



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR DEGREE
OF BACHELOR OF SCIENCE IN AGRICULTURAL
ECONOMICS/AGRIBUSINESS MANAGEMENT WITH
INFORMATION TECHNOLOGY**

MAIN CAMPUS

AEG 101: INTRODUCTION TO AGRICULTURAL ECONOMICS

Date: 2nd December, 2016

Time: 12.00 - 3.00pm

INSTRUCTIONS:

- Answer ALL Questions in Section A and any other TWO in Section B.
- Carefully read and follow the instructions contained in the answer booklets provided.
- Marks for each question are indicated in brackets against each question.





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IN AGRICULTURAL ECONOMICS WITH INFORMATION TECHNOLOGY**

AEG 101: INTRODUCTION TO AGRICULTURAL ECONOMICS

INSTRUCTIONS TO CANDIDATES

1. Carefully **READ AND FOLLOW THE INSTRUCTIONS** contained in the answer booklet(s) you have been provided with.
2. Answer **ALL** the Questions in Section A and Any Two Questions in Section B.
3. Marks for each question are indicated in brackets against each Question

SECTION A (Compulsory)

1. a. Using indifference curves derive the demand curve for a normal good. (5 mks)
b. Write brief notes on the following:
 - i. Scarcity and choice (2.5 mks)
 - ii. Price elasticity of demand (2.5 mks)
c. With the help of a diagram distinguish between the income effect and substitution effect of change in the price of a normal good (8 mks)
2. The demand and supply schedule for carrots in Kibuye market are given below. Use the information to answer the questions below:

Price Kshs "000" Per ton	Quantity demanded per (thousands of tons)	Quantity demanded per (thousands of tons)
2	110.0	5.0
4	90.0	46.0
8	67.5	100.0
10	62.5	115.0
12	60.0	122.5

- (i) Use the graphical method to determine the equilibrium price. (5 mk)
- (ii) Explain what would happen if the prices were set at Ksh 4,000 and Ksh 10,000 respectively. (3 mks)
- (iii) What is the price elasticity of demand when prices change from Ksh. 4,000 to Ksh. 10,000 (2 mks)
- (iv) Interpret the coefficient calculated and explain whether the demand at this point is considered to be elastic or inelastic. (1 mks)
- (v) State FOUR factors that would affect the supply of beans in Kibuye Market. (2 mks)

SECTION B – ANSWER ANY TWO QUESTIONS

3. The following table shows a production relationship between input (X) and output (Y). Use the information to answer the questions that follow.

X	Y
0	0
1	16
2	26
3	31
4	35
5	38
6	40
7	42
8	43
9	43
10	42

- (i) Calculate MPP & APP at each level of output. (5 mks)
- (ii) Plot the TPP, MPP and APP curves. Show the 3 production regions. (10 mks)
- (iii) Briefly discuss each region in (ii) above and explain what a rational producer should do in each region. (5 mks)

4. A firm is faced with the following schedule of output and associated cost of production

OUTPUT	TOTAL COST
0	1000
1	1500
2	3500
3	4500
4	6500
5	8500
6	12000

Use the above information to answer the questions below:-

- (i) Compute the Total Fixed Cost and Total Variable Cost at each level of output
(6 mks)
- (ii) Compute the AFC, AVC and MC at each level of output. (8 mks)
- (iii) What levels of output would maximize profit at prices of 1000 and 3500 respectively. State the principles used to determine these output levels.
(3 mks)
- (iv) Compute the profit generated at the levels of output in (iii) above. (3 mks)

5. a) What is oligopoly? (4 mks)
- b) Using a well-labeled diagram, show that a monopolist can make losses in the short-run even when $MC = MR$. (8 mks)
- c) Using a well-labeled diagram, explain why prices are „sticky“ downward under oligopolistic market (8 mks)