

NATIONAL UNIVERSITY OF LESOTHO

CROP SCIENCE DEPARTMENT

CPS3508: WEED SCIENCE

Date: AUGUST, 2023

Marks: 100

Time: 3hours

Instructions: a) Answer any 2 questions from Section A and any 2 questions from Section B

b) All questions carry equal marks

SECTION A: WEED BIOLOGY

Answer any 2 questions from this Section

Question 1 [25 Marks]

Discuss the harmful and beneficial effects of weeds (15 marks)

Discuss seed dormancy as a weed survival strategy (10 Marks)

Question 2 [25 Marks]

Give a note on weed characterization and its importance in weed control.

Question 3 [25 Marks]

1. Describe the major environmental conditions determining weed species composition on the field (15 Marks).
2. Discuss the four (4) principles of crop weed competition (10 Marks)

SECTION B (WEED MANAGEMENT)

INSTRUCTION: ANSWER ANY TWO QUESTIONS

QUESTION 4.

[25 marks]

Write the notes on **Pre-emergence herbicides** and **Post emergence herbicides**. Explain how they are used and what is required for their successful application. Give two examples for each category and the crops in which they are applied.

QUESTION FIVE

Explain all the steps involved in designing weed management program. [25 Marks]

QUESTION SIX

Write notes on the following major classes of weeds: **Aromatic carboxylic acids** and **Triazines**;

- A. mode of action
- B. injury symptomology,
- C. Basis for selectivity
- D. Two examples for each class.

SECTION A

Instructions: Answer any 2 questions in this section. All questions carry equal marks.