

BINDURA UNIVERSITY OF SCIENCE EDUCATION

BACHELOR OF SCIENCE DEGREE

NRF206

DEPARTMENT OF NATURAL RESOURCES
BSc PART II EXAMINATION
SILVICULTURE

2 HOURS (70 MARKS)

NOV 2023

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. Briefly explain the following concepts/ terms:

- a) Even-aged silviculture
- b) Cleaning
- c) Improvement cutting
- d) Liberating
- e) Root pruning
- f) Salvage cutting

[5 Marks]

[5 Marks]

[5 Marks]

[5 Marks]

[5 Marks]

[5 Marks]

SECTION B

2. Explain the following methods used to control weeds in forest plantations:

- a) Pre-plant spray
- b) Coning operation
- c) Chemical hoe
- d) Ring weeding
- e) Slash

[3 Marks]

[3 Marks]

[4 Marks]

[5 Marks]

[5 Marks]

3. Describe the dominant height based pruning regime for *Pinus patula* in Zimbabwe.

[20 Marks]

4. Review the ways that are used to store seed of the following forest plantation species:

- a) *Pinus patula*
- b) *Eucalyptus grandis*
- c) *Acacia mearnsii*

[8 Marks]

[7 Marks]

[5 Marks]

5. Explain seven parameters that are commonly used to grade the quality of pine seedlings before planting.

[20 Marks]

END OF PAPER