



2nd SEMESTER 2013/2014

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION

**PROGRAMME: BACHELOR OF SCIENCE IN AGRICULTURAL
EDUCATION YEAR 3, BACHELOR OF SCIENCE IN
AGRONOMY YEAR 3, AND BACHELOR OF SCIENCE IN
HORTICULTURE YEAR 3.**

COURSE CODE: CP 304

TITLE OF PAPER: PLANT PATHOLOGY & DISEASE MANAGEMENT

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS

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

QUESTION 1

Discuss a disease of your choice under the following topics:

- a. Name of the disease (2 marks)
- b. Causal agent (2 marks)
- c. Host range (3 marks)
- d. Symptoms and/or signs (8 marks)
- e. Possible control measures (10 marks)

[25 marks]

QUESTION 2

- A. Discuss cultural control in disease management. (10 marks)
- B. Discuss the gene-for-gene concept (3 marks)
- c. Describe three sexual fruiting bodies of ascomycetes (12 marks)

[25 marks]

QUESTION 3

Describe any five genera of phytopathogenic bacteria, give an example in each case.

[25 marks]

QUESTION 4

Discuss the following strategies as they relate to bacterial disease management:

- a) Exclusion (5 marks)
- b) Eradication (10 marks)
- c) Protection (10 marks)

[25 marks]

QUESTION 5

- a. List Kock's postulates (5 marks)
- b. Describe three ways in which pathogens attacks plants (10 marks)
- c. Compare and contrast symptoms of *Ralstonia solanacearum* and *Verticillium dahlia* (or *arbo-atrum*) in tomatoes. (8 marks)

[25 marks]