Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/BBA(H), BSCM, BIRM/SEM-1/BBA-104/2011-12

2011

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 : $10 \times 1 = 10$

   i) A consumer good is rationed if the price at which it is sold is
      a) greater than the market equilibrium price
      b) less than the market equilibrium price
      c) equal to the market equilibrium price
      d) none of these.

   ii) If the quantity demanded of good X is given by

      $Q_X = \frac{K}{P_X}$, K > 0, P_X is the price of good X, then

      the marginal revenue curve is
      a) downward sloping
      b) indeterminate
      c) flat (horizontal) and lies above the horizontal axis
      d) coincides with the horizontal axis.

iii) Suppose that the demand curve faced by a monopolist is downward slopping and linear. Suppose further that it has no variable cost and its fixed cost is positive. Then its profit maximizing price (provided profit is positive) is at the point on its demand curve where

a) elasticity of demand is zero

b) elasticity of demand is positive

c) elasticity of demand is less than one

d) elasticity of demand is zero.

iv) At the profit maximizing output level of a monopolist, the marginal cost curve has to be upward rising.

a) True

b) False

c) Not necessarily true

d) Usually false.

v) If the long run production function of a firm that is a price taker in the input markets satisfies constant returns to scale then the long run average cost curve is

a) V-shaped

b) upward rising

c) downward sloping

d) horizontal.

vi) A competitive firm that is a price taker in the input market uses a single variable input L to produce a single good Q. Suppose that the production function of the firm is given by

$$Q = L^2$$

Then the marginal cost curve of the firm is

a) downward slopping
b) upward rising
c) horizontal
d) does not exist.

vii) Two firms produce a homogeneous product. Their cost per unit of output is $a > 0$. The demand curve for the product is given by

$$Q = A - bP, A > a, b > 0$$

where Q is the quantity demanded and P is the price of the product. Suppose that the firms are engaged in Cournot competition. If the two firms merge and form a single firm, then the new firm's profit will be

a) higher than the total profit of the independent firms
b) lower than the total profit of the independent firms
c) equal to the total profit of the independent firms
d) cannot say.

viii) A man runs a small transport business. He owns the trucks and the garage where they are kept. Another man offers to take over his business and pay
Rs. 4,00,000 per annum for use of the garage and the trucks. This is the best such offfer available to the owner of the business. Now the owner calculates that after paying for all the inputs, he has Rs. 4,00,000 left each year. Then

a) his profit per year is Rs. 4,00,000

b) his rent per year is zero

c) his profit per year is zero

d) his rent is Rs. 2,00,000 and profit is Rs. 2,00,000 per year.

ix) In a price leadership model of oligopoly, the market price is

a) lower than the monopoly price

b) higher than the monopoly price

c) equal to the monopoly price

d) none of these.

x) A monopolist does not have a supply curve for its product because

a) it is a price taker in the output market

b) it can select both its output and its price

c) the price is always fixed by the government

d) none of these.

xi) The essential difference between a competitive market and a monopolistic market is that

a) there are more firms in a competitive market

b) the good is homogeneous in a competitive market

c) there are more firms in a monopolistic market

d) none of these.

xii) In Ricardian theory, rent will arise only for

a) land

b) land and labour

c) capital

d) none of these.

GROUP – B

(Short Answer Type Questions)

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

2. If a firm's production function is given by

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

where Q is the quantity of output and K and L are the quantities of the variable inputs,

a) show that the isoquants are L-shaped.

b) show that given any pair of input P_L , P_K prices, $\bullet > P_L > 0$, $\bullet > P_K > 0$, the marginal cost of production remains constant for all output levels. 2 + 3

3. Explain using a diagram why the LRAC does not touch the minimum points of the SRAC's if it is U shaped, except at its minimum point.

4. Explain why the demand curve for an inferior good does not have to be upward rising.

5. Explain briefly why small changes in input prices do not affect the price in a kinked demand curve model.

6. Show that a monopoly whose demand curve is given by a rectangular hyperbola and has only fixed costs of production can choose any output level to maximize profits.

GROUP – C

(Long Answer Type Questions)

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

7. Distinguish between the short and long run in a competitive market. Explain carefully why in the long run all firms earn zero profits.

8. A monopoly sells its product in two markets, market – 1 and market – 2. The (inverse) demand functions in the two markets are given by

   $$P_1 = 1000 - Q_1$$

   $$P_2 = 1000 - 2Q_2$$

   where P_i , $i = 1, 2$ is the price in market i ; Q_i , $i = 1, 2$ is the quantity in market i.

   Find

   i) the prices and quantities sold in the two markets

   ii) the profit in each market, if the total cost function is given by

   $$TC(Q) = 50{,}000 + 100\,Q.$$

9. Explain carefully why a monopolist can have a profit maximizing output even if its marginal cost curve is downward sloping. Why is this not true for a competitive firm ? Make sure that you explain the intuitive argument that lies below this.

10. What do you mean by economic rent ? Differentiate between the Ricardian theory of rent and the modern theory of rent.

5 + 10

11. Write short notes on any *three* of the following : 3 × 5

a) Law of variable proportion

b) Selling cost

c) Basic problems of an economy

d) Income elasticity.