

# **UNIVERSITY OF SWAZILAND**

Faculty of Health Science

Department of Environmental Health Sciences

Final Examination 2011/2012

Title of paper: Industrial Hygiene 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) Prime movers and transmission devices in a machine
- b) Escalators and hazards associated with them
- c) Hazards associated with construction industry – discuss five
- d) Mechanical hazards of a machine
- e) Pressure vessels and hazards associated to them

[25 Marks]

**Question 2**

- a) Outline three (3) activities taking place in a farm and the hazards associated with those activities
- b) What are the effects of an accident to the worker and the organization?

[15 Marks]

[10 Marks]

**Question 3**

- a) Define Industrial hygiene
- b) Give five functions of an industrial hygienist
- c) Unguarded machines can pose a danger to operators. Outline six (6) safety guards that can be put in place to safeguard a machine.

[3 Marks]

[10 Marks]

[12 Marks]

**Question 4**

- a) Outline the ideal relationship between the worker and the workplace – from the time he/she is employed to the exit date
- b) What is the hierarchy of developing control measures – Explain each option?

[15 Marks]

[10 Marks]