# **UNIVERSITY OF SWAZILAND**

### Faculty of Health Sciences

### Department of Environmental Health Science

## Final Examination December 2013

Title of paper: Risk Assessment, Management and

Communication I

Course code: EHS 567

Time allowed: 2 hours

Marks allocation: 100 Marks

#### **Instructions:**

- 1) Read the questions and instructions carefully
- 2) Answer any 4 questions
- 3) Each question is weighted 25 marks
- 4) Write neatly and clearly

This paper is not to be opened until the invigilator has granted permission

#### Question 1

a) What is task analysis (TA)? [15 Marks] Give an example of your choice (present it in a diagram)

b) Outline the phases of a system life cycle and explain how it can be integrated to the TA

[10 Marks]

#### Question 2

- a) When constructing a fault tree, there are special symbols used. Draw and define 5 symbols. [10 Marks]
- b) Illustrate the use of the 5 you defined above using an example

[15 Marks]

#### Question 3

Define the following terms:

- a) Workplace and premises
- b) Risk assessment
- c) Health and safety
- d) Environment
- e) Prevention of pollution

[25 Marks]

#### Question 4

- i) In relation to hazard identification methods:
  - a) What is an Inductive approach

[3 Marks]

b) What is a Deductive approach

[3 Marks]

- ii) In relation to risk assessment
  - a) What is a severity of a hazard?

[4 Marks]

b) What is meant by likelihood of occurrence?

[5 Marks]

c) Outline the prioritization of intervention using the matrix method

[4 Marks]

Define a task and explain the 4 types of tasks. Give an example for each task.

[6 Marks]

### Question 5

As a safety officer, the management of the company has asked you to design an occupational health and safety programme that will address the preventive and reactive measures.

Outline what you will include in your programme

[25 Marks]