



SUPPLEMENTARY 2006/2007

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

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

COURSE CODE: CP 203

TITLE OF PAPER: INTRODUCTION TO ENTOMOLOGY

TIME ALLOWED: TWO (2) HOURS

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

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

Question 1
(This question is compulsory)

(i) Explain briefly each of the following:-

- (a) Ecology
- (b) Habitat
- (c) Diapause
- (d) Species
- (e) Naiad
- (f) Haemocytes
- (g) Pheromone
- (h) Median caudal filament
- (i) Pleural membrane
- (j) Ecdysis

[10 marks]

(ii) How would you identify insects from the following insect Orders?

- (a) Homoptera
- (b) Hymenoptera
- (c) Isoptera
- (d) Diptera
- (e) Orthoptera

[10 marks]

(iii) Define the following parts of an insects

- (k) Tympanum
- (l) Coxa
- (m) Labrum
- (n) Antennae
- (o) Cerci

(5)

[25 marks]

Question 2

(i) What is the difference between the following:-

- (a) Chilopoda and Diplopoda
- (b) Ant and Termite
- (c) Stalkborer and Spotted borer
- (d) Crustacea and Hexapoda
- (e) Cabbage aphid and False cabbage aphid

(20)

(ii) Give examples of insects with the following types of antennae:

- (a) Genuiculate
- (b) Aristate
- (c) Filiform
- (d) Maniliform
- (e) Pectinate

(5)

[25 marks]

Question 3

(i) Give five ways and examples in which insects are an enemy to mankind?

(15)

(ii) Draw a well labeled sketch of a male or female reproductive system of an insect

(10)

[25 marks]

Question 4

(i) What parts of the insect does it use to:

- (a) Hear sounds
- (b) Get rid of waste products from the body
- (c) See objects
- (d) Detect substances that smell
- (e) Lay eggs
- (f) Produce viable eggs even when fertilization has not occurred
- (g) Grow in size in spite of the restrictions by the exoskeleton
- (h) Get food digested before it gets absorbed
- (i) Get oxygen to every part of the body when it is needed
- (j) To fight foreign bodies in the insects body.

(20)

(ii) What is hierarchy of the common stalkborer in the animal kingdom?

(5)

[25 marks]

Question 5

How do ticks reproduce and grow?

[25 marks]