



UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health
Sciences

Final Examination 2009

Title of paper: WATER TREATMENT 11

Course code: EHS 585

Time allowed: 2 hours

Marks allocation: 60 Marks

Instructions:

- 1) Read the questions and instructions carefully
- 2) Answer Three questions
- 3) Each question is weighted 20 marks
- 4) Write neatly and clearly

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

Main Examination: May 2009

EHS 585 II

Question 1.

- A) What are dual-media filters? (5)
- B) What are their advantages and disadvantages? (5)
- C) What is the principal cleaning mechanism in backwashing filters? (10)

Question 2.

- A) Describe the characteristics of a good disinfectant. (5)
- B) What factors militate against effective disinfection? (5)
- C) Name three (3) main commonly used disinfectants and what are the advantages and disadvantages posed by each. Which is the most commonly used in Swaziland? (10)

Question 3.

Discuss the ozonation kinetics. (20)

Question 4.

- A) What do you understand by Ct Concept in Water Treatment? (10)
- B) Briefly describe Ultra-violet Irradiation kinetics. (10)