EMPLOYEE COST

Q1. How will you treat the different types of idle time cost? **[Dec 14 - 4 Marks]**

Answer:

SN	Treatment of Idle Time	
	As per CAS-7, Idle Time Cost shall be assigned direct to the cost object or treated as overheads depending on the economic feasibility & specific circumstances causing such idle time.	
	Treatment of different categories of Idle Time are as below:	
1	**Unavoidable idle time**	In Cost Accounts, this is allowed to remain merged in the Production Order or Standing Order Number on which the worker was otherwise employed.
2	**Normal idle time**	It is booked to factory or works overhead. For the purpose of effective control, each type of idle time, i.e., idle time classified according to the causes is allocated to a separate Standing Order Number.
3	**Abnormal idle time**	It would usually be heavy in amount involves longer periods & would mostly be beyond the control of the management. Payment for such idle time is not included in cost & is adjusted through the Costing Profit & Loss Account or included in Profit & Loss Account, when the accounts are integrated.

Q2. What is the Employee Cost as defined in CAS-7 (Limited Revision 2017)? Also discuss the general principles of its measurement as per CAS-7. **[June 19 - 6 Marks]**

Answer: Employee Cost - CAS-7 [Limited Revision 2017):

As per CAS-7 [Limited Revision 2017] Employee Cost is the benefits paid or payable in all forms of consideration given for the service rendered by employee (including temporary, part time & contract employee/s) of an entity.

General Principles of Measurement:

The guidelines for ascertaining the Labour Cost/Employee Cost are as follows:

1. Employee Cost shall be ascertained taking in to account the gross pay including all allowances payable along with the cost to the employer of all the benefits.
2. Bonus whether payable as a statutory minimum or on a sharing of surplus shall be treated as part of Employee Cost. Ex-gratia payable in lieu of or in addition to bonus shall also be treated as part of the Employee Cost.
3. Remuneration payable to managerial personnel including executive directors on board & other officers of a corporate body under a statute will be considered as part of the Employee Cost of the year under reference, whether the whole or part of the remuneration is considered as a percentage of profits.
4. Separation costs related to voluntary retirement, retrenchment, termination etc. shall be amortized over the period of benefitting from such costs.
5. Employee Cost shall not be included any imputed costs.
6. Any subsidy, grant, incentive or any such amount received or receivable with respect to any Employee Cost shall be reduced from ascertainment of cost of the project to which such amounts are related.
7. Any abnormal cost where it is material & quantifiable shall not form part of the Employee Cost.
8. Penalties, damages paid to statutory authorities or other third parties shall not form part of the Employee Cost.
9. The cost of free housing, free conveyance & any other similar benefits provided to an employee shall be determined at the total cost of all resources consumed in providing such benefits.
10. Any recovery from employees towards the facilities provided shall be reduced from the Employee Cost.
11. Cost of idle time is ascertained by the idle hrs. multiplied by the hourly rate applicable to idle employee or a group of employees.
12. Where Employee Cost is accounted at standard cost, variances due to normal reasons related to employee cost shall be treated as part of Employee Cost.

    Variances due to abnormal reasons shall be treated as part of abnormal cost.
13. Any change in the cost accounting principles applied for the determination of the Employee Cost should be made only if it is required by law or for compliance with Cost Accounting Standard or change would result in a more appropriate way of presentation of Cost Statement.

Q3. List out the various measures to reduce the Labour Turnover (any 5). **[June 19 - 5 Marks]**

Answer: Measures to Reduce Labour Turnover:

Labour Turnover may be reduced by removing its avoidable causes & taking preventive remedial measures.

The various measures may be as under:

(a) Efficient, sympathetic & impartial personnel administration.

(b) Effective communication system to keep the workers informed on matters that affect them.

(c) Improving working conditions & placing the right man on the right job.

(d) Job enrichment to reduce boredom & monotony & to provide job satisfaction.

(e) Introducing fair rates of pay & allowance/s & incentives, pension, gratuity etc.

