



UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER

PROGRAM

BACHELOR OF SCIENCE IN AGRONOMY YEAR 1

COURSE CODE: CPR101

TITLE OF PAPER: INTRODUCTORY TO AGRICULTURAL ENTOMOLOGY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FIVE QUESTIONS

DO NOT OPEN THIS PAGE UNTIL PERMISSION HAS BEEN GRANTED BY THE
CHIEF INVIGILATOR

Question 1 (20 Marks)

- a) Name five types of modified legs and describe their function (10 Marks)
- b) Name three types of modified wings and describe their function (6 Marks)
- c) Name four modified insect mouth parts (4 marks)

Question 2 (20 Marks)

Describe the meaning of the insect order names below; give the common name and two key features of each insect order

- a) Orthoptera (4 Marks)
- b) Lepidoptera (4 Marks)
- c) Coleoptera (4 Marks)
- d) Diptera (4 Marks)
- e) Hemiptera (4 Marks)

Question 3 (20 Marks)

- a) Discuss the differences and similarities between the following
- i. Trachea and tracheole (4 Marks)
 - ii. Cellular respiration and organismal respiration (4 Marks)
 - iii. Cibarium and Salivarium (4 Marks)
- b) Describe an air sac and outline its functions (8 Marks)

Question 4 (20 Marks)

- a) Take any holometabolous insect as an example and explain how it grows and develop (8 marks)
- b) Describe the appearance of its immature stages and provide their common names (12 Marks)

Question 5 (20 Marks)

Explain the role of insects in global cycle of production and consumption (20 Marks)

Question 6 (20 Marks)

Name and discuss the different categories of pests based on what they target (feed on) (20 Marks)

3

Question 7 (20 Marks)

- a) Name the two categories of secondary ecological events (4 Marks)
- b) Explain how the events you mentioned in Q7(a) regulate insect populations (16 Marks)