

M.Sc. (Micro) Semester - 3 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2019)
Pharmaceutical and Medical Microbiology (Core (New))

Time: 2:30 Hours**Marks:70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

SECTION-I

- Que.1 Answer the following
- A) Discuss the computer-aided drug discovery and its advantages. (07)
 - B) Write a note on pharmacodynamics (07)
- OR
- Que.1 Discuss small and larger molecular drugs and discuss its advantages. (14)
- Que.2 Answer the following
- A) Describe the disease caused by Mycobacteria and explain its pathogenesis, diagnosis, and treatments. (07)
 - B) Write a note on viral diseases. (07)
- OR
- Que.2 Describe diagnostic principles, control, and prevention of host-parasite in detail. (14)
- Que.3 Do as direct (any seven) (07)
- 1) Define QSAR.
 - 2) Discuss the serological test for the detection of *Staphylococcus*.
 - 3) Define the term inactivated vaccine.
 - 4) Define antimicrobial therapy in brief.
 - 5) Write a brief about exotoxin and endotoxin.
 - 6) Define attenuated vaccine.
 - 7) What are SARS and MERS?
 - 8) Explain the role of microbiologist in CRO.

SECTION-II

- Que.1 Explain primary and secondary immunodeficiency. (14)
- OR
- Que.1 Answer the following
- A) Discuss the immune response against disease (07)
 - B) Explain immunotherapies in detail. (07)
- Que.2 Explain immunofiltration and immunochromatography diagnostic techniques in detail. (14)
- OR
- Que.2 Answer the following
- A) Write a note on antimalarial drugs. (07)
 - B) Write a note on monoclonal antibodies (07)
- Que.3 Do as direct (any seven) (07)
- 1) What do you mean by a lateral flow assay?
 - 2) How is PCR used as a diagnostic technique? Explain in brief.
 - 3) Define the micro cytotoxicity test
 - 4) Define adjuvant and its uses.
 - 5) Define the term oncofetal antigens.
 - 6) What is an allograft? Explain in brief.
 - 7) Mention the application of DNA microarray.
 - 8) Give some examples of antimalarial drugs?
