(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER EXAMINATIONS
FOR THE MASTERS DEGREE
IN
BUSINESS ADMINSTRATION

MAIN EXAMS

COURSE CODE: MBA 810

COURSE TITLE: MANAGERIAL ECONOMICS

DATE: Thursday, 28-04-2022   **TIME**: 9:00 -12:00

INSTRUCTIONS TO CANDIDATES

ATTEMPT **QUESTION ONE** AND **ANY OTHER TREE** QUESTIONS

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

QUESTION ONE [40 MARKS]

a) Explain the following terms   (12 Marks)

    i.   Dorminant strategy
    ii.   Nash equilibrium
    iii. Mixed strategy
    iv. Most favoured customer clause

    b) Discuss the factors affecting the demand of a product in a given market
(6 Marks).

    c) Explain elasticity and its application   [8mks]

    d) Explain reasons for capital budgeting   [6 mks.]

e) Suppose that the equation for monopolist is given by
$TC = 500 + 20Q^2$
Let the demand equation be given by
$P = 400 - 20Q$

f) Find the profit-maximizing price and output of a monopolist [8 Marks]

QUESTION TWO

a) Briefly explain the various steps involved in estimating demand by
regression analysis
    [5 Marks]

b) Clearly distinguish between consumer clinic and market experiments [5
marks]

c) The data below shows a tabulation on the production of a hypothetical
product

Output (Q)	0	1	2	3	4	5	6	7	8
Total cost	25	32	38	42	48	58	67	78	98

Using the above data, determine

    i.   Total fixed cost   [3 marks]
    ii.   Average variable cost when output equals 6 units   [4 marks]
    iii. Marginal cost of the 3rd unit of output   [3 marks]

QUESTION THREE (20 MARKS)

Suppose a firm has a cost function that depends on the levels of output of commodities X and W as follows:

$$C=4X^2+10W^2$$

The production manager wants to determine the quantities of each commodity that should be produced to minimize cost if the total output of X and W must equal to 800 units thus the cost must be minimized subject to the constraint.

   i.   Find the first order condition   (8mks)

  ii.   Check the second order condition.
         (7mks)

 iii.   What is the optimal cost.
         (5mks)

QUESTION FOUR (20 MARKS)

  a. Discuss pricing strategies used by firms
      (10 Marks)

  b. Explain two main periods of production   (10
      Marks).

QUESTION FIVE (20 MARKS)

Explain the difference between price elasticity and income elasticity of demand and highlight their importance in managerial economics   [8 Marks]

Consider the following production function $Q=56K^{0.25}L^{0.75}$

i) Find the elasticity of production with respect to labour input   [5 Marks]

ii) Establish the nature of returns to scale   [3 Marks]

iii) Given the cost of labour is \$20 per hour and the cost of capital is \$10 per machine hour .The firm has \$500 to spend .Determine the least cost combination of inputs

                                                         [4 Marks]