

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT**

**TEST -1 EXAMINATION- 2025**

**B.Tech-III Semester (All branches)**

**COURSE CODE (CREDITS):25B11HS311(3)**

**MAX. MARKS: 15**

**COURSE NAME: Economics**

**COURSE INSTRUCTORS: TGM, BLK**

**MAX. TIME: 1 Hour**

**Note:** (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

| Q.No    | Question   | CO        | Marks     |           |   |    |     |   |    |    |   |         |
|---------|--|-----------|-----------|-----------|---|----|-----|---|----|----|---|---------|
| Q1      | <p>For each of the following scenarios, use a supply and demand diagram to illustrate the effect of the given shock on the equilibrium price and quantity in the specified competitive market. Explain whether there is a shift in the demand curve, the supply curve, or neither.</p> <p>(a) An unexpected temporary heat wave hits the East Coast. Show the effect in the ice cream market in the surrounding area.</p> <p>(b) The government introduces a tax on ice cream which is paid by producers. What is the effect in the ice cream market?</p> <p>(c) China and Mexico are major producers of textiles. Workers in Mexico decide to go on strike. Show the effect on the market for Mexican textiles.</p> <p>(d) Show the effect of the situation described in (c) on the market for Chinese textiles.</p> <p>(e) Suppose the government imposes a price cap on bottled water. Show the effect in the bottled water market.</p> | 3         | (1*5=5)   |           |   |    |     |   |    |    |   |         |
| Q2      | <p>A manufacturer currently sells 5,000 units of a product at a price of Rs. 2,500. Per capita income is projected to rise from Rs. 30,000 to Rs. 31,000, leading to an expected increase in sales to 5,400 units at the same price.</p> <p>(a) Calculate the arc income elasticity of demand.</p> <p>(b) The company's economist estimates that if the price is increased to Rs. 2,700, sales will fall to 5,000 units. Calculate the arc price elasticity of demand and the corresponding revenue.</p> <p>(c) Should the company raise the price beyond Rs. 2,700? Explain.</p>  | 3         | (1+2+2=5) |           |   |    |     |   |    |    |   |         |
| Q3.     | <p>Two countries, A and B, have the following annual production possibilities:</p> <table><tr><th>Country</th><th>Cars</th><th>Computers</th></tr><tr><td>A</td><td>60</td><td>120</td></tr><tr><td>B</td><td>40</td><td>80</td></tr></table> <p>a) State which country has an absolute advantage in cars and in computers.</p> <p>b) Identify the comparative advantage of each country.</p>  | Country   | Cars      | Computers | A | 60 | 120 | B | 40 | 80 | 2 | (1*2=2) |
| Country | Cars   | Computers |           |           |   |    |     |   |    |    |   |         |
| A       | 60   | 120       |           |           |   |    |     |   |    |    |   |         |
| B       | 40   | 80        |           |           |   |    |     |   |    |    |   |         |
| Q4.     | <p>a) Explain with diagram, why the PPC is typically concave to the origin.</p> <p>b) Describe briefly any two limitations of the command economy.</p> <p>c) Economic analysis is marginal analysis. Comment.</p>  | 1         | (1*3=3)   |           |   |    |     |   |    |    |   |         |