

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

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

ENSC 450: SOLID WASTE MANAGEMENT

STREAMS: BSC ENSC Y4S1

TIME: 2 HOURS

DAY/DATE: MONDAY 22/03/2021

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

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

SECTION A (30 MARKS)

1. Briefly explain the concepts of ‘circular economy’ as a waste management approach. (6 marks)
2. Briefly discuss the merits of waste prevention. (6 marks)
3. Briefly explain any three reasons why you would hesitate to recommend waste incineration as a waste management method. (6 marks)
4. Using the typical composition of waste in urban Kenya, briefly discuss any three appropriate ways of managing waste. (6 marks)
5. Briefly explain how any three waste materials are recycled in Kenya. (6 marks)

SECTION B (40 MARKS)

6. (a) With a well labelled diagram, discuss the key features of a sanitary landfill. (12 marks)
(b) Explain why a sanitary landfill comes towards the bottom of the integrated solid waste management approach. (8 marks)
7. Discuss five main challenges to sustainable waste management in Kenya. (20 marks)

8. Critique the Sustainable Waste Management Bill and propose possible improvements to enhance waste management in the country. (20 marks)
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