



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF ENVIRONMENTAL SCIENCES

DEPARTMENT OF ENVIRONMENTAL SCIENCE

**BACHELOR OF SCIENCE HONOURS DEGREE IN ENVIRONMENTAL SCIENCE AND
HEALTH**

PRINCIPLES OF ECOTOXICOLOGY

ESH 2214

Final Examination Paper

March 2025

This examination paper consists of 3 printed pages.

Time Allowed: 3 hours.

Total Marks: 100

Special Requirements: None

Examiner's Name: Dr M. Ndabambi

INSTRUCTIONS

1. Answer any **FOUR** questions.
2. Each question carries 25 marks.

MARK ALLOCATION

| QUESTION | MARKS |
|-----------------|--------------|
| 1. | 25 |
| 2. | 25 |
| 3. | 25 |
| 4. | 25 |
| 5. | 25 |
| 6. | 25 |
| TOTAL | 100 |

1. Describe the sources, fate, and effects of plastics in the environment.
2. Describe the biological effects of any five heavy metals you studied.
3. Compare and contrast the mechanism of action of carbamates and organophosphate pesticides.
4. Discuss the basic elements of toxicity tests.
5. Discuss the factors that affect the concentration of organochlorine pesticides in living organisms.
6. Explain how the physico-chemical properties of organic chemicals affect their behaviour in the environment.