



NATIONAL OPEN UNIVERSITY OF NIGERIA
FACULTY OF SCIENCES
DEPARTMENT OF ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT
Plot 91, Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja
2022_2 EXAMINATION

COURSE CODE: ESM 426

COURSE TITLE: Biogeography

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.

QUESTION 1a. Using concrete example define Ecosystem. **(10 marks)**

b. Mention five inorganic part of the ecosystem. **.(5marks)**

c. Outline five organic structure of the ecosystem. **.(5 marks)**

d. Using adequate examples differentiate between autotrophs and consumers. **.(5marks)**

QUESTION 2. Briefly explain of the following processes of biotic succession.

a. Primary succession. **.(5marks)**

b. Secondary succession. **.(5marks)**

c. Climax community. **.(5marks)**

QUESTION 3. Explain the importance of the following in ecosystem functioning.

a. Decomposers. **.(7.5marks)**

b. Solar energy. **(7.5marks)**

QUESTION 4 a. Explain the term ecosystem equilibrium. **.(6marks)**

b. With appropriate illustration describe the grazing food chain. **.(9marks)**

QUESTION 5 a. Using adequate example describe a resilient ecosystem. **.(6marks)**

b. State factors that promote resilience in an ecosystem. **.(9marks)**