



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE
PUBLIC & COMMUNITY HEALTH AND DEVELOPMENT
3RD YEAR 2ND SEMESTER 2023/2024 ACADEMIC YEAR
MAIN

COURSE CODE: HCB 1306

COURSE TITLE: SOLID WASTE MANAGEMENT

EXAM VENUE: **STREAM: (BSc. Env Health)**

DATE: **EXAM SESSION:**

TIME: **2.00 HOURS**

Instructions:

1. Answer ALL questions in Section A and B and ANY other TWO questions in Section C
2. Do not write on the question paper



Registration No.....

SECTION A: 20 Marks (Each question carries 1 mark)

Indicate whether the statement is TRUE or FALSE.

1. There is a relationship between “Yield per capita” and “Bulk Density”.
2. Recycling is an effective way to reduce the amount of solid waste that ends up in landfills.
3. Windrow method involves anerobic decomposition of solid waste.
4. Barging is a waste disposal method involving dumping into the soil.
5. Open dumping is a recommended practice for solid waste disposal in urban centres.
6. Pulverisation ensures complete destruction of pathogenic bacteria in solid waste.
7. Use of “Old lorries” is not recommended for refuse transportation.
8. The “homeless” population currently form the bulk of solid waste management personnel in urban Kenya.
9. Moisture content significantly affects the weight of solid waste.
10. Waste segregation is a common practice in Kenya.
11. The police are mandated to enforce laws and regulations governing solid waste management in Kenya.
12. Incineration has a positive effect on the environment.
13. Recycled newspapers are recommended for use as food wrappers.
14. Biogas production is a form of solid waste reuse process.
15. Incineration is a solid waste disposal method that requires pre-sorting, grinding, and turning.
16. The waste hierarchy refers to the 3Rs.
17. Landfill gas contains butane.
18. Leachate are earthworms used for decomposition of solid waste material.
19. Burning of solid waste may be considered as a REUSE method.
20. Vacuum Trucks are used to collect waste from underground sewer systems.

SECTION B: 30 Marks

Attempt **all** questions in this section. Answers must be precise and concise.

21. Discuss the importance of using appropriate personal protective equipment (PPE) in the context of solid waste management in Kenya. Provide examples of suitable PPE for different tasks related to solid waste handling and explain how they help to mitigate the associated health and safety risks. (15 marks)
22. Discuss the role of the government in Solid Waste Management in Kenya. (15 marks)



Registration No.....

SECTION C: 20 Marks

There are a total of three (3) questions. Answer any **two (2)** questions.

23. Discuss the key principles and provisions of the laws that are relevant to the management of solid waste in Kenya. (10 marks)
24. Discuss the benefits of community engagement in “Refuse transportation”. (10 marks)
25. “One man’s trash is another man’s treasure”. Discuss. (10 marks)