



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF PUBLIC HEALTH
DEPARTMENT OF COMMUNITY HEALTH
DIPLOMA IN COMMUNITY HEALTH PRACTICE
END OF MAY-AUGUST 2024 SEMESTER EXAMINATIONS**

UNIT CODE: DCHP 126

UNIT NAME: LIQUID WASTE MANAGEMENT

DATE: FRIDAY 9TH AUGUST 2024

TIME: TWO HOURS

START: 2.00 PM **STOP:** 4.00 PM

INSTRUCTIONS

1. This exam is marked out of 60 marks
2. This Examination comprises TWO Sections
Section A: Compulsory Question (20 Marks)
Section B: Long Answer Questions (40 Marks)
3. This exam shall take TWO Hours
4. All questions in Section A are compulsory and Answer any TWO questions in Section B

SECTION A: COMPULSORY (20 Marks)

Short Answer Questions

1. Define the following terms as used in Liquid waste management; (4 Marks)
 - a) Liquid waste
 - b) BOD
 - c) Impurity;
 - d) Eutrophication
2. Highlight **three** objectives of liquid waste management (3 Marks)
3. Outline **five** Key components of waste water (5 Marks)
4. State **four** types of impurities found in the waste water (4 Marks)
5. Highlight **four** sources of water pollution in Kenya. (4 marks)

SECTION B: ANSWER ANY TWO (2) QUESTIONS (40 Marks)

Long Answer Questions

6. It is important to consider a number of factors before choosing the most suitable Method of waste water treatment
 - a) Explain **five** criteria used in the determination of waste water treatment methods. (10 Marks)
 - b) Discuss **five** Examples of waste water treatment methods Based on the above Criteria (10 Marks)
7. Liquid waste is such an important category of waste management because it is so difficult to deal with. Unlike solid wastes, liquid wastes cannot be easily picked up and removed from an environment.
 - a) Discuss five Effects of discharging waste water in a waterbody (10 Marks)
 - b) Explain five reasons for treating waste water (10 Marks)
8. Standards and guidelines in wastewater management are critical to ensure the protection of public health and the environment.
 - a) Discuss five standard guidelines in waste water treatment management (10 Marks)
 - b) Discuss three Purposes of Wastewater Sampling (6 Marks)
 - c) Explain two challenges that one may experience when carrying out waste water sampling (4 Marks)