QP Code : 24/PT/11/VI

POST-GRADUATE DEGREE PROGRAMME
Term End Examination — December, 2024
ECONOMICS
Paper-VI : MICROECONOMIC THEORY

Time : 2 hours] [Full Marks : 50

Weightage of Marks : 80%

Special credit will be given accuracy and relevance in the answer. Marks will be deducted for spelling, untidy work and illegible handwriting. The weightage for each question has been indicated in the margin.

Use of scientific calculator is strictly prohibited.

1. Answer any *four* of the following questions : $2\frac{1}{2} \times 4 = 10$

   a) What is Marginal Rate of Substitution ?

   b) If the utility function of two goods X_1 and X_2 is given by

   $U(X_1, X_2) = X_1^{\alpha}\ X_2^{1-\alpha}$

   where, $0 < \alpha < 1$

   Derive MU of X_1 and MU of X_2.

   c) What is Marshallian Consumer Surplus ?

   d) A firm uses 10 units of L and 20 units of K to produce 10 units of output. The $MP_L = 0 \cdot 5$. If there are constant returns to scale, then show that MP_K must be 0·25.

   e) What are the building blocks of Game theory ?

   f) In the context of general equilibrium, what is Walras Law ?

2. Answer any *four* of the following questions : $5 \times 4 = 20$

   a) Discuss two special cases about consumer's equilibrium resulting corner solutions.

   b) What is Cobb-Douglas production function ? Explain its any two properties.

c) Explain the relationship between Short-run Average Cost (SAC) curve and Long-run Average cost (LAC) curve with the help of a diagram.

d) What is shutdown point and what is break-even point in the context of a perfectly competitive market ? Explain with diagram.

e) Suppose a monopolist faces a linear demand curve. Her demand function is $p = 100 - 4q$ and her cost function is $C = 50 + 20q$.

Find out her profit maximising q and p and also the amount of profit.

f) Explain with examples whether an individual's degree of aversion to risk increases or decreases for higher levels of wealth.

3. Answer any *two* of the following questions : $10 \times 2 = 20$

a) When is price discrimination possible ? Also find out, when is price discrimination profitable.

b) Explain with examples the Arrow-Pratt measures of absolute and relative risk aversion.

c) Explain Baumol's Sales maximisation model.

d) Consider the following game in matrix form with two players. Payoffs for the row player Shila are indicated first in each cell and payoffs for the column player Anil are second.

	C	*D*
A	10, 16	14, 24
B	16, 20	6, 12

Does either player have a dominant strategy ? Explain your answer.