

UNIVERSITY OF SWAZILAND
RESIT 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 ALL QUESTIONS

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

Question 1 (25 Marks)

Write the letter from Column B that contains a word/phrase that best describes the types of Antenna, leg, Wing or Mouth part indicated in Column A

Column A

- 1. Setaceous
- 2. Monilform
- 3. Serrate
- 4. Filiform
- 5. Clavate
- 6. Capitate
- 7. Plumose
- 8. Aristate
- 9. Geniculate
- 10. Pectinate
- 11. Stylate
- 12. Saltatorial
- 13. Raptorial
- 14. Natatorial
- 15. Fossorial
- 16. Cursorial
- 17. Ambulatorial
- 18. Tegmina
- 19. Elytra
- 20. Halter
- 21. Hemelytra
- 22. Siphoning
- 23. Piercing and sucking
- 24. Chewing and lapping
- 25. Sponging

Column B

- A. Featherlike
- B. Elbowed
- C. With an arista
- D. With many plumes
- E. With a distinct head
- F. Tapering Club-like
- G. Thread-like
- H. Saw-toothed
- I. String of Beads
- J. Bristle-like
- K. With style like process
- L. Mandible, maxillae and labium modified to a piercing needle
- M. With mandibles modified for chewing
- N. Labium forming proboscis
- O. Modified maxillae forming a coiled proboscis
- P. Leathery protective forewing
- Q. A forewing hardened to form horny sheath for protection
- R. Hind wing modified to a balancing organ
- S. Partly hardened and partly membranous forewing
- T. Running legs
- U. Digging leg
- V. Swimming leg
- W. Grasping leg
- X. Jumping leg
- Y. Walking Leg

Question 2 (25 Marks)

Copy this table into your answer sheet and complete it by filling in the blank cells (each cell carry 1 Mark)

GROUP	Common	No of Tagmata	No of Antennae	No of Legs	No of Wings
Diplopoda					
Chilopoda					
Arachnida					
Crustacea					
Insecta					

Question 3 (25 Marks)

Draw the immature and adult stages of a butterfly and a grasshopper and show the similarities and differences in their life cycle

Question 4 (25 Marks)

a) Describe the following and explain their role in insect survival

(9 Marks)

- i. Pheromones
- ii. Allemones
- iii. Kiaromone
- b) Name six types of pheromones produced by insects

(6 Marks)

c) Discuss the function of any five of the pheromones you mentioned in Q5 (a) above

(10 Marks)