

# 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 towards the origin. Making diagrams are mandatory to support your answer.

( 5 Marks)

2. A firm's total cost function is given by the equation:

$$TC = 4000 + 5Q + 10Q^2$$

- (i) Write an expression for each of the following cost concepts:

- a. Total Fixed Cost
- b. Average Fixed Cost
- c. Total Variable Cost
- d. Average Variable Cost
- e. Average Total Cost
- f. Marginal Cost

- (ii) Determine the quantity that minimizes average total cost. Demonstrate the relationship between marginal cost and average cost.

(6 + 4 Marks)

3. Use graphs/figures to show

- a. Why isoquants are not intersecting?
- b. What kind of slope do isoquants have?
- c. What does the isoquant measure?
- d. What is the main difference between an isoquant curve and an indifference curve?

(2x4=8 Marks)

4. The study of economics is primarily concerned with:

(Questions 4 to 8, 1x5 = 5)

- a) demonstrating that capitalistic economies are superior to socialistic economies.
- b) determining the most equitable distribution of society's output.
- c) keeping private businesses from losing money.
- d) choices which are made in seeking to use scarce resources efficiently.

P.T.O.

**5. The difference between a good and a service is that:**

- a) goods are available in unlimited quantities; services are not.
- b) goods are tangible; services are not.
- c) services are available in unlimited quantities; goods are not.
- d) services help satisfy unlimited wants; goods do not.
- e) goods help satisfy unlimited wants; services do not.

**6. Our economy is characterized by:**

- a) unlimited wants and needs.
- b) unlimited material resources.
- c) no energy resources.
- d) abundant productive labor.
- e) no way to achieve satisfaction.

**7. The opportunity cost of an action:**

- a) is \$37.48.
- b) is the value of the best alternative.
- c) measures the undesirable aspects of that action.
- d) is the average amount of unhappiness experienced by everyone involved.
- e) will be the same for everyone.

**8. Which country has the Comparative Advantage in producing cars?**

United States: 50 Cars = 2 Planes

Great Britain: 40 Cars = 2 Planes

**9. Provide an appropriate word to fill the gap/gaps ( 2 marks )**

- a) Every nation has an economic problem and that is scarcity of.....
- b) At the interaction of the demand and supply curve the market is in .....
- c) In perfect competition there are ..... number of buyers and .....
- d) For normal goods indifference curve is ..... to the .....