



2nd SEMESTER 2005/2006

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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION

PROGRAMME: BACHELOR OF SCIENCE IN AGRICULTURE YEAR 4 (CROP PRODUCTION, HORTICULTURE OPTIONS)

COURSE CODE: CP 404

TITLE OF PAPER: PLANT PATHOLOGY

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTIONS: ANSWER ANY FOUR (4) QUESTIONS
BEGIN EACH QUESTION ON A NEW SHEET**

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

QUESTION 1

How are plant viruses controlled?

[25 Marks]

QUESTION 2

A tomato plant has a disease that affects all parts of the plant including fruits. It causes necrotic areas on the leaves, stems and fruits. The necrotic areas are brown with concentric rings. On the fruit the symptoms start on the pedicel attachment area. What is the name of the disease, what causes it? If you were to take the specimen to the laboratory, how would you confirm your diagnosis (use of a diagram is recommended!).

[25 Marks]

QUESTION 3

Explain the process of a fungal disease development from the time the pathogen comes in contact with the host to production of survival structures.

[25 Marks]

QUESTION 4

Compare and contrast

- a) A heteroecious and autoecious rust, give an example in each case. **[6]**
- b) A homothallic and heterothallic fungus, give an example in each case. **[6]**
- c) An alternative host and an alternate host, give an example in each case. **[6]**
- d) Monocyclic and polycyclic disease, give an example in each case. **[7]**

[25 Marks]

QUESTION 5

Describe the class basidiomycetes and discuss one disease caused by this class in sugarcane.

Discuss how the disease is controlled and/or prevented.

[25 Marks]