2024

(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)

		(Marks . 10)	
Tick	(✓) 1	e correct answer in the brackets provided : 1×10	=10
1.	The	vector and intermediate host for Leishmania donovani is	
	(a)	Phlebotomus sp. () (b) Anopheles sp. ()	
	(c)	Glossina sp. () (d) Aedes sp. ()	
2.	Epi	astigote is found in	
	(a)	andfly ()	
	(b)	Anopheles mosquito ()	
	(c)	setse fly ()	
	(d)	Culex mosquito ()	
3.		organs of attachment in flukes are two muscular cup-shaped ssion called	
	(a)	ook () (b) rostellum ()	
	(c)	colex () (d) acetabulum ()	

4.	The symptoms of schistosome infection are produced by its
	(a) sporocysts () (b) cercaria ()
	(c) miracidia () (d) eggs ()
5.	Neurocysticercosis is caused by
	(a) Taenia solium ()
	(b) Echinococcus granulosus ()
	(c) Plasmodium vivax ()
	(d) Leishmania donovani ()
6.	The organ which helps to attach with the mucous membrane of the host intestine in Ascaris lumbricoides is (a) mouth bounded by three line (1)
	(a) mouth bounded by three lips () (b) sucker ()
	(c) hook ()
	(d) scolex ()
7.	
•••	Which cytokine is released in response to virus infection? (a) Interferon (b) Monokine (c)
	() To the term of
	(c) Lymphokine () (d) Interleukin ()
8.	Humoral immunity is mediated by
	(a) B-cells () (b) macrophages ()
	(c) neutrophils () (d) phagocytes ()
9.	Antibodies are
	(a) lipids ()
	(b) carbohydrates ()
	(c) nucleic acids ()
	(d) glycoproteins ()
10.	Serum sickness is caused by
	(a) type I hypersensitivity ()
	(b) type II hypersensitivity ()
	(c) type III hypersensitivity ()
	(d) type IV hypersensitivity ()

(SECTION : B-SHORT ANSWERS) (Marks: 15) Write notes on the following: $3 \times 5 = 15$ UNIT-I 1. Visceral leishmaniasis OR 2. Cerebral malaria UNIT-II 3. Cysticercus cellulosae OR 4. Parasitic adaptations in cestodes UNIT-III 5. Schistosomiasis OR 6. Parasitic adaptation in nematodes UNIT-IV 7. Professional phagocytes OR 8. Cytokines

[Contd.

9. Antigen-antibody interaction

OR

10. Type III hypersensitivity

UNIT-V

(SECTION : C-DESCRIPTIVE)

(Marks: 50)

Answer the following questions:

10×5=50

UNIT-I

1. Describe the life cycle of Trypanosoma brucei with a neat labelled diagram.

or

2. Illustrate the life cycle of *Plasmodium falciparum* with a neat labelled diagram.

UNIT-II

3. Discuss the life cycle and pathogenicity of Taenia solium.

OR

4. Describe the life cycle of Fasciola hepatica.

Unit—III

5. Explain parasitic adaptations in trematodes.

OR

6. Explain the life cycle and pathogenicity of Ascaris lumbricoides.

UNIT-IV

7. Give a brief description of innate and acquired immunity.

OR

8. Describe the principles of vaccination and clonal selection.

Unit-V

9. Discuss the structure and types of immunoglobulins.

OR

10. Describe the structure and functions of MHC classes.

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(SECTION : A-OBJECTIVE)

(Marks: 10)

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2.	. Epimastigote is found in	
	(a) sandfly ()	
	(b) Anopheles mosquito ()	
	(c) Tsetse fly ()	
	(d) Culex mosquito ()	
3.	. The organs of attachment in flukes are two muscular cup-shaped depression called	
	(a) hook () (b) rostellum ()	
	(c) scolex () (d) acetabulum ()	

The symptoms of schistosome infection are produced by its sporocysts () (b) cercaria () (c) miracidia () (d) eggs () Neurocysticercosis is caused by (d) Echinococcus granulosus () (b) Echinococcus granulosus () (c) Plasmodium vivax () () Echinococcus granulosus () () Echinococus granulosus () () Echinococcus granulosus () (c) Lympholcine is released in response to virus infection? (d) Interfeukin () (d) Interleukin () (d) Interleukin () (d) Phagocytes () (c) neutrophils () (d) Phagocytes () (c) neutrophils () (d) Phagocytes () (c) nucleic acids () (d) Echonocicus acused by (d) Echonocicus is caused by (d) Evoe I hypersensitivity ()
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(SECTION: B—SHORT ANSWERS)

(Marks: 15)

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UNIT-I

1. Visceral leishmaniasis

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UNIT—II

3. Cysticercus cellulosae

OR

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INIT—III

5. Schistosomiasis

OR

6. Parasitic adaptation in nematodes

UNIT-IV

7. Professional phagocytes

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8. Cytokines

UNIT-V

9. Antigen-antibody interaction

OR

10. Type III hypersensitivity

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[Contd.

(SECTION: C-DESCRIPTIVE)

(Marks: 50)

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UNIT-II

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4. Describe the life cycle of Fasciola hepatica

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UNIT-IV

7. Give a brief description of innate and acquired immunity.

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