



**2<sup>nd</sup> SEMESTER 2005/2006**

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**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION**

**PROGRAMME: DIPLOMA IN AGRICULTURE YEAR 2 AND DIPLOMA IN  
AGRICULTURAL EDUCATION YEAR 2.**

**COURSE CODE: CP 205**

**TITLE OF PAPER: CROP DISEASES**

**TIME ALLOWED: TWO (2) HOURS**

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

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CHIEF INVIGILATOR**

**QUESTION 1**

- a) Discuss the different types of plant viruses based on their transmission by aphids. [15]
- b) Define the following terms:
- i) appressorium [3]
  - ii) germ-tube [3]
  - iii) hypha [2]
  - iv) chlamydospore [2]

**[25 Marks]****QUESTION 2**

Compare and contrast the following diseases:

- a) Early and late leaf spot of groundnuts [10]
- b) Early and late blight of tomatoes [10]
- c) Root-knot caused by root-knot nematodes and nodules on roots. [5]

**[25 Marks]****QUESTION 3**

Describe symptoms of the following diseases:

- a) Halo blight on beans [5]
- b) Grey leaf spot on maize [5]
- c) Carpospores leaf spot on spinach or beetroot [5]
- d) Powdery mildew on cucurbits [5]
- e) Phoma leaf blotch on groundnuts [5]

**[25 Marks]****QUESTION 4**

Discuss a disease of your choice under the following topics: name of the disease; host range; symptoms and/or signs; possible control measures. [25 Marks]

**QUESTION 5**

As an Extension Worker in the Lowveld, you are approached by a farmer who has a problem with his tomatoes which he grows under furrow irrigation. The plants are wilting even after irrigation. Initially, the plants were wilting when very hot but recovering when the weather was cool. The Farmer has been practising crop rotation after listening to a programme on the local radio where farmers were advised not to grow the same crop on the same piece of land over and over. His/her crop rotation plan has been: green mealies, cabbages, green pepper, tomatoes and potatoes. Diagnose the disease and explain how you can confirm your diagnosis in the field. What advise would you give the farmer to control the disease? Is the farmer following the correct crop rotation practice? If not, how can you advise him/her.

**[25 Marks]**