p.m.
- c) Bonus Rs 20% of salary and D.A.
- d) Other allowances Rs 250 p.m.
- e) Employee's contribution to P.F. 10% of salary and D.A.

'X' works for 2,400 hours per annum, out of which 400 hours are non-productive (Due to following Reason-a) Power Failures-100 b) Strike on work-100 c) Earthquake Shocks -10 d) Excess Time of lunch , tea break - 190.

You are required to find out the effective hourly cost of employee 'X'.

Q5 . (Labour Turnover)

From the following information, calculate a) Labour turnover rate b) Labour flux rate. No. of workers as on 01.01.2013 = 7,600

No. of worker as on 31.12.2013 = 8,400

During the year, 80 workers left while 320 workers were discharged 1,500 workers recruited during the year of these, 300 workers were recruited because of exits and the rest were recruited in accordance with expansion plans.

Q6 . (Straight Piece Rate / Taylor)

Calculate the earnings of workers A and B under Straight Piece Rate system and Taylor's Differential Place Rate system from the following particulars:

Normal rate per hour - Rs 1.80

Standard time per unit-20 seconds

Differential to be applied are:

80% of the piece rate below the standard;

120% of the piece rate above standard.

A produced 1,300 units per day 8 hours; and 1,500 units per day of 8 hours.

Q 7. (Taylor)

Standard production@20units per hour, general wage Rs 2.00 per hour, wage rate if work executed below standard: 80% of general rate, wage rate on execution of work equal to standard 120% of, general rate; production in 8 hours of one day by Mr. A : 150 units and by Mr. B: 200units Compute total remuneration payable to Mr. A and B under the Taylor plan.

Q 8. (Merrick System)

The following particulars apply to a particular job:

Standard production per hour – 6 units

Standard working hours – 8

Normal rate per hour- Rs 1.20

Mohan produced 32 units

Ram produces 42 units

Prasad produces 50 units.

Q 9 . (Gantt)

The following are the particulars applicable to a process:

Time Rate- Rs 8 per hour

High Task – 200 units per week.

In a 40 hour week, the production of the workers was:

A-180 units; B- 200units; b C-250units

Production above standard -high piece rate of Rs 2.00 per unit.

Calculate the total earnings of each worker under Gantt's Task Bonus system.

Q 10. (Efficiency Bonus)

From the following data calculate total monthly remuneration of 3 workers X,Y and Z:

1. Standard production per month per workers is 1,000 units
2. Actual production during a month – X: 800 units, Y: 700 units, Z:900 units
3. Piece-work rate unit of actual production: 15 paise
4. D.A Rs 40 per month (fixed)
5. House rent allowances Rs 20 per month (fixed)
6. Additional production bonus at the rate of Rs for each percentage of actual production exceeding 75% of actual production over standard.

Q 11. (Halsey / Roman)

A worker produced 200 units in a week's time. The guaranteed weekly wage payment for 45 hours is Rs 81. The expected time to produce one unit is 15 minutes which is raised further by 20% under the incentive scheme. What will be the earnings per hour of that worker under Halsey (50% sharing) and Rowan bonus sheme?

Q 12. (All method)

Standard Output per hour 5, Actual output in a 40 hour week is 220 units. Wage Rate per hour is RS 10 per hour. Calculate Total Earnings Under:

1. Straight Time Rate
2. Straight Piece Rate
3. Taylor's Differential Piece rate
4. Merrick's Differential Piece rate
5. Gantt Task Bonus system
6. Emerson's Efficiency Bonus Plan
7. Halsey Premium System
8. Rowan Premium System
9. Bath premium System

Q 13. ( Labour Cost Per Hour)

Mr. Jeet, an employee of the company gets the following emoluments and benefits:

Basic Wages	Rs 35,000 per month
Dearness Allowance	100% of basic
Employer's contribution to Provident Fund	10% of basic
Employer's contribution to E.S.I	4% of basic
Bonus	15% of basic
Other Allowances	Rs 42,500 p.a.

He works for 3,000 hours per annum, out of which 600 hours are normal idle time. Mr. Jeet worked 30 effective hours on a job 'B' where the cost of direct Material and labour. The sale value of job is quoted to earn profit 25% on cost.

You are required to find out effective hourly cost of Mr. Jeet and the expected sales value of job 'B'.

Q 14. [Earnings (2 workers) and Cost (3 Jobs)]

Calculate the earnings of A and B from the following particulars for a month and allocate the labour cost to each job X,Y and Z:

	A	B
i. Basic Wages	Rs 100	160
ii. Dearness Allowance	50%	50%
iii. Contribution to Provident Fund(on basic wages)	8%	8%
iv. Contribution to Employee's State Insurance(on basic wages)	2%	2%
v. Overtime	Hours 10	

The Normal working hours for the month are 200. Overtime is paid at double the total of normal wages and dearness allowance. Employer's and Employee's contribution to State Insurance and Provident Fund are at equal rates. The two workers employed on jobs X,Y and Z in the following proportions:

*Jobs*

	X	Y	Z
Workers A	40%	30%	30%
Workers B	50%	20%	

Overtime was done on job Y at the request of the customer.

Q 15. (Gross and Net Wages; Labour Cost Per Hour / Unit)

A Production Department provides the following information about a worker :

<b>Days</b>	<b>Hours Worked</b>	
Monday	7	
Tuesday	8	
Wednesday	9	
Thursday	10	
Friday	10	
Saturday	6	
Normal Working Hours per day		- 7 hours per day
Normal Rate per Hour		- ₹ 10 per hour
Overtime Rate		- Upto 8 hours in a day @ Single Rate and Over 8 hours in day @ double rate.
		OR
		-Upto 42 hours in a week @ Single Rate and over 42 hours @ Double rate, whichever is more beneficial to the workman.

Q.16) Calculate the earnings of Rakesh and Rajesh from the following particulars for the month of March 2018 and allocate the labour cost to each Job No. 100 and Job No. 101

Particulars	Rakesh	Rajesh
Basic Wages	₹ 15,000	₹ 18,000
D.A. (On Basic)	80 %	80 %
Employees Contribution to P.F. (On Basic)	10 %	10 %
Employees Contribution to E.S.I. (On Basic)	3 %	3 %
Overtime Hours	18	15
Expenditure on Amenities (Per Month)	₹ 600	₹ 700

The normal working hours for the month are 225. Overtime is paid at double the total of basic and D.A. Employers Contribution to E.S.I. and P.F. are at equal rate with employees' contribution. There were two workers employed on the Job No. 100 and Job No. 101 in the following proportion.

Name Of Worker	Job No 100	Job No 101
Rakesh	40 %	60 %
Rajesh	20 %	80 %

Overtime was done on Job No. 100.