



1ST SEM. 2007/2008

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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: AGRICULTURAL ENTOMOLOGY

COURSE CODE: CP 201

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

- a) What is Agricultural Entomology? (3 marks)
- b) Give two examples of the following arthropods and two distinguishing features for each. (3 marks each)
- (i) Crustacea
 - (ii) Arachnida
 - (iii) Myriapoda
 - (iv) Insecta
- c) What are the economic importance of insects in crop production? (10 marks)
- (25 MARKS)**

QUESTION 2

- a) Give four reasons for the biological success of insects. (5 marks)
- b) List five orders of insect of agricultural importance with two examples of each. (10 marks)
- c) What are the basic features that qualify arthropod to be an insect. (10 marks)
- (25 MARKS)**

QUESTION 3

- Differentiate between the following pairs: (5 marks each)
- a) Saprophagous and phytophagous insects
 - b) Taxonomy and Nomenclature
 - c) Metabola and Ametabola
 - d) Identification and classification
 - e) Viviparous and parthenogenetic insects
- (25 MARKS)**

QUESTION 4

- a) Name two types of mouth parts found in insects and for each, give three examples of insects bearing such mouth parts. (5 marks)
- b) List five (5) different types of antennae and two examples of insect bearing such antennae. (10 marks)
- c) What are the functions of the following parts in insect? (2 marks each)
- (i) Chemoreceptor
 - (ii) Malpighian tubules
 - (iii) Trachea
 - (iv) Ecdysis
 - (v) Exoskeleton

(25 MARKS)

QUESTION 5

- a) With the aid of a diagram briefly explain either the male or female reproductive system of an insect. (14 marks)
- ii) What are the values of insect identification and classification in entomology? (6 marks)
- iii) What are five possible reasons for insect success? (5 marks)

(25 MARKS)