



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF ENVIRONMENTAL SCIENCE

DEPARTMENT OF FOREST RESOURCES AND WILDLIFE MANAGEMENT

BIODIVERSITY CONSERVATION (EFW 4202)

Main Examination Paper

March 2025

This examination paper consists of 2 pages

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: None

Examiner's Name: Mr M. Mwanza

External Examiner: Prof. E. Chivandi

INSTRUCTIONS

1. Answer **QUESTION 1** and any **THREE** others
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. (a) Describe the following types of biodiversity: genetic, species and ecosystem diversity. **[9 marks]**

(b) Explore the role each of the above named type of biodiversity plays in support of modern agriculture, manufacturing industry and human health. **[16 marks]**
2. Giving named examples of invasive plant and animal species, explain their effects on the quality of wildlife habitats and species diversity.
3. Outline and explain any five strategies that Zimbabwe can implement to sustainably conserve biodiversity.
4. Critically examine the strengths and weaknesses of the following instruments in the governing and implementation of biodiversity conservation activities in Zimbabwe:
 - (a) **one** act of parliament. **[15 marks]**
 - (b) **one** international treaty. **[10 marks]**
5. Assess the environmental impacts on biodiversity caused by opening up of a new open-cast coal mine near a game reserve.
6. Describe how you would carry out a biodiversity species survey for monitoring on each of the following taxa found in a savannah natural woodland:
 - (a) woody plants. **[13 marks]**
 - (b) leaf litter-dwelling arthropods. **[12 marks]**