



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND  
TECHNOLOGY SCHOOL OF HEALTH SCIENCES  
UNIVERSITY EXAMINATION FOR BACHELORS IN COMMUNITY HEALTH  
AND DEVELOPMENT  
1<sup>st</sup> YEAR 2<sup>nd</sup> SEMESTER 2016/2017 ACADEMIC YEAR  
KISUMU LEARNING CENTRE**

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<b>COURSE CODE:</b>	<b>HCD 3122</b>
<b>COURSE TITLE:</b>	<b>WASTE MANAGEMENT</b>
<b>EXAM VENUE:</b>	<b>STREAM: (BSc Comm Hlth &amp; Dev)</b>
<b>DATE:</b>	<b>EXAM SESSION:</b>
<b>TIME:</b>	<b>2.00 HOURS</b>

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**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. Define the following terms; ( 3 marks)
  - (a)Waste management
  - (b)Sludge
  - (c) Occupational health
2. Identify three inorganic characteristics of waste water (3 marks)
3. State “extended producer responsibility” in the context of waste management (3 marks)
4. State the economic benefits of waste management (3 marks)
5. Explain any three challenges faced by developing countries in waste management (3 marks)
6. State any three factors to be considered when designing waste transport system aspect of waste management (3 marks)
7. State three methods of waste disposal (3 marks)
8. Identify three types of composting technologies (3 marks)
9. State the organic constituents of waste water (3 marks)
10. Describe three techniques of excreta disposal (3 marks)

**Section B: Answer any two Questions (40 MARKS)**

1. (a) Discuss the principles of waste management (12 marks)  
(b) Describe the four dimensions of sustainable development (8 marks)
2. Discuss the sources of stream pollution
3. (a) State the functional six functional elements involved in waste management ( 6 marks)  
(b) Discuss the risks associated with solid wastes (14 marks)
3. Discuss prevention of occupational health hazards ( 20 marks)