(f) Strengthening welfare measures.

(g) Augmenting recreational activities & schemes.

Q4. In a workshop the normal working hrs. is 8 hrs. for which Rs. 450 is paid as wages. However, calculation of wages payable is made on piece rate basis that 30 pieces will be produced per hour. When a worker produces below standard, 90% of the piece rate is paid but when he produces above standard, 110% of piece rate is paid. On a particular day, a worker produces 260 pieces in the allotted time of 8 hrs. What will be his earning? **[Dec 13 - 2 Marks]**

Answer:

Normal working hrs.	= 8
Wages for 8 hrs.	= Rs. 450
Normal piece rate	= total wages/no. of pieces = 450/240 = 1.875
Actual production	= 260 pieces
Standard Production	= 8 hrs x 30 pieces = 240 pieces
Efficiency of worker	=260 / 240 = 1.0833 or 108.33%

Hence, he will be paid 110% of piece rate

Earnings of worker = 110 % x 1.875 x 260 = Rs. 536.25

Q5. In a tailoring shop the standard output of a tailor making collars of a shirt is 20 units per hour for an 8-hour shift. The output of Tailor X for one week is as under:

Day	Units
Monday	150
Tuesday	160
Wednesday	180
Thursday	180
Friday	190
Saturday	200

You are required to calculate the earnings of Tailor X for the week under:

(a) Halsey Premium Plan with a guaranteed wage rate of Rs. 10 per hour & a premium of 60% of the time saved over standard

(b) Taylor Differential Rate system with the following rates of payment: Rs. 0.50 per unit at standard & up to 20% over standard, Rs. 0.40 per unit at production below standard & Rs. 0.60 per unit when daily output exceeds standard by 20%. **[Dec 13 - 8 Marks]**

Answer:

Day	Unit	Extra units over standard 160 units/8 hrs.	Time saved (hrs.)	Taylor's rate applicable (5 for units > 160 < 192)
Monday	150			0.4
Tuesday	160			0.5
Wednesday	180	20	1	0.5

Thursday	180	20	1	0.5
Friday	190	30	1.5	0.5
Saturday	200	40	2	0.6
Premium payment for			5.5	Taylor's plan = .4 x 150 +.5 x 710+ .6 x 200 = Rs. 535

Halsey's plan = 8 x 6 x 10 + 5.5 x 6 = Rs. 513

Q6. During a month, the following information is obtained from the Personnel Department of a manufacturing company:

(a) Labour force at the beginning of the month was 1900 & at the end of the month was 2100.

(b) 25 people left while 40 were discharged. 280 workers were engaged out of which only 30 were appointed in the vacancy created by the number of workers separated & the rest on account of an expansion scheme.

Calculate the labour turnover rate by the Replacement & Flux methods. **[Dec 13 - 4 Marks]**

Answer:

Labour at beginning	1,900
Labour at the end	2,100
Average workers during the period = 1900 + 2100 / 2	2000

Labour Turnover Rate:

(a) By Replacement method = No. of Replacement / No. of Avg. workers during the period = 30/2000 x 100 = 1.5%

(b) By Flux method = $\frac{\text{½ [No.of additions + no.of separation]}}{\text{Number of average workers during the period}}$

$= \frac{1/2\ (280 + 65)}{2000}$ x 100 = 8.63%

Q7. In a certain week, the time allowed to a worker for Job X was 48 hrs. He took 30 hrs. for the job. If the hourly effective rate of earnings of the worker under Rowan Plan is Rs. 55, find the normal hourly rate of wages. **[June 14 - 2 Marks]**

Answer: Total Earnings = H x R + [S - H]/S x H x R

Where H = Hrs. worked, R = Rate per hour, S = Standard time

Total Earning = 30 x 55 = 1,650

$1{,}650 = 30 \times R + \left(\frac{18}{48} \times 30 \times R\right)$

$= 30R + 11.25R$

$R = 1650/41.25 = 40$

Hence, Normal wage rate = Rs. 40/hr.

