



KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

SPECIAL/SUPPLEMENTARY EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE AWARD OF THE

DEGREE OF BACHELOR OF SCIENCE IN EDUCATION SCIENCE

SECOND SEMESTER, 2022/2023

(NOVEMBER/DECEMBER, 2022)

ZOOL 210: ECOLOGY

STREAM: Y2 S2

TIME: 2 HOURS

DAY:

DATE: 00/12/2022

INSTRUCTIONS

- 1. Do not write anything on this question paper.***
- 2. Answer ALL the questions in section A [Compulsory] and any other TWO Questions from section B.***

Attempt ALL questions in Section A and any TWO questions from section B.

SECTION A:

1. Relate the concept of resilience and resistance. (5 marks)
2. Explain the types of ecological pyramid. (5 marks)
3. State the characteristics of tundra. (5 marks)
4. Discuss briefly functions of wetlands. (5 marks)
5. Differentiate between the law of the minimum and law of limiting factors. (5 marks)
6. Explain ammensalism and give examples. (5 marks)
7. Describe the defence mechanism evolved by plants against herbivores.

(5 marks)

8. Explain how intraspecific competition affects population size. (5 marks)

SECTION B:

9. Discuss the nitrogen cycle with the help of a diagram. (15 marks)

10. Describe the following abiotic factors and how they influence the distribution of organisms.

(15 marks)

- i. Water
- ii. Light
- iii. Temperature

11. Explain secondary succession of a forest community after a disturbance. (15 marks)