Name : ....
Roll No. : ....
Invigilator's Signature : ....

CS/MBA(NEW)/SEM-1(FT & PT)/MB-101/2011-12

2011

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) A consumer reacheds equilibrium when

a) $MRS_{xy} > P_x / P_y$　　b) $MRS_{xy} < P_x / P_y$

c) $MRS_{xy} = P_x = P_y$　　d) $MRS_{xy} = P_x / P_y$ ..

ii) A short-run production function refers to a situation when

a) all inputs are variable

b) only one input is variable

c) no input is variable

d) none of these.

iii) When price decreases and Total Revenue increases or when Price increases and Total Revenue decreases, the value of price elasticity is

a) greater than 1 b) less than 1

c) equal to one d) negative.

iv) Returns to a factor in the short-run is an attribute of

a) plant & machinery b) a fixed input

c) a variable input d) none of these.

v) $Q = a - bP$ is a demand function. When marginal revenue is zero, the price elasticity of demand is

a) 0 b) 1

c) b d) none of these.

vi) Shut-down point is a situation where

a) marginal cost curve meets average variable cost

b) MC curve meets the AC curve

c) MC curve meets the demand curve

d) Fixed cost curve is tangential to MC curve.

vii) Air pollution created by Thermal Power Industry is an example of

a) positive externalities

b) negative externalities

c) both (a) & (b) are true

d) both (a) & (b) are false.

viii) If a monopolist has only fixed costs and chooses that output at which marginal cost equals price, it will

a) earn positive economic profits

b) earn zero economic profits

c) incur a loss equal to its variable costs

d) incur a loss equal to its fixed costs

e) cannot tell from the information given.

ix) If a 25% rise in quantity of inputs leads to 25% rise in output, it can be regarded as

a) increasing returns to scale

b) decreasing returns to scale

c) constant returns to scale

d) diseconomies of scale.

x) The demand curve faced by a monopoly is a rectangular hyperbola in the price-quantity space. It has no variable cost, and its fixed cost is F > 0.

Then :

a) there is no profit maximizing output level

b) the monopolist can produce any output it chooses and earn the same profit

c) there is a unique leved of profit maximizing output

d) none of these.

xi) The term oligopoly refers to

a) few buyers dominating the industry

b) few sellers dominating the industry

c) a single seller who controls a group of sellers

d) a restricted number of sellers.

xii) Ram has a budget of Rs. 200; he spends on 2 goods Coke and Pizza. Only coke is Rs. 10 per glass and Pizza costs Rs. 40 per piece. An observer finds that Ram spends Rs. 180 and gives the rest away to a poor man. We know that Ram does not get only special satisfaction from being benevolent. We can then say that Ram's preferences do not satisfy :

a) transitivity
b) non-satiation
c) reflexivity
d) completeness.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Let the TC for a competitive firm be $TC = 0 \cdot 1q^3 - 2q^2 + 15q + 15$.

   a) Find out the supply curve of this firm and for the industry, if the industry has fifty firms.

   b) If a fixed tax of Rs. 10 is imposed on each firm, what happens to the market supply curve ? 3 + 2

3. Explain why a monopoly does not have a supply curve.

4. Explain the rationale behind price discrimination by a monopoly. When is this possible ? 3 + 2

5. If a firm's Long Run Average Cost (LRAC) curve is *V*-shaped, show that except at its minimum point, the LRAC does not pass through the minimum points of the Short Run Average cost curves.

6. Show that the profit maximizing monopoly is greater than the market price under price leadership with the same demand and cost curve for the price leader and the monopoly.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. A firm uses two variable inputs K and L to produce output Q, Let the production function be given by

$$Q = \text{Min} [L, K]$$

Show that for any input price combination satisfying $0 < P_L < \infty$ and $0 < P_k < \infty$, the marginal cost is constant across output levels. What happens to this marginal cost if the price of input L , P_L doubles ? Explain.

8. For a discriminating monopolist the demand functions in two markets are gives as

$$P_1 = 80 - 2q_1$$

$$P_2 = 80 - 5q_2$$

$$TC = 50 + 10 (q_1 + q_2).$$

a) Find out the price levels and also the quantities sold.

b) Calculate the total profit earned by the monopolist.

10 + 5

9. Write short notes on the following : 5 × 3

i) Consumer's equilibrium in a two commodity world

ii) Marginal rate of technical substitution

iii) Law of variable proportion

iv) Block pricing

v) Substitution effect and income effect.

10. Two firm in the same industry sell their products at Rs. 10 per unit. One firm has TFC = Rs. 100 and AVC = Rs. 6, while the other firm has TFC = Rs. 300 and AVC = Rs. 3.333. Determine the break-even point of each firm.

11. Explain why all inferior goods are not Giffen goods. Under what conditions will an inferior good be a Giffen good ? Use diagrams to explain your answer. 10 + 5