

PY - 704

B.Pharm. VII Semester
Examination, December 2012
Pharmaceutical Biotechnology

Time : Three Hours

Maximum Marks : 70

Note : 1. Solve any five questions.

2. All questions carry equal marks.

1. a) Explain antigen-antibody reactions and their applications. (7)

b) Describe diagnostic preparation. (7)

2) a) Describe hybridoma technology and its applications. (7)

b) Explain, in brief, translation, conjugation and transduction. (7)

3) a) Explain the methods for immobilization of bacterial and plant cells. (7)

b) Write pharmaceutical uses of hyaluronidase, streptokinase and penicillinase. (7)

4) a) Explain the methodology for recombinant DNA technology. (7)

b) Give a general idea about enzyme kinetics. (7)

5) a) Write various chemical reactions transformed by bacteria. (7)

b) Draw and explain the design of a bioreactor with steroid as a product. (7)

6) Detail out fermentative production of (7x2=14)

a) Riboflavin

b) Vitamin B12

7) Explain the followings: (14)

a) Cellular humoral immunity

b) Humulin

c) Protoplast fusion

d) Mutants

8) Prepare notes on following :(Any two) (7x2=14)

a) Gene therapy

b) Gene cloning

c) Different parameters in fermentation process.
