

CHUKA

UNIVERSITY



UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF
EDUCATION AND BACHELOR OF SCIENCE**

ZOOL 210: ECOLOGY

STREAMS: BSc, BED

TIME: 2 HOURS

DAY/DATE: TUESDAY 19/12/2023

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS

- **Answer all questions in section A and any other two questions in section B**

SECTION A (30 MARKS)

1. Outline the ecological role of marshlands. (4 marks)
2. Describe adaptations of plants to grassland ecosystem. (6 marks)
3. Describe how density dependent factors affect the size of a population. (6 marks)
4. Describe how commensalism influences the type, distribution and abundance of commensals in an environment, using a suitable example. (5 marks)
5. Describe the harmful effects of dumping of organic wastes in aquatic ecosystems. (5 marks)
6. Explain the influence of altitude on the distribution of vegetation in Mount Kenya along a vertical transect. (4 marks)

SECTION B (20 MARKS)

7. Discuss tropical rain forest ecosystems under the following sub headings;
 - a) Abiotic characteristics (8 marks)
 - b) Adaptations of biotic communities (12 marks)
8. a) Describe hydrological cycle. (10 marks)

b) Discuss effects of deforestation on the hydrological cycle. (10 marks)

9. a) Describe the composition of animal communities during primary succession that culminates into a forest. (14 marks)

b) Describe features that distinguish a temperate lake from a tropical lake ecosystem. (6 marks)

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