



**RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES**

**B.Sc. in Applied Sciences
Second year – Semester II Examination – September/ October 2020**

ZOO 2202 – GENERAL ENTOMOLOGY

Time: Two (02) hours

**Answer FOUR (04) questions including question Number 01.
Illustrate your answers with suitable diagrams when appropriate.**

1. Explain, giving suitable example, the structural adaptations of mouthparts of insects for different feeding habits. **(100 marks)**

2. a) Explain briefly the term “sensory receptor”. **(15 marks)**
b) Give an account on the photoreceptive structures found in insects. **(85 marks)**

3. “Studies suggest that 40% of insect species are in decline. If this trend continues, entire ecosystem will collapse in near future, especially due to starvation.” Citing suitable examples critically discuss this statement. **(100 marks)**

4. a) Explain briefly the process of metamorphosis briefly. **(20 marks)**
b) Describe using examples, **four (04)** types of metamorphosis found in class insect. **(80 Marks)**

5. Write short notes of the following:

- a) Respiratory system of a typical insects **(25 marks)**
- b) Structure of insect integument **(25 marks)**
- c) Insect Antennae **(25 marks)**
- d) Different types of pupal stages of insects **(25 marks)**