

FACULTY OF PHARMACY
B. Pharmacy VI - Semester (PCI) (Backlog) Examination, April 2024
Subject: Pharmaceutical Biotechnology

Time: 3 Hours

Max. Marks: 75

PART-A

Note: Answer all the questions.

(10 x 2 = 20 Marks)

1. Write a brief note on plasmids.
2. Explain restriction endonucleases.
3. Write about types of aerators in Fermenter.
4. Mention the applications of Hybridoma technology.
5. What are vectors? Write the ideal properties of vectors.
6. Describe the importance of linkers and adapters.
7. Differentiate between exotoxins and endotoxins.
8. What are the organisms responsible for the production of amylases and lipases?
9. Write a note on DNA ligase.
10. What is genetic engineering?

PART-B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

11. What are plasma substitutes? Discuss in detail about the preparation of dextran.
12. Discuss the production of Penicillin by fermentation process.
13. Discuss the structure and function of Major Histocompatibility Complex.

PART-C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

14. Explain the southern blotting technique.
15. Explain the preparation of dried human plasma and dried human serum.
16. Differentiate between 'type II Hypersensitivity' and 'type III Hypersensitivity' reactions.
17. Write short note on vitamin B12 Production by fermentation.
18. What are mutations? Explain the types of mutations.
19. Write about IgG and IgE antibodies.
20. Describe the process of transduction.
21. Discuss the applications of biosensors.
22. Explain protein engineering.
