



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

DIPLOMA IN ENVIRONMENTAL HEALTH

FINAL EXAMINATION PAPER 2005

- TITLE OF PAPER** : SOLID WASTE MANAGEMENT
- COURSE CODE** : EHS 205
- DURATION** : 2 HOURS
- MARKS** : 100
- INSTRUCTIONS** :
- : ANSWER ANY FOUR QUESTIONS
 - : EACH QUESTION CARRIES 25 MARKS.
 - : NO PAPER SHOULD BE BROUGHT INTO NOR OUT OF THE EXAMINATION ROOM.
 - : BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR.

QUESTION 1.

State and explain the general principles to be observed in a modern Waste management System. (25)

QUESTION 2.

A) Briefly discuss the terms, Policy and Strategy- the differences and linkages. (10)

B) Write a brief presentation entitled "LOCAL AGENDA 21- CHALLENGES FOR THE NEW MILLENNIUM", your answer should make reference to the three(3) agenda 21 essentials. (15)

QUESTION 3.

A local authority which has adopted a Sanitary Landfill in accordance with the recommendation of the Ministry of Health and Social Welfare for the disposal of solid waste, receives complaints of flies and odours in residential houses near the landfill.

What investigations as an EHO would you consider necessary to make and why in order to rectify the complaints. (25)

QUESTION 4.

A Town Board of an area under your jurisdiction as an EHO wishes to install an incinerator to solve the problem of waste generated in the fast expanding town. A land which is suitable for a Sanitary Landfill construction is available at a reasonable distance from the town.

Explain how would you convince the Board to go for a Sanitary Landfill instead of the Incinerator. (25)

QUESTION 5.

A) Define the term composting. (3)

B) Explain three (3) requirements for biodegradation of waste in an In-Vessel reactor during composting process. (7)

C) Describe fully the process of waste composting in the In-Vessel reactor. (15)

QUESTION 6.

A) What are the benefits of waste minimization and recycling? (10)

B) What is Environmental Auditing of a company in regard to waste management and how does it help the company? (6)

C) Write notes on the following recycling system.

i) Bring system (3)

ii) Collect system (3)

iii) Centralised Segregation (3)