



**MASENO UNIVERSITY**  
**UNIVERSITY EXAMINATIONS 2015/2016**

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE  
OF BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS WITH  
INFORMATION TECHNOLOGY**

**MAIN CAMPUS**

**AEC 204: AGRICULTURAL ECONOMICS**


Date: 8<sup>th</sup> January, 2016

Time: 2.30 - 4.30pm

**INSTRUCTIONS:**

- Carefully read and follow the instructions contained in the answer booklet(s) you have been provided with.
- This paper consists of TWO sections. Answer ALL the questions in Section A and any FOUR in Section B.
- Marks for each question are indicated in brackets against each question.

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- (i) Use the graphical method to determine the equilibrium price. (8 marks)
- (ii) Explain what would happen if the prices were set at Ksh 300 and Ksh 420 respectively. (3 marks)
- (iii) What is the price elasticity of demand when prices change from Ksh. 300 to Ksh. 420. (2 marks)
- (iv) Interpret the coefficient calculated and explain whether the demand at this point is considered to be elastic or inelastic. (2 marks)

**SECTION B – ANSWER ANY TWO QUESTIONS**

Q4. 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 marks)
- (ii) Plot the TPP, MPP and APP curves. Show the 3 production regions. (10 marks)
- (iii) Briefly discuss each region in (ii) above and explain what a rational producer should do in each region. (5 marks)

Q5. 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 marks)
- (ii) Compute the AFC, AVC and MC at each level of output (8 marks)
- (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 marks)
- (iv) Compute the profit generated at the levels of output in (iii) above. (3 marks)

Q6.a) What is oligopoly? (4 marks)

b) Using a well-illustrated diagram, show that a monopolist can make losses in the short-run even when  $MC = MR$ . (8 marks)

c) Using a well-illustrated diagram, explain why prices are "sticky" downward under oligopolistic market. (8 marks)