

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

[BPHARM 1022]

**OCTOBER 2022
(MARCH 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. Explain the production of Monoclonal antibodies with their applications.
2. Production of penicillin by fermentation.
3. Write in detail about gene transfer methods.

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

1. Production of amylase.
2. Microbial Biotransformation.
3. Hypersensitivity Reactions.
4. Cloning Vectors.
5. Production of Citric Acid.
6. Write short notes on Interferon.
7. Write note on Polymerase chain reaction.
8. Protein engineering.
9. Note on transposable elements.

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

1. Conjugation.
2. Functions of MHC.
3. Southern blot.
4. Gene expression.
5. Source of organisms for the production glutamic acid.
6. Biosensors.
7. Live bacterial vaccines.
8. Types of Immunity.
9. Examples for restriction endonucleases.
10. Examples of immune modulators and immune suppressants.
