

# UNIVERSITY OF SWAZILAND Faculty of Health Sciences

### **DEGREE IN ENVIRONMENTAL HEALTH**

# **FINAL EXAMINATION PAPER 2007/2008**

TITLE OF PAPER

: AIR SAMPLING AND ANALYSIS I

COURSE CODE

EHS 564

DURATION

2 HOURS

**MARKS** 

100

INSTRUCTIONS

**READ THE QUESTIONS & INSTRUCTIONS** 

**CAREFULLY** 

: ANSWER ALL QUESTIONS

: EACH QUESTION CARRIES 25 MARKS

: WRITE NEATLY & CLEARLY

: NO PAPER SHOULD BE BROUGHT INTO NOR OUT

OF THE EXAMINATION ROOM

: BEGIN EACH QUESTION ON A SEPARATE SHEET

OF PAPER

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

#### **QUESTION 1**

a) Define the following

i. Dust	(3 Marks)
ii. Smoke	(3 Marks)
iii. Fumes	(3 Marks)
iv. Mists	(3 Marks)
v. Vapour	(3 Marks)

b) What are the objectives of air pollution monitoring and sampling (10 Marks)

## **QUESTION 2**

- i) Define and illustrate the use of the Tyndall method (10 Marks)
- ii) Define the passive sampling method for gases and vapours (15 Marks)

#### **QUESTION 3**

a) What is a Material Safety Data Sheet and why is it useful to have it?

(5 Marks)

b) Outline 10 items listed in an MSDS

(20 Marks)

#### **QUESTION 4**

a) What is a sampling strategy?

(2 Marks)

b) List the 10 factors to consider when preparing of sampling

(20 Marks)

c) Define OEL

(2 Marks)

d) Define AL

(1 Mark)