

**TECHNICAL UNIVERSITY OF MOMBASA**  
**FACULTY OF APPLIED AND HEALTH SCIENCES**  
**DEPARTMENT OF ENVIRONMENT & HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF**  
**SCIENCE IN COMMUNITY HEALTH**  
**BSCH 13S/YEAR3/ SEMESTER 11**  
**APH 4311: COMMUNITY WASTE MANAGEMENT**  
**SEMESTER EXAMINATION**  
**SERIES: APRIL/MAY 2016**  
**TIME: 2 HOURS**

*Instructions to Candidates*

This paper consists of **FIVE** questions

Answer question **ONE (COMPULSORY)** and any other **TWO** questions.

*This paper consists of two printed pages.*

**Question 1**

- a) Using illustrations, define the following concepts;
- i. Hospital waste (2 marks)
  - ii. Waste disposal (2 marks)
  - iii. Incineration (2 marks)
- b) Write short notes on the following;
- i. Integrated waste management (5 marks)
  - ii. Environmental pollution (5 marks)

- c) Describe the concepts of Recycle, Reduce and Re-use in waste management **(5 marks)**
- d) Briefly describe the importance of waste regulations **(5 marks)**
- e) Describe the process of biological waste treatment **(4 marks)**

### **Question 2**

- a) Discuss the different methods of solid waste treatment and disposal **(15 marks)**
- b) Discuss the main challenges affecting waste management in Kenya. **(5 marks)**

### **Question 3**

Waste can be categorized depending on their source of generation, physical state and composition and properties. Discuss using relevant examples **(20 marks)**

### **Question 4**

- a) You are a resident of Dandora Estate which is located 0.5 km from the Dandora dumpsite. Discuss some of the environmental and health challenges that you are likely to face. **(12 marks)**
- b) Discuss the importance of waste management **(8 marks)**

### **Question 5**

- a) You have been hired as a waste management consultant to advise the County Government of Mombasa on the best approaches to solid waste management. What methods would you recommend. **(15 marks)**
- b) Discuss the disadvantages of open burning in solid waste management **(5 marks)**