



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

DEGREE IN ENVIRONMENTAL HEALTH
RE-SIT EXAMINATION PAPER JANUARY 2019

TITLE OF PAPER	:	On site Sanitation
COURSE CODE	:	EHS 205
DURATION	:	2 HOURS
MARKS	:	100
INSTRUCTIONS	:	READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
	:	THERE ARE FIVE QUESTIONS, ANSWER FOUR QUESTIONS, QUESTION ONE IS COMPULSORY
	:	EACH QUESTION CARRIES 25 MARKS
	:	WRITE NEATLY & CLEARLY
	:	NO PAPER SHOULD BE BROUGHT INTO 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 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 marks]
- (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 this statement [10 marks]
- (c) Contrast public latrines against individual latrines. What are the pros and cons for each? [5 marks]

QUESTION TWO

- (a) Transmission of diseases from excreta to new host is often referred to as the faecal oral route. With the aid of a diagram discuss this route giving examples [15 marks]
- (b) Describe the 4F cycle and how it can be broken to stop transmission of faecal borne diseases. What challenges does one face in breaking the cycle? [10 marks]

QUESTION THREE

- (a) Explain the five effects of indiscriminate excreta disposal [10 marks]
- (b) Faecal 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 marks]
- (c) In using the Mapping Tool in the PHAST methodology what aspects would you focus on? [10 marks]

QUESTION FOUR

- (a) Discuss advantages and disadvantages of any five principles utilized during the PHAST approach to community development [10 marks]

- (c) Differentiate between a septic tank and a cesspool. [5marks]
- (d) For excreta to transmit diseases five factors are necessary. What are they?
[10 marks]

QUESTION FIVE

- A) What are the advantages of dry toilet systems over ordinary VIP? [5 marks]
- B) With the aid of a sketch diagram describe how the following types of dry toilet systems operate;
- i. Dry composting [10 marks]
 - ii. Enviro Loo [10 marks]
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