**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM**

**FIRST TRIMESTER (Batch 2021-23)**

**END TERM EXAMINATION, OCT-2021**

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

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**Note: All questions are mandatory.**

**Q:1** From the following payoff matrix, where the payoffs are profits or losses of the two firms, determine (a) whether Firm A has a dominant strategy; (b) whether Firm B has a dominant strategy, and (c) the optimal strategy for each firm.

|  |  |  |  |
| --- | --- | --- | --- |
| **Firm A** |  | **Firm B** | |
| **Low Price** | **High Price** |
| **Low Price** | **(1 , 1)** | **(3, -2)** |
| **High Price** | **(-2, 3)** | **(2, 2)** |

**[ 1.5 + 1.5 + 2 = 5 Marks ]**

**Q: 2** Comment on following statements with sufficient arguments and examples (You may choose to agree/disagree with the given statements): (Answer in not more than 3 lines)

1. It is advisable to reduce the prices in a highly elastic market in order to increase total revenue
2. The market for life saving drugs is advertisement elastic
3. A certain car manufacturer regards his business as highly competitive because he is keenly aware of his rivalry with the other car manufacturers. Like the other manufacturers, he undertakes vigorous advertising campaigns seeking to convince potential buyers of the superior quality and better style of his automobiles and reacts very quickly to claims of superiority by rivals. Is this the meaning of perfect competition?
4. Impact on the equilibrium price and quantity of Air-India flights as customers assume better services after the acquisition by Tata group.
5. Impact on the supply of onions, if the farmers see a better profit in exotic vegetables like broccoli.

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

**Q:3** Suppose General Motors estimated the following demand equation for Chevrolet automobiles:

QC = 100,000 – 100PC + 2,000N + 50M + 30PF – 1,000PG + 3A + 40,000PI

Where,

QC = Quantity demanded per year of Chevrolet automobiles; PC = Price of Chevrolet automobiles in dollars; N = Population of United States in millions; M = Per capita disposable income, in dollars; PF = Price of Ford automobiles, in dollars; PG = Price of gasoline in cents per gallon; A = Advertising expenditures by Chevrolet in dollars per year; PI = Credit incentives to purchase Chevrolets in percentage points.

1. Calculate Price elasticity of demand; Advertisement elasticity and Income elasticity. Comment on the values so arrived. Given: Average PC = $ 9,000; N = 200 million; M = $ 10,000; PF = $ 8,000;

PG = 80 cents; A = $ 200,000 and PI = 1

**B.** Derive the equation of specific demand curve for Chevrolets.

**C.** Suppose the supply equation of Chevrolet cars is given by QSC = 8,00,000 + 20 PC, find the market equilibrium. **[ 6 + 2 + 2 = 10 Marks ]**

**Q: 4**

1. Lower movie ticket rates during mid-week qualify for which degree of price discrimination and why?
2. Complete the table of short run production costs as given below (please explain the calculation part as well)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Quantity of Output**  **(Q)** | **Total Variable Cost (TVC)** | **Total Cost (TC)** | **Average Variable Cost**  **(AVC)** | **Average Total Cost**  **(ATC)** | **Marginal Cost**  **(MC)** |
| 0 | 0 |  |  |  |  |
| 1 | 60 | 2060 |  |  |  |
| 2 | 30 |  |  |  |  |
| 3 | 48 |  |  |  |  |

1. Suppose a company has average variable cost as INR 15 and it decides to sell at INR 20. The fixed cost of the company is INR 54,000. 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 6,000 units.

**[ 3 + 7 + 5 = 15 Marks ]**

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