

**UNIVERSITY OF SWAZILAND**  
**Faculty of Health Sciences**

**Department of Environmental Health Science**

**Main Examination**  
**December 2014**

**Title of paper:** Industrial Hygiene Aspect 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 any 4 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 any four (4) questions**

**Question 1**

- a) Explain the hazards associated with using machines/plants in an industry. [10 Marks]
- b) Outline 5 different types of control measures that can be put in place in order to protect workers from machine hazards. [10 Marks]
- c) What is task analysis and what are the characteristics of a task? [5 Marks]

**Question 2**

- a) Define the different types of escalators and their hazards [5 Marks]
- b) Outline 5 functions of an industrial hygienist [10 Marks]
- c) Outline the Economics effects of accidents [10 Marks]

**Question 3**

- a) Describe the physical hazards associated with the construction industry. Give examples. [20 Marks]
- b) Outline the content of a Safety file in a construction industry [5 Marks]

**Question 4**

- a) Define farming. [5 Marks]
- b) Outline the general safety and health hazards associated with farming. [10 Marks]
- c) Proper handling of animals is essential in preventing accidents. Describe 5 different ways of ensuring prevention of accidents whilst handling animals (not specific to any animal). [10 Marks]

**Question 5**

- a) Define pressure vessels and outline possible hazards that can be caused by using pressure vessels [10 Marks]
- b) Write in detail activities carried out in step 1 and 2 of risk assessment (hazard identification and risk assessment) [15 Marks]