



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI - ABUJA
FACULTY OF SCIENCE
Department of Biological Sciences
2025 2 EXAMINATIONS

BIO304: General Ecology

Time: 2½ Hours

Credit Units: 3

Instruction: Attempt FOUR (4) questions only. QUESTION 1 is compulsory.

1a. Define the following:

- i. Energy flow in an ecosystem (2 marks)
- ii. Biogeochemical cycle (2 marks)
- iii. Aquatic ecosystem (2 marks)
- iv. Marine ecosystem (2 marks)
- v. Artificial ecosystem (2 marks)

b. Distinguish between a desert and a grassland (4 marks)

c. Discuss parasitism is a harmful relationship in a population. (11marks)

Total Marks = (25 marks)

2a. Explain the term Ecosystem Ecology (6 marks)

b. Write succinctly on Mutualism (9 marks)

Total Marks = (15 marks)

3a. Explain the following:

- i. Life table (3 marks)
- ii. Survivorship curve (4 marks)
- b. Discuss the characteristics of an Ecosystem (8 marks)

Total Marks = (15 marks)

4a. Differentiate between Natality and Mortality (5 marks)

b. Give an account of a community in Ecology (10 marks)

Total Marks = (15 marks)

5a. List any five (5) types of biomes you know (5 marks)

b. Describe the different types of biogeography (10 marks)

Total Marks = (15 marks)

6ai. Define Pollution as it relates to ecosystem (2 marks)

ii. List three (3) types of Pollution (3 marks)

bi. Outline five (5) characteristics of a community. (5 marks)

ii. Briefly describe a stable ecosystem community (5 marks)

Total Marks = (15 marks)