



UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health
Sciences

Main Examination 2010

Title of paper: WATER QUALITY MANAGEMENT II

Course code: EHS 583

Time allowed: 2 hours

Marks allocation: 100 Marks

Instructions:

- 1) Read the questions and Instructions carefully
- 2) Answer ALL questions
- 3) Each question is weighted 25 marks
- 4) Write neatly and clearly
- 5) Begin each question in a separate sheet of paper

This paper is not to be opened until the invigilator has granted
permission

Main Examination: May 2010

EHS 583 II

Question 1.

Discuss the key issues to be observed in Water Standards (25)

Question 2.

A) What are the responsibilities of a Surface Water Pollution Control organization? (10)

ii) How would you develop capacity building for a WPC organization? (15)

Question 3.

Discuss the different ways and techniques to reduce the point and non-point sources of pollution. (25)

Question 4.

A) The use of wastewater for agriculture is a very old practice and land disposal was the first wastewater treatment system:

i) What were the limiting factors for the rate of application for the wastewater? (6)

ii) Give and explain two (2) categories of risks associated with the re-use of wastewater for agriculture. (4)

B) With regard to the mathematical approach adopted, water quality models can be classified as Empirical or Statistical, Stochastic and Deterministic.

Describe briefly the characteristics of each model. (15)