



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
MARCH/APRIL 2016 EXAMINATION
SCHOOL OF AGRICULTURAL

Course Title: Agricultural Production Economics
Course Code: AEA303
Credit Unit: 3
Time Allowed: 3 Hours
INSTRUCTION: Answer any five (5) questions. All questions carry equal marks.

1. Briefly explain the term production possibility curve and state its characteristic features.
2. Write short note on marginal rate of technical substitution (MRTS) and Isoquant. What are the characteristic features of MRTS and Isoquant?
3. Define the term elasticity of production? State the end product of output elasticity will guide you to determine elasticity of production in the three stages of production function.
4. State the implicit production function product-product relationships. With the aid of distinct examples highlight the different types of product-product relationships.
5. List four assumptions for determining the optimum level of output in a resource allocation involving one variable input and one product. Highlight five uses of economics in agriculture?
6. The production function of maize output as follows:

$$Y = 100 + 400X - 2X^2$$

Where Y = maize output (kg) and
X = fertilizer application (kg)

Calculate: (a) the level of input that will maximize maize output.

(b) The optimum quantity of maize that could be produced.

7. Define the term efficiency? Highlight the various ways efficiency can be expressed? List ten (10) features of agricultural production that distinguish it from industrial production?