

Third B. Pharm (Ayurveda) Degree Supplementary Examinations
August 2024
Pharmaceutical Microbiology & Biotechnology

Time: 3 Hours

Total 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*
- *Write Section A and Section B in separate answer books (32 Pages). Do not mix up questions from section A and section B*

QP CODE: 304008**Section A- Microbiology****Marks: 50****Essay:****(10)**

1. Enumerate different staining techniques. Discuss the principle and procedure involved in gram staining.

Short notes:**(5x5=25)**

2. Disinfectants and their evaluation.
3. Electron microscopy.
4. Structure of bacterial cell
5. Interferon
6. Microbiological assay of antibiotics.

Answer briefly:**(5x3=15)**

7. Bacterial growth curve.
8. Scope of microbiology.
9. Classification of virus.
10. Microbial resistance
11. Classify culture media

QP CODE: 308008**Section B - Biotechnology****Marks: 50****Essay:****(10)**

1. Describe the development process of monoclonal antibodies

Short notes:**(5x5=25)**

2. Explain active and passive immunization.
3. Enzyme immobilization.
4. Fermentation procedure for vitamin B₁₂.
5. Enumerate the characteristics of an ideal fermenter
6. Antigen - Antibody reaction

Answer briefly:**(5x3=15)**

7. Humoral immunity.
8. Hypersensitivity
9. Bacterial Conjugation
10. Haptens
11. Mutation.