Q8. Bonus at 10% of salary is paid to the foreman who supervises five different production shops producing five different products. How will the bonus be treated in the Cost Accounts? **[Dec 14 - 2 Marks]**

Answer:

As per CAS - 7, Principles of measurement of labour cost

- Any bonus whether payable as a statutory minimum or on a sharing of surplus shall be treated as part of employee cost.
- The foreman is mainly concerned with the supervision of man & machine. Payment made to foreman is included in works overheads.
- If foreman devotes time for various machines or various departments, it should be charged off proportionately against all of them.
- In the given case foreman is getting 10% of salary as bonus & supervising 5 production shops. His bonus & salary should be charged proportionately to all 5 production shops.

Q9. The standard time per unit is 10 minutes. Time available in a day is 8 hrs. Hourly rate of labour is fixed on a piece rate of Rs. 5. X produces 60 units a day & Y produce's 72 units a day. What will be each of their daily earnings under Piece-rate & Rowan Scheme? **[Dec 14 - 4 Marks]**

Answer:

Particulars	Product X	Product Y
Earning under piece rate		
Actual production	60	72
Guaranteed daily wages (8 x 5) (a)	40	40
Earning under piece rate (b)	(5/6 x 60) = 50	(5/6 x 72) = 60
Labour cost under piece work system with guaranteed weekly wages [higher of (a) & (b)]	50	60
Earning per week	50 x 6 = 300	60 x 6 = 360
Earnings under Rowan Plan		
Actual production	60	72
Standard time allowed	60/6 = 10	72/6 = 12
Actual time taken	8	8
Time saved	2	4
Earnings = (time take x hourly rate + time taken/time allowed x time saved x hourly rate)	8/10 x 2 x 30 = 48	8/12 x 4 x 30 = 80
Wages	48 + 8 x 30 = 288	80 + 8 x 30 = 320

Q10. In a factory, a worker produced 14 units in a day of 8 hrs. Wage rate per hour is Rs. 40. Standard output per hour is 2 units. Under differential piece rate system, a worker is paid at 83% when his performance is below standard & 125% of piece rate when his performance is at or above standard. Find out the labour cost of the worker for the day. **[June 15 - 2 Marks]**

Answer:

Actual production = 14 units

Standard production = 2 units per hour

Standard output for 8 hrs. = 16 units

Worker's performance = 14/16 x 100 = 87.5%

As worker's performance is below standard so he will be paid Rs. 835 of piece rate.

Piece rate = 40/2 = Rs. 20 per piece.

Worker's day wages = 14 x 20 x 83% = Rs. 232.40

Q11. The number of employees at the beginning & end of year 2014 was 380 & 420. During the year, ,18 employees resigned, 6 were terminated & there were 16 replacements. Find the Labour Turnover Ratio under the Flux Method.

Answer: **[June 15 - 2 Marks]**

Labour turnover (Flux method) = $\frac{\text{No of seperations + no. of accessions}}{\text{Average no. of workers during the period}}$

Average no. of workers = $\frac{380 + 420}{2}$ = 400

Labour, turnover (Flux method) = $\frac{24 + 16}{400}$ x 100 = 10%

Q12. Two workmen, Gyani & Jeetu, produce the same product using the same material. Their normal wage rate is also the same. Gyani is paid bonus according to the Halsey System, while Jeetu is paid bonus according to the Rowan System. The time allowed to make the product is 40 hrs. Gyani takes 25 hrs. while Jeetu takes 32 hrs. to complete the product. The factory overheads are charged @ 125% of direct labour cost. The factory cost for the product for Gyani is Rs. 8,925 & for Jeetu it is Rs. 9,456. **[June 15 - 8 Marks]**

You are required to:

(a) find the normal rate of wages;

(b) find the cost of materials;

(c) prepare a statement comparing the element wise factory cost of the products as made by the two workmen.

