

QP CODE: 202326

Reg. No:

**Second Year Pharm D Degree Regular/Supplementary Examinations
November 2021**

Pharmaceutical Microbiology

Time: 3 Hours

Total Marks: 70

- *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*

Essays

(3x10=30)

1. Mention the causative organism, mode of transmission, signs and symptoms, diagnosis and prevention of AIDS.
2. Add a note on continuous cultivation of bacteria. Detail batch culture.
3. What is pure culture. Enlist methods for isolation of pure culture. Describe any two industrially important techniques of preserving bacteria.

Short notes

(8x5=40)

4. Define the following:
 - Pasteurization • Phagocytosis. • Tyndallisation • Incineration • Antisepsis
5. Write principle, procedure and applications of Western Blotting technique.
6. Write the procedure, merits and demerits of membrane filtration.
7. Differentiate gram-positive and gram-negative cell wall and also mention the role of each chemical used in gram- staining.
8. Explain any three Ag-Ab reactions
9. Explain the sterilization by autoclaving
10. Enriched media and selective media
11. Describe the ultra-structure of bacteria with a neat labelled diagram
