

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

[BPHARM 0321]

MARCH 2021

Sub. Code: 2066

(SEPTEMBER 2020 EXAM SESSION)

B. PHARMACY DEGREE EXAMINATION

PCI Regulation 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. What are the immobilized enzymes? Discuss the various techniques for enzyme immobilization?
2. What is rDNA Technique? Explain in detail Restriction endo nuclease and plasmid cloning vector.
3. Explain steps involved in southern blotting technique.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Write the application of biosensor
2. Briefly discuss the steps involved in PCR.
3. Discuss the Quality control test for vaccines.
4. Explain Type I Hyper sensitivity reactions.
5. Describe sandwich ELISA procedure
6. Explain Production of Vitamin B₁₂ by fermentation method.
7. Discuss the structural components of Immunoglobulin
8. Explain the preparation method of Dried Human Plasma
9. Write the applications of Genetic engineering.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. Define Protein Engineering
2. Component of Biosensor
3. Define Transformation process
4. What is selective marker system?
5. Define Antigen and Antibody.
6. What are Vaccine adjuvant?
7. State the function of DNA
8. Define Genome.
9. Define Sparger
10. Describe briefly Down streaming process in fermentation.