Answer: Let x be the wage rate & y be the material cost

Earning of Gyani

25x + 50/100 (40 - 25) x = 25x + 7.5x = 32.5x

Factory cost = material + wages + overheads

8.925 = y + 32.5x + 125/100 x 32.5x

= y + 32.5x + 40.625x

8.925 = y + 73.125x

Earning of Jeetu

32x + (40 - 32)/40 x 32x = 32x + 6.4x = 38.4x

Factory cost = material + wages + overheads

9,456 = y + 38.4x + 125% of 38.4x

= y + 38.4x + 48x

= y + 86.4x

From Equation (1) & (2)

y + 73.125x = 8925

y + 86.4x = 9,456/-13.275 x = -531

or x = 531/13.275 = Rs. 40

(a) Normal rate of Wages = Rs. 40

Cost of material 73.125 x 40 + y = 8925

Or y = 8,925 – 2,925 = Rs. 6,000

(b) Cost of material = Rs. 6,000

Statement comparing the factory cost of the products as made by the two workmen:

Particulars	Gyani	Jeetu
Material Cost	6,000	6,000
Labour Cost	1,300	1,536
Factory Overheads	1,625	1,920
Factory Cost	8,925	9,456

Q13. The total available working hrs. in a month in respect of a machine is 200 hrs.

(a) The idle-time card reveals as follows: **[June 15 - 11 Marks]**

Tea break	20 hrs.
Waiting for job	10 hrs.
Waiting for tools	6 hrs.
Break down (major)	10 hrs.

Report the idle-time cost to the management under the appropriate category if hourly fixed costs of the machine amount to Rs. 4.25 and the operator is paid Rs. 0.75 per hour.

(b) Compute the Employee Cost as per CAS-7 with appropriate reasoning:

Extract of Trial Balance as on 31.3.2015

Particulars (Debit)	Amount	Particulars (Credit)	Amount
Material consumed	30,00,000	Special subsidy received from Government towards employee salary	3,50,000
Salaries	18,00,000	Recoverable amount from employees out of perquisites extended	80,000
Employee training cost	3,00,000		
Perquisites to employees	4,80,000		
Contribution to gratuity fund	4,20,000		
Lease rent for accommodation provided to employees	5,60,000		
Festival bonus	1,00,000		

Answer: **As per Idle Time Card**

Normal Idle Time	
Tea Break	20 hrs.
Total Normal idle time	**20 hrs.**
Abnormal Idle Time	
Waiting for jobs	10 hrs.
Waiting for tools	6 hrs.
Break down (major)	10 hrs.
Total abnormal idle time	**26 hrs.**

Idle Time Report

Particulars	Time (hrs.)	Amount
Unavoidable Idle Time Tea break @ 5.00	**20**	**100**
Abnormal Idle Time		
Waiting for job @ 5.00	10	50
Waiting for tools @ 5.00	6	30
Break down (major) @ 5.00	10	50
Total Idle Time	**46**	**230**

Answer: **Computation of Employees Cost as per CAS-7**

Particulars	Amount
Salaries	18,00,000
Add: Net cost of perquisites (4,80,000 - 80,000)	4,00,000
Lease rent for accommodation provided for employees	5,60,000
Contribution to gratuity fund	4,20,000
Festival Bonus	1,00,000
Less: Special subsidy received from Govt, towards employees Salary	3,50,000
Employees cost	**29,30,000**

Note:

(a) Recoverable amount from employees is excluded from the cost of perquisite.

(b) Employees training cost is not an employee's cost. It is to be treated as overhead cost.

(c) Special subsidy received from Government is to be excluded as it reduces the cost of employer.

