

# **UNIVERSITY OF SWAZILAND**

**Faculty of Health Sciences**

**DEGREE IN ENVIRONMENTAL HEALTH**

**SUPPLEMENTARY EXAMINATION PAPER 2014**

<b>TITLE OF PAPER</b>	<b>: Occupational Health and Safety</b>
<b>COURSE CODE</b>	<b>: EHM 211</b>
<b>DURATION</b>	<b>: 2 HOURS</b>
<b>MARKS</b>	<b>: 100 MARKS</b>
<b>INSTRUCTIONS</b>	<b>: READ THE QUESTIONS AND INSTRUCTIONS CAREFULLY</b>
	<b>: ANSWER FOUR (4) QUESTIONS</b>
	<b>: EACH CARRIES 25 MARKS</b>
	<b>: WRITE NEATLY AND CLEARLY</b>
	<b>: NO PAPER SHOULD BE BROUGHT INTO NOR OUT OF THE</b>
	<b>EXAMINATION ROOM</b>
	<b>: BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER</b>

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR**

### Question 1

A) Define the following terms that are used in occupational health and safety

- i) Time Weighted Average (TWA)
- ii) Threshold Limit Value (TLV)
- iii) Permissible Exposure Level (PEL)
- iv) Recommended Exposure Level (REL)
- v) LD<sub>50</sub>
- vi) Immediately Dangerous to Life or Health (IDLH)

**(3 marks each – Total = 15 marks)**

B) List ten (10) items covered in a typical Material Safety Data Sheet (MSDS). **(10 marks)**

### Question 2

Anticipation, recognition, evaluation and control of occupational hazards are core in the study of occupational hygiene. Discuss these principles in detail. **(25 marks)**

### Question 3

- i) List with one example of each the occupational hazards that may be encountered in the workplace **(10 marks)**
- ii) In noise control, what is meant by Sound Power Level (SWL) and Sound Pressure level (SPL) **(6 marks)**
- iii) What is the difference between contact irritant and contact allergic dermatitis? **(4 marks)**
- iv) What occupational hazards may be inflicted by a moving abrasive wheel? **(5 marks)**

### Question 4

- i) How would you determine the moisture content or humidity when undertaking an environmental measurement? **(5 marks)**
- ii) Briefly discuss the health effects of asbestos **(10 marks)**
- iii) Outline the hazard recognition procedure **(10 marks)**

### Question 5

- a) Discuss the concept of child labour under the following headings
  - What constitutes child labour and
  - what are the effects of child labour **(10 marks)**
- b) Differentiate between Raynaud's phenomenon and carpal tunnel syndrome **(5 marks)**
- c) List five (5) machine guards that are used in the workplace **(5 marks)**
- d) According to the Swaziland Occupational Safety and Health Act 2001 (Act No. 9 of 2001), what are the functions of the safety and health representatives? **(5 marks)**