

UNIVERSITY OF SWAZILAND

Faculty of Health Sciences

(BSC) IN ENVIRONMENTAL HEALTH

SECOND SEMESTER FINAL EXAMINATION PAPER 2009

TITLE OF PAPER : ENVIRONMENTAL IMPACT ASSESSMENT

COURSE CODE : EHS 403

DURATION : TWO HOURS

MARKS : 100

INSTRUCTIONS : ANSWER ONLY FOUR QUESTIONS

: EACH QUESTION CARRIES 25 MARKS

: QUESTIONS ONE AND TWO ARE COMPULSARY

: NO QUESTION 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**

QUESTION ONE

- a. Describe the meaning of the term “sustainable”. Include in your answer an outline of the fundamental components that should typify sustainable environmental health practice. (15 marks)
- b. What is the difference between environmental impact assessment and environmental auditing? (10 marks)

TOTAL 25 MARKS

QUESTION TWO

- a. Explain the meaning of the following: environmental impact, environmental aspect, environmental effect, comprehensive mitigation plan, and alternatives as they relate to environmental impact assessment. (10 marks)
- b. While conducting an environmental audit of a large corporation, an associate audit is sometimes required. Explain the aim(s) of the associate audit and how it is done. (15 marks)

TOTAL 25 MARKS

QUESTION THREE

- a. Nxumalo and associates a waste management company is offering services of medical waste collection and disposal to the Mbabane clinic. It has been noticed that this company disposes off the waste at the Mpolonjeni tip site, and the Swaziland Environmental Authority is suspecting that this waste might be polluting the Mpolonjeni River and wants to close the company down. Your company of environmental management services has been offered the tender to carry out an environmental audit of this company to find out if it is complying with the Swaziland environmental management Act of 2002, Swaziland water services Act of 2000, and the Swaziland waste management regulations of 2000. Which type of environmental audit will you adopt? Explain the objectives of this audit type, and how you are going to go about it. (15 marks)
- b. One of the criteria for environmental auditing is that the auditing system must not be seen as a policing system but rather as a self-regulatory tool to improve environmental management performance at all levels of the enterprise. Defend this statement. (5 marks)
- c. One of the activities done on the location or site during an environmental audit exercise is identification of management control systems. Motivate this statement. (5 marks)

TOTAL 25 MARKS

QUESTION FOUR

Discuss the five problems surrounding the development of alternatives in carrying out an Environmental Impact Assessment (EIA) process listed below. (5 marks each)

1. Narrow definition of the problem (purpose and need) dictates and constricts possible solutions (alternatives)
2. The “problem” can be constructed to justify the “solution”.
3. Alternatives are subject to agency agendas and agency autonomy.
4. Alternatives are also subject to stock solutions and problem framing.
5. Other alternatives may be intentionally made less attractive.

TOTAL 25 MARKS.

QUESTION FIVE

Congratulations! You have been appointed to head a consultancy company in carrying out an environmental impact assessment study for the construction of a new faculty of health to be constructed at Pine Valley. The faculty is expected to house eight departments, 150 staff, and 1500 students. It is expected to hire 50 manual laborers and 30 support (non academic) staff from the area. It is expected that local materials will be used for the construction and is going to boost economic growth in the area. An estimated area of three square kilometers will be taken up by the faculty. Explain how you are going to manage this daunting EIA process.

TOTAL 25 MARKS.