Q14. A worker has produced 154 units in 10 hrs. instead of 15 hrs. If the normal wages rate is Rs. 30 per hour find his remuneration under Rowan Premium Plan. **[Dec 15 - 2 Marks]**

Answer: Remuneration = (10 x 30) + (15 - 10)/15 x 10 x 30

= 300 + 100

= 400

Q15. Standard time for a job = 20 hrs. Rate per hour = Rs. 2. The actual time taken by a worker is 15 hrs. Calculate his earnings under Barth Variable Sharing Plan. **[June 16 - 2 Marks]**

Answer: Earnings = Rate per hrs. × $\sqrt{\text{Standard hrs. x Hrs. worked}}$

= 2 x $\sqrt{20 \text{ x } 15}$

= 2 x 17.32 **= Rs. 34.64**

Q16. Standard time allowed = 1 hour for 1 unit

Actual time taken by a worker = 32 hrs. for 40 units

Standard Wage rate: Rs. 20 per unit or Rs. 20 per hour Calculate the earnings of the worker under:

(a) Taylor's Differential Piece Rate System

(b) Merrick Differential Piece Rate System

(c) Gantt Task Bonus Plan (High piece rate = Rs. 35/unit)

(d) Halsey Premium Plan

(e) Rowan Plan **[June 16 - 10 Marks]**

Answer:

(a) The worker is efficient and will be paid @ 120% of normal piece rate. Normal piece rate = Rs. 20 per unit

120% of 20 = Rs. 24

Earnings = 40 units x 24 = Rs. 960

(b) Rs. 960 (as in (i))

(c) 40 units x Rs. 35 = Rs. 1,400

(d) 32 x 20 + 50% (40 - 32) x 20 = Rs. 720

(e) (32x20) + (8/40 x 32 x 20) = Rs. 768

Q17. Standard Time allowed = 3 minutes per unit. Normal time rate = Rs. 30 per hour; Taylor's differential piece rate basis: 80% and 120%. for below and above standard respectively. Worker W produces 225 units in an eight-hour day. Calculate his earnings for the day. **[Dec 16 - 2 Marks]**

Answer: Standard units per day = 20 x 8 = 160.

Actual = 225

Taylor's differential rate earnings = 120% x 30/20 x 225 = Rs. 405 for the day.

Q18. The existing Incentive system of SHRISTI LTD is as under:

Normal working week	5 days of 8 hrs. each plus 3 late shifts of 3 hrs. each	
Rate of Payment	Daywork	Rs. 160 per hour
	Late shift	Rs. 225 per hour
Average output per operator for 49-hrs. week i.e. including 3 late shifts	120 articles	

In order to increase output and eliminate overtime, it was decided to switch on to a system of payment by results. The following information is obtained:

Time rate (as usual)	Rs. 160 per hour
Basic time allowed for 15 articles	5 hrs.
Piece work rate	Add 20% to basic piece fate
Premium Bonus	Add 50% to time.

Required: Prepare a Statement showing hrs. worked, weekly earnings, number of articles produced and labour cost per article for one operator under the following systems:

(a) Existing time-rate

(b) Straight piece-work

(c) Rowan system

(d) Halsey premium system **[June 18 - 9 Marks]**

Assume that 135 articles are produced in a 40-hour week under straight piece work, Rowan Premium System, the Halsey Premium System above 'and worker earns half the time saved under Halsey Premium System.

Answer: **Table Showing Labour Cost Per Article**

Method of Payment	Hrs. worked	Weekly earnings produced	Number of articles	Labour cost per article
Existing time rate	49	8,425.00	120	70.21
Straight piece rate system	40	8,640.00	135	64.00
Rowan Premium System	40	9,007.41	135	66.72
Halsey Premium System	40	8,600.00	135	63.70

Working Notes:

