Total number of printed pages – 3B. PharmPH. 8.3

Eighth Semester Examination – 2008

PHARMACEUTICAL BIOTECHNOLOGY

Full Marks - 70

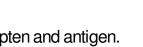
Time : 3 Hours

Answer Question No. 1 which is compulsory and any five from the rest.

The figures in the right-hand margin indicate marks.

- 1. Answer the following questions : 2×10^{-2}
 - (i) What is passive and active immunity ?
 - (ii) Write down the mechanism involved in hypersensitivity reaction.
 - (iii) Differentiate between a hapten and antigen.
 - P.T.O.

- (iv) What is a hybridoma ?
- (v) Write two advantages of microbial biotransformation.
- (vi) What is plasma substitute ? Give two examples.
- (vii) Write the advantages of monoclonal antibody.
- (viii) What is immunological tolerance ?.
- (ix) Differentiate between vaccine and sera.
- (x) Differentiate between enzyme and catalyst.
- Classify immunity with examples, write the various antigen, antibody reactions and a short note on humonal immunity. 3+4+4
- Write down the method of prepartion and storage of Vaccine.
 10
- PH. 8.3 2 Contd.







4. What is genetic recombination ? Write down the process involved in it with their application.

10

– C

- Explain the design of a fermenter and fermentation process. What are the different control parameters?
- 6. Write down the process involved in fermentation and isolation of penicillin.10
- Briefly discuss about the techniques involved in the immobilisation of enzymes.
 10
- Discuss about the factors affecting the Kinetics of enzyme reaction.
 10

PH. 8.3

3