

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY



FACULTY OF ENVIRONMENTAL SCIENCE

DEPARTMENT OF FOREST RESOURCES AND WILDLIFE MANAGEMENT

PLANT AND ANIMAL DISEASES (EFW 1206)

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: Dr J. Maringa

External Examiner: Prof. E. Chivandi

INSTRUCTIONS

1. Answer **QUESTION ONE** 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. Giving examples, explain the following terms:

(a) susceptible host. [5 marks]

(b) emerging infectious wildlife diseases. [5 marks]

(c) epizootic. [3 marks]

(d) surveillance. [5 marks]

(e) multi-host systems. [7 marks]

2. Giving examples, clearly narrate how zoonotic disease are of economic importance and describe how they affect humans, plants, and animals.

3. With reference to rabies, do the following:

(a) identify and draw a diagram of the disease triangle. [6 marks]

(b) describe the major signs and symptoms of the disease. [8 marks]

(c) discuss prevention and management strategies. [11 marks]

4. Giving examples, describe the importance of pathogens in shaping the population dynamics of host populations.

5. Discuss the influence of globalisation on the evolution and spread of plant and animal diseases.

6. Giving examples, explain in detail the effects of the following pests, pathogens, and parasites on plants:

(a) mistletoes. [5 marks]

(b) weeds. [5 marks]

(c) fungi. [5 marks]

(d) bacteria. [5 marks]

(e) nematodes. [5 marks]