

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

NRF 202

DEPARTMENT OF NATURAL RESOURCES
BSC PART II EXAMINATION
FOREST BOTANY

 JUN 2023

2 HOURS (70 MARKS)

INSTRUCTIONS

Answer **THREE** questions out of the following four questions. You must answer question **One** from **SECTION A** and any **Two** from **SECTION B**.

SECTION A (COMPULSORY)

1. (a) Distinguish between two theories of organisation of the plant apices: Korper-Kappe and the Tunica Corpus theory. [10 Marks]
- (b) Discuss the three main types of plant tissues and their functions. [10 Marks]
- (c) Discuss the concept of plant classification. [10 Marks]

SECTION B

2. (a) Distinguish angiosperms from gymnosperms. [2 Marks]
- (b) Discuss the role of plant indicator species. [10 Marks]
- (c) Outline the rules and codes of plant nomenclature as outlined by the international botanical code of nomenclature (ICBN). [8 Marks]
3. (a) Explain how the structure of plants is an adaptation to their basic function in terrestrial ecosystems. [5 Marks]

- (b) Draw and label the longitudinal view of a tree trunk. [5 Marks]
- (c) Explain the functions of any five parts shown in (b) above [10 Marks]
4. (a) Discuss leaf and stem modifications in plants. [10 Marks]
- (b) Differentiate between primary and secondary growth, and describe where and how each kind of growth occurs. [10 Marks]
5. (a) Draw and label two distinct floral types in plants. [10 Marks]
- (b) Describe the procedures for preparing a herbarium specimen. [10 Marks]

END OF PAPER