

B.Pharm III Year I Semester (R15) Regular Examinations November 2017

PHARMACEUTICAL BIOTECHNOLOGY

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- Write the functions of baffle.
 - Write a note on fungal diastase.
 - Write about interferon.
 - Differentiate between submerged and solid state fermentation.
 - Give a brief note on whole cell immobilization.
 - Write in brief about antitoxins.
 - Write any two uses of pepsin.
 - Give a brief account on lactobacillus.
 - Define proteomics.
 - Write briefly on solid state fermentation.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Write in detail about the function and uses of fermenter accessory units. Add note on secondary metabolites.

OR

- 3 Write in detail about the working of fermenter with a neat diagram. Write brief notes on baffles.

UNIT – II

- 4 Explain in detail the production of monoclonal antibodies by Hybridoma technique.

OR

- 5 Define R-DNA technology. Describe the production of synthetic vaccine hepatitis – B by R-DNA technology.

UNIT – III

- 6 Describe the process for preparation of:

- Cholera vaccine.
- Polio vaccine.

OR

- 7 Explain in detail various antigen – antibody reactions.

UNIT – IV

- 8 Explain in detail various methods used for immobilization of enzymes with examples.

OR

- 9 Give a note on:

- Penicillinase.
- Streptokinase enzyme.

UNIT – V

- 10 Explain in detail applications of bioinformatics in different fields of science.

OR

- 11 Write applications of proteomics and write a note on its limitations.