

BINDURA UNIVERSITY OF SCIENCE EDUCATION
BIOLOGICAL SCIENCES DEPARTMENT
BScBZH/HBScED/BScED
PLANT PATHOLOGY (BZM404)

EXAMINATION

2 HOURS (100 MARKS)

 **MAR 2023**

INSTRUCTIONS

Answer **FOUR** questions. You **MUST** answer **QUESTION 1** (Section A) and any **THREE** questions from Section B. Each question carries **25 MARKS**. Where a question contains subdivisions, the mark value is given in brackets. Illustrate your answers where possible with large clearly labelled diagrams. You should not spend more than thirty minutes on each question.

SECTION A (COMPULSORY)

1. Outline how you would illustrate Koch postulates using bacterial wilt as an example.

SECTION B

2. Illustrate the diseases cycle of a named fungal disease, its spread and survival.
3. Describe any five methods of virus diagnosis in plants based physical properties of the virus.
4. Write short notes on any five of the following:
 - a) Transovarial virus transmission. (5 marks)
 - b) Dodder transmission. (5 marks)
 - c) Systemic fungicides (5 marks)
 - d) Vertical resistance. (5 marks)

e) Gene for gene concept.

(5 marks)

f) Why bacterial diseases are difficult to control with chemicals. (5 marks)

5. Describe any **five** physiological effects of pathogens on plants.

6. Explain why the adoption of integrated pest management has been slow in developing countries.

END OF EXAMINATION QUESTION PAPER