

## **Technical University of Mombasa**

# Faculty of Applied and Health Sciences DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

DIPLOMA IN ENVIRONMENTAL HEALTH (DEH 11M)

**AES 2303 : WASTE MANAGEMENT** 

**SUPPLEMENTARY/SPECIAL: EXAMINATIONS** 

**SERIES:** MARCH 2014

TIME: 2 HOURS

### **INSTRUCTIONS:**

You should have the following for this paper

- Answer booklet

This paper consists of *FIVE* questions. Answer Question **ONE** (**compulsory**) and any other **TWO** questions *This paper consists of 2 PRINTED pages* 

#### **QUESTION ONE**

a)	State any goals of solid waste management	(4 marks)
<b>b</b> )	Define waste composition and state the content of sewage	(5 marks)
c)	Briefly describe the characteristics of a modern sanitary landfill	(5 marks)
d)	Identify the classes of medical wastes	(3 marks)
e)	Outline the criteria for water quality analysis	(5 marks)
f)	Give any four effects of poor waste management	(4 marks)
g)	Identify the classes of radioactive wastes	(4 marks)

#### **QUESTION TWO**

- a) Briefly explain the following principles of waste management
  - (i) Waste hierarchy (2 marks)
  - (ii) Pollution pay principle (2 marks)
  - (iii) Proximity principle (2 marks)
- b) Define hazardous waste and outline any four methods of treating hazardous waste (9 marks)

#### **QUESTION THREE**

- a) Outline any three parameters used in the analysis of sewage based on each of the following
  - (i) Chemical characteristics
  - (ii) Physical characteristics

(6 marks)

b) Discuss the challenges of solid waste management in Mombasa city

(9 marks)

#### **QUESTION FOUR**

Describe the treatment of sewage in a centralized treatment system

(15 marks)

#### **QUESTION FIVE**

Describe the laws that are relevant to waste management in Kenya

(15 marks)