**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 – 2Px - 0.75Py + 10Pz - 0.50M

Research shows that the prices of related goods are given by Py = $ 1,000 and Pz = $ 50, while the average income of individuals consuming this product is M= $ 10,000.

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 = $ 25?

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 a decrease in price have on the Total Revenue?

e. Determine the demand function and inverse demand function for good X. **(5 Marks)**

**Question 2**.Several changes are affecting the market for two wheelers. Predict how each of the following events (given below) will impact the equilibrium price and quantity in the market for two wheelers graphically and justify it with proper reasoning.

a. Two wheelers are becoming more fuel efficient leading to an increase in mileage.

b. A major discovery of new technology has been made, thereby reducing the cost of manufacturing two wheelers.

c. The economies of major two wheeler-using nations are in recession.

d. For major two wheeler manufacturing nations, political uncertainty has disrupted the production process.

e. The price of two wheelers increases above the equilibrium price.  **(5 Marks)**

**Question 3**.Suppose, after completing your graduation, you decided to go for an MBA instead of doing a full time job. Now you have invested around Rs 8, 00,000 in MBA for two years. And also, let’s say, if you would have joined a job after graduation, you could have earned a decent Rs 4, 00,000 per annum.

1. What is the cost of MBA to you? Calculate this, from an economic perspective (taking the opportunity cost into account).
2. After completion of your MBA, how much worth of job you should get in order to be not in loss atleast. **(5 Marks)**

**Question 4.**

1. In December, the price of Christmas trees rises and the number of trees sold also rises. Is this a violation of the law of demand?
2. Find the slope of an assumed linear demand curve for theater tickets, when persons purchase 1,000 at Rs 5.00 per ticket and 200 at Rs 15.00 per ticket.
3. Given the following data:

P = 80 - Q (Demand)

P = 20 + 2Q (Supply)

Now suppliers must pay a tax of Rs 6 per unit. Find the new equilibrium price-inclusive price and quantity. **(5 Marks)**

**Question 5**. Describe the concept of Dominated strategy. In the example given below, how do we arrive at the solution of the game by elimination of dominated strategies?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 |

**(5 Marks)**

**Question 6.**

Consider a price taking firm that has total fixed cost of $50 and faces a market determined price of $2 per unit for its output. The wage rate is $10 per unit of labor, the only variable input. Using the following table, answer the questions below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Units of labor | Output | Marginal Product | Marginal revenue product | Marginal cost | Profit |
| 3 | 30 |  |  |  |  |
| 4 | 50 |  |  |  |  |
| 5 | 65 |  |  |  |  |
| 6 | 77 |  |  |  |  |
| 7 | 86 |  |  |  |  |
| 8 | 94 |  |  |  |  |
| 9 | 98 |  |  |  |  |
| 10 | 96 |  |  |  |  |

a. Fill in the blanks in column 3 of the table by computing the marginal product of labor for each level of labor usage.

b. Fill in the blanks in column 4 of the table by computing the marginal revenue product for each level of labor usage.

c. Fill in the blanks in column 5 of the table by computing marginal cost.

d. Fill in the blanks in column 6 with the profit earned at each level of labor usage.

**(5 Marks)**

**Question 7.**

1. A firm its output in a perfectly competitive market. The firm's total cost function is given in the following schedule:

|  |  |
| --- | --- |
| Output (units) | Total cost ($) |
| 0 | 50 |
| 10 | 120 |
| 20 | 170 |
| 30 | 210 |
| 40 | 260 |
| 50 | 330 |
| 60 | 430 |

The prevailing market price is $7 per unit. What is the firm's profit maximizing output level?

**(2 Marks)**

1. Write short notes on the following :
2. Price discrimination and its different types
3. Cost plus pricing method
4. Comparison between Perfect competition and Monopolistic competition

**(8 Marks)**

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