

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FIRST SEMESTER 2025/2026 ACADEMIC YEAR

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

ECON 111/BCOM -112: PRINCIPLES OF MICROECONOMICS

STREAM: BSC (ECON STAT), BSC(STAT),AGBM,AGEC & BCOM

TIME: 2 HRS

DAY: MONDAY [14. 30P.M-16.30 P.M] ***DATE:*** 02/02/2026

THIS QUESTION PAPER CONSISTS OF FIVE (5) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

Instructions

1. Answer question **ONE** and any other **TWO** questions.
2. Question **ONE** is compulsory and carries **30** marks
3. All other questions carry **20** marks each.
4. Ensure your hand writing is neat and legible. Also ensure that your grammar is correct with **NO** editorial errors.

Question One

(a) Distinguish between the following pairs of concepts

- | | |
|--|------------------|
| i) Isoquant curve and indifference curve | (2 Marks) |
| ii) Change in quantity supplied and change in supply | (2 Marks) |
| iii) Monopoly and oligopoly | (2 Marks) |

(b) Assume that the demand for a crate of apples is given by

$$Q_D = 12000 - \frac{1}{3}P$$

$$Q_S = \frac{1}{6}P$$

Where: P = price per Kg (Shillings)

Subject to $Q_D \geq 0$, $Q_S \geq 0$, and $P \geq 0$.

- | | |
|---|------------------|
| i) Calculate the equilibrium price and quantity. | (4 marks) |
| ii) Draw a diagram and show consumer and producer surpluses. | (4 marks) |
| iii) Assuming no government intervention, calculate consumer and producer surpluses. | (4 marks) |
| iv) Suppose the government decides to impose a lump-sum tax on producers equal to 9000 shillings. Calculate the new equilibrium price and quantity. | (4 marks) |
| v) Calculate the new consumer surplus, producer surplus and the deadweight loss. | (6 marks) |
| vi) Does a tax lead to efficiency? Give reasons for your answer. | (2 marks) |

Question Two

- (a) Explain **FOUR** factors that affect quantity demanded. **(8 Marks)**
- (b) Soita's father has given him Shs. 300 to buy lunch from a restaurant. The restaurant sells chips and chicken. Chips and chicken cost Shs. 60 each. The table below shows Soita's total utilities from consuming the two goods.

Chips		Chicken	
Quantity	TU _{Chips}	Quantity	TU _{Chicken}
0	0	0	0
1	1140	1	1260
2	2220	2	2460
3	3240	3	3540
4	4140	4	4440
5	4920	5	5040
6	5520	6	5280

- i) Which combination of chips and chicken maximizes Soita's total utility? **(4 marks)**
- ii) What is the total utility of the utility-maximizing combination of chips and chicken? **(2 marks)**
- iii) Suppose the restaurant decides to reduce the price of chips to Shs. 30. Which new combination of chips and chicken maximizes Soita's total utility? **(4 marks)**
- iv) What is the total utility of the new utility-maximizing combination of chips and chicken? **(2 marks)**

Question Three

- (a) A researcher found that in the long-run, a 10% rise in the price of petrol brings a 5% decrease in quantity of petrol consumed, ceteris paribus. The researcher also found that when the average price of petrol increases by 53%, the quantity of petrol consumed decreased by 10%.
- i) Compute the price elasticity of demand for petrol. **(4 Marks)**
- ii) Interpret the results in part (i). **(2 Marks)**

iii) Why does the government impose a tax on products that are inelastic in demand?

(2 Marks)

(b) Explain the long-run average cost curve.

(4 marks)

(c) Tom can produce 40 bags of maize or 4 bales of rice. Mary can produce 80 bags of maize or 4 bales of rice.

i) Calculate Tom's opportunity cost of producing maize and rice.

(3 Marks)

ii) Calculate Mary's opportunity cost of producing maize and rice.

(3 Marks)

iii) Who has a comparative advantage in producing maize and rice? Explain your answer.

(2 Marks)

Question Four

(a) Compare and contrast a perfectly competitive industry with a monopolistically competitive industry with respect to:

i) Characteristics of the two industries.

(6 Marks)

ii) Long-run equilibrium. Use appropriate graphs.

(6 Marks)

iii) Allocative and productive efficiency

(4 Marks)

(b) Explain the kinked demand curve for an oligopoly.

(4 marks)

Question Five

You are given the following Table for a firm.

Output	AR	TR	MR	TC	AC	MC
0	22			0		
1	20			10		
2	18			13		
3	16			20		
4	14			33		
5	12			58		
6	10			93		
7	8			140		
8	6			210		

(a) Complete the Table.

(4 marks)

- (b) Plot the cost and revenue curves. **(6 marks)**
- (c) Find the profit maximizing output, break-even output and the size of the economic profit. **(6 marks)**
- (d) Explain the relationship between product curves and cost curves. **(4 marks)**