GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

Subject: **Zoology**
Paper name: **Parasitology & Immunology**
Paper No: **XI**
Semester: **Sixth**

A. Multiple choice questions:

1. The intermediate host of *P. falciparum* is
   a) *Phlebotomus*
   b) Man
   c) *Glossina*
   d) *Anopheles*

2. A parasite of connective tissue
   a) *Trypanosoma brucei*
   b) *Leishmania*
   c) *P. falciparum*
   d) *Ascaris*

3. A parasite of the reticuloendothelial system is
   a) *Leishmania*
   b) *Trypanosoma brucei*
   c) *P. falciparum*
   d) Tse tse fly

4. *Glossina* is one vector of
   a) African sleeping sickness
   b) *Leishmaniasis*
   c) Malaria (falciparum)
   d) Visceral leishmaniasis

5. The transmission of *Leishmania donovani* from man to man is carried out by
   a) *Phlebotomus*
   b) Tsetse fly
   c) *P. falciparum*
   d) *Anopheles*

6. Cysticercus larva of *Taenia solium* occurs in
   a) man
   b) pig
   c) sheep
   d) snail

7. Neurocysticercosis is caused by
   a) *Taenia solium*
   b) *Taenia saginata*

c) *Echinococcus granulosus*
d) *Leishmania donovani*

8. The adult *Taenia saginata* may live for up to
   a) 10 years
   b) 15 years
   c) 5 years
   d) 20 years

9. Lifespan of adult *Echinococcus granulosus* is
   a) 6 months
   b) 10 months
   c) 7 months
   d) 8 months

10. Apolysis takes place in
    a) *Taenia solium*
    b) *Taenia saginata*
    c) *Echinococcus granulosus*
    d) *Trypanosoma*

11. Infective stage of *Schistosoma* of human is
    a) sporocyst
    b) cercariae
    c) redia
    d) rhabditiform

12. The disease caused by *Schistosoma* is called
    a) *Schistosoma mansoni*
    b) visceral schistosomiasis
    c) Egyptian sphenimegaly
    d) All of the above

13. The development in snail takes about
    a) 1 to 2 weeks
    b) 2 to 4 weeks
    c) 3 to 6 weeks
    d) 4 to 8 weeks

14. Name a parasite without intermediate host
    a) *T. solium*
    b) *Schistosoma*
    c) *Leishmania*
    d) *Ascaris*

15. Moulting occurs in
    a) *Echinococcus*

b) *T. brucei*
c) *Ascaris*
d) *P. falciparum*

16. Disease causing entity is also known as
    a) antibody
    b) antigen
    c) interferon
    d) cytokine

17. Small protein molecules that function as cell signals are called
    a) interferons
    b) kinins
    c) cytokines
    d) plasma

18. B-lymphocytes that do not differentiate into plasma cells are called
    a) T-lymphocytes
    b) helper T-cells
    c) memory B cells
    d) memory T-cells

19. Plasma cells are a specific type of immune cells which secretes
    a) antibodies of many types
    b) a specific antibody
    c) lysozyme
    d) antigen

20. Clonal selection occurs when antigen is encountered by
    a) basophils
    b) eosinophils
    c) neutrophils
    d) T-cells

21. Immunoglobins secreted by lymphocytes are of
    a) 3 types
    b) 4 types
    c) 5 types
    d) 8 types

22. Immunoglobulins are composed of light and heavy chains, stabilized by
    a) peptide bonds
    b) disulphide bridges
    c) covalent bonds
    d) None of the above

23. This ‘macroglobulin’ is the largest antibody

a) IgG
b) IgM
c) IgA
d) IgE

24. Antibody-antigen binding occurs through
    a) antigen binding fragment
    b) paratope of antigen and epitope of antibody
    c) epitope of antigen and paratope of antibody
    d) All of the above

25. Major histocompatibility complex (MHC) are encoded by genes on
    a) chromosome 2
    b) X chromosome
    c) chromosome 6
    d) chromosome 8

B. Fill in the blanks:

1. Preerythrocytic schizogony comprises a single cycle and lasts _____ days.
2. The time taken for the complete evolution of the infective forms (metacyclic stage) inside the Tsetse fly is about _____ .
3. _____ is the period between the time of the initial infection and the appearance of clinical manifestation.
4. Cysticercus bovis does not occur in _____ .
5. The larval worm of *Echinococcus granulosus* causes _____ in man.
6. When ingested by dogs, the fertile hydatids are capable of growing into adult worms in about _____ .
7. _____ penetrate the unbroken skin of man.
8. _____ are 25-40 cm in length with a maximum diameter of 5 mm.
9. _____ enter the lumen of an appendix, causing appendicitis.
10. _____ is a part of an antibody which recognizes and binds to an antigen
11. The goal of vaccination is to provide memory to the immune system of the body against particular pathogen, by injecting _____ live pathogen.
12. The clonal selection theory was introduced by _____ .
13. Immunoglobulin _____ has the ability to traverse the placenta between mother and foetus.
14. The immunoglobulin found in serum and secretory forms is _____ .
15. Undesirable reactions produced by the normal immune system are referred to as _____ .

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

Key Answers

A. Multiple choice questions:

1. b)	2. a)	3. a)	4. a)	5. a)	6. a)	7. a)
8. a)	9. a)	10. a)	11. b)	12. d)	13. a)	14. c)
15. c)	16. b)	17. c)	18. c)	19. b)	20. d)	21. c)
22. b)	23. b)	24. c)	25. c)			

B. Fill in the blanks:

1. 6 days
2. 20 days
3. incubation period
4. man
5. unilocular hydatid disease
6. 6 to 7 weeks
7. fork-tailed cercariae
8. female *Ascaris*
9. wandering *Ascaris*
10. paratope
11. inactivated
12. Frank Macfarlane Burnet
13. IgG
14. Immunoglobulin A (IgA)
15. hypersensitivity