



GWANDA STATE UNIVERSITY
FACULTY OF NATURAL RESOURCES MANAGEMENT AND AGRICULTURE
DEPARTMENT OF HORTICULTURE AND CROP PRODUCTION
BACHELOR OF SCIENCE HONOURS DEGREE IN HORTICULTURE AND CROP
PRODUCTION
NHC 1101 INTRODUCTION TO HORTICULTURE
FIRST SEMESTER EXAMINATION
DECEMBER 2024

NHC 1101 Introduction to 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

QUASTION	MARKS
SECTION A	60
SECTIONB	40
TOTAL ATTAINABLE MARKS	100

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE

- Define the word horticulture (1 Mark)
List 3 major differences between horticultural and agronomic crops (3 Marks)
State and describe four (4) branches of horticulture and give two (2) specific example of plants or features in each branch. 16 Marks

QUESTION TWO

- a. Explain the term 'binominal nomenclature' and give an example. (4 Mark)
b. State and explain, giving specific examples, five (5) rules for writing binomial names. (10 Marks)
c. Distinguish warm-season from cool-season vegetable crops, giving two (2) specific examples for each category. (6 Marks)

QUESTION THREE

- a. Distinguish the following terms
- i) Grafting and Budding (2 Marks)
 - ii) Direct and Indirect planting (2 Marks)
 - iii) Epigeal and Hypogeal germination. (2 Marks)
 - iv) Softwood and Hardwood cutting (2 Marks)
 - v) Simple layering and air layering (2 Marks)
- b. Discuss the following dormancy breaking methods
- i. Mechanical (2 Marks)
 - ii. Temperature (2 Marks)
 - iii. Light (2 Marks)
 - iv. Acid treatment (2 Marks)
 - v. Leaching with water (2 Marks)

SECTION B: ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION FOUR

Distinguish, giving specific examples

- a. Rhizomes and stolons (10 Marks)
- b. Stem tubers and tuberous roots (10 Marks)

QUESTION FIVE

Discuss the following methods of irrigating horticulture crops

- i. Drip irrigation (10 Marks)
- ii. Overhead irrigation (10 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.....