BINDURA UNIVERSITY OF SCIENCE EDUCATION BIOLOGICAL SCIENCES DEPARTMENT MASTER OF SCIENCE IN APPLIED MICROBIOLOGY AND PLANT PATHOLOGY (MPP512) HERBAL MEDICINAL PRODUCTS & ANTIMICROBIAL DRUG DISCOVERY

EXAMINATION 2 HOURS (100 MARKS)

- JUN 2025

INSTRUCTIONS

Answer <u>TWO</u> (2) questions in all. You <u>MUST</u> choose **ONE** <u>QUESTION</u> from Section A and another **ONE** <u>QUESTION</u> from <u>SECTION</u> B. Each question carries 50 marks. Where a question contains subdivisions, the mark value of each part is given in brackets. Illustrate your answer were appropriate with large clearly labelled diagrams.

SECTION A

- 1. Explain how you can perform a scientific investigation on a plant with known medicinal and pharmaceutical application.
- 2. Discuss the disadvantages and advantages of using a known source of plant material with bioactive compounds for medicinal application.

SECTION B

- 3. Describe the role of microbial cells as engineers and designs of medicinal and pharmaceutical products.
- 4. Describe the overview of the era of discovery of drugs and antibiotics.

END OF EXAMINATION PAPER