## END OF SEMESTER EXAMINATIONS APRIL-2019

## EXAMINATION FOR THE DEGREE OF BACHELOR OF AGRIBUSINESS

 (YR III SEM II)UNIT CODE: BAAFS 2112

## UNIT TITLE: AGRICULTURAL ECONOMICS

## DATE: $\mathbf{2 5}^{\text {TH }}$ APRIL, 2019

TIME: 2:00 PM - 4:00 PM

## INSTRUCTIONS:

Answer question ONE (compulsory) and any other TWO questions Question one

## QUESTION ONE

(a) Define the following terms
(6 marks)
i. Elasticity of demand
ii. Ridgeline
iii. Marginal rate of substitution
(b) Distinguish between a normal price and market price (6 marks)
(c) Briefly describe the different types of demand elasticity (6 marks)
(d) Highlight the properties of isoquant curve
(6 marks)
(e) In order to produce 1000 units of output, the following combinations of inputs X1 and X 2 are required

| X1 | X2 |
| :--- | :--- |
| 0 | 120 |
| 2 | 100 |
| 4 | 84 |
| 6 | 72 |
| 8 | 60 |
| 10 | 44 |
| 12 | 20 |
| 14 | 8 |
| 16 | 0 |

Determine the least cost combination of X1 and X2 when the price of X1 is Ksh. 100 per unit and price for X 2 is Ksh. 40 per unit

## QUESTION TWO

(a) Discuss the various factors that will cause shift in a demand curve` (10 marks)
(b) With aid of diagrams distinguish between the different types of marginal returns
(10 marks)

## QUESTION THREE

(a) Describe the THREE different ways in which factors of production can be combined
(8 marks)
(b) Describe the FOUR processes that are used in price determination

## QUESTION FOUR

(a) With the aid of a well drawn, neat and labeled graph show the relationship between total cost (TC), total fixed cost (TFC) and total variable cost (TVC)
(10 marks)
(b) Give reasons why the law of diminishing marginal return is most common in agricultural production

## QUESTION FIVE

Given the following information extracted from Greenbelt farm records

| Quantity of labour (X) | Quantity of onions (Y) |
| :--- | :--- |
| 0 | 0 |
| 5 | 75 |
| 10 | 245 |
| 15 | 435 |
| 20 | 560 |
| 25 | 648 |
| 30 | 710 |
| 35 | 753 |
| 40 | 782 |
| 45 | 800 |
| 50 | 810 |
| 55 | 808 |

(a) Calculate the average physical product (APP) and the marginal physical product (MPP)
(b) Draw graphs showing the relationship between inputs, TPP, MPP and APP and explain the relationship of the three graphs
(8 marks)
(c) Using lines demarcate and explain the various regions representing the stages of production explaining the most relevant region of production
(6 marks)

