



UNIVERSITY OF SWAZILAND
FINAL EXAMINATION PAPER

PROGRAMMES:

BACHELOR OF SCIENCE IN AGRONOMY YEAR 2

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION YEAR 2

BACHELOR OF SCIENCE IN HORTICULTURE YEAR 2

COURSE CODE: CP 203

TITLE OF PAPER: AGRICULTURAL ENTOMOLOGY

TIME ALLOWED: TWO (2) HOURS

INSTRUCTION: ANSWER ANY FIVE QUESTIONS

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INVIGILATOR

Question 1 (20 Marks)

Name five unique features of insects and five features they share with other arthropods

Question 2 (20 Marks)

- a) Draw and label a model structure of insect exoskeleton (10 Marks)
- b) Describe the functions of each of the components of the exoskeleton (10 Marks)

Question 3 (20 Marks)

- a) Define digestion (2 Marks)
- b) Name sites of digestion in insect (2 Marks)
- c) Explain how food is digested in the sites you mentioned (16 Marks)

Question 4 (20 Marks)

Discuss the differences and similarities between the following

- a) Exoskeleton and Cuticle (4 Marks)
- b) Elytra and Haltare (4 Marks)
- c) Nymph and Larva (4 Marks)
- d) Chrysalis and Puparium (4 Marks)
- e) Pharate and Instar (4 Marks)

Question 5 (20 Marks)

Copy this table onto your answer book and complete it by filling your answers in the empty boxes (each box carries one Mark)

Insect name	Insect order	Type of metamorphosis	Type of mouth part	Unique feature of its wing	Common name of the immature stages
House fly					
Dung beetle					
Gypsy moth					
Grasshopper					

Question 6 (20 Marks)

- a) Describe sources of defensive chemicals in insects (4 Marks)
- b) Explain how defensive chemicals protect insects from their natural enemies (16 Marks)

Question 7 (20 Marks)

- a) Name five (5) principal elements to be considered in pest management decision making process (5 Marks)
- b) Describe the importance of any three (3) of the elements mentioned in Q 7 above in pest management decision making (15 Marks)