| UNIVERSITY WITH A PURPOSE <br> UNIVERSITY OF PETROLEUM AND ENERGY STUDIES <br> End Semester Examination, December 2021 |  |  |  |
| :---: | :---: | :---: | :---: |
| Q.No | Section A <br> (Type the answers in test box) | Marks | COs |
| Q1 | The objective of the firm is : <br> A. Revenue maximization <br> B. Profit maximization <br> C. Revenue maximization and cost minimization simultaneous <br> D. None of the above. | 2 | CO1 |
| Q2 | When demand is inelastic, an increase in price leads to : <br> A. an increase in total revenue <br> B. a decline in total revenue <br> C. no change in total revenue <br> D. a decrease in profit. | 2 | CO1 |
| Q3 | Which of the following statements is true ? <br> A. when demand is elastic, marginal revenue is negative <br> B. when demand is unitary elastic, margir..al revenue is zero <br> C. when demand is inelastic, marginal revenue is positive <br> D. all of the above | 2 | CO1 |
| Q4 | In the long run : <br> A. Fixed cost is zero <br> B. Total cost equals to variable cost <br> C. Total variable cost is less than total cost <br> D. Both $(\mathrm{A})$ and $(\mathrm{B})$ are correct. | 2 | CO1 |
| Q5 | Opportunity costs include: <br> A. Explicit costs <br> B. Explicit and implicit costs <br> C. Implicit cost <br> D. None of the above | 2 | CO1 |
| Q6 | An important relationship between production and cost can be represented by which of the following statements :- <br> A. When average or marginal products are increasing, average or marginal costs are increasing <br> B. When average or marginal products are increasing, average or marginal costs are decreasing <br> C. When average or marginal products are decreasing, average or marginal products are decreasing. <br> D. There is no relationship between production and cost. | 2 | CO1 |
| Q7 | Cross elasticity of demand is: <br> A. Negative for complementary goods <br> B. Negative for substitute goods. <br> C. Unitary for inferior goods. <br> D. Positive for inferior goods | 2 | CO1 |
| Q8 | The Iso-quant curve reflects. <br> A. All the possible combinations of two inputs that give the same level of output. <br> B. All the possible combinations of two inputs that give different levels of output. | 2 | CO1 |


|  | C. All the possible combinations of two product, where a producer is indifferent because it gives the same profit. <br> D. None of the above. |  |  |
| :---: | :---: | :---: | :---: |
| Q9 | Which of the following is not a long run concept? <br> A. Expansion Path <br> B. Isoquant <br> C. Returns to scale <br> D. Law of variable proportions | 2 | CO1 |
| Q10 | If demand equation is given by $\mathrm{D}=1000-\mathrm{P}$, and the supply equation is given by $\mathrm{S}=100+4 \mathrm{P}$, price would be <br> A. 160 <br> B. 180 <br> C. 170 <br> D. 140 | 2 | CO1 |
|  | Section B | Marks |  |
| Q1 | Explain the concept of Total fixed cost , Total variable cost and total cost. How are they related to each other? Illustrate them through curves. Is the distinction between the fixed cost and variable cost relevant in the long run? | 5 | CO 2 |
| Q2 | What is difference between expilicit cost and implicit costs? Should both be considered for optimal business decision-making by the firm? | 5 | CO2 |
| Q3 | What are the different steps involved in a decision making process of a company. | 5 | CO2 |
| Q4 | Define 'Production Function'. Explain with a diagram, the three stages of the Law of Variable Proportions. | 5 | CO2 |
|  | Section C | Marks |  |
| Q1 | What is Elasticity of Demand? Explain Price, Cross and Income Elasticity of Demand used in managerial decision making process. | 10 | CO3 |
| Q2 | Explain in detail the nature and scope of Managerial Economics. How Micro Economics differs from Managerial Economics? | 10 | CO3 |
| Q3 | The demand function of monopolist firms is given as $\mathrm{P}=240-10 \mathrm{x}$; its cost function is $C=x^{3}-12 x^{2}+220 x-570$. Determine the profit maximizing level of output, price $\&$ total maximum profit | 10 | CO3 |
|  | Section D | Mark |  |
| 1 | A firm has estimated the following demand function for its product: $Q=\mathbf{1 0 0} \mathbf{- 5 P + 5 I + 1 5 A}$ where $Q$ is quantity demanded per month in thousands, $P$ is product price, $I$ is an index of consumer income, and $A$ is advertising expenditures per month in thousands. Assume that $\boldsymbol{P}=\mathbf{\$ 2 0 0}, I=\mathbf{1 5 0}$, and $\boldsymbol{A}=\mathbf{3 0}$. Use the point formulas to complete the elasticity calculations indicated below. <br> A. Calculate quantity demanded. <br> B. Calculate the price elasticity for demand. Is demand elastic, inelastic, or unit elastic? <br> C. Calculate the income elasticity of demand. Is the good normal or inferior? Is it a necessity or a luxury? <br> D. Calculate the advertising elasticity of demand | 15 | CO4 |

2 How is a break-even analysis useful and important for a firm for making decisions? Using linear

Given the following cost, revenue function and profit
Fixed cost = Rs. 10,000
Sell price = Rs. 20
Average variable cost $=$ Rs. 15
Targeted Profit = Rs. 35,000
(a) Find out the break even point level of output
(b) Find out targetrd profit level of output.

