



Roll No: _____

K.R. MANGALAM UNIVERSITY

Sohna Road, Gurgaon

Reappear End Term Examination–2024**Course Title: Pharmaceutical Biotechnology****Course Code: BP605T****Programme: B. Pharm****Time: 3 hr****Sem: 6****Max. Marks: 75****NOTE: Attempt all questions from section-A, any seven out of nine questions in section B and any two out of two questions in section C.****Section-A (10 X 2 = 20 Marks)**

1	Define transduction.	CO4
2	What are the main approaches of protein engineering?	CO2
3	Classify immunity.	CO3
4	What is amylase?	CO4
5	Define interferons.	CO2
6	Define toxoids.	CO2
7	What are plasmids?	CO2
8	Define enzyme immobilization.	CO1
9	What are different methods that are suitable for production of citric acid?	CO4
10	What is dried human plasma?	CO2

Section B (7 X 5 = 35 Marks)

1	Discuss briefly about Fed batch fermentation	CO4
2	Explain in detail Gel electrophoresis.	CO2
3	Write a note on uses of microbes in industry.	CO4
4	Discuss in detail about structure of Immunoglobulins.	CO3
5	Write a note on DNA ligases.	CO2
6	Write a note on preparation of diphtheria vaccine.	CO4
7	Explain in detail immobilization of enzymes by covalent binding.	CO1
8	Add a note on storage conditions and stability of official vaccines.	CO2
9	Write a note on conjugation	CO4

Section C (2X 10 = 20 Marks)

1	What are interferons? Explain production and therapeutic applications of interferons.	CO2
2	Give a detailed note on ELISA technique.	CO3
3	What are biosensors? Write a detailed note on the advantages, working and applications of different types of biosensors.	CO4