

QP Code: 625006

Reg. No.....

**Sixth Semester B. Pharm Degree Supplementary Examinations
May 2024**

Pharmaceutical Biotechnology

(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Discuss the different methods of Enzyme immobilizations and its applications
2. Explain the gene transfer mechanism by conjugation. Explain the steps involved in PCR (Polymerase Chain Reaction)

Short Notes

(7x5=35)

3. Production of insulin by rDNA technology
4. Explain the production of tetanus vaccine
5. Explain the working and applications of biosensors
6. Write a note on microbial transformation of steroids
7. Describe the production and recovery of Citric acid
8. Explain the applications of biotechnology in pharmaceutical industry
9. Explain mutation with examples

Answer Briefly

(10x2=20)

10. Briefly explain type II hypersensitivity reactions
11. Different types of Spargers
12. Amylase
13. Genotypic variations
14. Protein engineering
15. Recombinant vaccine
16. Blotting technique
17. Control of fermentation parameters
18. RT-PCR test
19. ELISA
