



2ND SEMESTER 2007/2008

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMMES: BACHELOR OF SCIENCE IN AGRONOMY, YEAR 4
BACHELOR OF SCIENCE IN HORTICULTURE, YEAR 4**

COURSE CODE: CP 406

TITLE OF PAPER: WEED MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTION: ANSWER A TOTAL OF FOUR [4] QUESTIONS. ALL
QUESTIONS CARRY EQUAL MARKS.**

**DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED
BY THE INVIGILATOR.**

INSTRUCTIONS: ANSWER ANY FOUR [4] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

QUESTION 1

- a. Discuss human influences on weed ecology. (8 marks)
- b. Discuss the weed-crop ecosystem. (8 marks)
- c. Explain three weed-environment interactions (9 marks)

[Total marks for Question 1 = 25 marks]

QUESTION 2

- a. List eight characteristics of an ideal herbicide. (8 marks)
- b. Explain the involvement of allelopathy in weed competition. (6 marks)
- c. Name three examples of allelopathy in plants. (3 marks)
- d. Discuss four research areas that need to be included in planning for future weed science. (4 x 2 marks = 8 marks)

[Total marks for Question 2 = 25 marks]

QUESTION 3

- a. Explain what herbicides can do that other weed control methods cannot achieve. (5 marks)
- b. Explain what biological weed control cannot achieve. (5 marks)
- c. Make a classification of herbicides, with named examples. (15 marks)

[Total marks for Question 3 = 25 marks]

INSTRUCTIONS: ANSWER ANY FOUR [4] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

QUESTION 4

- a. Explain the factors that affect soil-applied herbicides. (8 marks)
- b. Discuss the soil persistence of herbicides. (8 marks)
- c. What is a surfactant, and its role in herbicide formulation? (4.5 marks)
- d. What is an adjuvant, and what do adjuvants do in herbicide formulations? (4.5 marks)

[Total marks for Question 3 = 25 marks]

QUESTION 5

Explain the meaning of each of the following terms:

- (i) Noxious weed (5 marks)
- (ii) Weed prevention (5 marks)
- (iii) Weed control (5 marks)
- (iv) Weed eradication (5 marks)
- (v) Weed management (5 marks)

[Total marks for question 5 = 25 marks]