



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF AGRICULTURAL SCIENCES
DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION
2025_2 EXAMINATIONS

Programme: Agricultural Economics and Agribusiness

Course Code: AEA510

Course Title: Environmental Economics

Credit Unit: 2

Total Score: 70 Marks

Time Allowed: 3 Hours

Instruction: Answer Question ONE (1) any THREE (3) Questions

- 1a Explain using **five (5) points** the meaning of environmental economics (**5marks**).
- b. Environmental economics is associated with the term social carrying capacity. If this is true, establish using **five (5)** instances what social carrying capacity is (**5marks**).
- c.i. List terrestrial ecosystems (**5marks**)
- ii. Analyze the second law of thermodynamics (**5marks**)
- d. Explain the impact of human intervention on the functions the ecosystem (**5mark**)
2. a. Vividly explain the principles of 3Rs (Recovery, Recycling and Reuse) (**9marks**)
- b. Provide **six (6)** reasons why the Material Balance Models developed by Alen Kneese and R.V. Ayres is important to the environment (**6marks**)
- 3a. How can you justify environmental pollution as an economic problem? (**9marks**)
- b. Suggest the relevance of Normative economics in determining environmental economic issues (**6marks**)
4. Write short notes on the following with respect to environmental economics
 - i. Economy-Environmental analysis (**3marks**)
 - ii. Eco-Development (**2marks**)
 - iii. Dynamic and stock-flow analysis (**4marks**)
 - iv. Environmental Value (**4marks**)
 - v. Clean Technology (**2marks**)
- 5a. Explain using **six (6) instances** the meaning of production (**6marks**).
- b. Outline the importance of land in agricultural production in Nigeria economy (**5marks**).
- c. State the assumptions of production function (**4marks**).