

Instructions: - All questions are Compulsory.

Use of Non-scientific calculators is allowed.

Q.No.1 Explain in brief Any Five of the following

5 x 4=20

1. Explain the concept of opportunity cost principle with an example.
2. Calculate the discounting percentage rate for an amount of Rs.1,00,000 to be received after four years and whose present value is Rs.76289.5212
3. Explain the concept of risk and uncertainty.
4. Calculate the equilibrium price and quantity for a product which has a demand and supply function as $Q^d = 1500 - P$ and $Q^s = 300 + 4P$
5. Explain how availability of substitutes affects price elasticity of demand.
6. What is demand forecasting? Briefly explain the levels at which it is undertaken.

Q.No.2 Explain in brief Any six of the following

6 x 4=24

1. Define law of returns to scale. State its assumptions
2. Briefly explain the term long run production function.
3. Explain the third stage of law of returns to scale.
4. Calculate the weighted average cost if a firm producing three products A,B and C in an equal ratio have variable costs per unit as Rs 10, Rs12 and Rs 15 respectively, its total fixed cost is Rs.1500 and total output is 150 units.
5. Briefly explain the concepts of Economic and Accounting costs.
6. If a firm produces 300 units of a commodity at an average variable cost of Rs.8 and average fixed cost of Rs.10, calculate its profits if its total revenue amounts to Rs.6,000.
7. Write a note on Economies of Scope.
8. Write a note on Costs of joint products.

Q.No.3

12

A.**(6+6)**

1) Cadbury Ltd determines that the demand curve for its celebrations chocolate pack is $P = 2000 - 50Q$, where P is the price of the chocolate and Q is the number of chocolate packs sold per month.

a) What is the E_p value if price is Rs 500? b) What is the E_p value if 35 units are sold? c) At $E_p = -0.5$ how many units will be sold?

2) If for a product the arc advertising elasticity is $E_A = 0.6364$ and sales volume is 5000 units, calculate the new sales if its advertising expenditure is increased from Rs.30,000 to Rs.40,000.

Or

B. The production and marketing teams at *Nike* are trying to analyse the change in demand for their sports shoes and seek your advice. The company provides its data which states that the demand for their shoes has a price, income and advertising elasticity of around (-0.8), (1.8) and (1.5) respectively. *Nike* is planning to increase the price of its product from Rs.1,800 to Rs.2,070. However, its closest competitor *Adidas* has decided to reduce its price for a similar product from Rs 2,300 to Rs. 2,024. *Nike* has a cross elasticity of (0.7) with *Adidas* for this product. *Nike's* data further states that the income level and advertising expenditure would increase by 3% and 5% respectively. If the current quantity sold by *Nike* is one thousand units, calculate expected % change in revenue and advise if *Nike's* decision to increase price is correct. (Use percentage method)

Q.No.4

12

A. Explain the law of variable proportions with diagram.

Or

B. Explain the term production and various factors affecting production.

Q.No.5

12

A. If AC and AVC for $Q = 5$ is Rs.130 and Rs.30 respectively then calculate TFC, TVC, TC and AFC from the following data:

Q(units)	1	2	3	4	5	6	7	8	9	10
MC (Rs)	50	30	25	24	21	30	45	55	80	90

Or

B. If AVC for $Q = 800$ is Rs 31.25 then calculate TFC, TVC, AFC, AVC and MC from the following data:

Q(units)	100	200	300	400	500	600	700	800
TC(Rs)	15,000	16,000	16,500	18,000	20,000	23,000	27,000	33,000

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