



**2<sup>nd</sup> SEM. 2007/2008**

**PAGE 1 OF 3**

**UNIVERSITY OF SWAZILAND**

**FINAL EXAMINATION PAPER**

**PROGRAMMES: BACHELOR OF SCIENCE IN AGRONOMY YEAR 2,  
BACHELOR OF SCIENCE IN HORTICULTURE YEAR 2, AND  
BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION  
YEAR 2**

**TITLE OF PAPER: CROP PEST MANAGEMENT**

**COURSE CODE: CP 204**

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

**INSTRUCTIONS: 1. THIS PAPER HAS FIVE (5) QUESTIONS  
2. ANSWER ANY FOUR (4) QUESTIONS.  
3. ALL QUESTIONS CARRY EQUAL MARKS OF 25 AND  
MARKS FOR SUBSECTIONS ARE GIVEN IN BRACKETS  
WHERE APPLICABLE.**

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN  
GRANTED BY THE CHIEF INVIGILATOR**

**QUESTION 1**

Using specific examples briefly describe the following orders of insect of agricultural importance in Swaziland.

- a. Orthoptera (5 marks)
- b. Homoptera (5 marks)
- c. Coleoptera (5 marks)
- d. Lepidoptera (5 marks)
- e. Hymenoptera (5 marks)

**(25 MARKS)**

**QUESTION 2**

- a. What often indicates the presence of nematodes in the field? (5 marks)
- b. Discuss the effects of nematodes on plant growth and possible cultural control measures. (10 marks)
- c. What are the possible beneficial and detrimental activities of insects in Swaziland? (10 marks)

**(25 MARKS)**

**QUESTION 3**

Differentiate between the following:

- a. Pest and pest complex (5 marks)
- b. Pest load and pest spectrum (5 marks)
- c. Serious pest and minor pest (5 marks)
- d. Potential pest and Major pest (5 marks)
- e. Economic pest and Key pest (5 marks)

**(25 MARKS)**

**QUESTION 4**

- a. Define the following as they relate to pest population dynamics
- i. Economic damage (5 marks)
  - ii. Economic injury level (5 marks)
  - iii. Economic threshold (5 marks)
- b. Briefly describe five (5) cultural practices that a grower can apply to minimize insect pest populations in his/her field. (10 marks)  
**(25 MARKS)**

**QUESTION 5**

- a. What is biological control? (4 marks)
- b. Explain the significance of the following natural enemies in pest control:
- i. Parasites (4 marks)
  - ii. Parasitoids (4 marks)
  - iii. Predators (4 marks)
- c. Briefly explain the following types of pesticidal formulations :
- i. Granules (3 marks)
  - ii. Wettable powder (3 marks)
  - iii. Bait (3 marks)
- (25 MARKS)**