Roll Number: 101918039

**_Thapar Institute of Engineering & Technology, Patiala_**
**_(Deemed University)_**
School of Humanities & Social Sciences
Mid Semester Examination

BE First year CSBS (Semester-2)

**Course Code:** UHU007
**Course Name:** Fundamentals of Economics
Tuesday, 13:00 – 15.00 Hrs
Name of Faculty: Dr Ravi Kiran

March 03, 2020
Time: 2 Hours, M. Marks: 30

**Instructions: Attempt all questions. Assume missing value (if any)**

| **Question Description** | **Marks** |
|---|---|

**Q1 a)** Explain whether the following would cause an extension in supply or increase in supply of tires: **(3)**
i) Increase in tax on tires by government
ii) reduction in price of tires
iii) new technology lowers production cost

**b)** Should the price of a subway ride or bus ride be increased or decreased if total revenue needs to be increased? What about the price of a taxi ride? **(2)**

**Q2 a)** Calculate elasticity of demand and explain whether these are substitutes or complementary goods **(3)**
i) The price of desktop computers were reduced from Rs 50000/- to Rs 25000/-. It was observed that the sale of printers increased from 50 printers to 150 printers.
ii) The price of butter increased from Rs 10 per 100 gms to Rs 10.50. The consumption of margarine increased from 500 gms to 600 gms.

**b)** State giving reason whether the following is true or false: **(3)**
i) Isoquants are negatively sloped
ii) Marginal cost is always greater than Average cost

**Q3 a)** Table 1 depicts output corresponding to units of labour for Arihant computers. **(4)**

Table 1: Output and units of labour

| Units of Labour | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Output | 50 | 110 | 145 | 175 | 175 | 150 |

Explain the law underlying the change in output as input is changed. Also identify the various stages in total product.

**b)** An isoquant $I_b$ is twice as far away from the origin as Isoquant Ia. Does it follow that $I_b$ represents an output twice as large as Ia. Why or why not? **(3)**

**Q4 a)** A consumer buys 80 units of a good at a price of Rs. 4 per unit. When the price falls, he buys 100 units. If price elasticity of demand is (–)1, find out the new price. **(3)**

**b)** From the data in table 2 relating to cost of a firm, calculate: (i) average fixed cost, and (ii) total variable cost; iii) average variable cost **(3)**

Table 2: Cost of a firm

| Output (Units) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|
| Costs | 60 | 78 | 90 | 102 | 112 | 120 | 126 | 130 |

**Q5 a)** Explain the effect of price ceiling on consumer & producer surpluses **(4)**

**b)** Explain the difference in Ordinal and Cardinal Utility **(2)**