Material and Employee (Labour) Cost

Time Allowed : 1 hour	TEST-7	Total Marks: 34 Marks

Q.1: XYZ Limited has capacity to produce 5000 tons of a product in a year. The product passes through two departments P and Q. The sales forecast for the next year is full utilization of production capacity in the following customer mix: -

Mr. X: 3000 tons at ₹ 1,80,000 per ton	**Mr. Y**: 2000 tons at ₹ 2,00,000 per ton

The company has option to buy raw material from any one or more of the following three suppliers: -

(a) Supplier L is prepared to supply 3800 tons of material @ ₹ 65,000 per ton.

(b) Supplier M offers to supply 4000 tons of material @ ₹ 60,000 per ton.

(c) Supplier N offers to supply @ ₹ 70,000 per ton and agrees to give a discount of 5% and also bear entire transport cost subject to the condition that the entire input requirement is purchased from him.

The cost of transporting materials from supplier's premises to XYZ Limited is ₹ 3,000 per ton in case of purchases from L and ₹ 5,000 per ton in case of M. Average scrap in production Department P is 5% and in Department Q 10% of the final output. The scrap of Department P realizes ₹ 20,000 per ton and that of Department Q ₹ 25,000 per ton.

Budgeted costs for the two departments for the next year are:-

Departments	P (₹)	Q (₹)
Direct Labour	20,00,000	50,00,000
Overheads	60,00,000	1,50,00,000

Calculate: -

(a) The gross quantity of material input to be purchased.

(b) The selection of the source of procurement and net per ton cost of procurement.

(c) The total profit for the next year assuming that the distribution cost is 10% of cost of production. **(10 Marks)**

Q.2: 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. **Find** the profit foregone last year on account of labour turnover. **(10 Marks)**

Q.3 Apex Ltd. 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 and basic rate of wages are same for a job which is similar and is carried out on similar machinery. Time allowed is 60 hours. Job at location A is completed in 36 hours, while at B, it has taken 48 hours. Conversion costs at respective places are ₹ 2,448 and ₹ 3,000. Overheads account for ₹ 40 per hour. **Find out** the Normal Wage Rate.

(5 Marks)

Q.4: M/s. SJ Private Limited manufactures 20,000 units of a product per month. The cost of placing an order is ₹ 1,500. The purchase price of the raw material is ₹ 100 per kg. The re-order period is 5 to 7 weeks. The consumption of raw materials varies from 200 kg. to 300 kg. per week, the average consumption being 250 kg. The carrying cost of inventory is 9.75% per annum.

<u>You are required to calculate:</u>

- **(a) Re-order Quantity**
- **(b) Re-order Level**
- **(c) Maximum Stock Level**
- **(d) Minimum Stock Level**
- **(e) Average Stock Level**

(5 Marks)

Q.5: Explain meaning and purpose of time study and motion study in context of labour cost.

(4 Marks)