



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
INNOVATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL DIPLOMA

IN

HORTICULTURE

MODULE: Plant Protection

PAPER NO: 514/23/M04

DURATION: 3 Hours

MAY/ JUNE 2025 EXAMINATION

REQUIREMENTS

Pen, pencil, ruler, rubber.

INSTRUCTIONS TO CANDIDATE

- 1. Answer any five (5) questions.**
- 2. Each question carries twenty (20) marks.**

QUESTION 1

- a) Discuss the general management of viral, bacteria and fungal diseases. (10 marks)
- b) Distinguish and explain the difference between natural and applied pest control methods. (10 marks)

QUESTION 2

- a) Discuss pesticide resistance. (10 marks)
- b) Discuss efficacy of an insecticide. (10 marks)

QUESTION 3

Elaborate how pathogens disseminate and overwinter. (20 marks)

QUESTION 4

- a) Definition of terms:
 - i) Mode of action. (2 marks)
 - ii) Insecticide (2 marks)
 - iii) Herbicide (2 marks)
 - iv) Fungicide (2 marks)
 - v) Avicides (2 marks)
- b) Discuss the concept of Koch's postulates. (10 marks)

QUESTION 5

Elaborate more on the cultural control for bacteria, viruses and fungi. (20 marks)

QUESTION 6

Outline and explain health and safety precautions. (20 marks)