(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2020/2021 ACADEMIC YEAR

FIRST YEAR FIRST SEMESTER

SPECIAL/SUPPLEMENTARY EXAMS

FOR THE DEGREEOF MASTER OF BUSINESS ADMINISTRATION

COURSE CODE: **MBA 810**

COURSE TITLE:MANAGERIAL ECONOMICS

DATE: 23ᴿᴰ NOV,2022   **TIME:** 2.00PM – 4.00PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER THREE (3) QUESTIONS

TIME: 3 HOURS

KIBU observes ZERO tolerance to examination cheating

This Paper Consists of Printed Pages. Please Turn Over.

QUESTION ONE (40 MARKS)

a). Discuss the role of business managers in attainment of a firm's objectives. (6 Marks)

b). Outline four common objectives of a business firm.   (8 Marks)

c). Company x sells its output to company Y for shillings 250 per unit. The cost of the sales per week in company x are given by the following cost function;

$$C = 4q^2 + 60q - 800$$

Q = value of weekly sales

Company Y uses the output of company X to manufacture a product whose demand is dependent on the sale price. The revenue per week of company Y is given by the following function.

R = 1000q – 8q²

The cost per week of company Y excluding costs of the products bought from company X are given by the following function;

$$C = 4q^2 - 60q + 400$$

Company X can restrict the weekly supply of its product to company Y, but cannot raise the unit price above sh. 250.

The two companies are considering whether to merge together into a single company.

Required:

(i) At what weekly sales would company X maximize its profits. What would be the profit or loss of company Y if company X were able to supply a profit maximizing quantity or its product each week.   (5 Marks)

(ii) At what level of weekly sales would company Y maximize its profits? (3 Marks)

(iii)If the two companies merge into one, what would be the profit maximizing output per week and what would be the weekly profit?   (3 Marks)

d). Discuss the various pricing strategies a firm can adopt for its product.(5 Marks)

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

QUESTION TWO (20 MARKS)

a) Discuss the managerial decision-making process. (4 Marks)

b) Given the following average revenue and total cost functions;

$AR_1 = 8 - 2Q_1 - 10Q_2$

$AR_2 = 4 - 4Q_1 - 2Q_2$

$Tc = 4Q_1^3 + 6Q_1Q_2 + 2Q_2^2$

Determine the corresponding profit function. (4 Marks)

c) Explain the least cost combination of inputs principle. (4 Marks)

d) Explain the purpose of demand analysis from stand point of Management

(8 Marks)

QUESTION THREE (20 MARKS)

a) A firm producing two products Q1 and Q2 under monopolistic market structures has the following demand and cost functions;

$$Q_2 = -2 P_1 - P_2 + 40$$
$$Q_2 = -P_1 - P_2 + 35$$
$$C = Q_1^2 + 2Q_2^2$$

(i) Find the firm's average revenue functions. (2 Mark)

(ii) Find the total revenue (R) for the firm. (2 Mark)

(iii) What's the profit function? (2 Marks)

(iv) Find the levels of Q_1 and Q_2 that satisfies the first order condition for maximization. (2 Marks)

b) Given the demand and cost function for a monopolist;

$P = 3 - Q$

$TC = Q^2 + Q$

If the government imposes a per unit tax "t" on the firms output; (2 Marks)

(i) Calculate the maximum profits (2 Marks)

(ii) Calculate the change in price. (2 Marks)

(iii) Calculate the tax rate that maximizes tax revenue (2 Marks)

c). Giving three examples of monopolies in Kenya, explain the sources of monopoly power for each of the monopoly stated and how the source acts as a barrier to entry (6 Marks)

QUESTION FOUR (20 MARKS)

a)   KK Ltd has Cobb-Douglas production function of this nature.

$$Q = 120 L^2 K^3$$

Where L represents labour units and K are the capital units. Each labor unit costs the firm twice as much as each unit capital. The cost of acquiring each unit of capital is Kenya Shillings 200. The firm has a cost outlay of 60,000 shillings to spend on capital and labour.

Required:

(i) Determine the least cost combination of capital and labour.   (4 Marks)
(ii) Determine the optimum production level of the firm.   (4 Marks)
b)   Explain the relationship between managerial economics and other subjects. (4 Marks)

c). what is break-even point? Explain the important managerial uses of break-even analysis. (8 Marks)

QUESTION FIVE (20 MARKS)

a)   Explain the importance of managerial economics to business managers. (2 Marks)
b)   For the following two demand functions, compute the four partial elasticity's of demand and state whether the two commodities are substitutes or complements.   (6 Marks)
$$Q_1 = 7 - 2P_1 - P_2$$
$$Q_2 = 23 - P_1 - 3P_2$$
c)   Explain the methods used in demand estimation and forecasting. (4 Marks) d) Explain seven (7) main factors that influence investment.   (8 Marks)