UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY

BACHELOR OF SCIENCE IN HORTICULTURE

COURSE CODE: CP 501

TITLE OF PAPER: WEED SCIENCE

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER A TOTAL OF FIVE [5] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

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

INSTRUCTIONS: ANSWER ANY FIVE [5] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

QUESTION 1

a. What is 'allelopathy'?   (4 marks)

b. Give three specific examples of allelopathy. (6 marks)

c. Discuss, with specific examples, the present role of allelopathy in weed management.   (10 marks)

[Total marks for question 1 = 20 marks]

QUESTION 2

a. Give <u>two</u> different meanings of the term, "weed".   (= 4 marks)

b. Describe, with examples, <u>four</u> benefits of weeds.   (8 marks)

c. Describe, with examples, <u>four</u> harmful effects of weeds. (8 marks)

[Total marks for question 2 = 20 marks]

QUESTION 3

(a) What do you understand by each of the following terms?

(i)   Herbicide;   (3 marks)

(ii)   Contact herbicide;   (3 marks)

(iii) Systemic herbicide;   (3 marks)

(iv)   Selective herbicide;   (3 marks)

(b) What is the difference between a preemergence herbicide and a postemergence herbicide?   (3 marks)

(c) Explain what would guide you in choosing to use a contact herbicide, a systemic herbicide or a selective herbicide in a particular situation.   (5 marks)

[Total marks for question 3 = 20 marks]

INSTRUCTIONS: ANSWER ANY FIVE [5] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

QUESTION 4

a. What is an invasive species?   (2 marks)

b. Using a tabular format, name <u>four</u> major invasive species in Swaziland, giving the scientific name, the common English name and the siSwati name, respectively.

(0.5 x 12 = 6 marks)

c. Describe any research efforts that have been carried out to experimentally control invasive species in Swaziland.   (8 marks)

d. Explain <u>one strength</u> and <u>one weakness</u> of any specific named efforts made to manage one of the major invasive species in Swaziland.   (4 marks)

[Total marks for question 4 = 20 marks]

QUESTION 5

a. How are weed classification systems used? (5 marks)

b. What classification system is most likely to be used by agronomists, horticulturists, and weed scientists?   (5 marks)

c. Classify any <u>three named</u> weeds, belonging to different botanical families.

(3 x 2 marks each = 6 marks)

d. Describe the botanical characteristics of one of the weeds named in 5(c) above.

(4 marks)

[Total marks for question 5 = 20 marks]

INSTRUCTIONS: ANSWER ANY FIVE [5] QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

QUESTION 6

Explain the meaning of each of the following terms:

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

[Total marks for question 6 = 20 marks]