

## UNIVERSITY OF KELANIYA – SRI LANKA

# Centre for Distance and Continuing Education

#### FACULTY OF COMMERCE & MANAGEMENT STUDIES

Bachelor of Commerce (Special) Degree First Year Examination (External) -2023

May 2025

#### **BCOM E1025 - Microeconomics**

No. of questions: Sevan (07)

Time: 03 hours

Answer any five (05) Questions.

#### Question No. 01

a). i). Define microeconomics and explain its importance in the functioning of an economy.

(05 Marks)

ii). Explain how the forces of demand and supply determine the equilibrium price in a competitive market.

(04 Marks)

b). The demand and supply functions for a product are as follows:

Demand:

Od = 100 - 2P

Supply:

Qs = 20 + 3P

Required:

i). Calculate the equilibrium price and quantity.

(04 Marks)

ii). If the government sets a price ceiling at P = 10, calculate the resulting shortage or surplus.

(04 Marks)

iii). Explain one possible consequence of a price ceiling in the market.

(03 Marks)

(Total 20 Marks)

#### Question No. 02

a) Define Price Elasticity of Demand (PED) and explain the factors influencing PED.

(08 Marks)

b) A company sells a product at Rs.50. When the price is reduced to Rs.40, the quantity demanded increases from 1,000 units to 1,400 units.

#### Required:

i). Calculate the price elasticity of demand using the midpoint method

(03 Marks)

ii). Is the demand elastic, inelastic, or unitary? Interpret your result.

(03 Marks)

c.) Explain how understanding of Price elasticity of demand (PED) helps businesses and governments make better pricing and policy decisions.

(06 Marks)

(Total 20 Marks)

#### Question No. 03

a) i). Explain the difference between total utility and marginal utility?

(05 Marks)

ii). Explain how budget constraints impact consumer decisions.

(05 Marks)

- b) A customer has a budget of Rs.360. He should deciding how to allocate it between Good A and Good B.
  - Price of Good A = Rs. 60
  - Price of Good B = Rs. 30

The marginal utility (MU) of each unit is given below:

Units	marginal utility of	marginal utility of		
	(MU) <sub>A</sub>	(MU) <sub>B</sub>		
1	30	18		
2	24	15		
3	18	12		
4	12	9		
5	6	6		

#### Required:

i). Calculate the marginal utility for each unit of A and B.

(03 Marks)

- ii). How many units of each good should the consumer buy to maximize his total utility?
  (03 Marks)
- iii). Show that the consumer is maximizing utility by verifying the Equi marginal principle.

(04 Marks)

(Total 20 Markes)

#### Question No. 04

a) A firm hires workers to produce goods in the short run, where capital is fixed. The table below shows the total product (TP) of labour:

Units of Labour (L)	1	2	3	4	5	6	7
Total	15	40	70	95	110	120	125
Product (TP)							

#### Required:

i). Calculate the marginal product (MP) and average product (AP) for each unit of labour.

(04 Marks)

ii). Explain the difference between increasing, diminishing, and negative marginal returns using the calculated values.

(04 Marks)

iii).Draw the Total Production (TP), Average Production (AP) and Marginal Production (MP) curves in a graph and explain their relationships.

(04 Marks)

b) i). What is meant by the production function.

(03 Marks)

ii). How does a firm determine the optimal combination of inputs using isoquants and iso costs? Explain with a practical example from a production setup.

(05 Marks)

(Total 20 Marks)

#### **Question No 05**

a) A firm operates in a competitive market and is analyzes its cost structure. The firm produces output using both labor and capital, where labor is variable, and capital is fixed in the short run. The following data represents the firm's cost and output information:

Output (Q)	0	100	200	300	400	500
Total Fixed Cost (TFC)	1000	1000	1000	1000	1000	1000
Total Variable Cost (TVC)	0	2,000	3,000	4,500	6,000	8,500

## Required:

- i) Calculate the following for each level of output:
  - a. Total Cost (TC)
  - b. Average Variable Cost (AVC)
  - c. Marginal Cost (MC)

(06 Marks)

ii). Based on the given cost structure, analyze the firm's cost behavior and explain the relationship between Marginal Cost (MC) and Average Total Cost (ATC).

(07 Marks)

b) "Firms do not always aim to maximize profit". Discuss the alternative objectives a firm may pursue in both the short run and long run. Support your answer with examples.

(07 Marks)

(Total 20 Marks)

#### **Question No 06**

- a) How does a firm operating under perfect competition determine its price, output, and profit in the short run and the long run? Illustrate your answer with well-labeled diagrams and realworld examples.
   (08 Marks)
- b) Compare and contrast the market structures of perfect competition and oligopoly.

(06 Marks)

c) "In an oligopolistic market, firms often engage in non-price competition to gain market share".

Explain this statement, using real – world examples.

(06 Marks)

(Total 20 Marks)

## Question No 07

a). Compare and contrast the market structures of monopoly and monopolistic competition in terms of the number of firms, product differentiation, pricing power, and entry barriers.

(07 Marks)

b). Explain how a monopolist determines the profit-maximizing price and output using the Marginal Revenue (MR) = Marginal Cost (MC) rule. Illustrate your answer with a diagram.

(07 Marks)

c). How does a firm in monopolistic competition determine its profit-maximizing price and output in the short run and long run? Explain with the help of diagrams.

(06 Marks)

(Total 20 Marks)

