



National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja
Faculty of Science
2023_1 POP EXAMINATION.

COURSE CODE: ESM426

COURSE TITLE: Biogeography

CREDIT: 2Units

TIME ALLOWED: 2 Hours

Instruction: Attempt question number ONE (1) and any other TWO (2) questions. Question number one (1) carries 30marks, while the other questions carry (20) marks each.

1. (a) Describe the concept of Climax and Ecosystem Stability (**5Marks**)
(b) Explain the factors responsible for the salinity of the marine environment and its implications for life (10Marks)
(c) Identify 5 factors related to biomass of an ecosystem (5Marks)
(d) Describe the process of Energy flow in a typical ecosystem (10marks)
2. (a) Describe a biological desert (5marks)
(b) Identify 5 factors for the paucity of life and low productivity in dessert (10marks)
(c) describe 3 Survivorship curves (5marks)
3. (a) Identify three hypothetical pyramids (3marks)
(b) Define the following (a) Commensalism (b) proto-corporation (c) mutualism 12marks
(c) Identify 3 Areas Rainforests can be found (5marks)
4. (a) Describe grassland Ecosystem (5marks)
(b) Discuss two types of biological Desert (5marks)
(c) Identify 5 basis for the distribution of woody plants in which different types of savanna can be recognized (10marks)
5. (a) Describe cold Desert (5marks)
(b) Describe a resilient Ecosystem (7Marks)
(c) Identify 4 certain characteristics of grassland ecosystem which contrast markedly with those of forest ecosystem. (8marks)