

**PG Degree Regular/Supplementary Examinations in Microbiology
(MD) January 2025**

Paper IV - Applied Microbiology and Recent Advances in Microbiology

Time: 3 hrs

Max marks:100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essay:

(20)

1. Describe the newer techniques employed for identification and susceptibility testing of bacterial pathogens and discuss their advantages and disadvantages. Add a note on the utility of Next generation sequencing in diagnosis of infectious disease.

Short essays:

(8x10=80)

2. Discuss role of microbiologist in antimicrobial stewardship in a medical college hospital
3. Discuss prevention and control of health care associated infections.
4. Write in detail about expanded programme of immunisation. Add a note on newer vaccines
5. Internal Quality control in a microbiology laboratory
6. National vector borne diseases control programme
7. Prevention and control of laboratory acquired infections with appropriate examples
8. Discuss the epidemiology of sexually transmitted infections in India. Add a note on syndromic management
9. Spaulding's classification and use of High level disinfectants in hospitals with suitable examples.
