MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2023/2024 ACADEMIC YEAR
SECONDYEAR FIRSTSEMESTER

SCHOOL OF BUSINESS & ECONOMICS
MASTER OF BUSINESS ADMINISTRATION

COURSE CODE: MBA 8211

COURSE TITLE:MANAGERIAL ECONOMICS

DATE: DECEMBER, 2023 **TIME:**

INSTRUCTIONS TO CANDIDATES

1. Answer ANY FOUR Question.

QUESTION ONE

(a) What is meant by demand forecasting? Why is it important for the managers of business firm? **3 marks**

(b) The demand function of a product is given as Q = 500-5P. Find out the point price elasticity demand when P = 15 and Q = 200; and P = 50 and Q = 200.
3 marks

(c) What inferences you draw from the results (b) when the price of a commodity increases from 15 to 50, the quantity demanded remaining constant. **2 marks**

(d) In the table below, estimate the sales for 2012, 2015 and fit a linear regression equation and draw a trend line. 7 **marks**

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Sales	22734	24731	31489	44685	55319	91021	146234	107887	127483	97275

QUESTION TWO

(a) Discuss the areas of decision making where managerial economics prescribes specific solutions to business problems. **9 marks**

A company manufactures a single product which has the following cost structure basedon a production budget of 10,000 units.

Materials – 4 kg at Shs.3/kg Shs.12

Direct labor – 5 hours at Shs.7/hour Shs.35

Variable production overheads are recovered at the rate of Rs.8 per direct labor hour.

Other costs incurred by the company are:

Factory fixed overheads Shs120, 000

Selling and distribution overheads Shs160, 000

Fixed administration overheads Shs80, 000

The selling and distribution overheads include a variable element due to a distribution cost of Shs2per unit.

The fixed selling price of the unit is Shs129.

Required:

(b) Calculate how many units have to be sold for the company to break-even. **3 marks**

(c) Calculate the sales revenue which would give a net profit of Shs40, 000. **3 marks**

QUESTION THREE

(a) A firm has the following revenue and cost functions: $TR = 45Q - 0.5Q^2$ and $TC = Q^3 - 8Q^2 + 57Q + 2$. Determine Q that maximizes profit (π). **4 marks**

(b) Suppose the profit function and the cost outlay is given as follows: $\pi = 80X - 2X^2 - XY - 3Y^2 + 100Y$ and $X + Y = 12$ respectively. Using Langrangian method, determine optimal X and Y, and interpret the Langrangian multiplier. **5 marks**

(c) Discuss the managerial uses of production function. **6 marks**

QUESTION FOUR

(a) A firm has the production function X = LK (X = output, L = labour, K = capital); labour and capital prices are 8 and 10 per unit; and it desires to produce 32 units of output. What is the least cost combination of labour and capital? **4 marks**

(b) By suitable illustration, explain the relationship between total product, average product and marginal product. **6 marks**

(c) Discuss the managerial implications of (b) above. **5 marks**

QUESTION FIVE

(a) Discuss the managerial importance of understanding total costs, average costs, and marginal costs. **9 marks**

(b) "Firms may not maximise profit but they do have a profit policy." Discuss the above by bringing out clearly the various facets of a profit-policy decision by a firm. **6 marks**

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