| Time Allowed : 1 hour | Labour (Employee) Cost | Total : 30 Marks |
| :--- | :--- | :--- |

Q. 1 The management of a company are worried about their increasing labour turnover in the factory and before analyzing the causes and taking remedial steps, they want to have an idea of the profit foregone as a result of labour turnover in the last year. Last year sale amounted ₹ $83,03,300$ and variable cost was $80 \%$ of sales. The total number of actual hours worked by the Direct Labour Force was 4.45 lakhs.
As a result of the delay by the Personnel Department in filling vacancies due to labour turnover, 1,00,000 potentially productive hours were lost. The actual direct labour hours included 30,000 hours attributable to training new recruits, out of which half of the hours were unproductive. The costs incurred consequent on labour turnover revealed on analysis the following: -

| Settlement costs due to leaving -₹ 43,820 | Selection costs $-₹ 12,750$ |
| :--- | :--- |
| Recruitment costs -₹ 26,740 | Training costs -₹ 30,490 |

Assuming that the potential production lost as a consequence of labour turnover could have been sold at prevailing prices.
You are asked to calculate the following:
(i) Total labour hours lost due to the problem of labour turnover, i.e., unproductive training + Delay in replacement.
(A) 1,00,000 hours
(B) 1,30,000 hours
(C) 1,15,000 hours
(D) 1,45,000 houurs
(ii) Additional Sales which could have been obtained had there been no labour turnover.
(A) ₹ $22,20,650$
(B) ₹ $22,02,650$
(C) $22,22,650$
(D) ₹ $22,00,650$
(iii) If there were no labour turnover, total sales would have been
(A) ₹ $1,05,32,950$
(B) $1,05,32,590$
(C) ₹ $1,05,23,590$
(D) $1,05,23,950$
(iv) Total Profit foregone due to labour turnover is:-
(A) ₹ $5,75,930$
(B) ₹ $5,57,930$
(C) ₹ $5,75,390$
(D) 5,57,390
(v) If sales is lost due to labour turnover then
(A) Proportionate Variable Cost will also be saved.
(B) Proportionate Fixed Cost will also be saved.
(C) Both Variable \& Fixed Cost can be saved
(D) None of the above
(5 x 2 = 10 Marks)
Q. 2 From the given particulars you are required to work out the earnings of a worker for a week under: -(a) Straight piece-rate (b)Differential piece-rate (c) Halsey scheme (d) Rowan premium scheme

| Weekly working hours -48 | Actual output per week -150 pieces |
| :--- | :---: |
| Hourly wage rate $-₹ 7.50$ | Differential piece rate (on all pieces) |
| Normal time taken per piece -24 minutes | $-80 \%$ of piece-rate when output below normal and |
| Normal output per week -120 pieces | $120 \%$ of piece rate when output above normal. |

(7 Marks)
Q. 3 A skilled worker, in PK Ltd., is paid a guaranteed wage rate of ₹ 15.00 per hour in a 48-hour week. The standard time to produce a unit is 18 minutes. During a week, a skilled worker-Mr. ' $A$ ' has produced 200 units of the product. The Company has taken a drive for cost reduction and wants to reduce its labour cost. You are required to:
(i) Calculate wages of Mr . ' $A$ ' under each of the following methods:
A. Time rate,
B. Piece-rate with a guaranteed weekly wage,
C. Halsey Premium Plan
D. Rowan Premium Plan
(ii) Suggest which bonus plan i.e. Halsey Premium Plan or Rowan Premium Plan, the company should follow.
(7 Marks)
Q. 4 Calculate standard labour time for Machining Part No. E-75 from the following data: -

| Standard batch size100 pieces | Operating time(each piece)- Fixing job on machine2 minutes <br> Set up time64 minutes |
| :--- | :---: |
|  | - Cutting time10 minutes |
|  | -Removing job from machine3 minutes |

Allow $10 \%$ on total operation time for inspection during progress and allow further $5 \%$ on total time for fatigue.
(3 Marks)

## Q. 5 What are the essentials of goods wage system?

(3 Marks)

