



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**

**Faculty of Science**

**Department of Pure and Applied Science**

**End of second Semester Examination 2021 Academic Session**

**COURSE CODE: BIO 304 (2 CREDIT UNITS) TIME ALLOWED: 2 HOURS**

**COURSE TITLE: GENERAL ECOLOGY**

**INSTRUCTION:** Answer question ONE (1) and any other THREE (3) Questions only

- 1a Define the term ecosystem
- 1b What are the fundamental steps in the operation of the ecosystem
- 1c List the major organism groups in an aquatic ecosystem
- 1d Describe the process of Water cycle in the atmosphere
  
- 2 Differentiate between a Habitat and a Niche of an ecosystem
  
- 3 Explain the various characteristic features of a population
  
- 4a Briefly explain each of the following concepts:
  - i Primary productivity
  - ii Gross primary productivity
  - iii Net primary productivity
  - iv Ammonification
  - v Uptake of Nitrogen by plants.
  
- 4b what is the significance of primary productivity?
  
- 5 Describe the process of nutrient cycling within an ecosystem.