PAN AFRICA CHRISTIAN UNIVERSITY

END OF SEMESTER EXAMINATION FOR THE DEGREE OF

MASTERS OF BUSINESS ADMINISTRATION

JANUARY – APRIL 2018 SEMESTER

CAMPUS: ROYSAMBU

DEPARTMENT: BUSINESS STUDIES

COURSE CODE: MBA501

COURSE TITLE: MANAGERIAL ECONOMICS

EXAM DATE: WEDNESDAY 11TH APRIL 2018

TIME: 9:00AM-12:00PM

INSTRUCTIONS

- This examination script consists of **Six (6)** questions.
- Answer **Question One And Any Other Three**
- Read all questions carefully before attempting.
- Write your **student number** on the answer booklet provided.

SECTION A [COMPULSORY]

QUESTION ONE

a) Define the term Managerial Economics **[3 marks]**

b) Explain any three applications of Managerial Economics **[6 mark]**

c) Explain any five factors that influence demand of a product/service **[10 marks]**

d) By use of illustration, describe the meaning of price elasticity of demand **[5 marks]**

e) Identify and explain three types of price elasticity of demand **[6 marks]**

f) Briefly explain four factors that influence price elasticity of demand [**8 marks]**

g) Define the term cross elasticity of demand **[2 marks]**

SECTION B [ANSWER ANY THREE QUESTIONS]

QUESTION TWO

a) A firm's demand curve is given by P = 120-0.5Q where P= price and Q = quantity. The cost function is given by C =420+60Q+Q2.

Required: Determine the firm's optimal

i. Quantity **[5 marks]**

ii. Price [**5 marks]**

iii. Profit [**4 marks]**

b) Suppose instead that the firm can sell any and all of its output at the fixed market price P = 120. Find the firm's optimal output **[6 marks]**

QUESTION THREE

The demand function of XYZ Ltd is given as P = 340 – 0.8Q where P = price and Q = quantity. The total cost function is further given as C = 120 + 100Q.

Determine:

a) The total revenue function **[3 marks]**

b) The profit maximizing quantities if:

i. Fixed cost per unit increases from 120 to 150 **[5 marks]**

ii. Variable cost per unit increases from 100 to 200 **[5 marks]**

iii. The price function changes to P = 400 – 0.8Q [**7 marks]**

QUESTION FOUR

A retail store faces a demand equation for Roller Blades given by Q = 180 – 1.5P: where Q is the number of pairs sold per month and P is the price per pair in dollars.

i. The store currently charges P = $80 per pair. At this price, determine the number of pairs sold **[5 marks]**

ii. If management were to raise the price to $100, determine the number of pairs sold at this price **[5 marks]**

iii. Compute the point elasticity of demand at P = $80 and at P = $100 **[6 marks]**

iv. Determine the price at which demand is more price-sensitive and justify **[4 marks]**

QUESTION FIVE

a) Below table shows the relationship between price of a certain product and the quantity demanded at that price:

Price	250	265	270	280	285	290	320	350	380	400
Demand(dozens)	600	580	550	540	520	500	480	450	430	410

Required:

i. Determine the demand equation of the above product **[10 marks]**

ii. Use the equation to predict the number of dozens demanded when the price falls to Kshs 200 **[5 marks]**

iii. Estimate the price charged for the product if the demand is 1000 dozens **[5 marks]**

QUESTION SIX

a) Distinguish between:-

i. Fixed cost and variable cost. **[2 marks]**
ii. Opportunity cost and actual cost. **[3 marks]**

b) The production function of a firm is given by:-
$Q= 80 + K^{½}\ L^{½}$
The corresponding constraint is given by:-
$C=2L + 2K$
If the firm wishes to minimize its cost for a specified level of output
$Q_o = 88$
i. Write out the firms constraint cost minimization problem. **[2 marks]**
ii. Construct the corresponding Langrangian function. **[1 marks]**
iii. Find the critical values of L and K. **[3 marks]**
iv. Establish the second order condition. **[3 marks]**
v. What is the minimum cost. **[1 marks]**