

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

1ST SEMESTER 2023/2024 ACADEMIC YEAR

**FIRST YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN ECONOMICS &
STATISTICS, BACHELOR OF SCIENCE IN
AGRICULTURAL STUDIES, BACHELOR OF
AGRIBUSINESS MANAGEMENT AND BACHELOR OF
SCIENCE IN STATISTICS**

ECON -111/BCOM 112: PRINCIPLE OF MICROECONOMICS

STREAM: ECON STAT/SOCI/AGEC/AGBM/STAT

TIME: 2 HRS

DAY: MONDAY [14.30-16.30 P.M]

DATE: 4/12/2023

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

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INSTRUCTIONS:

- (i) Answer **Question One** and other **TWO Questions**
- (ii) Write **succinctly** and **legible**

QUESTION ONE

- a) Distinguish between the following terms as used in economics
 - i) Total utility and marginal utility **(2 marks)**
 - ii) Isocost line and budget line **(2 marks)**
 - iii) Price ceiling and price floor **(2 marks)**
- b) By using diagram, explain why indifference curves cannot intersect **(3 marks)**
- c) The total cost function of producing commodity P is $200 - 30Q + 15Q^2 + 12Q^3$. Compute the;
 - i) Equation of average total fixed cost. **(2 marks)**
 - ii) Equation of average variable cost **(2 marks)**
 - iii) Equation of marginal variable cost **(2 marks)**
 - iv) Equation of marginal cost function **(2 marks)**
 - v) Value of total cost of producing 10 units **(2 marks)**
- d) State five sources of monopoly power. **(5 marks)**
- e) Using a well-labeled diagram demonstrate the three stages of production in the short run period implied by the law of diminishing returns **(6 marks)**

QUESTION TWO

In Nakuru, illicit brews are outlawed, so people trade the drinks in a black market. The drinks' demand is $Q_D = 12 - P$, and the drinks' supply is $Q_s = 2P$.

- a) Find the equilibrium price and quantity in the black market **(3 marks)**
- b) The government becomes aware of the black market and reinforces the police so that half of the brews' supply would be seized and destroyed. Under this circumstance,
 - i) What are the demand and supply functions? **(2 marks)**
 - ii) What is the new equilibrium price and quantity? **(3 marks)**



- iii) Compute the consumer surplus? (3 marks)
- c) Suppose that the government changes the policy and legalizes brews' trade. Now the drinks are traded in an open market. However, for every litre of brew purchased, the buyer has to pay tax T to the government. T is equal to the pre-tax price P .
 - i) What are the demand and supply functions under this circumstance? (2 marks)
 - ii) What are the equilibrium (pre-tax) price and quantity? (3 marks)
 - iii) Which policy do consumers prefer? (2 marks)
 - iv) Which policy does the government prefer? (2 marks)

QUESTION THREE

- i) Distinguish between the shift in demand curve and movement along the demand curve (4 marks)
- ii) Explain any four factors that may cause an outward shift in supply curve (4 marks)
- iii) Discuss any three determinants of price elasticity of demand (3 marks)
- iv) Explain five assumption made under the ordinal approach to utility (5 marks)
- v) Discuss four features of perfectly competitive market structure (4 marks)

QUESTION FOUR

- i) Using a diagram, illustrate the equilibrium condition for an oligopolistic firm (10 arks)
- ii) Describe the features of a well behave indifference curve. (10 marks)

QUESTION FIVE

Jolly Bread Company faces costs of production as follows in a **perfect competitive** market:

Output (Q) (Pieces of Bread)	Total Fixed Cost (Ksh)	Total Variable Cost (Ksh)	total costs	average fixed costs	average variable costs	marginal cost
0	100	0				
1	100	50				



2	100	70				
3	100	90				
4	100	140				
5	100	200				
6	100	360				

Required;

- i) Fill in the table above by calculating the company’s total costs, average fixed costs, average variable costs, average total costs, and marginal cost at each level of output **(8 marks)**
- ii) Given that price of bread is Ksh. 50, how many pieces of bread should the company produce optimally? **(4 marks)**
- iii) Calculate the firm’s profit? **(4 marks)**
- iv) Explain whether the Company is operating in the short run or long run **(4 marks)**

