UNIVERSITY OF SWAZILAND **Faculty of Health Sciences Diploma in Environmental Health Sciences**

EXAMINATION PAPER DEC 2008

TITLE OF PAPER: RURAL EXCRETA DISPOSAL

METHODS

COURSE CODE

: EHS 216 2008 DEC

DURATION

: 2 HOURS

TOTAL MARKS :

100

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

: EACH QUESTION CARRIES 25

MARKS

: NO PAPER SHOULD BE BROUGHT

INTO OR OUT OF THE **EXAMINATION ROOM**

: BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER

EHS 216 P DECEMBER 2008 MAIN EXAM

QUESTION ONE

- (a) One of the main activities in the decomposition of excreta is destruction of pathogens. Account for this phenomena in a decommissioned pit toilet. [10]
- (b) There is a strong relationship between the disposal of excreta and the state of health of the population. However, the relationship is both direct and indirect in character. By giving examples explain what is meant by that? [10]
- (c) Contrast public latrines against individual latrines. What are the pros and cons for each? [5]

QUESTION TWO

- (a) Transmission of diseases from excreta to new host is often referred to as the faucal oral route. With the aid of a diagram discuss this route giving examples [10]
- (b) Describe the 4F cycle and how it can be broken to stop transmission of faucal borne diseases. What challenges does one face in breaking the cycle? [5]

QUESTION THREE

- (a)Explain the effects of indiscriminate excreta disposal [10]
- (b) Faucal borne diseases are caused by viruses, bacteria, parasitic worms, helminthes, and protozoa. Why is worm infestations by-roundworms, hookworms, whipworms, pinworm and tapeworm such a big worry? [5]
- (c) In using the Mapping Tool in the PHAST methodology what aspects would you focus on? [10]

QUESTION FOUR

- (a) Discus advantages and disadvantages of any five principles utilized during the PHAST approach to community development [15]
- (c) Differentiate between a septic tank and a cesspool. [5]
- (d) For excreta to transmit diseases four factors are necessary. What are they? [5]

QUESTION FIVE

- A) What are the advantages of dry toilet systems over ordinary VIP? [5]
- B) With the aid of a sketch diagram describe how the following types of dry toilet systems operate;
 - i. Otji [5]
 - ii. Dry composting [5]
 - iii. Enviro Loo [5]
- C) Write notes on the VIP toilets [5]