

BINDURA UNIVERSITY OF SCIENCE EDUCATION

BACHELOR OF SCIENCE DEGREE

NRF 407(1)

DEPARTMENT OF NATURAL RESOURCES

BES PART IV: Examination

SAWMILLING & WOOD TECHNOLOGY

2 HOURS (70 MARKS)

OCT 2024

INSTRUCTIONS

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

SECTION A (COMPULSORY)

1. (a) Discuss the distinguishing features between angiosperms and gymnosperms. [15 Marks]
- (b) State the three types of saws used in sawmilling. [3 Marks]
- (c) Define 'set' as used in sawing operations. [3 Marks]
- (d) Explain the three techniques used to achieve set on saws. [9 Marks]

SECTION B

2. Discuss the oven drying method for wood moisture content determination. [20 Marks]
3. Discuss the effects of silvicultural operations on wood properties. [20 Marks]
4. (a) Explain the sources of variation in specific gravity of wood. [10 Marks]
- (b) Discuss the environmental impacts of producing wood in intensively managed plantations. [10 Marks]
5. Discuss the factors that affect the strength properties of clear wood. [20 Marks]

END OF PAPER