



NATIONAL OPEN UNIVERSITY OF NIGERIA

Plot 91 Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja.

DEPARTMENT OF SCIENCE EDUCATION

EXAMINATION: 2021_2

COURSE CODE: SED327

COURSE TITLE: ENVIRONMENT AND POPULATION

CREDIT UNIT: 3

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE

- 1a. What are the actual resources in ecology? **(5Marks)**
- b. Discuss this vis-à-vis the interdependence of plants and animals especially humans. **(7Marks)**
- ci. Explain briefly how energy impacts natural environment. **(5Marks)**
- ii. Discuss the four main constituents of the living environment that forms the fresh water ecosystem. **(8Marks)**

- 2ai. Outline the constituents of abiotic resources. **(3Marks)**
- ii. Mention the major classifications under which natural resources can be grouped. **(3Marks)**
- b. What is the importance of atmospheric resources? **(4Marks)**
- c. In what ways can species be said to be the dominant one in a community? **(5Marks)**

- 3a. What is biomass? **(3Marks)**
- b. What causes climatic differences between cities and rural areas? **(3Marks)**
- ci. How does the manufactured food get transferred to the users? **(4Marks)**
- ii. Apart from producers, what other group of organisms benefit from this manufactured food? **(5Marks)**

- 4a. Apart from food, what other things do we get from plants? **(4Marks)**
- b. What do you think will happen if any member of the chain is missing in detritivores? **(2Marks)**
- ci. How does plant give shelter to animals? **(3Marks)**
- ii. In what ways would you say that plant need animals including man? **(3Marks)**
- d. Explain briefly how energy impacts natural environment **(3Marks)**

- 5a. Define the following terms in relation to a population: **(4Marks)**
- i. Density
 - ii. Death rate
 - iii. Birth rate
 - iv. Dispersal
- bi. How is the rate of population increase determined? **(2Marks)**
- ii. Sketch a graph of the sigmoid growth and explain the stages of the curve. **(4Marks)**
- ci. List four major groupings of aquatic habitat and state one distinguishing characteristic of each. **(3Marks)**
- ii. What physical conditions are common to all the habitats and how are they measured? **(2Marks)**