UNIVERSITY OF SWAZILAND Faculty of Health Sciences Department of Environmental Health Science

BSc. IN WATER RESOURCES AND ENVIRONMENTAL HEALTH MANAGEMENT

MAIN EXAMINATION PAPER MAY, 2018

TITLE OF PAPER

WATER HARVESTING

COURSE CODE

EHS 350

DURATION

2 HOURS

MARKS

100

:

INSTRUCTIONS

READ THE QUESTIONS & INSTRUCTIONS

CAREFULLY

: ANSWER ANY FOUR QUESTIONS

: EACH QUESTION <u>CARRIES 25</u> MARKS.

: WRITE NEATLY & CLEARLY

: NO PAPER SHOULD BE BROUGHT INTO OR 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) Describe what is Water Harvesting?

(10)

b) Explain what is the purpose of Water Harvesting

(15)

TOTAL 25 MARKS

Question 2

Water Harvesting can be classified and categorized into four distinguished groups!!

Briefly write notes on the following categories of Water Harvesting:

a) Flood water harvesting

(10)

b) Rooftop water harvesting

(15)

TOTAL 25 MARKS

Question 3

a) Discuss what is Runoff Coefficient (C) in water harvesting?

(10)

b) Why is Runoff Coefficient (C) important in water harvesting?

(10)

c) How is Runoff Coefficient (C) measured?

(5)

TOTAL 25 MARKS

Question 4

Water Harvesting has got its benefits and constraints:

a) What are the benefits of Water Harvesting?

(15)

b) What are the constraints of Water Harvesting?

(10)

TOTAL 25 MARKS

Question 5

A Water Harvesting project cannot be implemented without budgeting and cost estimation.

What are the main components of the system that needs to be included in the cost estimation of a Water Harvesting project?

25 MARKS