

**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 Y4S2**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 20/09/2021**

**2.30 P.M – 4.30 P.M**

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**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. Differentiate between waste composition in high income countries from that in low income countries. [6 marks]
2. Briefly explain the two aspects of circular economy with regard to waste management. [6 marks]
3. Briefly explain any two ways by which recyclable materials can be obtained. [6 marks]
4. Briefly explain any three merits of mechanical biological treatment of waste. [6 marks]
5. Briefly explain any one way that can be used to protect each of three components of the physical environment from contamination by a sanitary land fill. [6 marks]

**SECTION B (40 MARKS)**

6. Explain the different ways waste prevention can be achieved at the national level. [20 marks]

7. For any five gaseous pollutants from waste to energy emission stack, explain the process for their generation and their potential health effects. [20 marks]

8. (a) Explain the role of the informal sector in sustainable waste management. [10

marks]

(b) Discuss any four measures that can make waste management in Chuka University sustainable. [10 marks]

