



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

Bachelor of Science in Applied Biology
Third Year – Semester II Examination – January/February 2023

ZOO 3203 – ECONOMIC ENTOMOLOGY

Time: Two (02) hours

Answer Four (04) questions only.

1. a) Explain the action of insecticides according to their mode of entry with suitable examples. **(50 marks)**
b) “Lack of knowledge on the use of pesticides is leading to many health and environmental problems in Sri Lanka”. Justify this statement. **(50 marks)**
2. a) If you are to plan and execute an Integrated Pest Management (IPM) programme to manage paddy pests in Sri Lanka, explain how you would incorporate the eight IPM principles defined by the European Union in your programme. **(60 marks)**
b) List the challenges you can come across when introducing IPM concept and practices to general farmers. **(20 marks)**
c) Tabulate the advantages of using IPM when compared to the chemical control methods. **(20 marks)**
3. a) Explain the steps that need to be followed when transferring and relocating a natural honeybee (*Apis cerana*) colony in to a man-made bee hive. **(60 Marks)**
b) Describe the factors a bee keeper should consider to have a successful honey production. **(40 marks)**

4. Discuss the regulatory framework available to control the import, packing, labeling, storage, transport, sale and use of pesticides in Sri Lanka. **(100 marks)**
5. Write short notes on the following.
- a) Sterile insect technique **(30 marks)**
 - b) Nature of damage by insect pests **(30 marks)**
 - c) Defense mechanisms of plants against insect pests **(40 marks)**

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