

NATIONAL OPEN UNIVERSITY OF NIGERIA 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja FACULTY OF EDUCATION 2024 1 EXAMINATION

COURSE CODE; SED 321

COURSE TITLE: Biology For Integrated Science III

CREDIT UNIT: 2

TIME ALLOWED: 2HOURS

INSTRUCTION: Attempt question 1 and any other 2 questions

Question 1 is compulsory and carries 30marks while the other 2

questions carry 20 marks each

- 1(a) Explain what you understand by "Cell".
 - (b) With a well labelled diagram of a plant cell explain the functions of 5 different organelles of the cell.
- 2(a) How did Gregor Mendel get his first filial generation plants in his experiment?
 - (b) Represent the experiment explained in 2(a) above diagrammatically.
- 3(a) Discuss five ways by which human population is controlled in Nigeria.
 - (b)i. What are the advantages of human population control?
 - ii. Explain the problems facing human population control in Nigeria.
- 4(a) Explain what you understand by Environmental Resistant factors in population ecology.
 - (b)i. Discuss the two major types of Environmental Resistant Factors
 - ii. How does each of the factors act as a limiting factor?