



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

B.Sc. (Special) Degree in Applied Biology
Fourth Year – Semester II Examination – February/March 2019

ZOO 4201 – INSECT DIVERSITY & CONSERVATION

Time: Two (02) hours

Answer ALL questions.

1. a) Describe the role of insects in forest ecosystems. **(60 marks)**
 b) Outline the differences between a natural ecosystem and an agro-ecosystem? **(40 marks)**
2. Discuss the different theories put forward concerning the evolution of insect wings and give an account of the modifications of wings in different insect orders. **(100 marks)**
3. a) Review the current status of diversity in the Order Lepidoptera. **(70 marks)**
 b) List the special characteristics of social insects. **(30 marks)**
4. Write short notes on the following.
 a) Adaptations of insects to maximize reproductive potential.
 b) Comparison of the caste systems of termites and honey bees.
 c) Polyphyletic theory of insect evolution.
 d) Insects with slight metamorphosis.
 e) Diversity of insect larval forms. **(5x20 marks)**

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