



UNIVERSITY OF SWAZILAND
SUPPLEMENTARY 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 ALL QUESTIONS

DO NOT OPEN UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

QUESTION 1

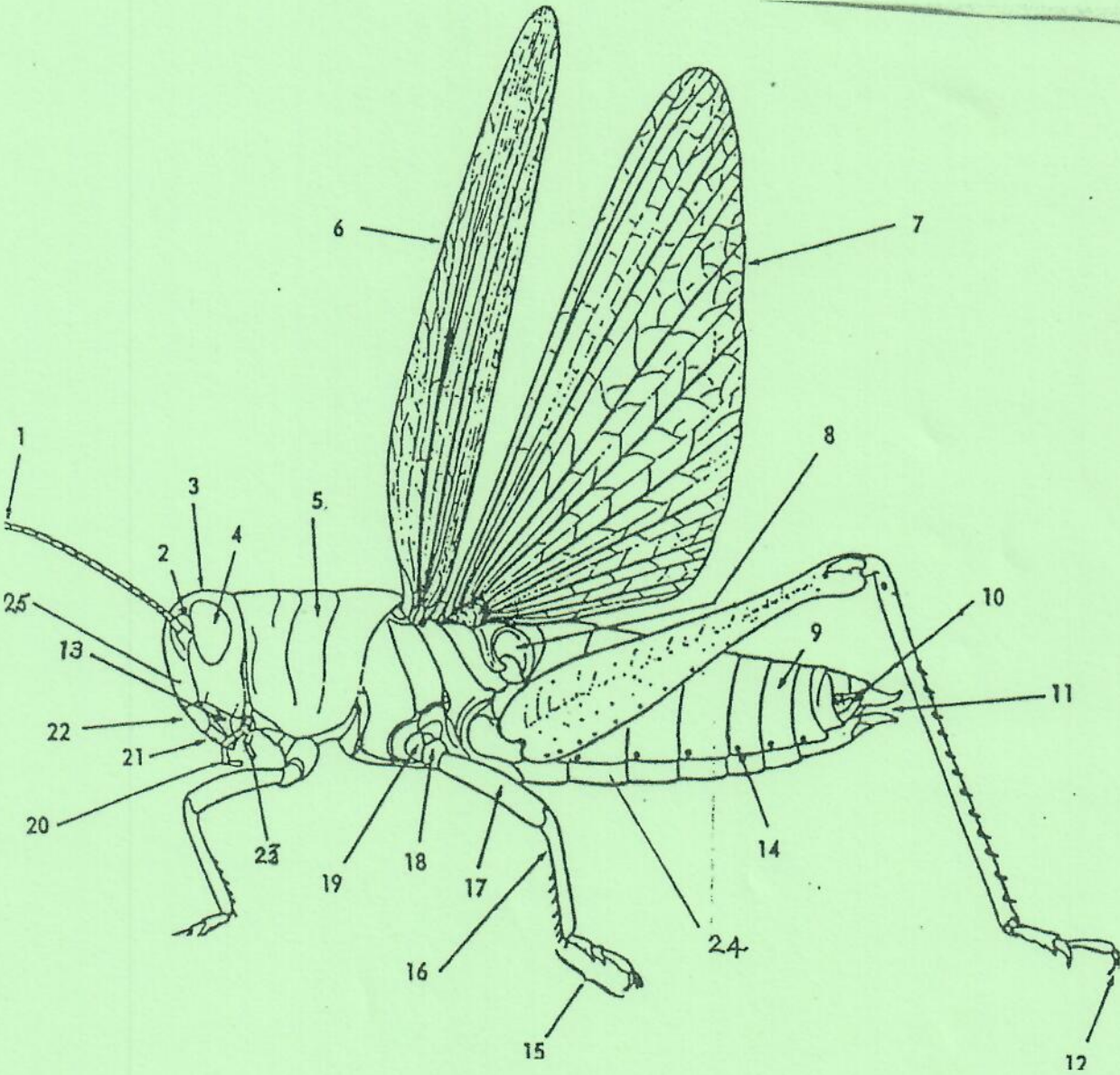
Briefly explain what each of the following mean:-

- i. Labrum (1 mark)
- ii. Scape (1 mark)
- iii. Corbiculum (1 mark)
- iv. Trochanter (1 mark)
- v. Ommatidium (1 mark)
- vi. Tympanum (1 mark)
- vii. Camouflage (1 mark)
- viii. Metamorphosis (1 mark)
- ix. Coxa (1 mark)
- x. Mandibles (1 mark)
- xi. Tergum (1 mark)
- xii. Tarsus (1 mark)
- xiii. Pronotum (1 mark)
- xiv. Tegmen (1 mark)
- xv. Exuvium (1 mark)
- xvi. Spiracle (1 mark)
- xvii. Labium (1 mark)
- xviii. Proleg (1 mark)
- xix. Femur (1 mark)
- xx. Ovipositor (1 mark)
- xxi. Maxilla (1 mark)
- xxii. Sternum (1 mark)
- xxiii. Elytron (1 mark)
- xxiv. Ootheca (1 mark)
- xxv. Clypeus (1 mark)

(25 Marks)

QUESTION 2

Label the different insect parts



(25 marks)

QUESTION 3

- a) List **four (4)** insect Orders with hypermetamorphosis. (4 marks)
 - b) List **four (4)** insect Orders with holometabolous development. (4 marks)
 - c) List **four (4)** insect Orders with ametabolous development. (4 marks)
 - d) List **four (4)** insect Orders with paurometabolous development. (4 marks)
 - e) What is the importance of ventilation in aquatic insects? (3 marks)
 - f) List **three (3)** insect Families with a closed tracheal system. (3 marks)
 - g) List **three (3)** insect Families with an open tracheal system. (3 marks)
- (25 marks)**

QUESTION 4

- a) Explain how insect pollinated plants are adapted for insect pollination. (10 marks)
- b) Explain why bees are good pollinators. (15 marks)