

(7 pages)

Reg. No. :

Code No. : 5920

Sub. Code : WMBM 22

M.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2024.

Second Semester

Microbiology – Core

MEDICAL VIROLOGY AND PARASITOLOGY

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (15 × 1 = 15 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of the following shows the coiled strands of RNA and capsomeres?
 - (a) Poliovirus
 - (b) Tobacco mosaic virus
 - (c) Measles virus
 - (d) Retrovirus

6. Which is the most important characteristic symptom of Rabies?
 - (a) Fear of Height
 - (b) Fear of Water
 - (c) Fear of Cats
 - (d) Fear of Fire
7. What are bacteriophages that cause bacterial cell lysis called?
 - (a) Viroids
 - (b) Lysogenic phages
 - (c) Virulent phages
 - (d) Temperate phages
8. Which of the following is easily blocked by antivirals?
 - (a) Virus penetration
 - (b) Nucleic acid replication
 - (c) Virus absorption
 - (d) Removal of the virus from the cell
9. Which of the following is an example of head-and-tail bacteriophage?
 - (a) M13
 - (b) Lambda phage
 - (c) Pbr322
 - (d) M16

2. The term "virion" is used for
 - (a) Mycoplasma colony
 - (b) Group of viruses
 - (c) Nostoc colony
 - (d) Viral particles
3. Which of the following method is used for the production of vaccines against yellow fever?
 - (a) tissue-culture method
 - (b) chick-embryo method
 - (c) through susceptible animals
 - (d) through appropriate media
4. Which of the following virus causes blunting of the villi?
 - (a) Influenzavirus
 - (b) Mumpsvirus
 - (c) Rotavirus
 - (d) Parvovirus
5. Which of the following virus affects the liver?
 - (a) HAV
 - (b) HIV
 - (c) HSV
 - (d) EBV

Page 2

Code No. : 5920

10. Tse-tse fly is a vector for sleeping sickness. Which of the following parasite transmits the infective stage?
 - (a) *Wuchereria bancrofti*
 - (b) *Leishmania donovani*
 - (c) *Plasmodium falciparum*
 - (d) *Trypanosoma gambiense*
11. How long after infection with *Trichomonas vaginalis* do clinical symptoms begin?
 - (a) 24 hrs
 - (b) 1-5 days
 - (c) 5-10 days
 - (d) 1-4 weeks
12. Which of the following parasite is a common cause of diarrhea in humans and some animals?
 - (a) *Giardia lamblia*
 - (b) *Leishmania donovani*
 - (c) *Toxoplasma gondii*
 - (d) *Pneumocystis carinii*
13. Pigs or dogs are the sources of human infection by each of the following parasites except
 - (a) *Echinococcus granulosus*
 - (b) *Taenia solium*
 - (c) *Ascaris lumbricoides*
 - (d) *Trichinella spiralis*

Page 3

Code No. : 5920

Page 4

Code No. : 5920

[P.T.O.]

14. This disease is caused by a nematod
(a) Amoebiasis (b) Leprosy
(c) Filariasis (d) Poliomyelitis
15. Which of the following is known as Tapeworm?
(a) *Dugesia tigruta*
(b) *Taenia solium*
(c) *Fasciola Hepatica*
(d) *Schistoma*

PART B — (5 × 4 = 20 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

16. (a) Give notes on the satellite RNAs and Virusoids.
Or
(b) Write in detail steps involved in virus multiplication.
17. (a) Describe about pathogenicity and treatment of herpes Virus.
Or
(b) Write about pathogenicity and lab diagnosis of adeno virus.

Page 5 Code No. : 5920

18. (a) Draw the structure of T4 bacteriophage.
Or
(b) Write notes on antiviral vaccine.
19. (a) Give a brief account of *Balantidium coli*.
Or
(b) Briefly describe *Giardia lamblia*.
20. (a) Make notes on life cycle and treatment of *Taenia saginata*.
Or
(b) Give an account on antiprotozoal drugs.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 600 words.

21. (a) Write in detail notes on structure of virus.
Or
(b) Give an account on cultivation of virus.
22. (a) Describe in detail on pathogenicity and lab diagnosis of Measles virus.
Or
(b) Give a detailed account on pathogenicity and prevention of mumps virus.

Page 6 Code No. : 5920

23. (a) Give the general characteristic of Lambda phage.
Or
(b) Write the different types of diagnosis of viral infections.
24. (a) Write an essay on life cycle, pathogenicity and treatment of *Trichomonas vaginalis*.
Or
(b) Make a detailed notes on *Leishmania donovani*.
25. (a) Explain in detailed about diagnosis of parasitic infections.
Or
(b) Write an account on life cycle and pathogenicity of *Ascaris lumbricoids*.

Page 7 Code No. : 5920