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UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRICULTURE YEAR 4 (CROP PRODUCTION AND HORTICULTURE OPTIONS) AND BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION (YEAR 4)

TITLE OF PAPER: AGRICULTURAL ENTOMOLOGY

COURSE CODE: CP 405

TIME ALLOWED: TWO (2) HOURS

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

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

QUESTION 1

Draw a table similar to the one shown below in your answer booklet. Fill in the table below as shown by the example.

e.g. *Maize stalk borer*	*Noctuidae*	*Larvae bore stalk*
Name of pest	Family	Detrimental stage & damage
Sugarcane borer		
Black cutworm		
Potato tuber moth		
Diamond back moth		
Sorghum stem borer		
African bollworm		
Citrus swallowtail		
Citrus leaf miner		
False codling moth		
Spotted maize beetle		
Black maize beetle		
Granary weevil		
Natal fruitfly		
Maize leafhopper		
Bagrada bug		
Citrus red scale		
Australian bug		
Citrus thrips		
Pugnacious ant		
Red spider mite		

[Total marks = 40]

QUESTION 2

Discuss the importance of the following as natural enemies in biological control:

i.   Microbial control   (5 marks)
ii. Nematodes   (5 marks)
iii. Bacteria   (5 marks)
iv. Fungi   (5 marks)

[Total = 20 marks]

QUESTION 3

One of the criteria used in plant breeding is plant resistance to insect damage. Discuss the various categories of plant resistance to insects.

[Total = 20 marks]

QUESTION 3

a. What are the goals of Integrated Pest Management?   (10)
b. Discuss strategies and tactics which should be utilised for an effective IPM
programme.   (15)

[Total = 20 marks]

QUESTION 4

Give an account of lepidopterans as pests in Swaziland.

[Total = 20 marks]

QUESTION 6

Discuss the significance of the following in agriculture:

i.   Introduced species   (10)
ii. Relative plant apparency   (10)

[Total = 20 marks]