



UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER

PROGRAMME: BACHELOR OF SCIENCE IN AGRONOMY YEAR 1

COURSE CODE: CPR 101

TITLE OF PAPER: INTRODUCTORY AGRICULTURAL ENTOMOLOGY

TIME ALLOWED: TWO (2) HOURS

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

DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

QUESTION 1

- a) List **ten (10)** insect Orders and for each Order give an example, and **one (1)** main characteristic. (15 marks)
- b) Explain why insects are important. (10 marks)
(25 marks)

QUESTION 2

- a) List **ten (10)** Arthropods and give an example for each. (5 marks)
- b) What are the **five (5)** characteristics of Arthropods? (5 marks)
- c) Explain why insects are more successful than other animals? (15 marks)
- (25 marks)

QUESTION 3

- a) How insects are classified using the Linnaeus's System of Classification? (15 marks)
- b) State the differences between the following:-
- (i) Capitate and Clavate (2 marks)
 - (ii) Pectinate and Plumose (2 marks)
 - (iii) Aristate and Setaceous (2 marks)
 - (iv) Filiform and Moniliform (2 marks)
 - (v) Apposition and Superposition (2 marks)
- (25 marks)

QUESTION 4

- a) Draw the **three (3)** insect mouthpart orientations and state examples of an insect with the mouthpart orientation. (6 marks)
- b) List the **six (6)** insect's mouthparts. (6 marks)
- c) List **six (6)** mouthpart modifications and examples of an insect with the mouthpart modification. (12 marks)
- d) Draw an insect antennae and label the different parts. (1 marks)

(25 marks)

QUESTION 5

- (a) Explain the following:
 - (i) Camouflage (2 marks)
 - (ii) Aposematic (2 marks)
 - (iii) Hibernation (2 marks)
 - (iv) Aestivation (2 marks)
 - (v) Parthenogenesis (2 marks)
 - (vi) Viviparous (2 marks)
 - (vii) Exuvium (2 marks)
 - (viii) Stadium (1 mark)
- (b) Describe the following and state where they each is found
 - (i) Vermiform (2 marks)
 - (ii) Eruciform (2 marks)
 - (iii) Elateriform (2 marks)
 - (iv) Campodeiform (2 marks)
 - (v) Scarabeiform (2 marks)

(25 marks)