

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE

ENSC 212: GLOBAL ECOSYSTEMS AND ENVIRONMENT

STREAMS: BSC ENSC Y2S2

TIME: 2 HOURS

DAY/DATE: MONDAY 05/07/2021

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS:

- Answer ALL questions in section A and ANY TWO in section B.
- Do not write anything on the question paper.

SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. Describe the difference between an ecosystem and an environment. (5 marks)
2. With the aid of a diagram, outline the characteristics of pond ecosystem. (5 marks)
3. Describe the structure of food chain in a tropical grassland ecosystem. (5 marks)
4. Examine the structure of energy flow amongst organism within an ecosystem. (5 marks)
5. Describe any five ecological services derived from Mt. Kenya forest ecosystem. (5 marks)
6. Write short explanatory notes on the concept of nutrient cycle and its role in ecological conservation. (5 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (40 MARKS)

7. Discuss the role played by climate in controlling the distribution of global ecosystems and trends of ecological changes within them. (20 marks)
8. Name any four human activities that cause environmental degradation on a global ecosystem of your choice and explain how related negative consequences can be mitigated. (20 marks)

9. Examine the concept of ecosystem approach and discuss its application in environmental management for sustainable development. (20 marks)
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