

# UNIVERSITY OF SWAZILAND Faculty of Health Sciences

# **DIPLOMA IN ENVIRONMENTAL HEALTH**

# FINAL EXAMINATION PAPER 2007/2008

TITLE OF PAPER

RURAL EXCRETA DISPOSAL

COURSE CODE

EHS 216

DURATION

2 HOURS

**MARKS** 

100

INSTRUCTIONS

**READ THE QUESTIONS & INSTRUCTIONS** 

CAREFULLY

: ANSWER ALL QUESTIONS

EACH QUESTION CARRIES 25 MARKS

: WRITE NEATLY & CLEARLY

: 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

a) You are in charge of a community that would like to start putting up toilet systems projects. You are then given a chance as the local Environmental Officer to address the community on how the excreta disposal systems can be sustainable using the PHAST methodology. Discuss the points that you will discuss with the community.

(10 Marks)

b) Critically comment on the statement that raw excreta cannot be profitably used as fertilizer

(5 Marks)

c) What can you expect from rural populations and how can these be obstructive in your work as an EHO in trying to introduce proper excreta disposal systems?

(10 Marks)

### Question 2

a) In a community where excreta is still disposed of indiscriminately critically raise your concerns as an Environmental health Officer.

(10 Marks)

b) Describe how a VIP latrine is constructed.

(10 Marks)

c) In a densely populated peri urban area there is bound to be problems of 'flying toilets'. Why that is the case and what advice can you give to solve such a problem?

(5 Marks)

#### Question 3

a) Account for the need for non sewered sanitation systems

(10 Marks)

b) The following figure represents quantities of human faeces produced by individuals per day in different continents.

| Asia           | 200 – 400g |
|----------------|------------|
| European & USA | 100 – 150g |
| Tropics        | 280 – 530g |

Account for these differences and explain how human faeces quantification helps in the work of an Environmental Health Officer.

(10 Marks)

c) Discuss five advantages of providing health education in order to have a successful excreta disposal system.

(5 Marks)

# Question 4

a) You are asked to explain about 'excreta' to an educated audience. What points would you discuss to ensure that you leave an even more knowledgeable audience on this subject?

(10 Marks)

b) Design and sketch a septic tank that can cater for a school with 200 pupils and 10 teachers.

(5 Marks)

c) Explain how a septic tank works.

(10 Marks)