



PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES
DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION : ENVIRONMENTAL HEALTH SCIENCES	
QUALIFICATION CODE: 08BOHS	LEVEL: 6
COURSE CODE: WSM611S	COURSE NAME: WASTE MANAGEMENT
SESSION: JUNE 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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INSTRUCTIONS
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly.

PERMISSIBLE MATERIALS: NONE

THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)

SECTION A (30 MARKS)

QUESTION 1 [10 MARKS]

- 1.0 Assess the following statements and decide whether they are true or false. Write only the number of the question and next to it true for a true statement and false for a false statement next to the number of the question.
- 1.1 Ecological phenomena such as water and air pollution have also been attributed to improper management of solid waste. (1)
- 1.2 Reuse is the processing of material so that it can be used again as the same material (1)
- 1.3 Social issues contribute to the need for policy changes to improve effective and efficient solid waste management. (1)
- 1.4 Solid waste management matrix helps with identifying gaps in existing solid waste management programmes. (1)
- 1.5 The aim of the waste hierarchy is to extract the minimum practical benefits from products and to generate the maximum amount of waste. (1)
- 1.6 General health-care facility waste should be part of the stream of domestic refuse for disposal. (1)
- 1.7 A topographic survey for surface contours and features estimates amount of available water source. (1)
- 1.8 Waste cleansing services play an important part in our scope of service and play a critical role in gaining public acceptance. (1)
- 1.9 A transfer station may include stationary compactors or mobile equipment. (1)
- 1.10 Surgical waste is generated from both outpatient department and inpatient wards as a result of diagnosing, treating, or handling the patient. (1)

QUESTION 2 [10 MARKS]

2.0 Match the term in Column A with its description/definition in Column B.

(10)

COLUMN A	COLUMN B
2.1 Waste Collection Strategy	A. It illustrates the rising importance that solid waste management has amongst advocates of sustainable development.
2.2 Open Dumping site	D. Need to try to link the formal and informal solid waste management sector through waste collection schemes.
2.3 Incinerator	E. It is classified as the cornerstone of most waste minimization strategies.
2.4 Tire	G. Attraction of flies, mosquitoes, and other insects as well as stray dogs, rats, and other animals.
2.5 Local Authority Act No. 23 of 2003	B. There is a need to monitor ground water periodically.
2.6 Institutional Issues	C. The system should develop local appropriate partnership between service authority and private sectors and community.
2.7 Waste hierarchy	F. Less land is required than for landfills.
2.8 Volume reduction	H. Incineration may decrease volume by more than 90%.
2.9 Landfill site	I. Solid waste management services are the responsibilities of these municipalities and town councils.
2.10 UNCHS Habitat	J. It poses health threats to a community

QUESTION 3 [10 MARKS]

3.0 Define the following terms:

3.1 Autoclaving (2)

3.2 Infectious waste (2)

3.3 Resource recovery (2)

3.4 Resource reduction (2)

3.5 Solid waste (2)

SECTION B (30 MARKS)

QUESTION 4 [10 MARKS]

- 4.1 List the recommendations of United Nations Conference on Environment in terms solid waste management. (5)
- 4.2 State the institutional based waste management. (5)

QUESTION 5 [20 MARKS]

- 5.1 Outline the objectives of National Waste Management Policy (7)
- 5.2 Namibia is a co-signatory to three (3) Conventions; Explain in more details. (13)

SECTION C (40 MARKS)

QUESTION 6 [20 MARKS]

- 6.1 Elaborate on the disadvantages of a landfill site. (10)
- 6.2 Discuss effects of public attitudes and legislation on waste generations. (10)

QUESTION 7 [20 MARKS]

- 7.1 Describe the process of Incineration and its advantages to the environment. (10)
- 7.2 Give a brief description of the benefits of public cleansing services. (10)

GOOD LUCK