



GWANDA STATE UNIVERSITY
FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE
DEPARTMENT OF HORTICULTURE AND CROP PRODUCTION
BACHELOR OF SCIENCE HONOURS DEGREE IN CROP SCIENCE
LCS 4210 PRINCIPLES OF HORTICULTURE
SECOND SEMESTER EXAMINATION
JUNE 2024

LCS 4210 Principles of Horticulture

Time Allowed: 3 hours

Total Marks: 100

Special Requirements: None

Examiner's Name: Dr. P. Zanamwe

INSTRUCTIONS

1. Answer **all** questions in Section A
2. Answer **TWO (2)** questions in Section B

MARK ALLOCATION

SECTION	MARKS
SECTION A	60
SECTION B	40
TOTAL ATTAINABLE MARKS	100

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE

- a. Explain how horticultural plants differ from forestry and agronomic crops (4 Marks)
- b. State and describe four (4) branches of horticulture and give two (2) specific examples of plants or features in each branch. (16 Marks)

QUESTION TWO

- a. Discuss five (5) benefits of horticulture in Zimbabwe (10 Mark)
- c. Explain a berry fruit and discuss giving one (1) example of each of the two (2) types of special berries (5 Marks)
- d. Distinguish warm-season from cool-season vegetable crops and give two specific examples for each category (5 Marks)

QUESTION THREE

- a. Distinguish the following terms
- i) Biological and Apomictic seeds (2 Marks)
 - ii) Epigeal and Hypogeal germination. (2 Marks)
 - iii) Direct and Indirect planting (2 Marks)
 - iv) Softwood and Hardwood cutting (2 Marks)
 - v) Serpentine and Trench layering
- b. State five (5) special uses of grafting in horticulture (10 Marks)

SECTION B: ANSWER TWO QUESTIONS IN SECTION B

QUESTION FOUR

State and discuss five (5) types of horticultural produce markets in Zimbabwe (20 Marks)

QUESTION FIVE

Discuss the following ways of protecting horticulture plants against frost damage

- i. Hot caps (4 Marks)
- ii Row covers (4 Marks)
- iii Polyethylene tunnel (4 Marks)
- iv Wind machines (4 Marks)
- v Sprinkler application (4 Marks)

QUESTION SIX

Explain the following terms

- a) Etiolation (5 Marks)
- b) Heat unit (5 Marks)
- c) Blanching (5 Marks)
- d) Photoperiodism (5 Marks)

.....THE END.....