

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

AGH 112

Department of Crop Science
BSc Agricultural Science (Honours) Part I Examination
Introduction to Microbiology

3 HOURS (100 Marks)

NOV 2023

INSTRUCTIONS

Answer any **FOUR** questions. Each question carries **25 marks**.

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1. a) Explain five (5) ways in which microorganisms are important. [15 marks]
b) Discuss the Germ theory for Disease and Spontaneous Generation theory. [10 marks]
 2. a) With the use of a diagram, explain reproduction by binary fission in bacteria. [10 marks]
b) With the aid of a diagram, outline the structure of a prokaryotic cell. [15 marks]
 3. a) Outline any five (5) characteristics that are used to differentiate and classify viruses. [15 marks]
b) Explain any five (5) properties of viruses. [10 marks]
 4. a) Discuss the distinguishing characteristics of the Zygomycota, Ascomycota and the Basidiomycota. [15 marks]
b) Discuss the ecological associations existing among microbial populations. [10 marks]
 5. Discuss five (5) environmental factors affecting the growth of microbes. [25 marks]

6. a) Discuss any five (5) methods of food preservation. **[15 marks]**
- b) Explain any five (5) practical concerns in microbial control. **[10 marks]**

End of Exam Paper