

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

[M.PHARM 0823]

**AUGUST 2023
(APRIL 2023 EXAM SESSION)**

Sub. Code: 2966

**M.PHARMACY DEGREE EXAMINATION
SEMESTER - II (PCI New regulations 2016)
PHARMACEUTICAL BIOTECHNOLOGY - MPB
PAPER II – IMMUNOTECHNOLOGY**

Q.P. Code: 262966

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the types of vaccines. Describe the methods for any two-vaccine production in detail.
2. a) Describe the production and purification of monoclonal antibodies.
b) Explain the process of B cell maturation, activation and differentiation.

II. Write notes on:

(7 × 5= 35)

1. Stem cell technology and its applications to Immunology.
2. Immuno diagnosis.
3. Cell mediated immunity.
4. Write note on immunofluorescence and chemiluminescence assay.
5. Types of complement activation and their biological functions.
6. Explain phagocytosis with its mechanism.
7. Write a note on autoimmune disorders.
