

UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

**BSc DEGREE IN ENVIRONMENTAL
HEALTH SCIENCES**

MAIN EXAMINATION PAPER MAY 2014

TITLE OF PAPER: Environmental Pollution
Management

COURSE CODE : EHM 307

DURATION : 2 HOURS

MARKS : 100

INSTRUCTIONS : ANSWER ANY FOUR QUESTIONS

: EACH QUESTION CARRIES 25 MARKS

: BEGIN EACH QUESTION ON A
SEPARATE SHEET OF PAPER

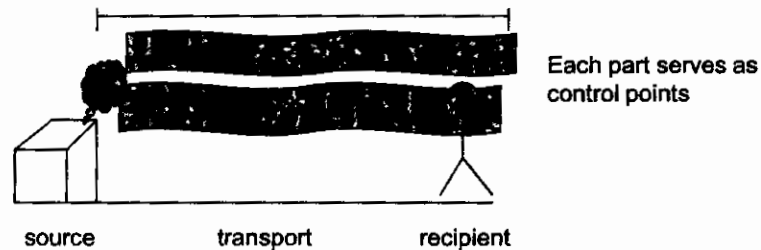
**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS
GRANTED BY THE INVIGILATOR**

QUESTION ONE

- a) Outlined below are the three important factors that impact on air pollution. Taking these into account discuss how you can use these to mount a successful intervention program. [9]

Three factors in an air pollution problem

1. Its source
2. Its movement or dispersion
3. recipient



- b) Compare point sources and non point sources in water pollution and air pollution. Is there a different approach in the application of intervention strategies for the two sources? [10]
- c) As an Environment Manager for Sappi Usuthu you have been assigned specifically to manage hazards emanating from dust and fumes in the pulp factory. Where would you focus your environmental intervention strategy? [6]

QUESTION TWO

- a) Peoples responses to the environment basically follow three theories of environmental responsibility. Define these theories and give two examples of each to demonstrate your understanding of these theories. [9]
- b) Explain the main difference between pollution prevention and pollution cleanup [11]

- c) Define the three important aspects that you would focus on in carrying out a Dose Response Evaluation. [5]

QUESTION THREE

- a) Compare the hazards from point source and non-point source of water pollution [5]
- b) What is the main impact of water pollution by inorganic nutrients? [5]
- c) What are the significant impacts of thermal pollution? [5]
- d) Discuss the main source of sediment pollution. What impacts does it have on aquatic ecosystems? [5]
- e) Define streambed degradation in river streams [5]

QUESTION FOUR

- a) Differentiate between natural and cultural eutrophication [5]
- b) How does eutrophication occur? [5]
- c) Give reasons why is it that ground water pollution is more difficult to monitor and clean? [5]
- d) Suppose your company is concerned about oil spills at sea. What factors would determine the extent of impacts and damage by oil spills [5]
- e) How may oil spills be contained at sea? [5]

QUESTION FIVE

- a) What are POPs and what is their characteristics [5]
- b) What are the characteristics of hazardous waste [5]
- c) Give the three main families of POPS. [3]
- d) What are the main categories of pesticides and how do they differ? [7]
- e) What has been the trend in pesticides use as a result of resistance [5]
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