



NATIONAL OPEN UNIVERSITY OF NIGERIA

University Village, Nnamdi Azikiwe Expressway, Plot 91, Cadastral Zone, Jabi, Abuja

Faculty of Agricultural Sciences, Dept. of Agricultural Economics and Extension,

PoP Examination Questions, November/December, 2019

Programme: Agricultural Economics and Agribusiness

Course Title: Agricultural Production Economics

Course code: AEA 303

Credit Unit: 2

Time Allowed: 2 Hours

INSTRUCTION:

Answer Compulsory question 1 (25 marks) and any 3 other questions (15 marks each).

- 1 a (i) Explain the term production function with diagram (2 marks)
(ii) State the algebraic expression of production function. (2marks)
 - b State five (5) relationships between TPP and MPP (5 marks)
 - c Mention three (3) uses of economics in agriculture (3 marks)
 - d Explain the following resources used in Agricultural production.
 - i. Fixed resources (3 marks)
 - ii. Variable resources (3 marks)
 - iii. Flow resources (3 marks)
 - e. Explain two (2) importance of the law of diminishing returns in Agricultural production (4 mks)
- 2(a) Itemize five (5) areas of specialisation in Agricultural economics. (5 marks)
(b) Describe five (5) characteristic features of Stage 1 of the production process (10 marks)
- 3 (a) Discuss the following Law of returns. 9 marks
 - i) Law of Increasing Returns (3marks)
 - ii) Law of Constant Returns (3marks)
 - iii) Law of Decreasing Returns (3marks)
- b) Consider the production function of rice output as follows:
$$Y = 100 + 400X - 2X^2$$

Where Y = rice output (kg) and X = fertilizer application (kg)
Calculate: (i) The level of input that will maximize rice output.
(ii) The optimum quantity of rice that could be produced. **6 marks**
- 4) (a) State the meaning and application of Agricultural Economics (5 marks)
(b) Determine the state of elasticity of production at the three stages of production. (10 marks)
- 5) (a) Explain the three (3) types of production:
 - (i) Primary Production (3 marks)
 - (ii) Secondary Production (3 marks)
 - (iii) Tertiary Production (3marks)
- (b) Discuss three (3) usefulness of production function. (6 marks)
- 6 (a) Discuss any three (3) factors of production. (9 marks)
(b) Explain the Short run and Long run period in production. (6 marks)