The Open University of Sri Lanka
Faculty of Natural Sciences
B.Sc degree programme

042

Department	: Zoology
Name of the Examination	: Final Examination
Academic Year	: 2024/2025
Course Code and Title	: ZYU5306 - Entomology
Level	: 5
Date	: 23.11.2024
Time	: 9.30 am -11.30 am
Time duration	; 2 hrs

General Instructions to Candidates

1. Read all instructions carefully before answering the questions.
2. This question paper consists of two (02) pages and Six (06) questions.
3. Answer any **four (04)** questions.
4. The answer for each question should commence from a new page.
5. Use blue or black ink to write your answers.
6. Draw fully labelled diagrams where necessary.
7. Write the numbers of the questions you answered in the front page of the answer script.
8. Clearly write your index number in the answer script.
9. Do not bring in or have in possession unauthorized materials, including mobile phones and other electronic devices, or violate other examination rules.
10. Handover your answer script at the end of the examination.

Answer any Four (04) questions.

1. Giving the examples discuss the major types of insect limbs and their modifications related to their functions. (100 marks)

2. 2.1 Describe the generalized structure of the respiratory system of insects (60 marks)

   2.2. Breifly explain the main adaptive features of the respiratory systems of aquatic and endoparasitic insects? (40 marks)

3. Write a concise account on insect parasitoids and their role? Give the relative effectiveness of parasitoids compared to insect predators. (100 marks)

4. 4.1. List the life activities of insects where intra specific communication has a very important role (10 marks)

   4.2. Summarize advantages and disadvantages of the tactile, visual and acoustic intra specific communication methods among insects (50 marks)

   4.3 Discuss pheromone signaling method in insects (40 marks)

5. Comment on the biology, ecology and economic importance of mining insect herbivores (100 marks)

6. Write short notes on **three** of the given below

   (a). Malpighian tubules

   (b) Metamorphosis in insects

   (c). Salivary glands of an insect (100 marks)

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