2023

ECONOMICS — HONOURS

Paper : CC-8

(Intermediate Microeconomics-II)

Full Marks : 65

The figures in the margin indicate full marks.

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

Group - A

1. Answer ***any ten*** questions : 2×10

(a) Explain what is natural monopoly with an example.

(b) Assume that Marginal cost of the monopolist is 10 rupees. The demand curve faced by him is $p=100-3q$. Find the equilibrium price and quantity.

(c) For a profit maximising monopolist how is markup pricing related to elasticity of demand?

(d) Define third-degree price discrimination.

(e) Calculate the value of Lerner Index when P (= price) = Rs.10 and MR (= marginal revenue) = Rs. 5.

(f) What is the implication of product differentiation in monopolistic competitive market?

(g) According to Chamberlin why does excess capacity exist in monopolistically competitive market?

(h) Define conjectural variation in the determination of oligopoly market.

(i) What is the single most important characteristic in oligopolistic markets and to what problem does it lead?

(j) What do you mean by bilateral monopoly?

(k) Why is the production possibility curve concave to the origin?

(l) Define public good. Give a suitable example.

(m) Why does externality lead to market failure?

(n) What do you mean by Free rider problem?

(o) Explain the difference between adverse selection and moral hazard in insurance markets.

Group - B

2. Answer ***any three*** questions :

(a) Explain whether a monopolist seeking to maximise profit will operate in the elastic or inelastic part of the demand curve. 5

(b) In the Stackelberg model, the firm that sets output first has an advantage. Explain why. 5

(c) How does asymmetric information between buyers and sellers lead to market failure, when a market is otherwise perfectly competitive? 5

(d) Explain the idea of negative and positive consumption externalities with suitable examples and diagrams. Explain whether the following goods are public or private or common resources : (i) Free vaccination at public health department (ii) Education in private university. 3+2

(e) What do you understand by dead weight loss under Monopoly with reference to that of perfect competition? 5

Group - C

Answer *any three* questions.

3. (a) (i) Explain with the help of a diagram whether a monopolist has a supply curve.

(ii) A monopolist sells his output in two distinct markets between which price discrimination is possible. His total cost and the two demand curves are given by $TC = 8Q + 100$; $Q_1 = 10 - 0.5P_1$; $Q_2 = 40 - P_2$. Calculate the profit maximising values of P_1, P_2, Q_1, Q_2. Prove that higher price is charged in the market with the lower price-elasticity of demand. 4+1+1+1+1+2

(b) (i) Mention any two factors governing the growth of monopoly.

(ii) Suppose the cost and demand functions of a natural monopolist are $LTC = 20q - (\frac{1}{8})q^2$ and $p = 50 - q$ respectively. Determine the equilibrium level of output, price and profit / loss if the monopolist is forced to follow marginal-cost pricing rule.

(iii) In the above problem, if the monopolist follows the average-cost pricing rule, then what will be the equilibrium level of price and output? 2+5+3

(c) (i) Define Pareto efficiency. Jack has 16 litres of coca-cola and 4 sandwiches. Bob has 4 liters of coca-cola and 8 sandwiches. With these endowments, Jack's MRS of coca-cola for sandwiches is 2 and Bob's MRS of cola for sandwiches is 1. Draw an Edgeworth box diagram to show whether this allocation is Pareto efficient. Explain your answer.

(ii) Show that Pareto Optimality conditions are satisfied under perfect competition. (1+4)+5

(d) (i) The Kinked demand curve describes price rigidity. Explain how the model works. What are its limitations? Why does price rigidity occur in oligopolistic market?

(ii) Suppose that two identical firms are there, whose cost functions are given by $C_1 = 60q_1$ and $C_2 = 60q_2$, where q_1 and q_2 are output of firm 1 and firm 2 respectively. The inverse demand function of firm's output is given by $p = 300 - q$, where $q = q_1 + q_2$. What are the firm's output in Nash equilibrium of the Cournot model? (3+2+1)+4

(e) Explain the concepts of monopolistic and monopsonistic exploitation of labour. Can labour union always eliminate such exploitation? 5+5