

THE APOLLO UNIVERSITY

Saketa, Chittoor, AP

AHS - V Semester End Examination, June-2024

MLTT 3501-SYSTEMIC VIROLOGY AND MYCOLOGY

Time: 3 hours

Max. Marks: 60

Section –A (10x2=20 marks)

Answer all Questions with short answers

1. Define Virology. List some of the important viruses causing diseases in humans
2. Draw a neat, labelled diagram of Viral replication cycle.
3. Name two diseases caused by Poxvirus in humans
4. Name two human diseases caused by Herpesvirus infections
5. What are the primary sample types collected for the laboratory diagnosis of enterovirus infections?
6. List the differences between Oral poliovirus (OPV) and Inactivated polio virus (IPV).
7. What are the main types of Hepatitis viruses that affect humans?
8. List the common methods for transmission of HIV.
9. Mention any 4 differences between the bacteria and fungi.
10. Define Mycetoma.

Section –B (5X8=40 marks)

Answer all Questions either A or B with essay type answers

11. A) Describe the basis for classification of virus. With a neat, labelled diagram briefly explain the Virus replication cycle.

OR

B) Draw a neat, labelled diagram of embryonated egg and indicate sites of cultivation for different viruses.

12. A) With the help of a neat, labelled diagram, Describe the life cycle of poxvirus within a host cell, from attachment to release of progeny virions.

OR

B) Classify the family Herpesviridae. Describe the pathogenesis and clinical manifestations of Herpes simplex virus infection.

Cont....

13. A) Classify Arboviruses with examples. Discuss the pathogenesis and laboratory diagnosis of Dengue.

OR

B) Evaluate the diagnostic methods used to detect Poliovirus in the Laboratory, including specimen collection, virological, serological, and molecular techniques. Add a note on its prophylaxis.

14. A) With the help of a diagram describe the structure of HIV and comment on the genome of the virus. Describe the opportunistic infections seen in AIDS.

OR

B) Describe in brief the structure of Coronavirus. Briefly explain its pathogenesis and clinical features. Add a note on its prophylaxis.

15. A) Evaluate the diagnostic methods in general mycology in laboratory including the specimen collection, direct microscopy, culture identification specifying the macroscopic appearance and microscopic appearance of the colony of fungi.

OR

B) Describe the morphology, lifecycle, pathogenesis, and clinical features of *Cryptococcus neoformans*. Write a note on its laboratory diagnosis.
