JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION 2013 1st YEAR 1st SEMESTER EXAMINATION FOR DIPLOMA IN COMMUNITY HEALTH AND DEVELOPMENT (KISII LEARNING CENTRE)

COURSE CODE: HCD 2113

COURSE TITLE: WASTE MANAGEMENT

DATE: TIME:

INSTRUCTIONS

- 1. This examination paper contains **COMPULSORY** and **ELECTIVE** questions
- 2. Answer ALL COMPULSORY questions and ANY TWO ELECTIVE set of questions
- 3. Write all answers in the examination booklet provided

COMPULSORY OUESTIONS

Answer ALL questions in this section [TOTAL MARKS=30]

- 1. Define hazardous wastes (2 marks)
- 2. State **TWO** parametric measures used to determine the strength of sewerage (2 marks)
- 3. Differentiate between solid waste and liquid waste and give **ONE** example of each in your community (*4 marks*)
- 4. List at least **TWO** advantages and **TWO** disadvantages of the following methods of waste disposal:

Controlled tipping (2 marks) Separation and incineration (2 marks)

5. State at least **THREE** advantages and **THREE** disadvantages of using the following waste receptacle methods:

Standard metal bins (3 marks) Plastic standard bins (3 marks)

- 6. Identify **THREE** factors that influence selection of a type of latrine in a community (3 marks)
- 7. Differentiate between a sanitary landfill and crude dumping (3 marks)
- 8. State **THREE** forms of treatment which solid wastes can be subjected to before disposal (3 *marks*)
- 9. What is the importance of keeping records of refuse collection (3 marks)

ELECTIVE OUESTIONS

Answer ANY TWO questions in this section [TOTAL MARKS = 40]

Question 10

- 10.1. Outline **FIVE** objectives of treating sewerage before final disposal (5 marks)
- 10.2. Highlight **FIVE** considerations that will guide your plan for a waste collection system (5 *marks*)
- 10.3. Why is hazardous waste becoming a major public and community health concern in Kenya? (10 marks)

Question 11

- 11.1. Describe briefly **FIVE** factors which affect the amount and characteristics of solid wastes in a community you live (*10 marks*)
- 11.2. Give **FIVE** reasons for analyzing solid wastes in a fast growing town (10 marks)

Question 12

- 12.1. Outline **THREE** factors which affect the collection of solid wastes (6 marks)
- 12.2. State **FOUR** advantages of pour-flush latrines (*4 marks*)
- 12.3. Identify **FIVE** sources of solid wastes in urban areas (5 marks)
- 12.4. What are the classes of solid wastes in rural and urban areas? (5 marks)