



SUPPLEMENTARY 2006/2007

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

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

COURSE CODE: CP 204

TITLE OF PAPER: CROP PESTS

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTIONS: ANSWER QUESTION 1, WHICH IS
COMPULSORY AND ANY OTHER THREE (3)
QUESTIONS**

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BY THE CHIEF INVIGILATOR**

INSTRUCTIONS: ANSWER QUESTION 1, WHICH IS COMPULSORY AND ANY OTHER THREE (3) QUESTIONS

Question 1
(This question is compulsory)

(a) Give **two** (2) examples of each of the following:

- (i) Homopteran and Lepidopteran insect pests of sugarcane
- (ii) Organophosphates
- (iii) Dipteran and Homopteran insect pests of Citrus
- (iv) Carbamates
- (v) Insect Growth Regulars (IGRs)
- (vi) Acarian and Lepidopteran insect pests of cotton
- (vii) Fumigants
- (viii) One example of microbial pesticide

(15 marks)

(b) Present clear differences between the following:

- (i) Biotic and abiotic factors affecting pest abundance
- (ii) Intrinsic and extrinsic factors of the environment that affect pests
- (iii) r – strategists and K – strategists in insect pest species
- (iv) Key/ severe insect pest and sub-economic insect pest
- (v) In Situ counts and knockdown technique in sampling

(10 marks)
[25 marks]

Question 2

- (a) Explain why pesticide applications against most sucking pests should be directed to the underside of foliage? (10 marks)
- (b) Explain why accurate timing of pesticide application is dependent on knowledge of the life history of the pest species? (15 marks)

[25 marks]**Question 3**

- (a) How would you calibrate a knapsack sprayer in order to be able to apply the correct amount of pesticide? (10 marks)
- (b) Explain the FOUR (4) categories of pesticide toxicity (toxicity rating) currently followed in Swaziland. (15 marks)

[25 marks]**Question 4**

- (a) Discuss FIVE requirements for a pest management decision. (15 marks)
- (b) Define Economic Damage and Economic Injury Level as they relate to pest population dynamics. (10 marks)

[25 marks]**Question 5**

Discuss the advantages and disadvantages of Biological control.

[25 marks]