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PART - I

Case Scenario-I :

XYZ Limited produces the product P. The cost accountant of the company has to prepare its budget for a particular year.

The following information are made available for this purpose :

The expected sales of the product P is 1,00,000 units during the year at a selling price of ₹ 50 per unit. *SP* *Sales*

Each unit of product P requires 3 kgs of raw material Q and 4 kgs of raw material R.

The expected stock levels are as follows :

	Beginning of year	End of year
Finished product P in units	12,000	15,000
Raw material Q in kgs	26,000	20,000
Raw material R in kgs	36,000	42,000

Raw material Q costs ₹ 2 per kg and R costs ₹ 3 per kg.

It requires 10 minutes of direct labour time to produce one unit of product P. Labour cost is ₹ 50 per hour.

Variable manufacturing overheads are ₹ 10 per unit.

Fixed manufacturing cost is ₹ 3,00,000 per year.

Fixed Administration and selling expenses are ₹ 25,000 per year.

On the basis of above Case Scenario, you are required to answer the following MCQs 1 to 5 :

1. The total quantity of raw material R to be purchased during the year 2
(A) 4,06,000 kgs (B) 4,18,000 kgs
(C) 3,82,000 kgs (D) 3,75,000 kgs
2. The total cost of purchase of Raw Material Q during the year is 2
(A) ₹ 6,00,000 (B) ₹ 6,06,000
(C) ₹ 5,88,000 (D) ₹ 6,12,000

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3. The budgeted variable cost of production of one unit of product P is 2
- (A) ₹ 46.33 (B) ₹ 36.38
- (C) ₹ 25.33 (D) ₹ 36.33
4. What is the budgeted net income for the year? 2
- (A) ₹ 10,41,667 (B) ₹ 13,66,650
- (C) ₹ 10,67,000 (D) ₹ 10,37,000
5. The total number of units to be produced of product P is : 2
- (A) 1,03,000 units (B) 97,000 units
- (C) 92,000 units (D) 1,27,000 units
6. Two products Y and Z are obtained in a crude form and require further processing at a cost of ₹ 6 for Y and ₹ 5 for Z per litre before the products can be sold in the market. The final prices of product Y and Z are ₹ 15 and ₹ 8.75 per litre respectively. The company earns a net margin of 25% on Cost. 2

The following data is available for output of both the products for the year

Y 8,000 Litres $\times 8.75 = 8000 \times$

Z 6,000 Litres

$\frac{30000}{60000} \times$

A joint cost of ₹ 60,000 was incurred for the year and company apportions the joint costs on the basis of net realisable value after further processing.

Calculate the joint cost per unit of product Y.

60000

- (A) ₹ 4.74 (B) ₹ 5.00
- (C) ₹ 5.625 (D) ₹ 6.00

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$\frac{8.75}{5.625}$

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7. The data pertaining to the worker C in a factory depicts that he is paid at a rate of ₹ 100 per hour and a week comprises 48 hours for a 6 days' work. The allowed absence time is 15 minutes per day for maintenance etc. The job card of C indicates, his chargeable time is scattered for 2 different jobs J1 - 21 hours and J2 - 24 hours. Any unaccounted time is attributable for power failure.

2

Calculate cost of normal idle time and abnormal idle time.

- (A) ₹ 100 and ₹ 150 (B) ₹ 150 and ₹ 150
(C) ₹ 150 and ₹ 100 (D) ₹ 100 and ₹ 100

8. AB limited has furnished the following data :

2

	Budget	Actual (for the month of March)
Production in units	40,000	48,000
Fixed overheads (₹)	78,000	84,000

Calculate fixed overhead volume variance.

- (A) ₹ 15,600 F (B) ₹ 15,600 A
(C) ₹ 6,000 A (D) ₹ 14,000 A

$50 \times SP$ $RAV \times SP$

28000

$AO \times SP$

9. A company is analysing its inventory management practices and has determined that the Economic Order Quantity (EOQ) is 400 units. The cost incurred for placing a single order is ₹ 25, while the total demand for the year amounts to 8,000 units.

2

Calculate the Carrying Cost per unit.

- (A) ₹ 2.80 per unit (B) ₹ 1.85 per unit
(C) ₹ 1.58 per unit (D) ₹ 2.50 per unit

$\frac{\sqrt{2 \times 25 \times 8000}}{C} = 400$

$\frac{\sqrt{2 \times 25 \times 8000}}{C} = 400$

10. During a certain period, 4,000 labour hours were utilized, and the standard hours for actual production were 5,500 hours. The Variable Overhead Efficiency Variance amounted to ₹ 15,000 (Favourable).

2

Calculate the Standard Variable Overhead Rate per hour.

- (A) ₹ 15 per hour (B) ₹ 20 per hour
(C) ₹ 10 per hour (D) ₹ 25 per hour

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$SH \times SR$

$- AO \times SP$

$55000 \times SP - 4000 \times SP$

$= 15000$

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Case Scenario-II :

ABC Company produces three products X, Y and Z. Similar type of material is used in the production of all the three products. The company has been using traditional absorption costing method, using direct labour hours to allocate overheads to its products. The Cost Accountant has suggested considering an activity based costing system. The following information is available in the records of the company.

	X	Y	Z
Production Volume p.a. (In units)	16,000	17,000	15,000
Direct Material per unit	3 kg	4 kg	5 kg
Labour hours per unit	0.10	0.15	0.20
Machine hours per unit	0.5	0.7	0.9
No. of Production runs p.a	50	65	60
No. of purchase orders p.a	5	10	15
No. of orders shipped p.a	25	35	32

Activity	Cost (₹)	Cost Driver
Machine setup costs	49,000	Production Runs
Machine running costs	64,128	Machine hours
Purchase costs	52,050	Purchase orders
Delivery costs	46,460	Orders shipped

The price of Raw Material is ₹ 2 per kg.

Direct labour cost per hour is ₹ 20.

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DM-136000
L= 51000

DM 39000
AL 51000
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on
Mw
0.7 x 12000

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On the basis of above Case Scenario, you are required to answer the following MCQs 11 to 15 :

11. What is full cost per unit of product Y under traditional absorption costing method ? 2
- (A) ₹ 19.92 ~~(B) ₹ 4.44~~
- (C) ₹ 46.32 ~~(D) ₹ 15.44~~
12. Under an activity based costing system, what is the cost driver rate for machine set up costs ? 2
- ~~(A) ₹ 280~~ (B) ₹ 1.467
- (C) ₹ 6.85 (D) ₹ 230
13. Under an activity based costing system, the amount of allocated overheads attributable to machine running hours to product X is : 2
- (A) ₹ 22,848 ~~(B) ₹ 15,360~~
- (C) ₹ 25,920 (D) ₹ 14,000
14. The total cost of product Z as per activity based costing method is : 2
- (A) ₹ 2,86,073 ~~(B) ₹ 2,94,905~~
- (C) ₹ 84,905 (D) ₹ 2,60,660
15. What is overhead absorption rate per hour as per traditional absorption costing method ? 2
- ~~(A) ₹ 29.60~~ (B) ₹ 29.32
- (C) ₹ 13.78 (D) ₹ 15.82