



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**National Open University of Nigeria**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**  
**SEPTEMBER, 2020\_1 EXAMINATION**

**COURSE TITLE: ANIMAL ECOLOGY**

**COURSE CODE: BIO 313**

**CRDIT UNIT: 2**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS**

- 1a. Describe an ecosystem? (2mks)
  - b. State and discuss the importance of 5 specific abiotic factors in an ecosystem. (10marks).
  - c. Explain three kinds of population in respect to age distribution. (6marks).
  - d. Discuss the taste and odor of water (5marks).
  - e. Mention the properties of water that allows it to moderate the Earth's climate. (2marks).
- 2a. Explain the term territory in relation to animals (2marks)
  - b. Describe the term spraying in animal behavior. (5marks)
  - c. State the importance of life tables (2marks).
  - d. Describe the three methods of constructing Life Tables (6marks).
- 3a. Describe Ecological Community (2marks).
  - b. Discuss Energy Flow in the ecosystem (7marks)
  - c. Differentiate between Habitat and Ecological Niche (6marks)
- 4a. What is Population Growth Curve? (1mark)
  - b. Discuss the phases of population growth curves (6marks)
  - c. Explain briefly the following terms:
    - i. Immigration (2marks)
    - ii. Emigration (6marks)
- 5a. Write a comprehensive essay on Human population control (7marks)
  - b. Discuss the occurrence of population cycle in mammal populations (8marks)