

2010 Scheme

QP CODE: 301006

Reg. No:

Third Year B.Pharm Degree Supplementary Examinations March 2024

Pharmaceutics IV

(Pharmaceutical Microbiology and 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 chemical structures/equations wherever necessary.*

Essays

(3x10=30)

1. What are fungi. Explain fungal reproduction and cultivation.
2. What is sterilization. Classify the methods of sterilization. Explain moist heat sterilization.
3. What are antigens. Explain various antigen antibody reactions and their applications.

Short notes

(14x5=70)

4. Explain the principle and procedure of Acid-fast staining.
5. Define gene cloning. Discuss the applications of gene cloning.
6. Explain the method of preparation of any one bacterial vaccine.
7. Describe the various techniques used in microscopy.
8. Discuss the interactions between viruses and their host organisms.
9. Define flagella and elaborate on their structure and functions.
10. Discuss interferons and their role in immunity.
11. What are monoclonal antibodies. Explain the importance of monoclonal antibodies.
12. Elaborate on the Redial Walker's test.
13. Describe the indicators used in the validation of dry heat sterilization.
14. Explain the process of alcohol production by fermentation.
15. Discuss about techniques for enzyme immobilization.
16. Explain microbial biotransformation with examples.
17. Explain the terms transformation and transduction.
