B.Sc. 5th Semester (Hons.) Examination, 2020 (CBCS) Subject: Zoology

Paper: DSE-2

(DSE-T3: Parasitology)

Full Marks: 40 Time: 2 Hrs

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

Answer any **eight** questions of the following:

 $5 \times 8 = 40$

- 1. Represent the life cycle of *Leishmania donovani* carried out in human.
- 2. Make a comment on the microfilarial periodicity of Wuchereria bancrofti.
- 3. Establish the role of mosquito as a potent biological vector.
- 4. Focus on the nematode plant interactionsciting a well-known example.
- 5. Schematically represent the sequential events of life cycle in *Taenia sajinata*.
- 6. How does a soft tick differ from a hard tick biologically?
- 7. Draw and represent the dorsal view of feeding stage of an intestinal flagellate.
- 8. With a suitable flowchart elaborate the phase of larval migration in the life history of *Ascaris lumbricoides*.
- 9. Discuss the role of vampire bat as a potent parasitic vertebrate.
- 10. Explain the biological importance of mites with a note on its control.

(DSE-T4: Biology of Insects)

Full Marks: 40 Time: 2 Hrs

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

Answer any **eight** questions of the following:

 $5 \times 8 = 40$

- 1. Write the characters of order Hemiptera and Diptera with example.
- 2. Differentiate between complete and incomplete metamorphosis with hormones that control molting and metamorphosis.
- 3. Write the name and function of mouth parts of insects.
- 4. Describe different casts of termite.
- 5. Briefly describe the role of mosquito as vector.
- 6. What do you mean by allochemicals and describe how allochemicals affect insect behavior?
- 7. Briefly describe the structure of photoreceptor in an insect.
- 8. Describe with example how insect legs have adapted for digging and clinging.
- 9. With example write different types of insect wings.
- 10. Write the role of insect as mechanical and biological vector.