Reg. No.....

Third B. Pharm (Ayurveda) Degree Regular/Supplementary Examinations April 2022
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. Explain chemical disinfectants

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

2. Moist heat Sterilization
3. Draw and explain the structure of gram negative cell wall.
4. Explain microbial resistance.
5. Viral Multiplication
6. Define and write about the different types of plasmids.

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

7. Name any one transport media, anaerobic media and enriched media.
8. Write the main functions of natural killer cells, TH cells and macrophages.
9. "Differential staining techniques"..
10. Name any three selective and differential culture media.
11. Define bacteriostatic and bactericidal

QP CODE: 308008 Section B - Biotechnology Marks: 50

Essay: **(10)**

1. Define bacterial transformation. Explain in detail transformation in steroid molecule through oxidation reaction

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

2. Define and enumerate various applications of monoclonal antibodies.
3. Genetic transformation process.
4. Give the preparation, storage, packing and labeling of bacterial vaccines.
5. Write the process of screening of soil for antibiotics producing organisms.
6. Draw and describe the general structure of antibodies

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

7. Define active and passive immunization.
8. What are semi synthetic penicillin
9. Full forms of: BCG, Ig, PFU
10. Define: Hybridoma technology, Mutation, Anaphylaxis
11. Write the application of following immobilized enzymes: Penicillinase, Amylase, Hyaluronidase

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