



MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF HEALTH SCIENCES

DEPARTMENT OF PUBLIC AND COMMUNITY HEALTH

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR PUBLIC HEALTH

HPH 31: HAZARDOUS WASTE MANAGEMENT

DATE:

TIME:

Instructions:

This paper consists of two sections A and B

Section A is compulsory

Section B choose any two (2) questions

SECTION A

Specific Instructions

- Answer all questions in this section
- The question is 30 marks

- a) Highlight three (3) problems of e-wastes (3 marks)
- b) Explain why incineration of health care wastes is not the best practice for waste disposal (3 marks)
- c) Identify three (3) best practices in managing radioactive and hazardous waste (3 marks)
- d) Identify three (3) considerations in the storage of radioactive wastes (3 marks)
- e) Differentiate between acute and chronic toxicity of hazardous wastes (3 marks)
- f) Identify six (6) sources of hazardous waste (3 marks)
- g) For the following UN class numbers indicate the hazardous characteristic (3 marks)

5	6	7	3	4	9
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- h) Outline three adverse health outcomes associated with health care wastes and products (3 marks)
- i) Citing relevant examples explain the concept of resource recovery. (3 marks)
- j) Describe three (3) precautions that the health care worker will take into consideration while handling dead bodies of unknown category. (3 marks)

SECTION B

Specific Instructions

- **This Section has four (4) questions**
- **Answer any two (2) questions**
- **Each question is 20 marks**

QUESTION TWO (20 MARKS)

- a) Giving relevant examples discuss the F, K, P, U industrial waste coding. (10 marks)
- b) As a Public Health officer what has been your observation on the status of waste management in Kenya. Given a chance what changes would you make. (10 marks)

QUESTION THREE (20 MARKS)

- a) Discuss the harmful effects of hazardous waste to the environment. (10 marks)
- b) Machakos county intends to put up a controlled landfill for disposal of hazardous waste within the county. You have been invited to an inception meeting as the Public Health expert. Advise the committee on the pros and cons of the chosen method. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Discuss the harmful effects of hazardous waste to human health. (10 marks)
- b) Discuss the main problems facing the management of hazardous waste in developing countries. (10 marks)

QUESTION FIVE (20 MARKS)

- a) Describe the criteria for classification hazardous wastes as per their characteristics. (10 marks)
- b) Discuss the provisions of the Environmental and Management Coordination Act 1999 (EMCA, 1999) in hazardous waste disposal (10 marks)

