CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF
BACHELOR OF SCIENCE IN AGRICULTURAL ECONOMICS, BACHELOR OF AGRIBUSINESS MANAGEMENT AND BACHELOR OF SCIENCE IN AGRICULTURE

AGEC 111: INTRODUCTION TO AGRICULTURAL ECONOMICS

STREAMS: AGBM, AGEC, AGRIC   **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 8/04/2015   **2.30 PM – 4.30 PM**

INSTRUCTIONS:

Answer Question One and any other Two Questions

Question One

(a)   Distinguish between the following economic concepts

      (i)   Agricultural economics and economics   [2 marks]
      (ii)   Marginal productivity and incremental costs   [4 marks]
      (iii)   Short-run production function and long-run production function   [2 marks]
      (iv)   Isoquant and isocost line   [4 marks]

(b)   Explain the main features of agricultural production in Kenya.   [6 marks]

(c)   With each extra addition of an input to other fixed inputs, output initially increases at an increasing rate and later increases at a diminishing rate. Explain the causes of this observation in agricultural production.   [12 marks]

Question Two

(a)   With a well labeled diagram, discuss the law of diminishing returns to a factor.

[14 marks]

(b)   Explain the least cost combination of inputs as applied in agricultural production.

[6 marks]

Question Three

(a)   Compare and contrast the key features of agricultural production and agricultural demand.

(b)   Discuss the importance of agricultural sector in national economy development.

Question Four

(a)   Consider the following short-run production function where L is the variable input and Q the output. $Q = 12L^2 - 0.4L^3$

Find:

(i)   The value of L at which output is at maximum   [4 marks]

(ii)   The value of L at which average product is at maximum   [4 marks]

(iii)   The value of L at which the marginal product is at maximum   [4 marks]

(b)   Discuss the various types of returns to scale.   [8 marks]