



UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health Sciences

Final Examination
December 2012

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 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

Explain the following:

- a) Prime movers and transmission devices in a machine [5 Marks]
- b) Escalators and their hazards [5 Marks]
- c) Safety file in the construction industry [5 Marks]
- d) Hazards associated with using a machine/plant [5 Marks]
- e) Economic effects of accidents [5 Marks]

Question 2

- a) Outline five (5) types of controls that can be put in place in order to protect workers from machine hazards. [15 Marks]
- b) Describe the hazards and safety procedures you would put in place for one (1) of the following activities:
 - i. Working at heights
 - ii. Using forklifts
 - iii. Using heavy equipment
 - iv. Using hoists
 - v. Excavation[10 Marks]

Question 3

Agriculture is an industry with hazards that can be fatal and can also lead to disabilities:

- a) What hazardous activities are involved in land cultivation and how can they be prevented? [10 Marks]
- b) Explain why animals need to be handled and the hazards associated with that handling. Give examples. [15 Marks]

Question 4

- a) Outline five (5) activities to be performed by an industrial hygienist. In each activity explain the importance of that activity in relation to the health and safety of the worker. [25 Marks]