



SUPPLEMENTARY EXAMINATION 2013

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UNIVERSITY OF SWAZILAND

SUPPLEMENTARY EXAMINATION PAPER

**PROGRAMME: BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION,
AGRONOMY AND HORTICULTURE II**

COURSE CODE: CP 203

TITLE OF PAPER: AGRICULTURAL ENTOMOLOGY

TIME ALLOWED: TWO (2) HOURS

**INSTRUCTIONS: ANSWER QUESTION ONE (1) AND ANY OTHER THREE
(3) QUESTIONS)**

DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

QUESTION 1

Briefly explain what EACH of the following are:-

- (a) Taxonomic hierarchy (5 Marks)
- (b) Open blood circulatory system (5 Marks)
- (c) The difference between primary and secondary storage pests (5 Marks)
- (d) The difference between the Heteroptera and the Homoptera (5 Marks)
- (e) Cultural pest control (5 Marks)

(25Marks)

QUESTION 2

- (a) Name the FIVE (5) biting and chewing mouthparts of an insect. (5 Marks)
- (b) Give an example of an insect Order that has the following mouthparts (10 Marks)
 - a. Prognathous
 - b. Opisthognathous
 - c. Hypognathous
 - d. Biting and lapping
 - e. Rasping and sucking
 - f. Siphoning
 - g. Non-functional
 - h. Piercing and sucking
 - i. Biting and chewing
 - j. Biting and lapping

(c) How do insects do the following:-

- a. Taste food? (3 Marks)
 - b. Hear? (2 marks)
 - c. Feel? (3 Marks)
 - d. Smell? (2 Marks)
- (25 marks)**

QUESTION 3

How can you identify EACH of the following crop pests:-

- (a) Australian bug? (5 Marks)
- (b) Diamond back moth? (5 Marks)
- (c) African bollworm? (5 Marks)
- (d) African armyworm? (5 Marks)
- (e) CMR beetle? (5 Marks)

(25 marks)

QUESTION 4

- (a) Briefly describe what legislative pest control is? (10 Marks)
- (b) Give an example of an insect that can be or has been controlled using legislative control (15 Marks)

QUESTION 5

- (a) Why are bees good plant pollinators? (10 Marks)
 - (b) How do plants get adapted for pollination by insects? (10 Marks)
 - (c) Why are insects the dominant living organism on this planet? (5 Marks)
- (25 marks)**