Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/MBA (NEW)/SEM-1 (PT & FT)/MB-101/2010-11
2010-11
BUSINESS ECONOMICS – I

Time Allotted : 3 Hours   *Full Marks :* 70
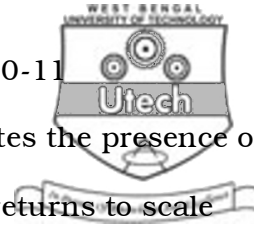
The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A
(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :   10 × 1 = 10
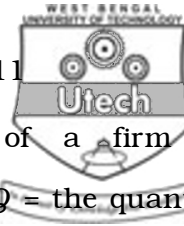
    i) The demand for personal computers (PCs) is downward sloping and price-elastic. As the price of PCs fell through the 1990s, all else remaining the same

        a) consumer surplus rose and total expenditures on PCs fell

        b) consumer surplus fell and total expenditures on PCs fell

        c) consumer surplus rose and total expenditures on PCs rose.

        d) consumer surplus fell and total expenditures on PCs rose.

16001   [Turn over

ii) A U-shaped long-run AC curve indicates the presence of

   a) increasing and then decreasing returns to scale

   b) decreasing and then increasing returns to scale

   c) inefficient production

   d) the law of diminishing returns to variable proportions.

iii) Suppose, the income elasticity of demand for wheat is 0·45. This implies that, if income rises

   a) consumers will buy less wheat

   b) consumers will buy proportionately more wheat so that the share of income spent on wheat rises

   c) consumers will continue to buy the same amount of wheat because wheat is a necessity

   d) consumers will buy more wheat, but proportionately less, so that the share of income spent on wheat falls.

iv) The demand curve for rental apartments is $D = 960 - 7P$ and the supply curve is $S = 160 + 3P$ where P is the rent of apartments. The government makes it illegal to charge a rent higher than 35. How much excess demand for rental apartments will there be ?

   a) 149   b) 450

   c) 364   d) 726

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v) Which of the following would shift the demand curve for new textbooks to the right ?

a) a fall in the price of paper used in publishing texts

b) a fall in the price of equivalent used textbooks

c) an increase in the number of students attending college

d) a fall in the price of new textbooks.

vi) Sita buys 10 kg of onion per month when the price is Rs. 7·50 per kg. If the price falls to Rs. 5·00 per kg, she buys 30 kg of onion. What is her arc (average) elasticity of demand over this price range ?

a) – 1·33

b) – 2

c) – 2·5

d) – 6.

vii) In the short run

a) there are no fixed inputs

b) all inputs are fixed

c) at least one input level cannot be varied

d) labour input cannot be varied.

16001   3   [Turn over

viii) Suppose, the production function of a firm is represented by $Q = 4 + 5L + 3K$ where Q = the quantity of output, L = number of man-hours used and K = number of machine-hours used. Which of the following statement would then be true ?
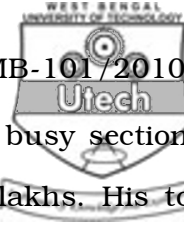
a) the production function exhibits the law of diminishing marginal product

b) the production function exhibits increasing returns to scale

c) the production function exhibits diminishing returns to scale

d) the production function exhibits constant returns to scale.

ix) If the demand function is given by $Q = 10 - 2P$, then the corresponding marginal revenue equation is

a) $MR = 10 - 4P$ 　　　　b) $MR = 5 - 2Q$

c) $MR = 5 - Q$ 　　　　　d) $MR = 10 - Q$.

x) If total cost is given by $TC = 10Q - Q^2 + 0 \cdot 3Q^3$, then the average cost is a minimum when

a) $Q = 3 \cdot 33$ 　　　　b) $Q = 0 \cdot 0$

c) $Q = 1 \cdot 67$ 　　　　d) $Q = 0 \cdot 6$.

xi)   Kamal owns a small grocery store in a busy section of Kolkata. His annual revenue is Rs. 4 lakhs. His total cost (including his own Rs. 60,000 salary) is Rs 3·6 lakhs per year. A supermarket chain wants to hire him has its manager for Rs. 1·2 lakhs per annum. Kamal's economic profit is

a)   Rs. 40,000   b)   Rs. 20,000

c)   Rs. 80,000   d)   Rs. 1,20,000.

GROUP – B
(Short Answer Type Questions)
Answer any *three* of the following.   3 × 5 = 15

2.   Why does demand curve slope downward ?

3.   Define an indifference curve. What assumptions are required to draw an indifference curve ?

4.   How do ridge lines separate economic region of production from that on uneconomic region ?

5.   Why the short-run average cost curve is *U*-shaped ?

6.   Distinguish between perfect competition and monopoly.

GROUP – C

(**Long Answer Type Questions**)

Answer any *three* of the following. 3 × 15 = 45

7. State and explain the law of variable proportions. Write down the assumptions and limitations of this law. Why does an entrepreneur prefer to operate in Stage – II of the production process ? (2 + 4) + (2 + 2) + 5

8. If $TC = 100 + 60Q - 12Q^2 + Q^3$, then find

   a) the equation of *TVC*, *AVC* and *MC* functions

   b) the level of output at which *AVC* and *MC* are minimum and prove that the *AVC* and *MC* curves are *U*-shaped

   c) *AVC* and *MC* for the level output at which the *AVC* curve is minimum. (1 + 1 + 1) + (3 + 4) + (2 + 3)

9. a) Define perfect competition. How would you determine the equilibrium level of output under perfect competition ?

   b) If the demand function faced by a firm is $Q = 90 - 2P$ and cost function is $TC = Q^3 - 8Q^2 + 57Q + 2$, then determine the profit maximizing level of output. 1 + 9 + 5

10. Define monopoly. Show the short-run and long-run equilibrium of a monopolist firm.   1 + 7 + 7

11. What is the price effect ? Show that price effect is the resultant of substitution effect and income effect.   3 + 12

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