



MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS
2018/2019 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER**

**SCHOOL OF BUSINESS & ECONOMICS
BACHELOR OF SCIENCE IN ECONOMICS
BACHELOR OF SCIENCE IN FINANCIAL
ECONOMICS
BACHELOR OF SCIENCE IN ECONOMICS
AND STATISTICS**

COURSE CODE: ARE 1205

**COURSE TITLE: INTRODUCTION TO
AGRICULTURAL
ECONOMICS**

INSTRUCTIONS TO CANDIDATES

Answer Question **ONE** and any other **THREE** questions

*This paper consists of **three** printed pages. Please turn over.*

QUESTION ONE

a) Discuss the unique characteristics of agricultural products.
(7 Marks)

b) Distinguish between returns to scale and economies of scale.
(4 Marks)

c) Explain the importance of the concept of elasticity in agriculture.

(6 Marks)

d) "Supply in agriculture is said to be irreversible." Discuss this statement giving relevant examples.
(8 Marks)

QUESTION TWO

a) Use diagrams to explain the resultant changes in equilibrium price and quantity from a simultaneous fall in price of a substitute and an increase in the cost of raw materials for a specific commodity.
(9 Marks)

b) Discuss the concept of marginal rate of technical substitution in relation to least cost combination of inputs in the production process.
(6 Marks)

QUESTION THREE

a) Discuss the problems facing the agricultural sector in Kenya that are of concern to agricultural economists.
(10 Marks)

- b) Explain the factors that may cause a fall in the demand for an agricultural commodity.
(5 Marks)

QUESTION FOUR

- a) The equilibrium budget constraint and optimal combination of inputs are concepts frequently encountered in agricultural economics. Explain the differences and similarities between the two concepts. (4 Marks)
- b) Given hypothetical data as follows:

Input (X)	0	1	2	3	4	5	6	7	8	9
Output (Q)	0	50	11	16	20	23	25	260	26	250
			0	0	0	0	0		0	

- i) With the aid of a diagram, describe the stages of production showing the relationship between APP, TPP, and MPP curves. (8 Marks)
- ii) Which stage would you advise a farmer to produce at and why?

(3 Marks)

QUESTION FIVE

- a) Distinguish between short-run production plan and long-run production plan. (4 Marks)
- b) Consider the following production functions for maize and wheat enterprises, and use information provided to answer the questions that follow:

Units of labor	Units of maize	Units of wheat
0	0	0
1	22	10
2	48	30

3	70	46
4	90	56
5	88	64
6	84	66
7	76	66

N.B. Price of maize per unit =ksh 20.00

Price of wheat per unit=ksh 40.00

Unit factor cost of labor = ksh 100.00

- a. Assume the producer has only 7 units of labor available. What would be the optimum combination of enterprises?
(6 Marks)
- b. If the farmer can hire as much labor as required, what would be the new economic optimum? Assume labor is indivisible.
(5 Marks)

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