

PY - 704
B.Pharmacy VII Semester
Examination, December 2014
Pharmaceutical Biotechnology
Time : Three Hours
Maximum Marks : 70

Note: i) This question paper contains eight questions.

ii) Attempt any five out of eight questions.

iii) Each question carry equal marks.

1. a) Discuss about the different types of antigen-antibody reactions. 7
b) How cellular immunity defend against foreign invade? 7
2. a) Discuss about various techniques of enzyme immobilization. 7
b) Discuss the application of immobilization of bacterial cell. 7
3. a) Discuss the method of preparation of monoclonal antibodies.
b) Write a descriptive note on litimulink by biotechnology.
4. a) Discuss various factors to be considered during the design of biotransformation process. 7
b) Discuss bout different types of reactions mediated by micro organisms. 7
5. a) Discuss about different types of fen`neters and their uses. 7
b) Discuss the industrial production of penicillin by fermentation technology. 7
- 6.a) Discuss about different types of "Hypersensitivities".7
b) Write a short note on "Enzyme based Sensors". 7
7. Write short notes on any two of the following:7 each
a) Protoplast Fusion technique and its application.
b) Recombinant DNA technology.
c) Drug Deliver System in Gene therapy.
8. a) How the improved production of steroids can be obtained using biotransformation process?
b) Discuss the use of mutagenic agents with suitable examples, in fermentation technology.