Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End-Term Examination, January-2021

Course: Managerial Economics **Semester: I**
Program: MBA Digital Business **Time: 3 Hours**
Course code: ECON7006 **Max. Marks: 100**

SECTION A

Note: Answer all the questions below		**Marks**	**CO**
1.	Explain decision-making process of business.	5	CO1
2.	Explain Cross elasticity of demand and Promotional elasticity of demand.	5	CO2
3.	Which of the following commodities has the most inelastic demand and why? (a) Soap (b) Salt (c) Cigarettes, and (e) Ice-cream	5	CO2
4.	Distinguish between cost function and production function.	5	CO1
5.	What is the marginal rate of technical substitution?	5	CO1
6.	How does the study of managerial economics help a business manager in decision-making?	5	CO2

SECTION B

Note: Answer all the questions below		**Marks**	**CO**
Q 1	Show with the isoquant and iso-cost apparatus, a firm is in equilibrium with regard to the use of factor when the ratio of marginal products of factors to their respective price are equal.	10	CO3
Q 2	Explain each of the following concepts with the help of a diagram. **A.** Consumer Surplus **B.** Producer Surplus	10	CO3
Q 3	A biscuit producing company has the following variable cost function: $TVC = 200Q + 9Q^2 + .25Q^3$ if the company has fixed cost are equal to Rs. 150 Lakhs. Find out. 1. Total Cost function (TC) 2. Marginal cost function (MC) 3. Average variable cost function (AVC) 4. Average total cost function (ATC)	10	CO3

Q 4	What is profit? Derived the condition of Maximum & Minimum profit. If the average revenue (AR) of a firm is P= 45- 0.5x & Total cost (TC) = x3-8x^2+57x+2. Find the output at which firm is getting maximum profit and also find out the marginal revenue (MR) & marginal cost (MC). .	10	CO4
Q 5	Explain the following cost concepts with examples a) Implicit cost b) Variable cost c) Private cost and social cost d) Explicit cost.	10	CO2
SECTION-C			
Q 1	What is mean by production function? Distinguish between short run production function & Long run production function. Explain law of return to variable factor & law of returns to scale. Illustrate your answer graphically. **Or** A firm has estimated the following demand function for its product: $\boldsymbol{Q = 100 - 5P + 5I + 15A}$ 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 P = Rs. 200, I = Rs.150, and A = Rs.30. Use the point formulas to complete the elasticity calculations indicated below. **A.** Calculate quantity demanded. **B.** Calculate the price elasticity for demand. Is demand elastic, inelastic, or unit elastic? **C.** Calculate the income elasticity of demand. Is the good normal or inferior? Is it a necessity or a luxury? **D.** Calculate the advertising elasticity of demand	20	CO4