JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE PUBLIC HEALTH / COMMUNITY HEALTH AND DEVELOPMENT

3RD YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: HCB 1307

COURSE TITLE: HARZARDOUS WASTE MANAGEMENT

EXAM VENUE: **STREAM: (BSc. Public Health)**

DATE: **EXAM SESSION: DECEMBER 2022**

TIME: 2.00 HOURS

Instructions:

1. **Answer all the questions in Section A 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. Explain THREE effects of hazardous waste to man (3mks)

2. Describe THREE ways of source reduction in hazardous waste control measures

3. Explain THREE ways of Thermal Methods in Hazardous Waste Treatment Methods

4. Describe THREE hazardous waste disposal methods (3mks)

5. Explain THREE solid waste procedures to the treatment of radioactive waste

6. Explain Waste Immobilisation of radioactive wastes (3mks)

7. Explain THREE main objectives of pre-treatment of hazardous waste (3mks)

8. Describe THREE ways by which hazardous wastes can be moved from one site to another (3mks)

9. Explain the cradle-to-grave hazardous waste management process (3mks)

10. Explain solidification and stabilization of hazardous waste(3mks)

SECTION B: ANSWER QUESTION ONE(1) AND ANY OTHER QUESTION (40 MARKS)

1.a) Describe FIVE main classification of hazardous wastes (10mks)

1.b) Explain retention time of radioactive wastes (10 mks)

2. Describe FOUR steps in the management of hazardous waste (20mks)

3. Explain some of the management options for the government, industries and the public in the management of e-wastes (20mks)

4. Explain Chemical precipitation of hazardous waste (20mks)