MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

(MMUST)

UNIVERSITY EXAMINATIONS

MAIN EXAMINATIONS

2023 /2024 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER EXAMINATIONS

MAIN EXAMINATION (MAIN CAMPUS)

BACHELOR OF SCIENCE IN ECONOMICS & BACHELOR OF SCIENCE MATHEMATICS AND ECONOMICS

COURSE CODE: ECO 314

COURSE TITLE: MANAGERIAL ECONOMICS

DATE: TUESDAY, 19-12-2023   TIME: 12:00-14:00

INSTRUCTIONS TO CANDIDATES:

Answer Question ONE and any other Two Questions

QUESTIONE ONE (30 marks)

a). Suppose the demand for a managerial economics book is given by:

$Q = 20,000 - 60P$

    i. Compute the point price elasticity of demand when price is sh.200 (4 marks)

    ii. If the objective is to increase total revenue from the sales of the book, should the price be increased or reduced? Explain.   (3 marks)

b). Suppose that the cost function of a firm producing two goods X and Y is given as follows: $TC = 2X^2 - XY + 3Y^2.$ The firm has to meet a combined order of 36 units of the two goods. As a manager you are required to determine:

    i. The optimal combination of the two goods X and Y that minimizes the cost of production   (8 marks)

    ii. The minimum cost at this level of production   (4 marks)

c). Explain the importance of the principles of managerial economics to a manager
    (3marks)

d). Discuss the role of business managers in attainment of a firm's objectives.   (8 marks)

QUESTION TWO (20 marks)

The following information relates to the sales of Nakuru furniture's for the period 2007 to 2016.

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sales	22734	24731	31489	44685	55319	91021	146234	107887	127483	97275

Required:

i)   Estimate the sales for 2017 and 2020   (5 marks)

ii)   Fit a linear regression equation   (1 mark)

iii) Draw a trend line.   (1mark)

iv)   Explain why demand forecasting is important for the managers of business firm?

(2marks)

v)   Mention the major criteria to consider when choosing a suitable forecasting method.

(5 marks)

vi)   Discuss the steps to be followed during demand forecast. (6marks)

QUESTION THREE (20 marks)

a). Discuss the types of risks faced by a business firm. (5 marks)

b). Suppose a discriminating monopolist is selling product in two separate markets in which demand functions are:

$P1 = 12 - Q1$

$P2 = 20 - Q2$

The monopolist total cost function is:

$TC = 3+2Q$

Determine:

i. The output to be sold in each market that maximizes profits   (2 marks)

ii. The prices to be charged in the two markets   (4 marks)

iii. The total profits of the monopolist   (4 marks)

c) Explain the significance of elasticity of demand in managerial decision making.

(5marks)

QUESTION FOUR (20 marks)

Write short notes on any FOUR of the following concepts as used in Managerial Economics:

a). Breakeven analysis and operating leverage (5 Marks)

b). Product bundling pricing scheme and peak-loading pricing scheme (5 Marks)

c). Economies of scope and Economies of scale (5 Marks)

d) Incremental cost and marginal cost (5 Marks)

QUESTION FIVE (20 marks)

a). Discuss any 3 ways of resolving externalities in management. (6 marks)

b). Managerial economics is often used to integrate the knowledge of economic theory with business. Illustrate with examples the role of managerial economics in shaping business decisions. (6 marks)

c). Describe the characteristic of a perfectly competitive and monopoly market structures. How is pricing done in both markets? (8marks)