



**NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
2023_1 POP EXAMINATION.**

PROGRAMME: AGRICULTURAL EXTENSION AND MANAGEMENT

COURSE CODE: AEA510

COURSE TITLE: ENVIRONMENTAL ECONOMICS

CREDIT UNIT: 3

TOTAL SCORE: 70 MARKS

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS ONLY

1a. What is environmental economics and why is the study important in economic and national development? **(10marks)**

b. Explain the following economic concepts

i. Utility **(1mark)**

ii. Limited availability (Scarcity) **(2¹/₂marks)**

iii. Choice **(1mark)**

iv Opportunity Cost **(1mark)**

v. Efficiency **(1mark)**

vi. Social institutions **(1mark)**

2a. Explain the meaning of ecosystem **and** outline the **two** main types **(5¹/₂ marks)**.

b. Discuss the meaning and importance of biotic and abiotic components of the environment **(12marks)**

3a. Suggest the meaning of production and explain why the major resources used in agricultural production are termed free and economic resources? **(12¹/₂marks)**

b. Outline **five (5)** properties of Isoquants **(5marks)**.

4ai. State **four (4)** assumptions of production function **(4marks)**.

ii. State **two (2)** reasons why the law of diminishing return is important in agricultural decision-making process **(2marks)**.

iii. Give **four (4)** reasons why you consider the concept of resources productivity analysis is important in agriculture **(4marks)**

b. Suggest what happens in the rational stage of production in a production function **(7¹/₂marks)**

5a. Enumerate **eight (8)** conditions that are necessary for maximum efficiency to be attained **(12marks)**

b. Explain using **four (4)** instances the implications of producing output at minimum cost **(4marks)**

c. What are the implications of attaining social efficiency **(1¹/₂ marks)**

6a. Enumerate **seven (7)** reasons why it is important to achieve efficiency in agricultural production **(10¹/₂ marks)**

b. State **seven (7)** factors that are likely to affect land availability and use **(7marks)**