



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/M.TECH (IEM)/SEM-2/IEM-201/2012**

**2012**

**MANAGERIAL ECONOMICS**

*Time Allotted : 3 Hours*

*Full Marks : 70*

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

Answer any *five* questions.

5 × 14 = 70

1. a) Explain Margin of Safety with reference to B/E analysis.
- b) A manufacturing organization is having the following data :

	<b>Prod. A</b>	<b>Prod. B</b>
Sales/unit	12.00	12.00
Var. Cost	6.00	7.00
Fixed cost	80,000.00	80,000.00

There is a critical material of which the availability is restricted to 1000 kg. Prod. A needs 0.2 kg/pc of that material and Prod. B needs 0.1 kg/pc. Decide the product mix for maximizing profit.

5 + 9

30325 (M.TECH)

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2. a) Explain Price Elasticity of Demand.
- b) Compare essential characteristics of Perfect Competition and Monopolistic Competition with Product Differentiation. 5 + 9
3. a) Describe the characteristics of Monopoly and mention the constraints faced by a monopoly to raise prices indefinitely.
- b) Explain Price discrimination and the necessary conditions for the same. 5 + 9

4. A manufacturing company wishes to buy a new capital equipment. The relevant data table is as follows :

Year	1	2	3	4	5	6
Cost	5,00,000	2,00,000	—	—	—	—
profit	—	1,50,000	2,00,000	2,00,000	2,00,000	2,00,000

Cost of equity is 12% and that of debt is 16%, Tax rate is 40%. The Debt equity Ratio cannot exceed 50 : 50 as per regulations of the lending authority. Decide course of action.

5. a) Explain graphically Production Function and variable Returns to Scale.
- b) Describe the concept of Factor pricing and in this context explain Marginal Physical Productivity and Marginal Revenue Productivity. 7 + 7



6. Following data refers to a pollution control equipment in a chemical plant :

Year	Operating Cost Rs.	Cost of New equip. Rs.	Salvage value Rs.
1	2500	10000	2500
2	3000	7500	1250
3	3500	8000	1000
4	4000	8500	750
5	5000	9000	500

Find out the most optimum replacement period. Govt. introduces a scheme for refund of 50% of the cost of new machine if replacement is done within 3 years should be company avail it ?

7. Following data is extracted from the Balance Sheet of a Company :

	Rs.		Rs.
10000 shares of		Plant & Equipment	2,00,000
Rs. 10 each	1,00,000	Less Depreciation	
Reserve and Surplus	50,000	( 50,000 )	
Long Term loan secured	2,00,000	Inventory	1,00,000
Outstanding Bills Payable	50,000	Bills Receivable	50,000
		Cash at Bank	50,000
Total	4,00,000	Total	4,00,000

Find out

- Net Worth per share
- Debt Equity ratio
- Current ratio.

5 + 4 + 5

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8. Write notes on any *two* of the following :

2 × 7

- a) Indifference Curve and Income Effect
  - b) Cobb-Douglas Production Function
  - c) Group Replacement
  - d) Cash B/E Point
  - e) Cost of capital.
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