

UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

**BSc ENVIRONMENTAL HEALTH
SCIENCES-ENVIRONMENTAL
MANAGEMENT**

MAIN EXAMINATION PAPER: MAY 2009

TITLE OF PAPER : ENVIRONMENTAL POLLUTION
ASSESSMENT

COURSE CODE : EHS 551

DURATION : 2 HOURS

MARKS : 75

INSTRUCTIONS : ANSWER ANY THREE QUESTIONS

: EACH QUESTION CARRIES 25 MARKS

: NO PAPER SHOULD BE BROUGHT
INTON 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

EHS 551 P 2009 APRIL MAIN EXAMINATION

QUESTION ONE

- A) Discuss and demonstrate your understanding of the debates around etiology, exposure and latency in pollution control and management [10]
- B) As an Environment Manager for Company X you are asked to explain about 'environmental pollution' to an educated audience. What convincing points can you raise to ensure that you leave an even more knowledgeable audience on this subject? [10]
- C) Differentiate between environmental pollution analysis and environmental pollution assessment [5]

QUESTION TWO

- A) Why is it difficult to solve environmental problems? [5]
- B) Define the following terms [10]
- Etiology
 - PPP
 - pollution
 - Biodegradation
 - Latency
 - ISO14001
 - Proximity principle
 - Command and control
 - EIA
 - Precautionary approach
- C) When faced with a serious environmental pollution problem outline the basic steps you would take and the kinds of questions you would normally ask to get to the bottom of the issue [10]

QUESTION THREE

- A) The Durban Municipal Council Environmental Management Unit has among its main objectives
- 1) Ensuring that any initiative /action/development in the city occurs with a view to maximizing environmental and health gains*
 - 2) Ensuring that people demonstrate commitment to environmental protection throughout their operating territory*
- Link these objectives to particular methods of dealing with pollution and explain your reasons for the link. [10]
- B) A) Assessment of pollution risk involves four tasks. Name these [4]
- C) Outline the legal framework for pollution control in Swaziland. [11]

QUESTION FOUR

A) The response of an organism to a pollutant depends on certain characterisation namely:

- 1) Threshold
- 2) Time versus dosage
- 3) Synergism
- 4) LC50 and LD 50
- 5) Bioaccumulation
- 6) Bio concentration

Define each and discuss how each helps in a dose response evaluation [12]

B) There are many useful approaches and procedures to environmental pollution assessment, management and control. Choose at least three that you know and describe in detail [13]
