Enrolment No:



UPES

End Semester Examination, May 2024

Course: Economics for Engineers Semester: IV

Program: B.Tech Sustainability Engineering Time: 03 hrs.

Course Code: SUEN2006_2 Max. Marks: 100

Instructions: Read the instructions provided for every question properly before attempting the

answer.

SECTION A (5Qx4M=20Marks)

S. No.		Marks	СО
Q1.	Harry's income declines, and as a result, he buys more pumpkin juice. Is pumpkin juice an inferior or a normal good? What happens to Harry's demand curve for pumpkin juice?	4	CO2
Q2.	Over time, technological advances increase consumers' incomes and reduce the price of smartphones. Each of these forces increases the amount consumers spend on smartphones if the income elasticity of demand is greater than and the price elasticity of demand is greater than a. zero; zero b. zero; one c. one; zero d. one; one	4	CO2
Q3.	Define and give an example of a common resource. Without government intervention, will people use this good too much or too little? Why?	4	CO3
Q4.	A firm is producing 1,000 units at a total cost of \$5,000. When it increases production to 1,001 units, its total cost rises to \$5,008. For this firm, a. marginal cost is \$5, and average variable cost is \$8. b. marginal cost is \$8, and average variable cost is \$5. c. marginal cost is \$5, and average total cost is \$8. d. marginal cost is \$8, and average total cost is \$5.	4	CO2

	Show yo	our steps.				
Q5.		Explain the concept of urban bias. What policies are associated with it, and what are their likely effects on urban and rural areas?			4	CO4
			SECTI			
			(4Qx10M=	40 Marks)		
Q6.	observe	What are the principal economic forces behind the urbanization trends observed worldwide? Do the benefits of agglomeration of population and economic activities always outweigh the costs? Explain.			10	CO4
Q7.	Suppose that business travellers and vacationers have the following demand for airline tickets from Chicago to Miami:					
	Price	Quantity Demanded (Business travellers)	Quantity Demanded (Vacationers)			
	\$150	2100 tickets	1000			
	200	2000	800			
	250	1900	600		(6+4)	CO2
	300	1800	400			
	a) As the price of tickets rises from \$200 to \$250, what is the price elasticity of demand for i) business travellers and (ii) vacationers? (Use the midpoint method in your calculations.)b) Why might vacationers and business travellers have different elasticities?					
Q8.	Some observers believe that the current levels of pollution in our society are too high.			5+5		
	a) If society wishes to reduce overall pollution by a certain amount, why might different amounts of reduction at different firms be efficient?					
	b) Command-and-control approaches often rely on uniform reductions among firms. Why are these approaches generally unable to target the firms that should undertake bigger reductions?					CO1
	OR					
	What is the environmental Kuznets curve? What factors may make it plausible? In what cases does it seem implausible?			10		

Q9.	Bob's lawn-mowing service is a profit-maximizing, competitive firm. Bob mows lawns for \$27 each. His total cost each day is \$280, of which \$30 is a fixed cost. He mows 10 lawns a day. What can you say about Bob's short-run decision regarding shutdown and his long-run decision regarding exit?	10	CO2
	SECTION-C (2Qx20M=40 Marks)		
Q10.	Explain the difference between purely private and public goods and how it applies to environmental problems faced by developing countries. What are the implications of the free-rider problem for allocation of a public good?	20	CO3
Q11.	Population growth in developing nations has proceeded at unprecedented rates over the past few decades. Compare and contrast the present rate of population growth in less developed countries with that of the modern developed nations during their early growth years. What has been the major factor contributing to rapid developing country population growth since the Second World War?		
	OR	20	CO1
	"Social and institutional innovations are as important for economic growth as technological and scientific inventions and innovations." What is meant by this statement? Explain your answer.		