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UNIVERSITY EXAMINATIONS 2023/2024

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF SCIENCE IN PUBLIC HEALTH

HPP 3315: SOLID WASTE MANAGEMENT

DATE: JANUARY 2025

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) Explain solid waste generated from the following sources.
- i. Residential area. (3 Marks)
 - ii. Commercial (3 Marks)
 - iii. Industrial. (3 Marks)
- b) For each of the following solid waste classification, give two types of waste that fit their characteristic or rather quality:
- i. Putrescible solid waste. (3 Marks)
 - ii. Non-putrescible solid waste. (3 Marks)
- c) Briefly discuss four (4) factors that should always be under consideration in the onsite storage of solid waste. (6 Marks)
- d) Explain the requirements of a well sited solid waste compost pit. (6 Marks)
- e) Describe briefly the following methods of solid waste management: -
- i. Windrow composting. (3 Marks)
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MUST is ISO 9001:2015 and



ISO/IEC 27001:2013 CERTIFIED

- ii. Static pile method. (3 Marks)

QUESTION TWO (20 MARKS)

- a) Describe the operation of sanitary-landfill as a solid waste disposal method. Discuss Its disadvantages as a solid wastes management method. (20 Marks)

QUESTION THREE (20 MARKS)

- a) What is leachate as referred to in solid waste management? (5 Marks)
- b) Explain how leachate occurs in a sanitary landfill, its danger to the environment and how it is removed from sanitary landfills. (15 Marks)

QUESTION FOUR (20 MARKS)

Explain how medical waste minimization is achieved through the management systems:

- a) Source reduction. (5 Marks)
- b) Recyclable products. (5 Marks)
- c) Good management and control practices. (5 Marks)
- d) Waste segregation. (5 Marks)

