CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION

MBAD 802: MANAGERIAL ECONOMICS

STREAMS: MBAD ODEL **TIME:2 HOURS**

DAY/DATE: MONDAY 11//08/2025 **2.30P.M. –4.30 P.M**

INSTRUCTIONS: Answer ONE Questions and any other THREE QUESTIONS

QUESTION ONE

a) Define the following terms:
   i. Economics (2 marks)
   ii. Managerial Economics (2 marks)

b) What is Break-even point? Explain the important managerial uses of break-even analysis? (10 Marks)

c) Distinguish between economies of scale and diseconomies of scale. Explain the factors that cause economies of scale (10 Marks)

d) Suppose a firm's estimated demand curve has the following equations; $Q = 220 - P$ and its $TC = 1000 + 80Q - 3Q^2 + \frac{1}{3}Q^2$. Determine:

   (i) An expression for the firm's total revenue function (2 Mark)

   (ii) The output level and price that will maximize profit (or minimize short run loss) for the firm. (2 Marks)

   (iii) The firm's economic profits or loss at the optimum point (2 Marks)

e) Discuss atleast 5 factors that affect the demand and supply of a commodity (10 Marks)

QUESTION TWO

a) Explain the nature and scope of managerial economics (2 Marks)

b) The market supply and demand curves for a product are given by:
   $Q_S = 900 + 200P$; $Q_D = 3000 - 500P$

   The industry supplying the product is perfectly competitive. An individual firm has fixed cost of KSh.150 per period. Its marginal and average variable cost functions are:

$MC = 15 - 4Q + \frac{3Q^2}{10}$ And $AVC = 15 - 2Q + \frac{Q^2}{10}$

Determine:

(i) The profit-maximizing rate of output for the firm (5 Marks)

(ii) The maximum total profit for the firm (5 Marks)

c) State and briefly discuss any FOUR principles in managerial economics (8 Marks)

QUESTION THREE

a) The treasurer of Makueni Fruits Processing Limited has projected the cash flows of 4 projects (A, B, C & D) as shown in the table below:

Year	**Project A**	**Project B**	**Project C**	**Project D**
Rate of Return (%)	*12*	*6*	*7.5*	*15*
0	-100,000	-200,000	-150,000	-500,000
1	35,000	47,000	40,000	135,800
2	24,000	38,500	55,000	125,000
3	16,000	29,000	10,500	200,500
4	18,000	42,000	66,500	105,000
5	25,000	48,000	22,500	34,700

i. Based on the payback period, which project should be adopted? (2 Marks)

ii. Compute NPV for each of the 4 projects and comment on which project should be adopted (10 Marks)

iii. Suppose that the four projects are independent. Which project should be adopted based on the internal rate of return rule? (2 Marks)

b) What are the main factors to consider before making any investment? (6 Marks)

QUESTION FOUR

a) A firms total cost function is given by $TC = 250 + 550Q - 300Q^2 + 50Q^3$ where Q is the number of units produced. Suppose that the firm produces 10 units, determine:

(i) Total Fixed Cost (2 Marks)

(ii) Total Variable Cost (2 Marks)

(iii) Average total cost (2 Marks)

(iv) Average Variable Cost (2 Marks)

(v) Marginal Cost (2 Marks)

b) Explain 5 main reason monopoly continue to thrive (10 marks)

QUESTION FIVE

a) Discuss the 5 factors that affect the demand and supply of a commodity (10 Marks)

b) Explain the term price discrimination and under conditions are necessary for price discrimination? (5 Marks)

c) Discuss 5 factors that cause a rightward shift of the supply curve (5 marks)
