

2025

(CBCS)

(6th Semester)

ZOOLOGY

ELEVENTH PAPER

(Parasitology and Immunology)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(SECTION : A—OBJECTIVE)

(Marks : 10)

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. A host in which the immature parasite undergoes no development but remains infective to a definitive host, is called

- (a) definitive host ()
- (b) intermediate host ()
- (c) paratenic host ()
- (d) reservoir host ()

2. The epimastigote form of *Trypanosoma brucei* is found in

- (a) insect host only ()
- (b) human host only ()
- (c) both insect and human host ()
- (d) free-living ()

3. The bladderworm of *Taenia saginata* is called
- (a) *Cysticercus bovis* ()
 - (b) *Cysticercus cellulosae* ()
 - (c) *Cysticercus ovis* ()
 - (d) *Cysticercus longicollis* ()
4. The larval stage of *Fasciola hepatica* which enters the intermediate host is
- (a) redia ()
 - (b) sporocyst ()
 - (c) miracidium ()
 - (d) cercaria ()
5. The disease where eosinophils accumulate in the lung in response to an *Ascaris* infection is
- (a) Guillain-Barre syndrome ()
 - (b) Hyperinfection syndrome ()
 - (c) Katayama syndrome ()
 - (d) Loeffler's syndrome ()
6. The gland in the larvae of trematode which secrete fluid to help in penetration of the first intermediate host tissue is
- (a) apical gland ()
 - (b) cephalic gland ()
 - (c) flame cells ()
 - (d) vitelline gland ()
7. The first malarial vaccine approved by WHO is
- (a) PFV, S ()
 - (b) PV23 ()
 - (c) RTS, S ()
 - (d) R21 ()

8. Coreceptor present in the cytotoxic T-cell is
(a) CD4 ()
(b) CD8 ()
(c) CD11 ()
(d) CD16 ()
9. The most abundant antibody isotype in the mucosal immune system is
(a) IgA ()
(b) IgD ()
(c) IgE ()
(d) IgG ()
10. The Class I MHC molecules bind peptides epitope derived from
(a) endogenous antigens ()
(b) exogenous antigens ()
(c) haptens ()
(d) superantigens ()

(SECTION : B—SHORT ANSWERS)

(Marks : 15)

Write notes on the following in 5 to 8 sentences each :

3×5=15

UNIT—I

1. African sleeping sickness

OR

2. Zoonoses

UNIT—II

3. Neurocysticercosis

OR

4. Scolex of *Taenia solium*

UNIT—III

5. Pathogenicity of *Ascaris lumbricoides*

OR

6. Developmental stages in Trematodes

UNIT—IV

7. Types of antigens

OR

8. Clonal selection

UNIT—V

9. MHC Class II

OR

10. Immunoglobulin G (IgG)

(SECTION : C—DESCRIPTIVE)

(Marks : 50)

Answer the following :

10×5=50

UNIT—I

1. Describe the life cycle and pathogenicity of *Leishmania donovani*.

OR

2. Discuss the mode of infection, life cycle and pathogenicity of *Plasmodium falciparum*.

UNIT—II

3. Describe the complex adaptation of Cestodes in their host.

OR

4. Discuss the life cycle and pathogenicity of *Fasciola hepatica*.

UNIT—III

5. Discuss the life cycle and pathogenicity of *Schistosoma mansoni*.

OR

6. Give an account of the adaptation involved in nematodes.

UNIT—IV

7. Give a general account of the cells of the immune system.

OR

8. Discuss the different types and their functions of cytokines.

UNIT—V

9. Explain briefly the types of antigen-antibody reaction.

OR

10. What is hypersensitivity? Discuss the different types of hypersensitivity with examples.
