



KISII UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF THE DEGREE OF
BACHELOR OF ENVIRONMENTAL SCIENCE**

SECOND SEMESTER 2023/2024

[JAN – APRIL, 2024]

ENSC 100: INTRODUCTION TO ENVIRONMENTAL SCIENCE

STREAM: Y1 S2

TIME: 2 HOURS

DAY: THURSDAY, 3:00 - 5:00 P.M.

DATE: 18/04/2024

INSTRUCTIONS

- 1. Do not write anything on this question paper.**
- 2. Answer question ONE in section A (Compulsory) and any other TWO questions from section B.**

SECTION A (40 marks) Answer all the questions

1. Differentiate between the limiting factor principle and tolerance level (2 marks)
2. Differentiate between the following terms:
 - a) Population and community (2 marks)
 - b) Ecosystem and biosphere (2 marks)
 - c) Eutrophication and cultural eutrophication (2 marks)
 - d) Bioaccumulation and biomagnification (2 marks)
3. Explain with examples the forms of environmental hazards (4mks)
4. Briefly explain what sustains life on earth (3 marks)
5. (i) Explain the importance of stratospheric ozone layer (6 marks)
(ii) List two chemicals showing their reactive equations with the ozone layer. (3 marks)

6. Briefly explain the factors affecting population size (6 marks)
7. (a) Define the term “**biodiversity**” (2 marks)
- (b) Explain briefly the importance of biodiversity (6 marks)

SECTION B (30 marks): Attempt any TWO questions

8. On December 2011, the whole world economies assembled in South Africa to discuss the effects of global warming; with concrete examples explain the effects of global warming. (15 marks)
9. According to the Kenyan Census of 2019, the human population had hit 47.6 million; with relevant examples, explain the impacts of this increase to the environment. (15 marks)
10. Carbon does occupy a minimal volume of the troposphere, with the aid of a diagram, explain the carbon cycle and the human activities affecting it. (15 marks)