

U.G. 6th Semester Examination - 2025**ZOOLOGY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : ZOOL-H-DSE-T-04****(Parasitology)**

Full Marks : 40

Time : 2½ Hours

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any **five** of the following: 2×5=10
- a) What are the benefits of parasitoids?
 - b) Why Trypanosomiasis is called African sleeping sickness?
 - c) Distinguish between mechanical and biological vectors with suitable examples.
 - d) What is bancroftian disease? Mention its associated symptoms.
 - e) How oriental rat flea cause a significant negative impact on economy?
 - f) Define hyperparasitism with an example.

[Turn Over]

- g) What are the ways by which transmission of lice can be controlled?
- h) Write two strategies by which parasites avoid immune defense mechanisms of host.
2. Answer any **two** of the following: $5 \times 2 = 10$
- a) Classify zoonosis based on etiological agents and transmission cycle. $3+2$
- b) Distinguish between soft ticks and hard ticks. Give a brief account on the medical and economic importance of ticks. $2+3$
- c) Comment on the various morphological forms of haemoflagellates. What is Kala-azar and what is its causative organism? $3+2$
- d) How humans are infected with blood fluke? What are the symptoms of this infection? How can this infection be diagnosed? $1+2+2$
3. Answer any **two** of the following: $10 \times 2 = 20$
- a) What is visceral leishmaniasis? Describe the life cycle of *Leishmania donovani*. Comment on its epidemiology and pathogenicity. $2+4+4$
- b) Describe the life cycle of *Schistosoma haematobium*. Comment on the causative organisms, pathogenicity and treatment of murine typhus and bubonic plague. $4+3+3$

- c) What is the infective stage of *Ascaris*? Discuss the pathogenicity of *Ascaris* by adult worms. Delineate the morphology of microfilaria with suitable diagram. How this microfilaria causes Elephantiasis? $1+3+4+2$
- d) Write short notes on any **two** of the following: $5 \times 2 = 10$
- i) Vampire bat as parasitic vertebrate
- ii) Faecal-borne disease and its prevention
- iii) Ecological and evolutionary significance of parasitism