Indian Institute of Technology Patna

Mid Semester Examination

HS201 - Introductory Microeconomics

Time - 2 hours

Marks-30

Answer all the questions

- 1. Can you think of any instances where the indifference curve will not be bowed in towards the origin or will not be convex to the origin. Explain each situation through graphs. (6 marks)
- 2. A. Sketch a graph for a perfectly competitive market, specifically showing the short run supply curve.
 - **B.** Why would a firm choose to operate at a loss in the short run? Explain carefully.
 - C. When do firms decide to shut down production in the short run? Explain carefully. $(3 \times 3 = 9 \text{ Marks})$
- 3. Match the following (5 Marks)

i.	In long-run equilibrium for a competitive firm economic profits	a.	average variable cost at the level of output where marginal revenue equals marginal cost
ii	If price is less than average variable cost at a level of output where marginal revenue is equal to marginal cost, then in the short run the firm	b.	takes the market price as given
iii	A firm will not shut down in the short run as long as price exceeds	c.	price is equal to marginal revenue
iv.	A price taker is a buyer or a seller who	d.	some factors of production are variable, while at least one factor of production is fixed
v.	If individual firms face a	e.	at its lowest point

	horizontal demand curve at a given market price,		
vi.	In the short run	f.	Negative cross price elasticity of demand with respect to each other.
vii.	Marginal cost is defined as	g.	should shut down
viii.	The marginal cost curve must cut the average variable cost curve	h.	the change in total variable cost resulting from one-unit increase in the quantity
ix.	If the cross-price elasticity between two commodities is 1.5	i.	Will be zero
х.	Complementary goods have	j.	the two goods are substitutes

4. Answer all the questions in two -three sentences

- a. Distinguish between change in supply and change in quantity supplied (draw a graph) 2 marks
- b. Give two examples of fixed cost 1 mark
- c. How does average fixed cost behave when output is increased? (draw a graph) 2 marks
- d. What is the behavior of average variable cost when output increases? (draw a graph) 2 marks
- e. Discuss the relationship between marginal cost and average cost.(draw a graph) 2 marks
- f. Give two examples of variable cost 1 mark