

Please check that this question paper contains 9 questions and 2 printed pages within first ten

[Total No. of Questions: 09]

[Total No. of Pages: ...2...]

Uni. Roll No.

MORNING

12 MAY 2023

Program: B.Tech. (Batch 2018 onward)

Semester: 1,2

Name of Subject: Principles of Engineering Economics and Management

Subject Code: HSMC-103

Paper ID: 15928

Scientific calculator is : Not Allowed

Detail of allowed codes/charts/tables etc. N.A

Time Allowed: 03 Hours

Max. Marks: 60

NOTE:

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately

Part – A

[Marks: 02 each]

Q1.

- a) Give Adam Smith's definition of Economics.
- b) What is meant by fixed & variable factors of Production.
- c) Is Management an Art or Science. Explain.
- d) Explain Opportunity Cost & Out of Pocket Cost. Give examples.
- e) Define Marginal Costing. Give Marginal Costing Equation
- f) Distinguish between NPV & IRR.

Part – B

[Marks: 04 each]

- Q2. What do you understand by "Elasticity of Demand ". Under what conditions it is equal to (a) Zero (b) Unitary (c) Less than Unitary (d) More than Unitary.
- Q3. Discuss Consumer's Equilibrium with the help of Indifference Curve analysis & give the main criticisms of Indifference Curve analysis.
- Q4. Explain Modern Theory of Factor Pricing.
- Q5. Prepare Cost Sheet from the following Data:

	On January 1, 2022 (Rs)	On December 31, 2022 (Rs)
Cost of Raw Materials	30,000	25,000
Cost of work –in –progress	12,000	15,000

Page 1 of 2

P.T.O.

Cost of Finished Stock	60,000	55,000
Transactions during the year :		
Purchase of Raw Materials:	Rs 4,50,000	Administration Overheads : Rs 30,000
Wages paid:	Rs 2,30,000	Selling & Distribution Overheads : Rs 20,000
Factory Overheads:	Rs 92,000	Sales : Rs 9,00,000.

MORNING
12 MAY 2023

- Q6. Explain any four Principles of Management given by Henry Fayol.
- Q7. Define BEP. Explain the relationship between BEP , MOS & Angle of Incidence Diagrammatically.

Part – C

[Marks: 12 each]

- Q8. What is Demand Curve. Why does Demand Curve slope downwards to the right ? Are there any exceptions to it.

OR

State and explain law of Variable Proportions with the help of table & diagram. Distinguish between Returns to Factor & Returns to Scale .

- Q9. Annual Demand for a particular item of inventory is 10,000 units. Inventory Carrying Cost per unit per year is 20% & Ordering Cost is Rs.40 per order. The Price quoted by the supplier is Rs.4 per unit. However , the supplier is willing to give discount of 5% for orders of 1,500 units or more . Is it worthwhile to avail of the discount offer .

OR

From the following Particulars Calculate (i) Contribution (ii) P/V Ratio (iii) Break Even Point in units & in rupees . (iv)What will be the selling price per unit if the break even point is brought down to 25,000 units ?
Fixed Expenses : Rs. 1,50,000 , Variable Cost : Rs 10 Per unit ,Selling Price : Rs. 15 Per Unit
