



Name :

Roll No. :

Invigilator's Signature :

**CS/M.TECH (IEM)/SEM-2/IEM-201/2013
2013**

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. $5 \times 14 = 70$

1. a) Describe Demand Function and the factors affecting demand.
- b) Explain Price Elasticity of Demand with reference to Income and Substitution effects. $6 + 8$
2. a) Describe Monopolistic Competition with product Differentiation as compared to perfect competition.
- b) Explain the concept of Price Discrimination in Monopoly. $7 + 7$

30325 (M.Tech)

[Turn over



3. a) Explain ARR and NPV methods.

b) Following data refers to the plan of upgradation of facilities :

Year :	1	2	3	4	5	6
Investment :	10,00,000	10,00,000	—	—	—	—
Profit :	—	4,00,000	6,00,000	6,00,000	8,00,000	8,00,000

The company intends to fund the project through borrowing for which the rate is 16%. The tax rate is 25%. The scrap value of the assets is 10% of the original value at the end of 6th year. Calculate the profitability ratio. 5 + 9

4. a) Develop the model for replacement of Equipment that deteriorates with time and value of money changes over time :

b) Following data refers to a modernization of a plant :

Year	Operating cost	Cost of new equip	Salvage value
1.	3,500	10,000	4,000
2.	3,500	12,000	3,000
3.	4,000	13,000	1,250
4.	4,500	14,000	2,000
5.	4,000	15,000	2,000

Find out the most optimum replacement period. 7 + 7



5. a) Explain Margin of Safety.

b) The price structure of a Vacuum Cleaner is as follows :

	Rs. / Pc.
Materials	1,000
Labour	300
Variable Overhead	500
	1,800
Fixed Overheads	600
Profit	600
	3,000

The above is based on a quantity of 60,000 pcs.

What is the additional quantity to be sold if profit is to be maintained after selling price is reduced by 10% ?

6 + 8

6. a) Explain Production Function and Marginal rate of technical substitution.

b) Describe the fundamental of theory of Distribution and develop the format for pricing of the factor of labour.

6 + 8

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

20,000 shares of		Plant & Equipment	3,00,000
Rs. 10 each	2,00,000	Less Depreciation	
Reserve and Surplus	1,00,000	(50,000)	
Long Term loan secured	2,00,000	Inventory	1,50,000
Outstanding Bill Payable	50,000	Bills Receivable	50,000
		Cash at Bank	50,000
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Total	5,50,000	Total	5,50,000
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Find out

a) Net worth per share

b) Working Capital. 7 + 7

8. Write short notes any *two* of the following : 2 × 7

a) Marginal Revenue Productivity

b) Production Function

c) Group Replacement

d) Cost of Capital.
