

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR
OF SCIENCE IN ENVIRONMENTAL SCIENCE**

ENSC 343: ENVIRONMENT AND HEALTH

STREAMS: BSC ENSC Y3S2

TIME: 2 HOURS

DAY/DATE: THURSDAY 08/07/2021

11.30 A.M – 1.30 P.M

INSTRUCTIONS:

Answer all questions in section A and any two in section B

Do not write anything on the question paper

SECTION A (30 MARKS)

1. With appropriate examples, differentiate between the following pairs of terms.
 - (a) Teratogens and carcinogens [3 marks]
 - (b) Chronic effects and acute effects of toxicants [2 marks]
2. Identify three parameters used to classify carcinogenic compounds. [3 marks]
3. With reference to specific metalloids or metals, explain the effects of possible multiple interactions. [4 marks]
4. Explain the phases of penetration of a toxicant from the environment to its sites of toxic effect in an organism's system. [6 marks]
5. Explain how the constitution of Kenya 2010 has elevated national environmental health. [6 marks]
6. Briefly describe three possible effects of physical and chemical agents in the toxic kinetic process. [6 marks]

SECTION B (40 MARKS)

7. Discuss the transport processes through which potentially toxic substances get into organisms. [20 marks]
 8. Evaluate the action and effects of five classes of chemical hazards. [20 marks]
 9. Critically examine factors that influence intensity of organismal response to toxicants. [20 marks]
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