

UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health Sciences

Final Examination 2010/2011

Title of paper: Industrial Hygiene Aspect of Plant Operation II

Course code: EHS 563

Time allowed: 2 hours

Marks allocation: 100 Marks

Instructions:

- 1) Read the questions and instructions carefully
- 2) Answer ALL 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

Electricity has to complete a circuit for it to have an effect on appliances and human users

- a) Outline and discuss how electricity flows up to the sockets/plugs [10 Marks]
- b) Write on 3 adverse effects of electricity to a human being [9 Marks]
- c) Explain how an employee working on electricity can prevent incidents/accidents [6 Marks]

QUESTION 2

As a safety officer hired in a human resource training institution outline your plan on the following issues:

- a. Extinguishers to use with respect to the types of fires that can occur [9 Marks]
- b. Fire safety management measures [6 Marks]
- c. Fire protection measures [10 Marks]

QUESTION 3

Health workers are at risk of radiation exposure; in relation to this discuss the following:

- a. Define the two classes of radiation [4 Marks]
- b. For each of the two classes of radiation define two (2) types of radiation, state their effects on the exposed human body [16 Marks]
- c. The routes of entry and prevention measures of radiation in general [5 Marks]

QUESTION 4

Each and every year statistics in Swaziland according to the Labour department show an increase in compensation for people with hearing impairment. This is a major concern in the workplace. In relation to this:

- a) What are the effects of noise? [5 Marks]
- b) As a safety officer what procedures will you put in place to prevent noise induced hearing loss? [20 Marks]