**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**FIRST TRIMESTER (Batch 2019-21)**

**END TERM EXAMINATION, SEPTEMBER-2019**

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| --- | --- | --- | --- |
| Course Name | **Managerial Economics** | Course Code | **ECO 101** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

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• This is a closed book examination.

• Electronic calculators are allowed.

• All questions are compulsory.

• Questions should be answered in the same sequence as they appear in the question paper.

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**Question 1**.The demand for good X is given by

Qdx = 1200 – 0.5Px + 0.25Py – 8Pz + 0.10M

Research shows that the prices of related goods are given by Py = $ 5,900 and Pz = $ 90, while the average income of individuals consuming this product is M= $ 55,000.

a. Indicate whether goods Y and Z are substitutes or complements for good X, respectively.

b. Is X an inferior or a normal good?

c. How many units of good X will be purchased when Px = $ 4,910?

d. Based on the data given above and the values calculated in part c, calculate the point price elasticity of demand under current conditions. Is it elastic or inelastic? Based on the kind of elasticity, what impact will an increase in price have on the Total Revenue?

e. Determine the demand function and inverse demand function for good X. **(6 Marks)**

**Question 2**.For each of the following scenarios, use the 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.

a. An unexpected temporary heat wave hits Rajasthan. Show the effect on the ice cream market.

b. The government introduces a tax on cold drinks which is paid by producers. What is the effect on the cold drink market?

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.

d. Show the effect of the situation described in (c) on the market for Chinese textiles.

e. Suppose the government imposes a price cap (P\*) below the equilibrium price (P) on bottled water. Show the effect on the bottled water market. **(5 Marks)**

**Question 3**.In his spare time, Suresh makes chains using metal rings he buys from a hardware store. He sells the final product at local crafts fairs. Being interviewed once by a local newspaper, he said literally the following: "The materials cost me $30, and the rest is just my labor, which is free. One chain sells for about $150, which gives me net profit of $120 for three nights of work."

a. Is he talking about economic profit or accounting profit? Explain the difference between the two.

b. Discuss Suresh's statement from economic perspective (taking the opportunity cost into account). **(5 Marks)**

**Question 4.** The total demand for wheat and the total supply of wheat per month in the Madhya Pradesh market are as follows:

|  |  |  |
| --- | --- | --- |
| Thousands of bushels of wheatdemanded | Price per bushel, $ | Thousands of bushels of wheat supplied |
| 85 | 3.40 | 72 |
| 80 | 3.70 | 73 |
| 75 | 4.00 | 75 |
| 70 | 4.30 | 77 |
| 65 | 4.60 | 79 |
| 60 | 4.90 | 81 |

1. What will be the price and quantity at equilibrium?
2. At Price of 3.70, what is the market outcome and how? In this case of market outcome, what is the resulting action?
3. At Price of 4.90, what is the market outcome and how? In this case of market outcome, what is the resulting action?

 **(5 Marks)**

**Question 5.** The Sales of a firm are 8 lakh Rs in a particular month. The firm sells a particular product at Rs 100. From the data given below, calculate the Break-even point.

Fixed Expenses = 200000 Rs

**Variable expenses**:

Direct material = 180000; Direct Labor = 120000; other variable Expenses= 100000 **(4 Marks)**

**Question 6**. Describe the concept of Prisoners’ dilemma. Is Dominant strategy and Nash equilibrium same in the case of Prisoner’s dilemma. Explain briefly. **(5 Marks)**

**Question 7.**

1. What is Market power? Rank the four major types of market structures in terms of their market power.
2. Uber and Ola use which type of pricing method during times of high demand. Explain briefly.
3. Market segmentation happens in which kind of price discrimination. Elucidate.
4. A perfectly competitive firm’s fixed cost is $ 100. Its min AVC is $ 55. If market price of the product which the firm is selling is $ 50, then what should the firm do in the short run. What will be the final profit/loss in this case?
5. In the monopolistic competition, the firm’s demand is highly elastic. Analyze this statement and give a brief explanation on the same. **(10 Marks)**