

## RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES, MIHINTALE

B.Sc. (Special) Degree in Applied Biology Fourth Year – Semester II Examination – April/May 2015

## **ZOO 4201 - INSECT DIVERSITY AND CONSERVATION**

Time: Two (02) hours

## Answer four (04) Questions.

- 1. a) Discuss the challenges encountered in the formulation of strategies for insect diversity conservation.
  - b) Mention the legal aspects of pollinator conservation in Sri Lanka.
- 2. a) Write a brief account on the sampling techniques that can be employed for assessing aerial insect populations.
  - b) List the nine Red List categories and briefly describe the criteria employed in assigning a taxon to these categories.
- 3. a) Explain the major types of associations found in insect populations.
  - b) State the special characteristics of social insects.
- 4. "Food habits of insects are more diverse than that in any other animal group"

Answer the following with reference to the above statement.

- a) Describe the morphological diversity of insect mouthparts in relation to diverse food habits.
- b) Explain how larval food habits of the Order Coleptera differ from those of the adults.

- 5 Write short notes on the following.
  - a) Linear reduction of insect populations
  - b) Breathing processes of aquatic insects
  - c) Types of insect larvae based on their body shape
  - d) Simpson's diversity index