

B.Pharm III Year I Semester (R15) Supplementary Examinations June 2018

PHARMACEUTICAL BIOTECHNOLOGY

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Explain about types of fermentations.
 - (b) Give an account on operation of bio reactor.
 - (c) Name the micro organism to produce tetracycline and cyanocobalamin .
 - (d) Write about humoral immunity.
 - (e) Write the significance of restriction endonuclease in DNA technology.
 - (f) Write in brief about antitoxins.
 - (g) What are the applications of hypersensitivity?.
 - (h) Mention the advantages of immobilization of enzymes.
 - (i) Explain the role of bioinformatics in personal medicine.
 - (j) Write the applications of bio informatics.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)**UNIT – I**

- 2 Give an account on principal and procedure involving in downstream processing and effluent treatment.

OR

- 3 Write in detail about the working of fermenter with a neat diagram. Add note on secondary metabolites.

UNIT – II

- 4 Describe the method of manufacture of hepatitis B vaccine by recombinant- DNA technology.

OR

- 5 What are monoclonal antibodies? Describe their production and its applications.

UNIT – III

- 6 List out the properties of antigens and antibodies. Describe any three antigen and antibody reactions in detail.

OR

- 7 Write an account on :
(a) Active and passive immunizations vaccine preparations.
(b) Standardization of BCG.

UNIT – IV

- 8 Outline the various steps involved in isolation and purification of enzymes.

OR

- 9 Describe various methods of immobilization of plant and bacterial cells.

UNIT – V

- 10 Discuss applications of bioinformatics in different fields of science.

OR

- 11 Give a brief account on various techniques involved in gene therapy. Write limitations of proteomics.
