

U.G. 6th Semester Examination - 2023

ZOOLOGY

[HONOURS]

Discipline Specific Elective (DSE)

Course Code : ZOOL-H-DSE-T-04

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** questions: $2 \times 5 = 10$
- Explain the concept of hyperparasite and give an instance as an example.
 - What is visceral leishmaniasis and why it is so called?
 - Define ancylostomiasis and enumerate the symptoms.
 - What are promastigote and amastigote forms of *Leishmania*?
 - Which parasite is responsible for causing cercarial dermatitis? Can you name two intermediate hosts of this parasite?

[Turn Over]

f) How does sex reversal occur in crabs parasitized by *Sacculina*?

g) Define lymphatic filariasis and enumerate its symptoms.

2. Answer any two of the following questions:

$$5 \times 2 = 10$$

a) Distinguish between mechanical and biological vectors. Draw and describe a microfilaria of *Wuchereria bancrofti*.

$$2 + 3 = 5$$

b) Give a short note on host specificity and immunological interaction between host and parasite.

$$2\frac{1}{2} + 2\frac{1}{2} = 5$$

c) Distinguish between male and female *Ascaris*. Comment on the epidemiology, pathogenicity and treatment of ascariasis.

$$2 + 1 + 1 = 5$$

d) What is the scientific name of Tsetse fly? Describe life cycle of *Trypanosoma gambiense*?

$$1 + 4 = 5$$

3. Answer any two of the following questions:

$$10 \times 2 = 20$$

a) Differentiate between soft ticks and hard ticks. Illustrate the life cycle of ticks using appropriate diagrams. Discuss the diseases caused by hard ticks along with control measures.

$$2 + 3 + 3 + 2 = 10$$

b) Name scientific name of two species of human lice. Describe role of lice in disease transmission in human. Comment on the diagnosis, pathogenicity and control of *Leishmania donovani*.

$$2 + 2 + 2 + 2 = 10$$

c) What is zoonosis? Classify zoonosis based on etiological agents and transmission cycle. Why is it important to study zoonotic diseases?

$$2 + 3 + 3 + 2 = 10$$

d) Define scabies and identify the causative organism. Describe role of mites in disease transmission in animals. Describe life cycle and pathogenicity of *Wuchereria bancrofti*.

$$2 + 2 + 4 + 2 = 10$$