



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER
MAIN EXAMS
FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION

COURSE CODE: MBA 810

COURSE TITLE: MANAGERIAL ECONOMICS

DATE: 10TH FEBRUARY, 2023

TIME: 2.00PM - 5.00PM

INSTRUCTIONS TO CANDIDATES

1. Answer Question One in Section A and Any other THREE (3) Questions in Section B
2. Question **one** carries **40** marks and each of the other THREE questions carry **20** marks each

TIME: 3 Hours

KIBU observes ZERO tolerance to examination cheating
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SECTION A**QUESTION ONE.**

- a. Managerial economics is very important in the success of firms and businesses. Using the flow diagram, explain the position of managerial economics in business (5 marks)
- b. Discuss the importance of economic theory in managerial decision making process (5 marks)

- c. The Manager of Nzoia Sugar Company major mandate is to produce quantities of brown sugar (X) and molasses (Y) in quantities that maximize the profits of the company. It's discovered that the profit maximization function of the company is given by;

$$\Pi = 80X - 2X^2 - XY - 3Y^2 + 100Y$$

Supposing the company faces the following constraint optimization problem

$$X + Y = 12$$

Use the Lagrangian Multiplier Method to find the quantities of X and Y that will maximize the profits of the company and interpret the value of the Lagrangian multiplier (10 marks)

- d. Distinguish between change in demand and change in quantities demanded using appropriate diagrams to illustrate the two (10 marks)
- e. Assume a short-run linear cost function of a firm is of the form $TC = 100 + 10x$ and a linear revenue function of the form $TR = 15x$ using the appropriate diagrams analyse the break-even point of this firm (10 marks) You are required to the hypothesis that the mean of difference of means is zero at 95% confidence level and 99% confidence level. (10 marks)

SECTION B**QUESTION TWO**

- a. A company is considering two mutually exclusive projects requiring an initial cash outlay of Sh 10,000 each and with a useful life of 5 years. The company required rate of return is 10%

and the appropriate corporate tax rate is 50%. The projects will be depreciated on a straight line basis. The before depreciation and taxes cashflows expected to be generated by the projects are as follows.

YEAR	1	2	3	4	5
Project A	4,000	4,000	4,000	4,000	4,000
Project B	6,000	3,000	2,000	5,000	5,000

Required:

Calculate for each project

- i. The payback period (14 marks)
 - ii. Which project should be accepted? (2 marks)
- b. Given a Cobb-Douglas function is of the form $X = b_0.L^{b_1}.K^{b_2}$ Find the Marginal products of factors of production (4 marks)

QUESTION THREE

- a. 'Even where the government does not intervene, cartels do not last long'. Justify this statement by advising the management of firms that want to collude as a cartel. (10 marks)
- b. The table below shows the quantities of ice cream sold on Kibabii market at each given price level

Price sh. X	14	15	16	17	18	19	20
Sales Y	96	88	60	52	60	36	56

If the relationship between the quantities sold and price is of the form

$$Y = a + bX,$$

Using this data,

- i. Using simple regression analysis find the estimated regression equation between X and Y. (8 marks)
- ii. Suppose the price of the ice cream is projected to be sh. 23 next week, forecast the quantities to be sold at that price (2 marks)

QUESTION FOUR

- a. In managerial economics, Structure and conduct interact to determine performance of an industry. Identify and explain five methods that can be used to evaluate the performance of an industry (10 marks)
- b. Setting the price at which to sell the firms product is a complex exercise with various pricing practices available for the management. Explain in details the following pricing strategies that a firm may adopt
- i. Price skimming (2 marks)
 - ii. Penetrating pricing (2 marks)
 - iii. Prestige pricing (2 marks)
 - iv. Psychological pricing (2 marks)
 - v. Life-cycle pricing (2 marks)

QUESTION FIVE

- a. The below shows the probability distribution and their possible returns for various states of the economy for two projects that an investor considers investing in, your task is to choose one of them for investment.

State of the Economy	Probability of occurrence of state of economy (P_i)	Profit of project A if state of economy occurs	Profit of project B if state of economy occurs
BOOM	0.2	600	1000
NORMAL	0.6	500	500
RECESSION	0.2	400	0

Using the standard deviation criterion, which of the two project is less risky to the investor (10 marks)

- b. Its argued that a firm operating on small scale may not be able to compete favourably with that operating on large scale production. Explain any five economies of scale that make large scale production more admirable (10 marks)