



GWANDA STATE UNIVERSITY
FACULTY OF NATURAL RESOURCES MANAGEMENT & AGRICULTURE
DEPARTMENT OF HORTICULTURE & CROP PRODUCTION
BACHELOR OF SCIENCE (HONOURS) DEGREE IN CROP SCIENCE
LCS 4106 AND NHC 2203 WEED BIOLOGY AND MANAGEMENT
MAIN EXAMINATION PAPER

SEPTEMBER 2024

This examination paper consists of 2 pages, inclusive of cover page

Time Allowed: 3 hours
Total Marks: 100
Examiner's Name: Musabayana Z

INSTRUCTIONS

1. Answer **ALL** questions in Section A
2. Answer **ONLY THREE** questions in Section B

MARK ALLOCATION

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

SECTION A ANSWER ALL QUESTIONS

Question 1.

Outline weed biological characteristics that facilitates invasion of new niches?
[20 Marks]

Question 2

Describe the economic importance of weeds? [20 Marks]

SECTION B ANSWER THREE QUESTIONS

Question 3.

- (a) Distinguish between true allelopathy and functional allelopathy [2 Marks]
- (b) Discuss the economic and ecological impact of aquatic weeds [5 Marks]
- (c) Discuss the plant characteristics that influence herbicide selectivity [5 Marks]
- (d) Discuss the four-step approach to weed management programme [8 Marks]

Question 4.

- a) Discuss five factors that affect the efficacy of foliar applied herbicides [20 Marks]

Question 5

When herbicides are applied they get in contact with the soil and are immediately subjected to a variety of process in the soil. Outline these processes in detail?[20 Marks]

Question 6

- a) Giving examples, explain the criteria used in classifying weeds [5 Marks]
- b) Describe any three ways used in classifying herbicides [8 Marks]
- c) Describe three different types of seed dormancy that affect weed seeds [7 Marks]

Question 7

Discuss any five weed management strategies used by farmers, giving examples of weeds that can be controlled effectively by the strategy [20 Marks]

END OF EXAMINATION