

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences Third Year Semester I Examinations – Oct. / Nov., 2015

ZOO 3209 - Medical Entomology

Time: Two (02) hours

Answer four (04) questions only.

- 01. a) Explain the contribution of the following scientists to the development of medical entomology as a sub-discipline of entomology.
 - i. Patrick Manson
 - ii. Theobald Smith
 - iii. Sir Ronald Ross
 - iv. Paul-Louis Simond
 - v. Giovanni Battista Grassi
- Faculty of Applied Science Rejarate University of Sri Lanks Milhintale.
- b) Write a brief account on the training and knowledge that should be possessed by a medical entomologist. (100 marks)
- 02. a) Describe the combination of characters that can be used to identify following insect orders.
 - i. Diptera
 - ii. Hymenoptera
 - iii. Siphanoptera
 - b) Describe briefly the medical importance of members of these three orders.

(100 marks)

03. Giving suitable examples, describe the factors that are involved in spreading vector-borne diseases.

(100 marks)

- 04. a) Name the two species of vectors of dengue in Sri Lanka.
 - b) Briefly explain the morphological features that can be used to identify the adult and larval stages of species mentioned in (a).
 - c) Describe the methods that can be used to survey populations of two species mentioned in (a).
 - d) Write a brief account on vector surveillance and its importance in medical entomology.

(100 marks)

- 05. a) Define the following terms in relation to vector-borne diseases.
 - i. Epidemiology
 - ii. Control
 - iii. Elimination
 - iv. Eradication
 - b) Describe the entomological investigations that should be conducted by medical entomologists to control an emerging vector-borne disease in Sri Lanka.

(100 marks)
