

ECONOMICS

(1st Semester)

Course No. : ECOCC-101

(Micro Economic Analysis—I)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer **one** question from each Unit

UNIT—I

1. (a) Explain the slope of an indifference curve and derive it (mathematically).
- (b) Show that the equilibrium condition of a consumer under both Marshallian Utility Analysis and Indifference Curve Analysis is the same. (2+4)+8=14
2. (a) Distinguish between direct utility function and indirect utility function. Derive Roy's identity and interpret the result.

- (b) Illustrate the theory of lexicographical ordering. (3+6)+5=14

UNIT—II

3. What is economies of scale and how does it arise in a firm? How such economies influence the shape of long run average cost in a firm? 4+6+4=14
4. (a) Justify the existence of a 'flat stretch' in the modern theory cost curves.
- (b) Show that Cobb-Douglas production is a special case of CES production function. 4+10=14

UNIT—III

5. (a) What is it that we cannot define the industry in monopolistic competition?
- (b) Why does excess capacity arise in monopolistic competition? What is its economic significance?
- (c) Discuss the nature of long run profits under monopolistic competition and derive the adjustment process which leads to the realization of such profits. 3+4+7=14

(3)

6. Distinguish among increasing cost, decreasing cost and constant cost industry. Discuss the factors which may lead to decreasing costs. Discuss the nature of the long run supply curve of a firm and industry under conditions of decreasing costs. 14

UNIT—IV

7. What is meant by full cost pricing principle? How will you use this principle to derive the equilibrium of a firm? Compare and construct the approach of full cost pricing with that of limit pricing model. 3+5+6=14
8. (a) Consider the following pay-off matrix where the payoffs are the profits or losses of two firms :

| | | | |
|---------------|-------------------|------------------|-------------------|
| | | <i>Firm B</i> | |
| | | <i>Low Price</i> | <i>High Price</i> |
| <i>Firm A</i> | <i>High Price</i> | 1, 1 | 3, -1 |
| | <i>Low Price</i> | -1, 3 | 4, 2 |

Determine—

- (i) whether firm A has a dominant strategy;
- (ii) whether firm B has a dominant strategy.
- (iii) the optional strategy of each firm;
- (iv) the Nash equilibrium, if there is any.

(4)

- (b) What do you understand by 'satisficing behaviour'? How does it differ an alternative approach to the process of price determination as compared to neo-classical theory? (2+2+2+2)+(2+4)=14

UNIT—V

9. What is 'expected utility'? Explain how von Neumann and Morgenstern used this concept to deal with an uncertain situation. 4+10=14
10. (a) For an utility function $u(y) = 100y - 10y^2$, suppose you are left with two situations (i) $y = 30$ and $y = 50$ with probability $\frac{1}{2}$ each and (ii) $y = 40$ with certainty. Which one would you select?
- (b) Define cost of risk. How can the cost of risk be reduced by risk pooling and risk spreading? 5+(3+3+3)=14
