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(CBCS)

(6th Semester)

ZOOLOGY

ELEVENTH PAPER

(**Parasitology and Immunology**)

Full Marks : 55

Time : 2½ hours

(**PART : A—OBJECTIVE**)

(*Marks : 20*)

The figures in the margin indicate full marks for the questions

SECTION—A

(*Marks : 5*)

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

$1 \times 5 = 5$

1. Tsetse fly (*Glossina*) is the vector of

- (a) visceral leishmaniasis ()
- (b) *Falciparum* malaria ()
- (c) African sleeping sickness ()
- (d) cutaneous leishmaniasis ()

2. Beef is the source of infection with

- (a) *Taenia saginata* ()
- (b) *Taenia solium* ()
- (c) *Fasciola hepatica* ()
- (d) *Leishmania donovani* ()

3. The infective stage of trematode parasites to the definitive host is called

- (a) sporocyst ()
- (b) redia ()
- (c) miracidium ()
- (d) cercaria ()

4. Conformational epitopes bind to antibody only in their

- (a) tertiary structure ()
- (b) secondary structure ()
- (c) primary structure ()
- (d) nascent structure ()

5. Asthma and allergies are mediated by

- (a) IgA ()
- (b) IgE ()
- (c) IgM ()
- (d) IgD ()

SECTION—B

(*Marks : 15*)

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

$3 \times 5 = 15$

1. Trypomastigote

OR

Kala-azar

2. Neurocysticercosis

OR

Tegument of cestodes

3. Sexual dimorphism in nematodes

OR

Intestinal schistosomiasis

4. Professional phagocytes

OR

Live attenuated vaccine

5. V(D)J recombination

OR

Multiple sclerosis

(PART : B—DESCRIPTIVE)

(Marks : 35)

The questions are of equal value

- 1.** Describe the life cycle of *Leishmania donovani*.

OR

Illustrate the life cycle of *Plasmodium falciparum*.

- 2.** Discuss the life cycle of *Taenia solium*.

OR

Delineate the life cycle of *Fasciola hepatica*.

- 3.** Explain the life cycle of *Schistosoma mansoni*.

OR

Describe the life cycle of *Ascaris lumbricoides*.

- 4.** Give a comparative account of humoral and cell-mediated immunity.

OR

Describe the types and general functions of cytokines.

- 5.** Illustrate the molecular structure of IgG.

OR

Describe the structure and functions of MHC classes.

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