

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

AGH417

Department of Crop Science
BSc Agricultural Science (Honours) Part 4 Examination
Nursery Production and Management

3 HOURS (100 Marks)

 MAR 2023

INSTRUCTIONS

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

1. a) Define the term 'nursery' [2 marks]
b) Why are nurseries important? [8 marks]
c) Discuss the classification of nurseries. [15 marks]
2. a) What are the functions of growing media for nurseries? [12 marks]
b) Describe the physical, chemical and biological properties of growing media. [13 marks]
3. a) Give the advantages and disadvantages of asexual plant propagation. [10 marks]
b) Describe the following commercial plant multiplication methods;
i) cutting ii) layering iii) budding [15 marks]
4. a) Describe the four main stages involved in micropropagation. [12 marks]
b) State five problems associated with poor seed quality. [5 marks]
c) Why is it important to test the electrical conductivity of growing media? [2 marks]
d) Explain three factors to consider when using an electrical conductivity meter [6 marks]
5. Write notes on the following;
a) Plant hardening [5 marks]
b) Micrografting [5 marks]
c) Shade house [5 marks]

d) Nursery certification in Zimbabwe

[10 marks]

6. a) Give five factors to consider when selecting a nursery propagation structure

[5 marks]

b) State five characteristics of good seeds.

[5 marks]

c) With the aid of a diagram, describe the Quonset greenhouse

[10 marks]

d) Distinguish between mechanical and natural greenhouse ventilation

[5 marks]

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