1	**Existing Time Rate**		
	Weekly Wages	40 hrs. @ Rs. 160 per hr.	Rs. 6,400
		9 hrs. @ Rs. 225 per hr.	Rs. 2,025
			Rs. 8,425
2	**Piece Rate System**		
	Basic Time	5 hrs. for 15 articles Cost of 15 articles at hourly rate of Rs. 160/hrs.	Rs. 800
		Add: 20%	Rs. 160
			Rs. 960
	∴ Rate per article = Rs. 960 ÷ 15 = Rs. 64.		
	Earning for the week = 135 articles x Rs. 64 = Rs. 8,640.		
3	**Rowan Premium System**		
	Basic Time	5 hrs. for 15 articles 50% to time 7.5 hrs. for 15 articles or 30 minutes per article	
	Time allowed for 135 articles = 67.50 hrs.		
	Actual time taken for 135 articles = 40 hrs.		
	Earnings = (HW × RH) + $\left(\frac{TA-HW}{TA} \times HW \times RH\right)$		
	= (40 hrs. × Rs.160) + $\left(\frac{67.50-40}{67.50} \times 40 \times Rs.160\right)$		Rs. 9,007.41
4	**Halsey Premium System:**	Earnings = (HW × RH) + $\left\{\frac{50}{100}(TA-HW) \times RH\right\}$	
		= (40 hrs. × Rs. 160) + $\left\{\frac{1}{2}(67.50-40) \times Rs.160\right\}$	Rs. 8,600

Q19. ZINTES LTD. a manufacturing company has its factories at two locations. Rowan plan is in use at location A and Halsey plan at location B. Standard time and basic rate of wages are same for a job which is similar and is carried out on similar machinery. Time allowed is 60 hrs. Job at location A is completed in 36 hrs. while at B, it has taken 48 hrs., conversion costs at respective places are Rs. 1224 and Rs. 1500. Overheads amount to Rs. 20 per hour.

Required:

(a) Find out the normal wage rate (b) Compare conversion costs. **[June 19 - 7 Marks]**

Answer:

Let Rs. x per hour be the normal wage rate. Wage rate at location A will be Rs. 36x and at location B - it will be Rs. 48x, on the basis of actual time taken, as against 60 hrs. permitted. For time saved, bonus will be payable as under:

Location A:

Bonus under Rowan system = $\frac{\text{Time saved}}{\text{Time allowed}}$ × Hrs. worked x Rate per hour

= $\frac{24}{60}$ x Rs. 36x x = Rs. 14.4x

Total wages = Rs. 36x + Rs. 14.4x = 50.4x

Overheads @ Rs. 20 per hour worked = 36 hrs. x Rs. 20 = Rs. 720

Therefore, total conversion cost is (50.4x + Rs. 720) = Rs. 1,224 or 50.4x = Rs. 504

Or x = Rs. 504/50.4 = Rs. 10

So, Bonus = 14.4x =14.4 x Rs. 10 = Rs. 144

Location B:

Bonus under Halsey plan = 50% of time saved x rate per hour

= 50% of Rs. 12x = Rs.6x

Total wages = Rs. 48x + f 6x = Rs. 54x

Overheads @ Rs. 20 per hour = 48 hrs. x Rs. 20 = Rs. 960

Total conversion cost is (54x + Rs. 960) = Rs. 1,500 or 54x = Rs. 540

Hence, x = Rs. $\frac{540}{54}$= Rs. 10

Bonus = 6x = 6x Rs. 10 = Rs. 60

Comparative conversion cost

Location	A (Rowan)	B (Halsey)
Wages @ Rs. 10 per hour worked	360	480
Bonus	144	60
Overheads	720	960
Total	**1,224**	**1,500**

Q20. Two workmen, Suresh and. Umesh, produce the same product using the same material. Their normal wage rate is also the same. Suresh is paid bonus according to the Rowan system, while Umesh is paid bonus according to the Halsey system. The time allowed to make the product is 25 hrs. Suresh takes 15 hrs. while Umesh takes 20 hrs. to complete the product. The factory overhead rate is Rs. 5 per man-hour actually worked. The factory cost for the product for Suresh is Rs. 1,745 and for Umesh it is Rs. 1,800.

(a) What is the amount of normal rate of wages per hour?

(b) The cost of materials would be how much?

(c) What is the amount of wages payable to workmen Suresh? **[Dec 21 - 6 Marks]**

Answer:

(a) Normal Rate of Wages per Hour:

Let's denote the normal wage rate per hour as W.

