



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

MAY – AUGUST 2019 TRIMESTER

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING AND FINANCE

SPECIAL/SUPPLEMENTARY PROGRAMME

CEC 520: MANAGERIAL ECONOMICS

Date: JULY 2019

Duration: 3 Hours

INSTRUCTIONS: Answer ALL Questions

- Q1. a) Explain, distinguishing clearly between the following terms.
- i. Historical costs and current costs **(2 marks).**
 - ii. Returns to scale of a production system and returns to a factor of production **(2 marks).**
 - iii. Economies of scale and minimum efficient scale **(2 marks).**
- b) Using suitable illustrations, explain briefly the effects of transportation costs on the minimum efficient scale **(3 marks).**
- c) Explain briefly the following:
- i. The 'entry and exit conditions' as a factor shaping competitive environment **(3 marks).**
 - ii. The two methods of dealing with effects of uncertainty in the basic valuation model of the firm **(3 marks).**
- Q2. a) Using appropriate illustrations as necessary, explain distinguishing between the following terms and statements:
- i. Utility maximization model and profit maximization model **(2 marks).**
 - ii. Supply curve and supply function. Illustrate your answer **(2 marks).**
 - iii. Substitution effect and income effect of a price change. Illustrate your answer **(2 marks).**
 - iv. Price consumption curve and income consumption curve. Illustrate your answer **(2 marks).**

b) Explain briefly three (3) applications of the concept of elasticity of demand **(3 marks).**

c) Consider the following information for Nguvu Company Ltd, a competitive profit-maximizing firm employing a single factor input, labour.

1.

Labour (L)	TP _L	MP _L	MRP _L
1	5		
2	9		
3	12		
4	14		
5	15		

Where

TP_L = total product of labour

MP_L = marginal product of labour

MRP_L = marginal revenue product of labour.

2. Price of output Kshs250

3. Price of labour Kshs600

Required to:

- i. Complete the table **(1 mark).**
- ii. Determine the number of workers to be hired **(2 marks).**
- iii. Calculate the total profit **(1 mark).**

Q3. a) Discuss briefly three (3) key models in trend analysis **(4 ½ marks)**

b) Distinguish clearly between 'returns to scale of a production system' and 'returns to a factor of production' **(3 marks)**

c) Discuss briefly three (3) factors for shaping the competitive environment **(6 marks)**

d) Explain briefly the term 'marginal revenue product' **(1 ½ marks)**

Q4. a) Explain briefly the following terms and statements.

i. Optimal decision **(2 marks).**

ii. The expected value maximization model is important in determining the optimal course of action **(4 marks).**

b) Consider the following revenue and cost equations for Safari Shoe Company

$$TR = \text{Kshs } 2400Q - \text{Kshs } 150Q^2$$

$$TC = \text{Kshs } 800 + \text{Kshs } 400Q + \text{Kshs } 50Q^2$$

Required to:

i. Find revenue-maximizing output level **(2 marks).**

ii. Find the revenue maximized **(2 marks).**

- iii. Calculate the profit-maximizing output level **(3 marks).**
- iv. Find the maximized profit **(2 marks).**

- Q5. a) Using suitable illustrations, explain briefly the terms
- 1. A change in quantity supplied **(2 marks)**
 - 2. A change in supply **(2 marks)**

- b) Consider the supply function for automobile industry in a hypothetical economy given as follows:

$$Q = 1,000P - 250P_x - 50,000W - 7,500S - 62,000E - 500,000i$$

Where

Q = number of new domestic automobiles (in millions), supplied during a given period

P = average price (\$) of new domestic automobiles

P_x = average price (\$) of new imported automobiles

W = average hourly price of labour (\$) per hour

S = average cost of steel per ton (\$)

E = average price of energy (\$)

i = average interest rate, cost of capital (in %)

The estimated values for the independent variables during the coming year are as follows:

$$P = \$15,000$$

$$P_x = \$21,000$$

$$W = \$50$$

$$S = \$400$$

$$E = \$3$$

$$i = 4\%$$

Required to

- 1. Estimate the industry supply for new automobiles in the coming year **(2 marks)**
 - 2. Derive the supply curve for automobile industry when
 - i. Q is expressed as a function of P **(1 mark)**
 - ii. P is expressed as a function of Q **(1 mark)**
 - 3. Present (2) above graphically **(1 mark)**
- c) Using suitable illustration, explain briefly the term 'market equilibrium' **(3 marks)**
- d) State the basic assumptions of consumer behaviour theory. **(3 marks)**

END