

2012 Scheme

Q P CODE: 311006

Reg. No:

**Third Year B.Pharm Degree Supplementary Examinations
January 2022
Pharmaceutics III
(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. Classify culture media and discuss on nutrients required for cultivation of bacteria
2. Explain the development of hybridoma for monoclonal antibodies
3. Explain the equipment, principle and procedure of dry heat sterilization

Short notes

(14x5=70)

4. Mention applications of monoclonal antibodies
5. Explain the principle involved sterility testing of pharmaceuticals
6. Explain immobilization techniques of enzymes
7. Differentiate gram positive and gram negative cell wall
8. Explain immunological tolerance with suitable example
9. What are disinfectants. Enlist ideal properties of disinfectants
10. Explain chemical methods of sterilisation
11. Explain the bacterial growth curve
12. Explain any one method for microbial assay of antibiotics.
13. Explain transgenesis and its applications
14. Explain the design of a fermenter and the control of any two parameters
15. Enlist factors influencing rate of mutation
16. Explain interferon
17. Explain virus host interactions with an example
