



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR BACHELOR OF SCIENCE IN
COMMUNITY HEALTH AND DEVELOPMENT
2ND YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR
CENTER: BUSIA**

COURSE CODE: HDC 2113
COURSE TITLE: WASTE MANAGEMENT
EXAM VENUE:
DATE:

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Instructions:

- 1. Answer ALL 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 (Total 30 marks)

1. **Differentiate** combustion and incineration. (3marks)
2. **State** three cornerstone strategies that are significant to waste minimization. (3marks)
3. **Explain** the term “polluter pays principle” as a concept to waste management. (3 marks)
4. **Identify** any six sources of wastes. (3 marks)
5. **Name** the three categories of transportation types in waste handling. (3 marks)
6. **Describe** the desirable location of a latrine in relation to ground water and wells. (3 marks)
7. **Outline** the prerequisite qualities of a good excreta disposal method. (3 marks)
8. **Give** the functions of ventilated pipe and fly screen used in some of the excreta disposal systems. (3 marks)
9. **Compare** raw sewage and sewage sludge. (3 marks)
10. **Highlight** the three approaches to wastewater treatment methods. (3marks)

Section B: Answer any TWO Questions (20 marks each)

Q1.

- (a) Describe the five key components of solid waste management. (5 marks)
- (b) Explain five strategies applicable to waste minimization in waste management hierarchy. (10 marks)

Q2.

- (a) Describe the problems associated or connected with improper excreta disposal. (5 marks)
- (b) Explain major conditions influencing the choice of sanitation technology in excreta disposal. (10 marks)

Q3.

- (a) Highlight the initial steps in solid waste management process. (5 marks)
- (b) Explain advantages and disadvantages of any three methods for waste management(10marks)

Q4.

- (a) Briefly explain stages of sewage wastewater treatment. (6 marks)
- (b) Describe any two types of ponds used in waste stabilization ponds. (9 marks)