

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[B.PHARM 0323]

**MARCH 2023
(SEPTEMBER 2022 EXAM SESSION)**

Sub. Code: 2066

**B.PHARMACY DEGREE COURSE (SEMESTER EXAMINATIONS)
PCI Regulation 2017 – SEMESTER VI
PAPER V – PHARMACEUTICAL BIOTECHNOLOGY**

Q.P. Code: 562066

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Define Immobilization. Explain the different methods of immobilization with applications.
2. General methods of preparation of bacterial vaccines. Mention the storage and stability of official vaccine.
3. What is Hybridoma technology? Explain the steps involved in Hybridoma technology.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Production of Insulin.
2. ELISA technique.
3. Biosensors.
4. Restriction endonucleases.
5. Collection of Whole human blood.
6. Screening method in fermentation process.
7. Write short notes on mutation.
8. Cloning strategies.
9. Write note on production of lipase.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Viral vaccines.
2. Western blot.
3. Microbial Biotransformation.
4. Source of organisms for the production of Vitamin B12.
5. Active immunity.
6. Gene mapping.
7. Vectors.
8. Microbial source for the production of glutamic acid.
9. Examples of triple vaccine.
10. Differentiate transcription and translation.
