

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences Third year – Semester I Examination - June/July 2018

ZOO 3201 - MEDICAL ENTOMOLOGY

Time: Two (02) hours

Answer Four (04) questions only.

- 1. Write a newspaper article on Malaria with special reference to epidemiological status in Sri Lanka. (25 marks)
- 2. a) Using Appendix 01 calculate the following indices
 - i. Premise (House) index.
 - ii. Container index.
 - iii. Breteau index.

(10 marks)

b) State the steps of a Dengue larval survey (Spot check).

(05 marks)

c) Explain the method of Wolbachia spp and BTI techniques in dengue vector control.

(10 marks)

3. Name <u>six (06)</u> techniques used for collecting adults mosquitoes and describe the landing and biting collection method, paying special emphasis on how to keep the specimens alive in the field and during transport.

(25 marks)

4. a) Name and explain three transmission cycles between vertebrate host and vector.

(10 marks)

b) *Write a brief account on disease transmission by arthropods vectors.

(15 marks)

- 5. Write short notes on any two (02) of the following
 - a. Lymphadema
 - b. Leishmaniasis in Sri Lanka
 - c. factors involve in vector borne diseases

(25 marks)

Appendix 01

S No	Premises	No. Of potential breeding sites	No of possitive breeding sites for <i>Aedes</i> albopictus	Type of breeding site
01	Sanista oil mart, Mihintale	01	04	Half plastic barrel
02	S.M.S. Samaraweera, Ambathalagama	03	03	Tyres
03	Mr. P.D. Madushan, Ambathalagama	03	0	Half metal barrels
04	Mr. P.K Piyasena, Udaya tyre works, Mihintale	01	5	Half plastic barrels
05	Indrani, Missaka mawatha Mihintale	01	6	Tyre
06	Smithy, T.A Karunaratne, Ambathalagama	02	3	Discarded metal receptacles
07	Nayanakantha, Ambathalagama	09	1	Tar barrels
08	A.Gunasena, Ruwanmaya, Mihintale	10	0	Cement pools
09	Mr. Harendra Perera, No 103, Misska mawatha	03	0	Tyres
10	Sumith motors, No 103 c, Prabudda Mw, Piliyandala	04	5	Polythene pokets
11	Auto works, No 103, Mihintale	01	1	Clay Pot
12	P.H.Jayasinghe, 105/1, Mihintale	00	1	Tyre
13	Alahakoon Concrete works, Ambathalagama	00	1	Plastic container
14	M Sanoor, Mihintale	06	5	Discarded receptacles
15	Lasath No3/5,sangarama, Mihintale	0.1	3	Metal ware
16	Gayan Fonseka, No ¾, Ambathalagama	00	4	Bamboo stump
17	Udaya motor engineering, Mihintale	00	0	
18	Pathirana Garage, No 60/2A, Missaka mawatha	01	4	Plastic Bucket
19	Arogya niwasa, Mihintale	01	0 .	Tyres
20	Somaratne, Friday Fair, No 117/7, Mihintale	02	4	Discarded plastic receptacles
21	Sakura motors, Pelanwatta, Ambathalagama	00	0	-
22	Thurursewana concrete works, No 45Trincomalee Rd Mihintale	04	0	Discarded plastic receptacles