PG Odd Semester (CBCS) Exam., December—2018

ECONOMICS

(1st Semester)

Course No. : ECOCC–101

(Microeconomic 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)* Compare and contrast between Marshallian utility analysis and indifference curves analysis with focus on consumers' equilibrium condition.

   (b) Illustrate using indifference curves :

   (i) Over-time wage rate in higher than normal wage rate

   (ii) Selective excise tax versus income tax   8+(3+3)=14

2. *(a)* Distinguish between direct utility function and indirect utility function. Derive Roy's identity and interpret the result.

   (b) Illustrate Colwell model. What is time path and how does Chiang interpret it?

          8+6=14

UNIT—II

3. What is 'economies of scale'? How does it arise in a firm? Does it influence the shape of long-run average cost (LRAC) curve of a firm?

          4+6+4=14

4. *(a)* Justify the existence of a flat stretch in the modern theory of cost curves.

   (b) Show that Cobb-Douglas production function is a special case of CES production function.   4+10=14

UNIT—III

5. *(a)* Describe the inverse elasticity rule of monopoly pricing.

   (b) Suppose the market of commodity x is monopolised by a single firm.

   (i) Draw the initial equilibrium for such a market.

(ii) If the market demand curve now shifts outwards, show that in general (as compared to perfect competition) it will not be possible to predict the effect of this shift in demand on the market equilibrium of *x*.

(c) Write a note on 'efficiency dilemma' in a natural monopoly.   3+2+5+4=14

6. A duopoly faces a market demand of $P = 120 - Q$. Firm I has a constant marginal cost of $MC_1 = 20$. Firm II's constant marginal cost is $MC_2 = 40$. Calculate the output of each firm, market output and price, if there is—

(a) Collusive equilibrium;

(b) Cournot equilibrium.   14

UNIT—IV

7. What do you understand by the neo-classical controversy? How do limit pricing models offer an alternative to determination of equilibrium as compared to the traditional model? Elaborate in the context of Bain's model of limit pricing.   5+3+6=14

8. What is Prisoner's dilemma? How can it be used to analyse price and non-price competition in oligopolistic markets? Do duopolists in a Cournot equilibrium face a prisoner's dilemma? Explain.   5+3+3+3=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 a utility function :

$$u(Y) = 100y - 10y^2$$

suppose you are left with two situations *(i)* $y = 30$ and $y = 50$ with probability ½ for 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

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