



UNIVERSITY OF SWAZILAND

Faculty of Health Science

Department of Environmental Health
Sciences

Final Examination 2006

Title of paper: Risk Assessment, Management and
Communication

Course code: EHS 534

Time allowed: 3 hours

Marks allocation: 100 Marks

Instructions:

- 1) Read the questions and instructions carefully
- 2) Answer Five questions
- 3) Each question is weighted 20 marks
- 4) Write neatly and clearly

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

Answer any 5 questions

Question 1

- a) Define task analysis [5 Marks]
- b) Give any 5 areas addressed by task analysis in the workplace? [15 Marks]

Question 2

- a) Define Risk assessment and factors to consider in the assessment [8 Marks]
- b) Define hazard identification and give 4 methods of identification [6 Marks]
- c) Outline the components life cycle of a system [6 Marks]

Question 3

In a 2-hour session, you are to make a presentation to management on “**Accident investigation and 1 method to adopt**”.

- a) Write the objectives of the session [4 Marks]
- b) Write points to discuss in the session [12 Marks]
- c) Write 4 questions you would ask a witness when investigating [4 Marks]

Question 4

Define and outline purpose of any 4 of the risk-identification methods.

- a) Hazard and Operability
- b) Preliminary Hazard Analysis
- c) Failure Mode and Effect Analysis
- d) Fault Tree Analysis
- e) Fault or Functional Hazard Analysis
- f) Job Safety Analysis

[20 Marks]

Question 5

- a) Explain the components of an emergency preparedness plan

[16 marks]

- b) Give 4 functions of an accident investigator?

[4 Marks]

Question 6

- a) Discuss the 3 sources of information needed for an effective communication in health and safety. [12 Marks]
- b) *Refer to the Factories, Machinery and Construction Work Act 1972, and Occupational Safety and Health Act 2001.*

- i. Define and discuss how accidents and diseases are report [6 Marks]

- ii. Discuss how to handle machinery or equipment at the accident scene. [2 Marks]