



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES**

**UNIVERSITY EXAMINATION FOR THE DEGREE OF
COMMUNITY HEALTH AND DEVELOPMENT**

2ND YEAR 1ST SEMESTER 2023/2024 ACADEMIC YEAR

MAIN

COURSE CODE: HCB 2102

COURSE TITLE: WASTE MANAGEMENT

EXAM VENUE:

DATE: EXAM SESSION:

TIME: 2 HOURS

Instructions:

- 1. Answer all questions in section A (Compulsory) and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A- ANSWER ALL QUESTIONS (30 marks)

1. State the three important aspects to consider in incineration of waste (3 marks)
2. What are the 3 risks posed by poor management of a landfill (3 marks)
3. State 3 reasons for treating waste water (3 marks)
4. State any 3 roles of National Environmental Authority in waste management (3 marks)
5. State the 3 principles of landfill (3 marks)
6. Briefly explain the following waste management principles (3 marks)
 - a) Polluter pays principle
 - b) Extended producer responsibility
 - c) Sustainable development
7. Mention the Four Stages in Sewage Treatment (2 Marks)
8. Mention the Three types of Bacteria commonly used in treatment of Waste Water (3 Marks)
9. Describe briefly the classification of radioactive wastes (4 Marks)
10. Describe briefly the steps in biomedical waste management (3 marks)

SECTION B ANSWER ANY 2 QUESTIONS (40 marks)

1. a) Discuss 5 potential risks of poor waste management (10 marks)
b) Discuss the elements of waste management hierarchy (10 marks)
2. As a member of community Health Committee in County A, discuss any 5 sources of river pollution and the control measures you will put in place to ensure water safety (20 marks)
3. Discuss
 - a) Describe the factors that can improve landfills management. (10 Marks)
 - b) Discuss the importance of Waste Water Treatment (10 marks)
4. Discuss
 - a) Factors to consider while selecting safe methods of excreta disposal to avoid environment contamination. (10 Marks)
 - b) With relevant examples, Discuss the common Types of wastes in our day to day life. (10marks)