

UNIVERSITY OF SWAZILAND
Faculty of Health Sciences
Department of Environmental Health sciences

BSc Environmental Management

Main Examination Paper December 2010

TITLE OF PAPER : ENVIRONMENTAL POLLUTION

COURSE CODE : EHS 550

DURATION : 2 HOURS

MARKS : 80

INSTRUCTIONS : ANSWER ANY FOUR QUESTIONS

: EACH QUESTION CARRIES 20 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) Outline the environmental pollution problems that may emanate from each stage of the waste life cycle [10]
- (b) There is obviously poor hazardous waste management in Swaziland. Based on the literature on hazardous waste management and your own observations discuss the main constraints to effective and efficient hazardous waste management in Swaziland [5]
- (c) Describe how land fills, septic tanks and underground gasoline tanks pollute underground water? [5]

QUESTION TWO

- (a) You are to give a talk on heavy metals as soil pollutants affecting agricultural production and human habitats. Give 8 points to support your talk [8]
- (b) Explain how runoff from construction sites and urban storm water runoff pollution may be controlled. Raise five points on this. [5]
- (c) Define the three philosophical approaches to environment. In each case give examples [3]
- (d) Explain the environmental pollution impacts of Alien Invasive plants and name three alien invasive plants that are of concern in Swaziland [4]

QUESTION THREE

- (a) List five anthropogenic activities that can result in soil pollution [5]
- (b) Make a distinction between the following terminologies [10]
 - (1) Thermosets and thermoplastics
 - (2) Bioaccumulation and biomagnifications
 - (3) Semi volatility and ubiquitous
 - (4) Stockholm Convention and Basel Convention
 - (5) Point source and non point source
- (c) 'There is a close relationship between company image and environment' Examine the suitability of this statement in relation to companies in Swaziland. [5]

QUESTION FOUR

- (a) State the two perspectives on waste and indicate how each is linked to the waste hierarchy and the waste life cycle [10]
- (b) Examine the major dimensions of water pollution control in Swaziland [10]

QUESTION FIVE

- (a) Identify and discuss the three critical factors in an air pollution problem [6]
 - (b) Discuss the main environmental impacts of mining [10]
 - (c) What are the qualities of an environmentally friendly product? [4]
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