

Third Year B.Pharm Degree Examinations July 2018
Pharmaceutics III
(Pharmaceutical Microbiology and Biotechnology)
(2012 Scheme)

Time: 3 Hours**Total Marks: 100**

- Answer all Questions.
- Draw diagram wherever necessary.

Essays**(3x10=30)**

1. Explain in detail the different methods for identification of pathogenic microorganisms.
2. Define vaccines and sera. Describe in detail various methods of standardization of vaccines and sera.
3. Define disinfectants. Explain in detail methods of evaluation of disinfectants.

Short notes**(14x5=70)**

4. Mechanism of endospore formation
5. Various methods of anaerobic culture
6. Reproduction of fungi
7. Define immunity. Mention the role of interferons in immunity
8. Transduction and their importance
9. Explain antigen antibody reactions in brief with examples.
10. Define hypersensitivity reaction. List various types of hypersensitivity with examples.
11. Principles involved in moist heat sterilization.
12. Validation of equipments used for sterilization.
13. Draw a neat diagram of fermenter and brief about their parts.
14. Production of penicillin.
15. Types of enzyme immobilization techniques.
16. Principle involved in microbial transformation with examples.
17. Immunological tolerance.