For Suresh:

Time saved = 25 hours-15 hours = 10 hours

Bonus under Rowan system = (Time saved / Time allowed) *Time taken*Wage rate

- Bonus for Suresh = (10/25) *15* W = 6W

Total wages for Suresh = Time taken * Wage rate + Bonus

- Total wages for Suresh = 15W + 6W = 21W

Factory overhead for Suresh = Time taken*Overhead rate

- Factory overhead for Suresh = 15 * 5 = Rs. 75

Factory cost for Suresh = Total wages for Suresh + Factory overhead + Material cost

- 1,74521W + Rs. 75 + Material cost

Simplifying, we get:

- 1,745 = 21W + Rs. 75 + Material cost
- 1,670 = 21W + Material cost .....(1)

For Umesh:

Time saved = 25 hours - 20 hours = 5 hours

Bonus under Halsey system (assuming 50% sharing) = 50% of Time saved *Wage rate

Bonus for Umesh = 0.5 * 5 * W = 2.5W

Total wages for Umesh = Time taken Wage rate + Bonus

- Total wages for Umesh = 20W + 2.5W = 22.5W

Factory overhead for Umesh = Time taken Overhead rate

- Factory overhead for Umesh = 20 * 5 = 100

Factory cost for Umesh = Total wages for Umesh + Factory overhead + Material cost

- 1,800 = 22.5W + 100 + Material cost

Simplifying, we get:

- Rs. 1,800 = 22.5W + Rs. 100 + Material cost
- Rs. 1,700 = 22.5W + Material cost.....(2)

Subtract the first equation from the second:

- Rs. 1,700-1,670 = 22.5W - 21W
- Rs. 30 = 1.5W
- W = Rs. $\frac{30}{1.5}$ = 20

Thus, the normal rate of wages per hour is Rs. 20.

(b) Cost of Materials:

Using W = 20 in either of the equations, let's use the first one:

- Rs. 1,670 = 21* Rs. 20 + Material cost
- Rs. 1,670 = 420 + Material cost
- Material cost = 1,670 - Rs. 420 = Rs. 1,250

Thus, the cost of materials is Rs. 1,250

(c) Wages Payable to Suresh:

Total wages payable to Suresh are:

- 21W = 21 * 20 = Rs. 420
- Thus, the wages payable to Suresh is Rs. 420.

Q21. M7s Peacock Ltd. is in the process of evaluation of employee's welfare scheme of the company. In this regard, it has selected three workers - K, L, and M to study their wage earnings. The company furnishes the following particulars for the month of April, 2023 as under:

SN	Particular	K	L	M
(a)	Job completed (Units)	10,000	8,000	14,400
(b)	Out of above output rejected and unsaleable (Units)	400	160	1,600
(c)	Time allowed for 100 units	2 Hrs. 36 Min.	3 Hrs.	1 Hr. 30 Min.
(d)	Basic wage rate per hour (Rs.)	25	40	30
(e)	Time taken (Hrs.)	200	216	184

The normal working hrs. per month are fixed at 176 hrs. Bonus is paid @ 60% of the basic wage rate for gross time worked and gross output produced without deduction for rejected output. The rate of overtime for first 20 hrs. is paid at time plus 1/3 and for next 20 hrs. is paid at time plus 1/2.

From the above information, you are asked by the management to calculate the following for each worker:

Number of bonus hrs. and amount of bonus earned;

Total wages earned including basic wages, overtime premium and bonus;

Direct wages cost per 100 saleable units. **[June 23 - 8 Marks]**

Answer:

