Subject Code: B133202/R13

III B. Pharmacy II Semester Regular Examinations April - 2017 PHARMACEUTICAL BIOTECHNOLOGY

Time: 3 hours Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B** Answering the question in **Part-A** is Compulsory, Three Questions should be answered from **Part-B**

PART-A

- 1. (a) Define microbial transformation. Write the types of reactions mediated by microorganisms.
 - (b) Define entrapment and encapsulation.
 - (c) What are anticoagulants?
 - (d) Explain anaerobic fermentation.
 - (e) Describe active and passive immunity.
 - (f) Explain the purification of Tetracycline.

[4+3+3+4+4+4]

PART-B

- 2. (a) Explain the steps involved in R-DNA technology.
 - (b) Explain the production of recombivax HB.

[12+4]

- 3. (a) Mention the applications of Proteomics and Genomics.
 - (b) Explain the collection and processing of Catgut.

[7+9]

- 4. (a) Explain the preparation, standardization and storage of official killed bacterial vaccines.
 - (b) Explain the applications of antigen-antibody reactions.

[8+8]

- 5. (a) Describe the various types of fermentations.
 - (b) Explain the design and operation of activated sludge bioreactor.

[10+6]

- 6. (a) Write a note on Penicillinase, Streptodornase and Amylase.
 - (b) Write the factors affecting enzyme kinetics.

[12+4]

- 7. Explain the fermentation and purification of the following.
 - (i) Erythromycin
- (ii) Cyanocobalamin (iii) Citric acid
- (iv) Glutamic acid

[4+4+4+4]

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