

# **MAASAI MARA UNIVERSITY**

## REGULAR UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR SECOND YEAR SECOND SEMESTER

## SCHOOL OF BUSINESS AND ECONOMICS BACHELOR OF AGRIBUSINESS MANAGEMENT

### **COURSE CODE: ECO 2207**

### **COURSE TITLE: MANAGERIAL ECONOMICS**

DATE: 27<sup>TH</sup> APRIL 2018

TIME: 1100 - 1300 HRS

#### **INSTRUCTIONS TO CANDIDATES**

Answer Question **ONE** and any other **THREE** questions

This paper consists of **TWO** printed pages. Please turn over.

#### **QUESTION ONE**

(a) A monopolist practising price discrimination has the following demand function:

 $P_1 = 126-8Q_1$   $P_2 = 210-10Q_2$   $P_3 = 150-12Q_3$ TC = 40+30Q

Find the profit maximising level of output and prices for the three markets

(7marks)

(b) Explain the following pricing techniques

i.	Loss-leader pricing	(5marks)
ii.	Peak load pricing	(5marks)

(c) With the aid of a well labelled diagram, explain the concept of income and substitution effects of a fall in the price of a normal good. **(4marks)** 

(d) What are the four basic assumptions about individual preferences?

(4marks)

#### **QUESTION TWO**

(b) Discuss the Delphi method of demand forecasting	(6marks)	
(c) Given the following:		
$Max \Pi = 50X - 2X^2 - XY - 3Y^2 + 95Y$		
Subject to: X + Y = 25		
Find the value of X and Y that maximise profit	(9marks)	

#### **QUESTION THREE**

(a) Down-Town limited is considering the purchase of a new wood processing machine. Two alternatives, European model and Japan model have been suggested each having initial capital of KSh. 400,000 and requiring KSh. 200,000 each as additional working capital at the end first year. Earnings are expected as follows:

	Cash Flows	
Year	European	Japan
	model	model
1	400,000	1,200,000
2	1,200,000	1,600,000
3	1,600,000	2,000,000
4	2,400,000	1,200,000
5	1,600,000	800,000

Assume 10% return on capital, compute the profitability of the machine and make your suggestions (8marks)

(b) A Strategic Plan is a vital decision making tool for a manager. Describe the process of Strategic Planning, clearly highlighting the eminent pitfalls. (7marks)

#### **QUESTION FOUR**

(a) Consider a competitive market for which the quantity demanded and supplied are given below:

Price	Quantity	Quantity
(KSh.)	demanded	supplied
60	22	14
80	20	16
100	18	18
120	16	20

- i. Calculate the price elasticity of demand when the price is KSh. 80 and when the price is KSh. 100 (3marks)
- ii. Derive the linear demand equation

(b) Discuss the application of managerial economics in business.

(8marks)

(4marks)

#### **QUESTION FIVE**

(a) Suppose that a firm is producing two models of a car, model J and model T. The total revenue function from the sales of the two cars is: TR=J.T. where both J and T are measured in thousands of units. Due to limited production capacity, the maximum number of cars that can be produced is 10 thousand. Using Lagrangian multiplier, determine the quantities of the two models that should be produced to maximise revenue. (10marks)
(b) Discuss the significance of microeconomics in managerial economics

(5 marks)

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