# THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

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JANUARY – APRIL 2019 TRIMESTER

**FACULTY OF COMMERCE** 

MBA REGULAR / EVENING / ODEL PROGRAMME

**CEC 520: MANAGERIAL ECONOMICS** 

Date: APRIL 2019 Duration: 3 Hours
INSTRUCTIONS: Answer ALL Questions

Q1. a) Explain briefly the following:

- i) The component analysis in the expected value maximization model (3 marks)
- ii) The reason why profits vary among firms (2 ½ marks)
- iii) The role of profits in the economy (1 ½ marks)
- iv) The primary goal of the firm (1 ½ marks)
- b) Consider the following fixed costs (FC) and variable costs (VC) equations for Karon Enterprises that specializes in producing bicycles.

FC = \$8

 $VC = $4Q + $0.5Q^2$ 

### Required to:

i) Find the cost-minimizing output level

(2 marks)

ii) The minimized cost

(1 ½ marks)

- c) Using suitable illustration, distinguish clearly between perfect substitutes and perfect complements (3 marks)
- Q2. a) Using suitable illustration, distinguish clearly between the following:
  - i) Demand curve and demand function

(2 marks)

- ii) Market equilibrium and market disequilibrium (2 marks)
- iii) Income effect and substitution effect of a price change

(2 marks)

b) Jambo Enterprises provides express services in cargo transport. The following is the demand function for the monthly transport tickets.

 $Q = 7000 - 5000P + 6000P_C + 150I + 1000A$ 

# Where

Q = Quantity of transport tickets

P = ticket price (\$)

 $P_C$  = competing price (\$)

I = Disposable income (\$)

A = advertising expenditure (\$)

#### Given

$$P_C = \$4$$
;  $I = \$60,000$ ;  $A = \$20,000$ ;  $p_1 = \$8$ ;  $p_2 = \$10$ 

# Required to:

- i) Derive the demand curve for the tickets (1 ½ marks)
- ii) Point price elasticities at p<sub>1</sub> and p<sub>2</sub> (2 marks)
- iii) Analyze the demand sensitivity for the tickets over the two prices (2 ½ marks)
- c) Explain briefly the following concepts.
  - i) Countercyclical goods (1 mark)
  - ii) Noncyclical normal goods (1 mark)
  - iii) Cyclical normal goods (1 mark)
- Q3. a) Explain briefly three 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) Explain briefly three factors for shaping the competitive environment (6 marks)
  - d) Explain briefly the term 'marginal revenue product' (1 ½ marks)
- Q4. a) Using suitable illustration, explain briefly the term 'minimum efficient scale' (2 marks)
  - b) The business status for Kiko Enterprises that specializes in the producing shoes is as follows.
    - Weekly sales have risen by 2 percent following a 1 percent discount.
    - The marginal cost is \$25

• The firm contemplates reflecting the effects of uncertainty in its effects in the basic valuation model.

# Required to:

- i) Compute the optimal price (2 marks)
- ii) Explain briefly two basic methods for reflecting the effects of uncertainty in the model (4 marks)
- c) The following Table presents a two-input (labour, L; capital, K) and oneoutput Y (TV sets) production system for Beta Electronics Limited

Units of Y Employed	Output Quantity									
10	52	71	87	101	113	122	127	129	130	131
9	56	74	89	102	111	120	125	127	128	129
8	59	75	91	99	108	117	122	124	125	126
7	61	77	87	96	104	112	117	120	121	122
6	62	72	82	91	99	107	111	114	116	117
5	55	66	75	84	92	99	104	107	109	110
4	47	58	68	77	85	91	97	100	102	103
3	35	49	59	68	76	83	89	91	90	89
2	15	31	48	59	68	72	73	72	70	67
1	5	12	35	48	56	55	53	50	46	40
Units of X	1	2	3	4	5	6	7	8	9	10

# Required to

- 1. List the capital-labour combinations for the isoquants 91 and 89 (2 marks)
- 2. Present graphically the isoquants in (1) above (2 mark)
- 3. Given the short-run capital level employed by the firm as 4 units, generate a table showing

i)	Total product of labour	(1 mark)
iĺ)	Marginal product of labour	(1 mark)
iii)	Average product of labour	(1 mark)

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