



**National Open University of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**OCTOBER, 2019\_2 EXAMINATIONS**

**COURSE CODE: ESM 428**

**COURSE TITLE: ECOLOGY OF NATURAL RESOURCES**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**Instruction:** Attempt question number ONE (1) and any other THREE (3) questions. Question number one (1) carries 25 marks, while the other questions carry (15) marks each.

- 1a. Define the term ozone layer. **(2marks)**
  - b. Explain these layers of the earth: ionosphere, homosphere and the planetary boundary layer **(3marks)**
  - c. Describe the term climate **(2 marks)**
  - d (i) What is ecosystem **(3 marks)**
  - (ii). Explain briefly biogeochemical cycles **(3 marks)**
  - (iii). Differentiate between wilderness and wildlife **(3 marks)**
  - e i. State the human impact on the natural environment **(4 marks)**
  - ii. State the clearest manifestation of degradation on natural environment **(3 marks)**
  - f(i) Explain briefly how energy impacts natural environment **(2 marks)**
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- 2a. Explain briefly the relationship between- ecosystem, habitat, and species **(2marks)**
  - 2b. Explain how degradation affects loss of fauna and flora **(3marks)**
  - 2c. Describe the concept of tourism and recreation **(4marks)**
  - 2d. What are the principles of resource sustainability **(2marks)**
  - 2e. State the goals for resource sustainability **(4 marks)**

- 3a. What is a lake **(2marks)**
- 3b. Describe the troposphere **(3marks)**
- 3c. Explain the concept weather **(4marks)**
- 3d. Describe the biosphere **(2marks)**
- 3e. Describe briefly the phosphorus cycle **(4marks)**

- 4a. What is troposphere **(2marks)**
- 4b. Describe the term weather **(3marks)**
- 4c. Describe water cycle **(4marks)**
- 4d. State human impact on natural environment **(2marks)**
- 4e. How can degradation of natural environment affect flora and fauna **(4marks)**

- 5a. List some component of the earth **(2marks)**
- 5b. Explain the biosphere as part of the natural environment **(3marks)**
- 5c. Define the term- sequestration **(3 marks)**
- 5d. Explain the emission reduction from the environment **(2 marks)**
- 5e. What are the actual resources in ecology **(4 marks)**