## B.Sc. 4<sup>th</sup> Semester (Honours) Examination, 2021

**Subject: ZOOLOGY** 

Course ID: 42614 Course Code: SH/ZOO/404/GE-4

**Course Title: Insect Vectors and Diseases** 

Full Marks: 25 Time: 1 Hr 15 Min

The figure in the margin indicates full marks.

Candidates are required to give their answers in their own words as far as practicable.

## 1. Answer any five questions of the following:

 $1 \times 5 = 5$ 

- a) What is "Pathogen"?
- b) Mention the difference between "Pest and Parasite".
- c) Give the scientific name of Sand fly and House fly.
- d) Define malignant tertian malaria.
- e) Give an example of "hypo-parasite".
- f) Mention scientific name of one nematode in biological control of mosquito.
- g) What is a parasitoid fly?
- h) What is hyperparasitism?

## 2. Answer any two questions of the following:

 $5 \times 2 = 10$ 

- a) Define "Monogenetic & Digenetic" parasite. Describe the life cycle of *Leishmania donovani* with suitable diagram.  $(\frac{1}{2} + \frac{1}{2} + 4 = 5)$
- b) Define "Pterygota & Apterygota". Mention the general features of order Hemiptera or Siphunculata. (1+1+3=5)
- c) What is a "mechanical and biological" vector? Describe the erythrocytic cycle of a malarial parasite. . (2+3)
- d) Write medical importance of houseflies. Mention controlling measure of dengue vector. (2+3)

## 3. Answer any one question of the following:

 $10 \times 1 = 10$ 

- a) Write down the scientific names of three different types of louse (head, body & pubic). Write down the characteristic features of head louse and body louse.
   Mention the important control measures of lice. 3+(2+2)+3=10
- b) Write short notes on (any two):

 $(5 \times 2 = 10)$ 

- i. Flea associated zoonotic diseases.
- ii. Sand fly( Morphology and diseases)
- iii. Chikungunya

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