Particulars	K	L	M
No. of units produced	10,000	8,000	14,400
Rejected Units	400	160	1600
Saleable Units	9,600	7840	12,800
Normal Rate per hour	25	40	30
Standard Time	156 minutes/100 units x 10,000 units/60 minutes	180 minutes/100 units x 8,000 units/60 minutes	90 minutes/100 units x 14,400/60 minutes
	260 hrs.	240 hrs.	216 hrs.
Actual Time Worked	200	216	184
Overtime Worked	24	40	8
Bonus Hrs.	60	24	32
Amount Bonus	60 x 60% of 25 = 900	24 x 60% Of 40 = 576	32 x 60% of 30 = 576
Overtime Wage	20 x 25 x 4/3 + 4 x 25 x 3/2 = 817	20 x 40 x 4/3 + 20 x 40 x 3/2 = 2,266	8 x 30 x 4/3 = 320
Basic Wage	176x25 = 4,400	176x40 = 7,040	176x30 = 5,280
Total Wage	**6,117**	**9,882**	**6,176**
DW Cost per 100 units	6,117/9,600 x 100 = 63.72	9,882/7840 x 100 = 126	6,176/12,800 x 100 = 48.25

Q22. The management of Dolphin Ltd. wants to know the profit lost/forgone as a result of labour turnover last year. Last year, sales accounted to Rs. 66,00,000 and the P/V ratio was 20%. The total number of actual hrs. worked by the direct labour force was 3,45,000. As a result of the delays by the personnel department in filling vacancies due to labour turnover, 75,000 potentially productive hrs. were lost. The actual direct labour hrs. included 30,000 hrs. attributable to training new recruits, out of which half of the hrs. were unproductive.

The cost incurred consequent on labour turnover revealed on analysis the following:

Settlement cost due to leaving	25,000
Recruitment costs	18,000
Selection costs	20,500
Training costs	16,000

Assume that the potential production lost due to labour turnover could have been sold at prevailing prices.

Required: Ascertain the profit lost/forgone last year on account of labour turnover. **[Dec 23 - 7 Marks]**

Answer: Profit Forgone = Loss in Contribution + Additional Cost incurred as a result of Labour turnover

(a)	Actual productive hrs. during last year 3,45,000-15,000	3,30,000 hrs.
(b)	Sales during last year	66,00,000
(c)	Productive hrs. lost in Current Year	75,000 hrs.

Loss of sales in current year = $\frac{66,00,000}{3,30,000}$ × 75,000 =15,00,000

Loss in contribution = 20% of 15,00,000 = 3,00,000

Computation of profit foregone during the year

Contribution lost	3,00,000
Settlement cost	25,000
Recruitment cost	18,000
Selection cost	20,500
Training cost	16,000
Total	**3,79,500**

Q23. the following particulars for the first week of July, 2023 relate to R, S and T three workers employed in Sun Ltd.:

SN	Particular	R	S	T
(a)	Job completed (units)	5,000	4,000	7,200
(b)	Out of above output rejected & unsaleable (units)	2000	80	800
(c)	Time allowed for 100 units	2hrs. 36 min	3hrs.	1hr. 30 min
(d)	Basic wage rate per hour (*)	25	40	30
(e)	Time taken (hrs.)	100	108	92

The normal working hrs. per week are fixed at 88 hrs. Bonus is paid @ 60% of the basic wage rate for gross time worked and gross output produced without deduction for rejected output. The rate of overtime for first 10 hrs. is paid at time plus 1/3 and for next 10 hrs. is paid at time plus 1/2.

Required: Calculate the following for each worker:

(a) Number of bonus hrs. and amount of bonus earned.

(b) Total wages earned including basic wages, overtime premium and bonus.

(c) Direct wages cost per 100 saleable units. **[June 24 - 7 Marks]**

Answer:

	Particulars	Worker		
		R	S	T
1	Bonus Hrs.	30	12	16
	Amount of Bonus (Rs.)	450	288	288
2	Overtime Premium (Rs.)	408.33	1,133.33	160
	Basic Wages (Rs.)	2,200	3,520	2,640
	Total Wages (Rs.)	**3,058.33**	**4,941.33**	**3,088**
3	Direct Wages Cost Per 100 Saleable Units (Rs.)	63.72	126.05	48.25