**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**FIRST TRIMESTER (Batch 2022-24)**

**END TERM EXAMINATION, Nov-2022**

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| Course Name | **Managerial Economics** | Course Code | **Eco-40401** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**Instruction:**

* All questions are mandatory.
* Only non-Scientific calculators are permitted, and the exchange of calculators is not allowed.

**Q:1**

Suppose the demand equation for good X is given by

Qdx = 500 – 0.4Px + 0.1Py + 0.05M

Research shows that the prices of related goods are given by Py = $ 4,000, while the average income of individuals consuming this product is M= $ 45,000.

**a.** How many units of good X will be purchased when Px = $ 6,000?

**b.** Indicate whether Good Y is a substitute or complement for good X, respectively. Use cross price elasticity to identify the same. Analyse how an increase in price of good Y by 5% will affect the demand of good X?

**c.** Calculate the point price elasticity of demand under current conditions. Is it elastic or inelastic? Suppose prices are dropped by 4%, how should it affect the demand of good X?

**d.** Derive the specific equation for demand curve. Suppose the supply equation is given as:

Qs = 2500 + 0.1Px, then identify the market equilibrium.

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

**Q: 2**

**A.** From the following payoff matrix, where the payoffs are profits or losses of the two firms, assess the optimal strategy for each firm using a method applicable.

|  |
| --- |
|  **EICHER** |
|  **TATA** |  | Build large | Build medium | Build small |
| Build large | 2,20 | 10,10 | 18,9 |
| Build medium | 8,11 | 17,17 | 20,18  |
| Build small | 9,15 | 15,16 | 18,18 |

**B.** Analyze the following statements with sufficient arguments, details and examples (You may choose to agree/disagree with the given statements):

1. The firms in a perfect market should shut down as soon as they identify they are making losses.
2. Higher the barriers to entry created by firms, more shall be the market power.
3. OPEC nations are a typical form of collusive oligopoly
4. The demand curve of a monopolist is perfectly inelastic i.e., parallel to price axis.
5. A monopolistic firm does not have much of the choices to fix their own prices.

**[2.5 + 7.5 = 10 Marks]**

**Q: 3**

1. Differentiating customers on the basis of their age / gender will be considered as which degree of price discrimination? Comment citing the difference between the three degrees of price discrimination.
2. Any firm belonging to any market structure can practice price discrimination. Assess the statement with necessary conditions enabling firms to benefit from it.
3. Discuss the pricing strategy adopted by Uber and Ola.
4. Identify the impact on market equilibrium if government puts a price ceiling on onions at Rs. 60.
5. Discuss the impact on equilibrium if the labor cost has gone up in construction sector.

**[5 \* 2 = 10 Marks]**

**Q: 4**

1. Complete the table of short run production costs (missing values) as given below (please explain the calculation part as well, else the answers will not be considered) (All data in dollars)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Quantity of Output****(Q)** | **Total Variable Cost (TVC in $)** | **Total Fixed Cost (TFC in $)** | **Total Cost (TC in $)** | **Average Variable Cost****(AVC in $)** | **Average Total Cost****(ATC in $)** | **Marginal Cost****(MC in $)** |
| **0** | **0** |  | **10** |  |  |  |
| **1** |  |  |  |  |  | **10** |
| **2** |  |  |  | **8.5** |  |  |
| **3** |  |  |  |  | **11.67** |  |
| **4** | **40** |  |  |  |  |  |
| **5** |  |  |  |  |  | **20** |
| **6** |  |  |  | **19** |  |  |

1. Comment what leads to economies of scale and what leads to economies of scope citing examples.
2. Suppose a company has average variable cost as INR 25 and it decides to sell at INR 40. The fixed cost of the company is INR 75,000. Find the breakeven sales in terms of units as well as revenue. Also, what should be selling price per unit if the breakeven point needs to be brought down to 3000 units.

**[5 + 2 + 3 = 10 Marks]**

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