

2012 Scheme

Q P CODE: 311006

Reg. No:

Third Year B.Pharm Degree Supplementary Examinations August 2023 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. Discuss the nutritional requirements of bacteria. What are the various culture media used for bacterial culture. Classify the types of culture media used along with suitable examples.
2. What is immunity. Discuss about the primary and secondary defensive mechanisms of the body to combat infection and the immune mechanisms of the body.
3. Explain the principle, procedure, applications, merits and demerits of sterilization using hot air oven.

Short notes

(14x5=70)

4. Write a note on cultivation of virus.
5. Explain bacterial growth curve.
6. What is pure culture. Write in detail about any one technique used for isolation of pure culture.
7. Discuss briefly the production of monoclonal antibodies by hybridoma technology.
8. Discuss the viral replication life cycle.
9. Explain the different types of hypersensitivity reactions.
10. Describe ELISA test with its applications.
11. Explain the principle involved in sterilisation by filtration. Add a note on its merits and demerits.
12. Describe the production and uses of amylase.
13. Explain the principles involved in microbiological assay of antibiotics.
14. Discuss the different enzyme immobilization techniques used along with its application.
15. What are the different microscopy techniques.
16. Write a note on reactions mediated by microorganisms.
17. Explain the construction and working of a fermenter and its parts with the help of a diagram.
