



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

**Bachelor of Science in Applied Sciences  
Third Year – Semester I Examination – July/August 2023**

**ZOO 3201 – MEDICAL ENTOMOLOGY**

**Time: Two (02) hours**

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**Answer FOUR (04) questions only.**

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1. Write concisely on the measures to be adopted by a medical entomologist, when a malaria patient is discovered in his MOH area. **(100 marks)**
  
2. a) "Phytotelmata are small water - filled cavities on terrestrial plants which serve as natural breeding sites for mosquito larvae"  
Explain the methodology you would employ in conducting Dengue larval surveillance of phytotelmata in the Royal Botanical Gardens Peradeniya. **(50 marks)**
  
- b) Describe the vector control of Dengue transmission using the bacteria *Wolbachia* and *Bacillus thuringiensis israelensis*. **(50 marks)**
  
3. Discuss the deployment of the Cattle Baited Trap for detecting the peak biting time of a newly discovered *Anopheles* spp. **(100 marks)**
  
4. a) Discuss how you would determine the infection and infected rate of filariasis **(50 marks)**
  
- b) Write a brief account on the sampling technique for adult mosquitoes resting in the grasslands during the daytime. **(35 marks)**
  
- c) State the steps involved in the larval surveillance of the vectors of Japanese Encephalitis in the paddy fields. **(15 marks)**

5. a) Give an account of the operating procedure of “WHO Tube test” for determining the insecticide susceptibility in mosquitoes. **(70 marks)**
- b) Mention the controlling strategies for Leishmaniasis and its vector. **(30 marks)**

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