

Code: 13R00802

B.Pharm IV Year II Semester (R13) Regular & Supplementary Examinations April 2018

PHARMACEUTICAL BIOTECHNOLOGY

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write about strain improvement.
 - (b) Write about purification of erythromycin.
 - (c) Write the applications of stem cells.
 - (d) What is genetic engineering?
 - (e) Write about humoral immunity.
 - (f) What are the applications of hypersensitivity?
 - (g) Write the advantages of immobilization of enzymes.
 - (h) Write the classification of supports used for immobilization of enzymes.
 - (i) Explain the role of bioinformatics in personal medicine.
 - (j) Write the advantages of proteomics.

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

- 2 Explain about design and operation of standard fermenter.

OR

- 3 Give a detailed account on production of penicillin by fermentation.

UNIT – II

- 4 Explain in detail about production of biotechnologically derived humatrope.

OR

- 5 Explain in detail about production of monoclonal antibodies by Hybridoma technology.

UNIT – III

- 6 Give a detailed account on preparation, standardization and dosage of smallpox vaccine.

OR

- 7 Write a detailed note on diagnostic agents.

UNIT – IV

- 8 (a) Enumerate the factors affecting enzyme kinetics.
(b) Write about immobilization of plant cells.

OR

- 9 Give a detailed account on study of Hyaluronidase.

UNIT – V

- 10 Give a brief account on various techniques involved in gene therapy.

OR

- 11 Give a detailed account on genomics.
