

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF  
SCIENCE IN WILDLIFE AND ENTERPRISE MANAGEMENT

WIEM 121: FUNDAMENTALS OF ECOLOGY

STREAMS: BSc. WIEM (Y1S2)

TIME: 2 HOURS

DAY/DATE: TUESDAY 09/04/2024

11.30 A.M. – 1.30 P.M.

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INSTRUCTIONS

- Answer all questions in section A and any two in section B
- Do not write on the question paper

SECTION A: (30 marks)

1. Differentiate the following terms as used in ecology
  - a) Endemic species and exotic species (2 marks)
  - b) Intraspecific competition and interspecific competition. (2 marks)
2. Explain the classification of ecological succession based on the nature of the original surface. (6 marks)
3. How does energy flow from one organism to the next in an ecosystem? (6 marks)
4. Explain briefly the zonation of aquatic ecosystems on the basis of light penetration. (4 marks)
5. Citing two relevant examples, explain the meaning of commensalism. (4 marks)
6. Explain the meaning of ecotone and highlight five characteristics of the same. (6 marks)

SECTION B (40 MARKS)

7. a) Discuss three factors that influence species distribution in an ecosystem. (12 marks)  
b) Using an example in each case, discuss the two types of food chains. (8 marks)

8. a) Ecology is primarily concerned with interactions between various levels of ecological organization. Explain (8 marks)
- b) With the help of diagram, describe the hydrologic cycle. (12 marks)
9. Discuss five ways in which climate change through its influence on ecosystems has affected wildlife in Kenya. (20 marks)
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