



UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE

BSc DEGREE IN ENVIRONMENTAL HEALTH SCIENCES

MAIN EXAMINATION, MAY, 2017

TITLE OF PAPER : HEALTH RISK MANAGEMENT

COURSE CODE : EHM 312

TIME : 2 HOURS

TOTAL MARKS : 100

INSTRUCTIONS:

- 1. QUESTION 1 IS COMPULSORY**
- 2. ANSWER ANY OTHER THREE QUESTIONS**
- 3. ALL QUESTIONS ARE WORTH 25 MARKS EACH**
- 4. BEGIN THE ANSWER TO EACH QUESTION IN A SEPARATE SHEET OF PAPER.**

DO NO OPEN THIS EXAMINATION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

QUESTION 1

- a) Legislation requires that an employer has to manage safety and health at work so as to prevent accidents and ill-health.
- b) Required safety measures must be adequate to eliminate, control or minimize the risk of injury.
- c) A hazard is something with a potential to cause harm.
- d) Measuring the risk that a hazard may pose, depends only on the likelihood of that harm occurring at the workplace.
- e) Assessing risk means examining carefully what, in the workplace, could cause harm to the employees, other people, including customers, visitors and members of the public.
- f) Carrying out risk assessments, preparing and implementing a safety statement will prevent accidents and ill health.
- g) A comprehensive safety statement, if properly implemented, is a practical tool for reducing accidents and ill health at work.
- h) Risk assessment is the determination of quantitative or qualitative value of risk related to a concrete situation.
- i) Risk management is a scientifically based process consisting of hazard identification, hazard characterization, exposure assessment and risk characterization.
- j) Hazard identification is the causal link between agent and effect.
- k) The risk assessment process ensures that factors influencing health are fully understood and adequately quantified so that decisions are taken inconsistently and in a cost-effective manner.

(22 marks)

II.

State three legal requirements that an employer has to do to manage safety and health at his place of work.

(3 marks)

QUESTION 2

- a) Define the following terms as applied in health risk management
 - i. Risk assessment [3]
 - ii. Hazard [3]
 - iii. Risk [3]
 - iv. Controlling risk [3]

(12 marks)

- a) Describe the functions listed in the International Labour Organization (ILO) Convention on Occupational Health Services (OHS) (No. 161) **(9 marks)**
- b) In the following table of hazards and risks below , fill in the blank spaces

Hazards	Risks
Faulty electrical equipment	
Manual handling 35 kg boxes of material	
Working near edge of mezzanine floor over offices	
Sheep dipping with organophosphate	

(4 marks)

QUESTION 3

- a) Describe the components of a safety statement **(10 marks)**
- b) Describe risk management.

(15 marks)

QUESTION 4

- a) Describe six steps to be followed when developing a safety and health management program. **(24 marks)**
- b) What is the goal of a risk assessment? **(1 mark)**

QUESTION 5

- a) Describe the types of risk assessments **(5 marks)**
- b) Describe the risk assessment process **(10 marks)**
- c) Describe the characteristics of successful emission and exposure controls **(10 marks)**