MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS MANAGEMENT AND TRADE

FOURTH YEAR SPECIAL/ SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT

AGB 103/KBT 209 PRINCIPLES OF AGRICULTURAL MICROECONOMICS

DATE: 18/01/2021 **TIME: 8.30-10.30 AM**

INSTRUCTIONS;

Answer question one and any other two questions

QUESTION ONE (30 MARKS)

a) Differentiate between the following terms as used in economics

i. Pareto optimality and Pareto superiority (2 marks)

ii. Microeconomics and macroeconomics (2 marks)

iii. Normal good and inferior good (2 marks)

iv. Overt collusion and tacit collusion (2 marks)

v. Positive externality and negative externality (2 marks)

vi. Ordinal utility and cardinal utility (2 marks)

vii. Price ceiling and price floor (2 marks)

b) With examples or illustrations, expound on the following economics terms

i. Income consumption curve (3 marks)

ii. Marginal rate of technical substitution (3 marks)

iii. The law of diminishing marginal utility (3 marks)

iv. Producer surplus (3 marks)

c) Describe four properties of indifference curves (4 marks)

QUESTION TWO (20 MARKS)

a) With relevant examples, explain FOUR factors that influence supply of agricultural products (8 marks).

b) The figures in the table below were taken from demand schedules of two goods.

	Quantity1	Price1	Quantity2	Price2
Good 1	50	4	35	5
Good 3	7	5	7	6
Good 4	45	24	30	36

i. Calculate the price elasticity of demand for each good (6 marks).

ii. Explain the meaning of elasticity values obtained for each good (3 marks).

iii. For each of the goods, explain what would happen to the total revenue earned from the good if the price of the good was increased (3 marks).

QUESTION THREE (20 MARKS)

a) Using an appropriate diagram, explain how a purely competitive firm maximizes profit (8 marks).

b) You have soft drinks – soda and fruit juice, and a fixed income. Using a diagram, explain how you would choose the optimal combination of these products to maximize utility assuming competitive markets (12 marks).

QUESTION FOUR (20 MARKS)

a) Expound on four reasons why perfect competition in agricultural markets rarely exists. (8 marks)

b) The Government of Kenya plans to set a maximum price of commercial fertilizers. Using a diagram, explain whether or not this policy change will be beneficial (12 marks)

QUESTION FIVE (20 MARKS)

a) Describe three types of returns to scale (6 marks)

b) Explain two sources of economies of scale (4 marks)

c) Suppose there was a sudden severe drought in key dairy production zones of Kenya. Explain, using a diagram, the likely changes in equilibrium price and quantity of milk in the short run (12 marks)