

MICROBIOLOGY- PAPER 1

Your answer should be specific to the question asked

Draw neat and labeled diagrams wherever necessary

LONG ESSAY

$2 \times 10 = 20$ Marks

1. Describe the toxins and enzymes produced and the lesions caused by *Staphylococcus aureus*. Outline the laboratory diagnosis of Staphylococcal infections. (3+4+3).
2. Describe acquired immunity and explain the different types with examples. (3+3+4).

SHORT ESSAY

$10 \times 5 = 50$ Marks

3. Describe the Bacterial flagella with reference to structure, types and functions. (2+1+2)
4. Typhoid carriers: Describe the types, methods of detection and treatment. (2+2+1)
5. Describe the principle and applications of Western blot test (3+2)
6. Describe Staphylococcal food poisoning with relation to food items involved, pathogenesis and clinical manifestations. (1+2+2)
7. Name the causative agent and the vector transmitting scrub typhus. Describe the laboratory diagnosis of scrub typhus. (1+1+3)
8. Describe the types, clinical manifestations and pathogenesis of botulism. (1+2+2)
9. Mention the types, mechanism, methods of detection of drug resistant tuberculosis. (1+2+2)
10. Describe the laboratory diagnosis of human brucellosis.
11. Describe the Biological effects of complement
12. Enumerate Alcohols used in disinfection. Describe the mechanism of action and uses of Alcohols. (1+2+2)

SHORT ANSWERS

$10 \times 3 = 30$ Marks

13. Enumerate the species of *Shigella*.
14. What is Quellung test?
15. Name 3 anaerobic organisms & the diseases caused by them
16. Mention Spaulding classification of disinfectants with examples.
17. Mention the causative agent and serotypes, and clinical manifestations of *Lymphogranuloma venereum*.
18. Mention three applications of Direct immunofluorescence test.
19. Name any three Atypical Mycobacteria and the diseases caused.
20. Name the toxin produced and two clinical manifestations of Enterohaemorhagic *Escherichia coli* infection.
21. Name three motile organisms.
22. List the Sites of carriage of Methicillin Resistant *Staphylococcus aureus* and treatment of carrier state.

SRI DEVRAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

M.B.B.S Phase-II Supplementary Examination April/May 2025

Time:3 hours

Max Marks:100

MICROBIOLOGY- PAPER 2

Your answer should be specific to the question asked

Draw neat and labeled diagrams wherever necessary

LONG ESSAY

2 X 10 = 20 Marks

1. Enumerate any four sexually transmitted diseases caused by viruses. Describe the pathogenesis and laboratory diagnosis of AIDS. (2+4+4)
2. Enumerate the cestodes of medical importance. Describe the life cycle and pathogenesis of *Taenia solium*. (2+4+4)

SHORT ESSAY

10 X 5 = 50 Marks

3. Name the aetiological agent and describe the pathogenesis and laboratory diagnosis of *Mucormycosis*. (1+2+2)
4. Enumerate the tissue culture vaccines for rabies and describe the vaccination schedule (2+3)
5. Describe the lifecycle of *Entamoeba histolytica*.
6. Enumerate the characteristics of Slow viruses and the diseases caused by them in man (2+3)
7. Describe the morphology and life cycle of *Giardia lamblia*. (2+3)
8. Describe the laboratory diagnosis of Dermatophytosis and name any two antifungal agents. (4+1)
9. Enumerate the Coxsackie viruses and list the diseases caused by them (2+3)
10. Describe the pathogenesis, clinical manifestations, laboratory diagnosis and treatment of *Sporotrichosis*. (1+1+2+1)
11. Describe the life cycle of *Plasmodium vivax* in man and clinical features of vivax malaria. (3+2)
12. Name the vector, hosts, clinical features and distribution of Kyasanur Forest Disease. (1+1+2+1)

SHORT ANSWERS

10 X 3 = 30 Marks

13. Name three cell lines used for cultivation of viruses
14. Classify fungi on morphological basis and give 1 example for each.
15. Mention the steps in the management of blood spills
16. Define definitive host. Mention four parasitic diseases where humans are definitive hosts.
17. How do you prevent mother to child transmission of HIV?
18. Name any three antibiotic susceptibility testing methods.
19. Enumerate the agents causing Subcutaneous mycoses.
20. What is the pathogenesis in *Balantidium coli* infection.
21. Mention the nature, schedule and route of administration of MMR vaccine.
22. Draw a neat labelled diagram of gametocytes of *Plasmodium falciparum*.