



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

2025_2 EXAMINATIONS

COURSE CODE: SED421

CODE TITLE: CYCLES IN NATURE BIOLOGICAL CYCLE

CREDIT UNIT: 2

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer question ONE and any other Two (2) questions

Question

- 1(a) Distinguish between food chain and food web in a tabular form. (12 marks)
- 1(b) Based on your understanding as a science teacher, discuss the meaning of Food web in an ecosystem. (12 marks)
- 1(c) In the simplest scheme, explain the trophic levels in Food webs. (4 marks)
- 1(d) Indicate four different kinds of feeding relations that exist in an Ecosystem. (2marks)
- 2(a) Expatriate on how the Carnot cycle produces both hot and cold temperature. (5marks)
- 2(b) Discuss why studying our Biorhythm cycles are important. (15marks)
- 3(a) Mention 6 stages of the hydrological cycle. (3 marks)
- 3(b) Explain how the Hydrological Cycle works. (12 marks)
- 3(c) State Lorentz Force Law as the definition of E and B. (5 marks)
- 4(a) How would you describe uses of canoe to humanity for Integrated Science student in their upcoming workshop? (8 marks)
- 4(b) In a science conference sponsored by the science education department, as an invited guest, how would you explain any 3 steps involved in the Carnot cycle when acting as a heat engine? (12 marks)