

The Open University of Sri Lanka  
BSc degree program  
Final Examination : 2006 / 2007 – Level 5  
Course code – ZOU 3163 / ZOE 5163 / ZOI 5163  
Course title – Entomology



045

Date 2/11/2006

Time – 9.30 am to 12 noon

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Answer any **four (4)** questions.

Wherever necessary illustrate your answers with clearly labeled diagrams.

- 1) a) Describe the process of moulting and the formation of the new cuticle in insects.  
b) Outline endocrine control of moulting.
  - 2) a) Describe the structure of the malpighian tubules.  
b) Explain the main types of excretory mechanisms found in terrestrial insects.
  - 3) a) List **five (5)** insect orders for each of the following divisions giving one example for each order you mention.
    - 1) Division Exopterygota
    - 2) Division Endopterygotab) Describe metamorphosis that occur during post embryonic development in insects.
  - 4) Explain the main types of defense strategies found among insects.
  - 5) Describe the morphology and biology of mosquitoes and comment on their role as vectors of diseases.
  - 6) Write short notes on any **three (3)** of the following:
    - a) Social organization in termites
    - b) Compound eye of insects.
    - c) Haemocytes
    - d) Insect pheromones.
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