

## RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences
Third Year – Semester II Examination – October /November 2017

## ZOO 3202 - ECONOMIC ENTOMOLOGY

Time: Two(02) hours

## Answer any four (04) of the following questions.

- a). Chilli leaf curl complex can be caused by the direct feeding of thrips, mites and viruses
  transmitted by the whitefly. Describe the symptoms caused by each of the above organism.
  (09 marks)
  - b). Name the crop/s upon which the following insects feed and describe the nature of damage caused by them
    - i. Helicoverpa armigera
    - ii. Ophiomyia phaseoli
  - iii. Empoasca devastans
  - iv. Earias vittella.

(16 marks)

- 2. a). Describe how the products other than honey are extracted from a bee hive. (20 marks)
  - b). Explain the procedure of collecting natural honey bee colonies for rearing. (05 marks)
- 3. a). Explain the major types of pheromones produced by insects. (08 marks)
  - b). Discuss the different types of pheromone traps that can be employed for controlling insect pests. (10 marks)
  - c). Describe the effect of neonicotinoid insecticides on the impulse transmission in insect nervous system. (07 marks)
- 4. a). State the main types of mechanical methods of insect control. (08 marks)

- b). Describe the mechanical methods that could be employed for the control of following insect pests.
  - i. Fruit fly of guava
  - ii. Paddy grain moth
  - iii. Cowpea weevil
  - iv. Damage to timber by wood boring beetles
  - v. Mosquito control at home

(17 marks)

- 5. Write short notes on the followings;
  - a) phytosanitary certificate
  - b) systemic insecticides
  - c) plant diseases vectored by insects
  - d) aerosol spray
  - e) zesticide resistance.

(25 marks)

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