

1<sup>st</sup> SEM. 2005/2006

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UNIVERSITY OF SWAZILAND FINAL EXAMINATION PAPER

**PROGRAMME:** 

BACHELOR OF SCIENCE IN AGRICULTURE -

**CROP PRODUCTION** 

BACHELOR OF SCIENCE IN AGRICULTURE -

**HORTICULTURE** 

**COURSE CODE:** 

**CP 501** 

TITLE OF PAPER:

WEED SCIENCE

TIME ALLOWED:

TWO (2) HOURS

**INSTRUCTIONS:** 

ANSWER A TOTAL OF FOUR [4] QUESTIONS.

ANSWER QUESTION ONE [1] AND ANY OTHER

THREE [3] QUESTIONS. ALL QUESTIONS CARRY

AN EQUAL NUMBER OF MARKS.

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#### **QUESTION 1**

#### (THIS QUESTION IS COMPULSORY)

| a. Explain in two different ways, what a weed is.                | $(2.5 \times 2 = 5 \text{ marks})$ |
|------------------------------------------------------------------|------------------------------------|
| b. Discuss (and give examples) of five benefits of weeds.        | (10 marks)                         |
| c. Discuss (and give examples) of five harmful effects of weeds. | (10 marks).                        |

## [Total marks for question 1 = 25 marks.]

## **QUESTION 2**

| a. | Explain what a herbicide is.                                                | (4 marks) |
|----|-----------------------------------------------------------------------------|-----------|
| b. | Name one example of a herbicide                                             | (1 mark)  |
| c. | What is a contact herbicide?                                                | (4 marks) |
| d. | Name one example of a contact herbicide.                                    | (1 mark)  |
| e. | What is a systemic herbicide?                                               | (4 marks) |
| f. | Name one example of a systemic herbicide.                                   | (1 mark)  |
| g. | What is a selective herbicide?                                              | (4 marks) |
| h. | Name one example of a selective herbicide.                                  | (1 mark)  |
| i. | What is the difference between a preemergence herbicide and a postemergence |           |
|    | herbicide?                                                                  | (5 marks) |

[Total marks for question 2 = 25 marks.]

#### **QUESTION 3**

a. If you were a small-scale farmer, what equipment would you use for applying (2 marks) herbicides on your farms? b. Draw a large, labelled diagram of the equipment named in 3(a) above, and label (10 five of its major parts. marks) c. List five precautions that should be taken when handling or using herbicides. (5 marks) d. Name five advantages of using herbicides. (5 marks) e. Name two disadvantages of using herbicides. (2 marks) f. Explain what a herbicide can achieve that a biological weed control method cannot achieve on a farm. (1 mark)

#### [Total marks for question 3 = 25 marks.]

### **QUESTION 4**

| a. Explain or define the following terms: |           |  |  |
|-------------------------------------------|-----------|--|--|
| i. A noxious weed                         | (4 marks) |  |  |
| ii. Weed prevention                       | (4 marks) |  |  |
| iii. Weed control                         | (4 marks) |  |  |
| iv. Weed eradication                      | (4 marks) |  |  |
| v. Weed management                        | (4 marks) |  |  |
|                                           |           |  |  |
| b. Give one example of:                   |           |  |  |
| i. A noxious weed                         | (1 mark)  |  |  |
| ii. A weed prevention programme           | (1 mark)  |  |  |
| iii. A weed control programme             | (1 mark)  |  |  |
| iv. A weed eradication programme          | (1 mark)  |  |  |
| v. A weed management programme            | (1 mark)  |  |  |

# [Total marks for question 4 = 25 marks.] QUESTION 5

a. Explain the term, "weed ecology". (5 marks)

b. Draw a simple diagram to illustrate the weed-crop ecosystem. (4 marks)

c. Give four reasons why there is a shift towards ecologically based weed
 management systems in modern times. (4 marks)

d. Discuss the term, "ecological succession". (9 marks)

e. Name three factors that plants compete for. (3 marks)

[Total marks for question 5 = 25 marks.]