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*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**REGULAR UNIVERSITY EXAMS**

SCHOOL OF NURSING MIDWIFERY AND PARAMEDICAL SCIENCES

**ACADEMIC YEAR**

**2021 / 2022**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN GLOBAL  
HEALTH**

**COURSE CODE: NCG 324**

**COURSE TITLE: WASTE MANAGEMENT AND SANITATION**

**DATE: 20<sup>TH</sup> WEDNESDAY, APRIL 2022**

**TIME: 8AM-11AM**

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**INSTRUCTIONS TO CANDIDATES**

All questions are compulsory

**DURATION: 3 Hours**

MMUST observes ZERO tolerance to examination cheating

This paper consists of 2 (Two) printed pages. Please turn over.

**SECTION A: SHORT ANSWER QUESTIONS (SAQS); 60 MARKS**

*Answer all the questions*

1. (a) Describe the following terminologies as used in waste management
  - (i) Bioaccumulation (2 Marks)
  - (ii) Putrescibility (2 Marks)(b) Differentiate between a recalcitrant and a biodegradable compound (4 Marks)
2. Describe the health and environmental effects that come as a result of poor waste management (8 Marks)
3. Describe any three (3) world conventions of waste management (12 Marks)
4. How would you manage biological wastes from hospital settings (8 Marks)
5. What considerations would you put in mind before constructing a sanitary land fill (8 Marks)
6. Describe biological oxygen demand (BOD) and chemical oxygen demand (COD in terms of;
  - (a) differences (4 Marks)
  - (b) How their measurements are done (4Marks)
7. Describe your role as a global health student in the management of wastes (8 Marks)

**SECTION B: LONG ESSAY QUESTIONS (LEQS); 40 MARKS**

*All the questions are compulsory*

1. You have been employed as safety officer at Webuye Pan-paper Mill's factory. How would you manage gaseous waste emanating from the factory (20 Marks)
2. Characterize wastes in terms of their physical, chemical, biological and radioactive natures (20 Marks)

*End*