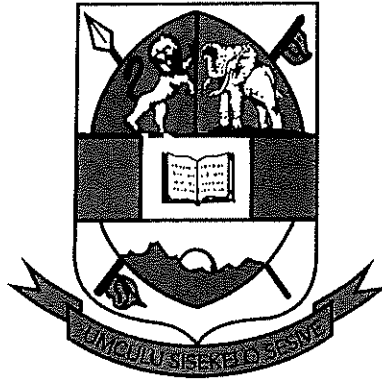


UNIVERSITY OF ESWATINI



Final Examination– 2020/2021

TITLE OF PAPER:	Environmental Pollution
COURSE NUMBER:	CHE613
TIME ALLOWED:	Three Hours

INSTRUCTIONS:

Answer any four (4) questions of the six (6) questions and every question holds 25 marks. NB: all questions are to be answered in a separate answer sheet.

This Examination Paper Contains **THREE** Printed Pages Including This Page

You are not supposed to open the paper until permission to do so has been granted by the Chief Invigilator.

Question 1

- a. Give a brief discussion about photochemical smog. Use equations to illustrate your answer. (15)
- b. How do VOCs contribute to increased ozone at ground level? (5)
- c. Use of lead-free petrol or diesel is recommended to reduce the pollutants emitted by automobiles. Explain why? (5)

Question 2

- a. What are the advantages and disadvantages of using pesticides and fertilizers as far as the environment is concerned? (10)
- b. How does the Paris Agreement under the United Nations Framework on Climate Change Convention (UNFCCC) supposed to address climate change? (10)
- c. What is the role of population growth in the production of municipal solid waste (MSW). Give examples of the categories of waste found in MSW. (5)

Question 3

- a. Give a brief discussion about eutrophication (10)
- b. How has DDT caused decline in bird population? (10)
- c. Give a brief discussion of biomagnification. Use an example to illustrate your answer (5)

Question 4

- a. The use of fossil fuels in industries and vehicles results in the release of different gaseous air pollutants. Discuss four of these and highlight their effects (10)
- b. What could be the harmful effects of improper management of industrial and domestic solid waste in a city?
(10)
- c. What are biodegradable and non-biodegradable pollutants? (5)

Question 5

- a. What are the basic characteristics of a modern landfill site. List any three and also mention the reasons for their use. (15)

- b. Write a short note on electronic waste. List the various sources of e-wastes and the problems associated with its disposal. (10)

Question 6

- a. How does deforestation contribute to climate change? Give a brief discussion (10)
- b. Describe soil pollution and how it can be prevented. (15)