



2nd SEMESTER 2009/2010

PAGE 1 OF 4

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 203

TIME ALLOWED: TWO (2) HOURS

- INSTRUCTIONS:**
- 1. THIS PAPER HAS FIVE (5) QUESTIONS**
 - 2. ANSWER QUESTION 1 AND ANY OTHER THREE (3) QUESTIONS**
 - 3. ALL QUESTIONS CARRY EQUAL MARKS OF TWENTY FIVE (25). 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**

Instruction:- Answer Question 1 and any other three (3) questions

Question 1 (Compulsory)

- (a) What do the following terms mean? (10)
- (i) Naiad
 - (ii) Ootheca
 - (iii) Nymph
 - (iv) Multivoltine
 - (v) Parthenogenesis
- (b) How can the following important insect Orders be identified? (10)
- (i) Diptera
 - (ii) Lepidoptera
 - (iii) Coleoptera
 - (iv) Orthoptera
 - (v) Homoptera
- (c) Name FIVE ways in which CULTURAL PEST CONTROL can be applied (5)

(25 Marks)

Question 2

Give one example of an insect in each of the following insect Orders:- (1 Mark each)

- (i) Collembola
- (ii) Thysanura
- (iii) Ephemeroptera
- (iv) Odonata
- (v) Plecoptera
- (vi) Dermaptera
- (vii) Orthoptera

- (viii) Phasmida
- (ix) Mantodea
- (x) Isoptera
- (xi) Psocoptera
- (xii) Blattaria
- (xiii) Thysanoptera
- (xiv) Heteroptera
- (xv) Homoptera
- (xvi) Anoplura
- (xvii) Mallophaga
- (xviii) Coleoptera
- (xix) Lepidoptera
- (xx) Neuroptera
- (xxi) Diptera
- (xxii) Hymenoptera
- (xxiii) Siphonaptera
- (xxiv) Mecoptera
- (xxv) Trichoptera

(25 Marks)

Question 3

Name FIVE pests of each of the following:-

- (a) Stored cereals (5)
- (b) Cereals (in the field) (5)
- (c) Beans (5)
- (d) Cabbages (5)
- (e) Citrus (5)

(25 Marks)

Question 4

(a) Briefly explain what each of the following are and give an example to illustrate your answer:-

- (i) Legislative Pest Control (10)
- (ii) Biorational Pest Control (10)
- (b) What is the difference between biological pest control and natural pest control? (5)

(25 Marks)

Question 5

What are the differences between the following:

- (a) Apposition and superposition eyes (5)
- (b) Organophosphate pesticides and carbamate pesticides (5)
- (c) Rice weevil and the maize weevil (5)
- (d) Larger grain borer and the lesser grain borer (5)
- (e) Physical and mechanical pest control (5)

(25 Marks)