

UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health Sciences

Final Examination 2010/2011

Title of paper: Industrial Hygiene and Aspects of Plant Operation I

Course code: EHS 562

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

Answer ALL questions

QUESTION 1

Write notes on the following:

- (a) Economic effects of accidents
- (b) The main hazards associated with machines
- (c) Relationship between the worker and the workplace
- (d) Five (5) physical injury hazards in the construction industry
- (e) Possible causes of occupational stress

[25 Marks]

QUESTION 2

In the workshop of the ABC Company there is only one floor, in this workshop there are a number of tools and machinery that are used when repairing objects. There are cables, oil spillages and objects all over the floor. In this workshop you can come in contact with rotating parts in some machines; operators are not using any personal protective equipment or clothing.

- a) From the description of the workshop above, are there any hazards in this workshop? Defend your response in five (5) points.

[15 Marks]

- b) Assess the risks of any five (5) hazards in the workshop in terms of severity and likelihood.

[10 Marks]

QUESTION 3

- a) Why do farmers handle animals?

[5 Marks]

- b) Explain the different types of mechanical and non-mechanical hazards that can have adverse effects on the safety and health of the workers in a livestock farm.

[20 Marks]

QUESTION 4

- a) Define an industrial hygienist.

[3 Marks]

- b) What are the core functions of an industrial hygienist – give 5

[10 Marks]

- c) Explain Six (6) types of safety guards that can be in place to safe guard accidents to machine users.

[12 Marks]