

UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

DIPLOMA IN ENVIRONMENTAL HEALTH SCIENCES

FINAL EXAMINATION PAPER 2007

TITLE OF PAPER : ENVIRONMENTAL POLLUTION
AND ASSESSMENT

COURSE CODE : EHS 521

DURATION : 3 HOURS

MARKS : 100

INSTRUCTIONS : ANSWER ANY FIVE QUESTIONS

: EACH QUESTION CARRIES 20 MARKS

: NO PAPER SHOULD BE BROUGHT INTO
NOR 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**

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QUESTION ONE

- A) Demonstrate your understanding of the debate around etiology, exposure and latency in pollution control and management [10]
B) In a dose response evaluation for environmental pollution there are five things to be observed. What are they? [10]

QUESTION TWO

- A) Why is it difficult to solve environmental problems? [10]
B) Define the following terms [10]
- a) Etiology
 - b) PPP
 - c) Environmental ethics
 - d) Biodegradation
 - e) Latency
 - f) ISO14001
 - g) Proximity principle
 - h) Command and control
 - i) EIA
 - j) Algae blooms

QUESTION THREE

- A) There are many ways to deal with pollution. Define the following ways and comment on the strengths of each
- 1) Precautionary approach [2]
 - 2) *Buntfu* and sustainable use [2]
 - 3) Environmental education [2]

B) The Mbabane City Council's 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]

C) Discuss the usual arguments for the continued poor hazardous waste management amongst nations of the world. [4]

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QUESTION FOUR

A) Water pollution may be defined as “**the loss of any of the actual or potential beneficial uses of water caused by any change in its composition due to human activity**” Outline at least five uses of water and state how the beneficial uses of each may be lost. [10]

B) Discuss the following classes of water pollution [10]

- 1) Eutrophication
- 2) Sediment
- 3) Thermal

QUESTION FIVE

A) What are the socioeconomic driving forces that exacerbate the problem of urban transport pollution? [10]

B) Mention at least ten things in an ordinary house that serve as sources of indoor pollution. [10]

QUESTION SIX

A) Answer on Persistent Organic Pollutants (POPs) under the following headings

- 1) What are POPs and their importance [2]
- 2) Sources [2]
- 3) Common POPs –the 12 identified by the Stockholm convention [2]
- 4) Characteristics of POPs [2]
- 5) Problems they cause [2]

B) Describe the Stockholm convention and list at least five elements of this convention [10]

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