**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:** All questions are compulsory.

**Question 1**.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 2.** 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 wheat demanded (Qd) | Price per bushel, $ | Thousands of bushels of wheat supplied (Qs) |
| 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 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 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. How many units of good X will be purchased when Px = $ 4,910?

b. Indicate whether goods Y and Good Z are substitutes or complements for good X, respectively. Use Cross Price Elasticity to identify the same.

c. Is X an inferior or a normal or luxury good? Identify by calculating Income Elasticity.

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. Explain impact of increase in price of good Y by 10% on quantity demanded of Good X.

**[1 + 3 + 2 + 3 + 1 = 10 Marks]**

**Question 5.**

**A.** A firm decides to sell a particular product at price Rs. 100. And accordingly it makes total sales revenue by the end of the month as Rs. 8 lacs. From the data given below, calculate the Break-even point.

Fixed Expenses = Rs. 200000

**Variable Expenses** (For all output in a month)

Direct Material = Rs. 180000; Direct Labor = Rs. 120000; Other Variable Expenses = Rs. 100000

**B.** A perfectly competitive firm’s fixed cost is $ 100. The minimum 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?

**[3 + 2 = 5 Marks]**

**Question 6**.

**A.** Using the concept of Dominated strategy or Nash Equilibrium, analyze the solution of the below mentioned game? The matrix contains pay-offs in terms of profits in million rupees in next one year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **TOYOTA** | | | | |
| **HONDA** |  | Build large | Build small | Do not build |
| Build large | 0,0 | 12,8 | 18,9 |
| Build small | 8,12 | 16,16 | 20,15 |
| Do not build | 9,18 | 15,20 | 18,18 |

**B.** What is Market power? Rank the four major types of market structures in terms of their market power.

**C.** Uber and Ola use which type of pricing method during times of high demand. Explain briefly.

D. Market segmentation happens in which kind of price discrimination. Elucidate with the help of examples.

**[4 + 2 + 2 + 2 =10 Marks]**

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