



University of Kelaniya - Sri Lanka  
Centre for Open and Distance Learning



Faculty of Commerce and Management Studies

Bachelor of Commerce Special Degree Examination (External) – 2008

Year I

BCOME 1025 – Microeconomics

No. of questions: Seven (07)

Time: 03 hours

Answer any five (05) questions.

Graph papers are provided.  
You are allowed to use calculators.

1)

i). 'The origin of economics lies in endless human wants and scarcity of resources'.  
Discuss.

(12 marks)

ii). What are the uses and limitations of microeconomic theories.

(08 marks)

(Total 20 marks)

2)

i). 'In a free market, disequilibrium itself creates the condition for equilibrium'. Do you agree with this statement. Explain.

(06 marks)

ii). The following table gives the data on demand and supply schedules of a commodity.

Price ( $P_x$ )	Quantity Demanded ( $Q_{dx}$ )	Quantity Supplied ( $Q_{sx}$ )
6	0	120
4	40	80
2	80	40
0	120	0

a) Draw demand and supply curves on one set of axes.

(03 marks)

b) Drive demand and supply functions.

(05 marks)

c) Place them in an augmented matrix and find the equilibrium price and quantity by solving the augmented matrix.

(06 marks)

(Total 20 marks)

3)

- i). How is the point elasticity on a curvilinear demand curve measured? (05 marks)
- ii). Prove that two intersecting straight line demand curves have different elasticities at the point of intersection. (06 marks)
- iii). Determine whether the demand function,  $P = 20 - 0.2Q_d$ , is inelastic, elastic or unitary at the below given price levels.  
a) Rs. 5      b) Rs. 10      c) Rs. 15 (06 marks)
- iv). State what should be the income elasticity ( $E_y > 1$ ,  $E_y = 1$  or  $E_y < 1$ ) for the following commodities.  
a) Necessities  
b) Comforts  
c) Luxuries

(03 marks)

(Total 20 marks)

4)

- i). Briefly explain the drawbacks of marginal utility approach. (08 marks)
- ii). Following table shows the Total Utility (TU) of a consumer for a commodity. The selling price of the commodity is Rs. 15.

Units	1	2	3	4	5	6	7	8
TU	30	55	75	90	100	100	90	75

Find the consumer equilibrium.

(03 marks)

- iii). How do you derive an individual demand curve under indifference curve approach? Explain.

(06 marks)

- iv). At point A, on his indifference curve for goods X and Y, a consumer consumes 10 units of X and 20 units of Y. When he moves down to point B on the curve, his combination of two goods changes to 12 units of X and 19 units of Y. Find the MRS (Marginal Rate of Substitution) between points A and B.

(03 marks)

(Total 20 marks)

5)

- i). Explain the following and illustrate graphically.  
a) Economic region of production  
b) Increasing returns to scale

(06 marks)

- ii). Following table provides the data on the relationship between the quantity of output and Total Cost (TC) for a commodity.

Quantity of output	TC
0	30
1	50
2	60
3	78
4	120
5	200

Using this table answer the following.

- Derive the Average Fixed Cost (AFC), the Average Variable Cost (AVC), Average Total Cost (ATC) and Marginal Cost (MC) schedules.
- Plot the AFC, AVC, ATC and MC curves on a same set of axes and explain the reasons for their shapes.

(08 marks)

- iii). The cost function of the company, Samanala, is given by  $C = 6x^2 + 10y^2 - xy + 30$  and the company produces two commodities namely X and Y which have a production quota of  $x + y = 34$ . What combination of goods X and Y should this company produce to minimize the total cost?

(Hint: Use Lagrangian multiplier method)

(06 marks)

(Total 20 marks)

6)

- Explain the main characteristics of an oligopoly. (05 marks)
- Explain and illustrate the equilibrium of a firm in monopolistic competition in short run. (05 marks)

- iii). The demand function faced by a monopolist for a product is given by

$$P = 200 - 4Q$$

The firm's total cost function is given by,

$$TC = 50 + 2Q^2$$

- Determine the profit maximizing output level of the monopolist.
- What price should be charged at the profit maximizing output level.
- What is the profit at that level of output.

(10 marks)

(Total 20 marks)

- 7) Differentiate the following concepts.

- Income elasticity of demand and cross elasticity of demand.
- Short-run production function and long-run production function.
- Implicit cost and Explicit cost.
- Perfect competition and monopoly.

(05 marks each)

(Total 20 marks)