



2nd SEMESTER 2011/2012

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

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

Define the following:

- | | |
|-------------------------|-------------------|
| (a) A symptom | (3 marks) |
| (b) A sign | (3 marks) |
| (c) An alternative host | (3 marks) |
| (d) An alternate host | (3 marks) |
| (e) A biotic disease | (3 marks) |
| (f) An inoculum | (3 marks) |
| (g) A propagule | (3 marks) |
| (h) A haustorium | (2 marks) |
| (i) An oogonium | (2 marks) |
| | [25 marks] |

QUESTION 2

Discuss the different spore stages of a heteroecious rust of your choice.

[25 marks]

QUESTION 3

Describe properties of the following genera of phytopathogenic bacteria and give one example in each case:

- | | |
|-------------------|-------------------|
| (a) Pseudomonas | (8 marks) |
| (b) Agrobacterium | (7 marks) |
| (c) Clavibacter | (6 marks) |
| (d) Xyllela | (4 marks) |
| | [25 marks] |

QUESTION 4

Name the causal agents of the following diseases:

- | | |
|---------------------------------|-------------------|
| a. Early leafspot on groundnuts | (4 marks) |
| b. Late leafspot on groundnuts | (4 marks) |
| c. Gray leafspot on maize | (4 marks) |
| d. Early blight on tomatoes | (4 marks) |
| e. Powdery mildew on cucurbits. | (4 marks) |
| f. Smut on sugarcane | (5 marks) |
| | [25 marks] |

QUESTION 5

Discuss in detail a disease of your choice including its management/control.

[25 marks]