

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

APRIL, 2016 UNIVERSITY EXAMINATION FOR DIPLOMA IN COMMUNITY HEALTH AND DEVELOPMENT

1ST YEAR 2ND SEMESTER 2015/2016 ACADEMIC YEAR

BUSIA

COURSE CODE: HDC 2113

COURSE TITLE: INTRODUCTION TO WASTE MANAGEMENT

EXAM VENUE: STREAM: (Diploma in Comm Health & Dev)

DATE: EXAM SESSION:

TIME: 1½ 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 (Total 30 marks)

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

Section B: Answer any TWO Questions (15 marks each)

1.

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

2.

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

3.

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

4.

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