

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt four questions from Section-A. Attempt two questions from Section-B & C respectively.

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**SECTION-A**

- I. (a) Distinction between costing and cost accounting.  
 (b) Explain cost classification.  
 (c) Explain importance of variance analysis.  
 (d) The Complete Gardener is deciding on the economic order quantity for two brands of lawn fertilizer: Super Grow and Nature's Own. Following information is collected.

	Fertilizer	
	Super Grow	Nature's Own
Annual Demand	2,000 bags	1280 bags
Relevant ordering cost per purchase order	₹1200	₹1400
Annual relevant carrying cost per bag	₹480	₹500

Required:

- (i) Compute EOQ for Super Glow and Nature Own.  
 (ii) For the EOQ what is the sum of the total annual relevant ordering costs and total annual relevant carrying costs for Super Grow and Nature's Own?  
 (iii) For the EOQ compute the number of deliveries per year for Super Grow and Nature's Own  
 (e) From the following data, calculate total monthly remuneration of three workers A, B and C under the "Gant Task and Bonus Scheme".  
 (i) Standard production per month per worker is 1,000 units. (ii) Actual production during the month: A-850 units, B 1000 units and C-1, 100 units.  
 (iii) Piece work rate 50 paise per unit.  
 (f) Define Bin Card & differentiate it with store ledger. (4×5)

**SECTION-B**

- II. Explain various incentive plans of wages with suitable examples. (15)  
 III. Define material control. Explain various techniques used for material control. (15)  
 IV. From the following particulars, prepare a cost statement showing the components of total cost and profit for the year ended 31<sup>st</sup> December 2016.

	1-1-2016	31-12-2016	
	₹	₹	
Stock of finished goods	6,000	15,000	
Stock of raw material	40,000	50,000	
Work in progress	15,000	10,000	
Transaction during the year:			
Purchase of raw materials	4,75,000	Sales of the year	8,60,000
Carriage inward	12,500	Income tax	500
Wages	1,75,000	Dividend	1000
Works manager's salary	30,000	Debenture interest	5000
Factory employees salaries	60,000	transfer to sinking fund for	
		Replacement of machinery	10,000
Factory rent, taxes and insurance	7,250	Goodwill written of	10,000
Power expenses	9,500	Payment of sales tax	16,000
Other production expenses	43,000	Selling expenses	9,250
General expenses	32,500		

(15)

P.T.O.

(2)

- V. (A) EXE limited has received an offer of quantity discounts on its order of materials as under:

Price per tonne ₹	Tonnes Nos.
1,200	Less than 500
1,180	500 and less than 1,000
1,160	1,000 and less than 2,000
1,140	2,000 and less than 3,000
1,120	3,000 and above

The annual requirement for the material is 5,000 tonnes. The ordering cost per order is ₹1200 and the stock holding cost is estimated at 20% of material cost per annum. You are required to compute the most economical purchase level.

- (B) What will be your answer to the above question if there are no discounts offered and the price per tonne is ₹1500? (15)

### SECTION-C

- VI. What do you mean by absorption of overhead? Explain various methods of factory overhead absorption rates. (15)

- VII. Explain standard costing and labour variance analysis with suitable examples. (15)

- VIII. A machine shop of Avon Ltd. has six identical machines manned by 6 operators. The machines cannot be worked without an operator wholly engaged on it. The cost of all these 6 machines including installation charges work out to ₹12 lakhs and these machines are deemed to have a scrap value of 10% at the end of its effective life (9 Years). These particulars are furnished for a six month period:

Normal available hours, per month	218
Absenteeism (without pay) hours	18
Leave (With Pay)- hours	20
Stoppage for repairs and maintenance etc.-hours	20
Average rate of wages per day of 8 hours	₹80
Production bonus estimated	15% on wages
Value of power consumed	₹24150
Supervision and indirect labour	₹9,900
Lighting and electricity	₹4,800

These particulars are for a year:

Repairs and maintenance including consumables	₹36,000
Insurance	₹60,000
Other sundry works expenses	₹36,000
General management expenses allocated	₹1,09,040

You are required to work out a comprehensive machine hour rate for the machine shop. (15)

- IX. The standard cost of a certain

Chemical mixture is:	Actual cost of materials used is:
40% material A at ₹40 per ton.	90 tons material A at a cost of ₹ 42 per ton.
60% material B at ₹ 30 per ton.	160 tons material B at a cost of ₹.28 per ton
A standard loss of 10% is expected in production	Actual output is 230 tons.

Prepare a statement showing the standard cost of output and the variances that emerge. (15)