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

[LP 966] NOVEMBER 2019 Sub. Code: 2966

M.PHARM. DEGREE EXAMINATION (PCI New regulations 2016) SEMESTER-II BRANCH-IV — PHARMACEUTICAL BIOTECHNOLOGY — MPB PAPER II — IMMUNOTECHNOLOGY

Q.P. Code: 262966

Time: Three hours Maximum: 75 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Discuss the types of immunity in an individual and their function. Add a note on Immunoglobulins.

2. Discuss in detail the importance and types of Antigen-Antibody reactions with examples.

II. Write notes on: $(7 \times 5 = 35)$

- 1. Types and treatment of hypersensitivity reactions.
- 2. MHC complex and antigen presenting cells.
- 3. Principle involved in blotting techniques.
- 4. Phagocytosis.
- 5. Applications of stem cell technology.
- 6. Synthetic peptides and immunodiagnostics.
- 7. Applications of monoclonal antibodies.

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[MPHARM 0921] SEPTEMBER 2021 Sub. Code: 2966 (OCTOBER 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION SEMESTER-II (PCI New regulations 2016) PHARMACEUTICAL BIOTECHNOLOGY - MPB PAPER II – IMMUNOTECHNOLOGY O.P. Code: 262966

Time: Three hours Answer ALL Questions Maximum: 75 Marks

I. Elaborate on: $(2 \times 20 = 40)$

- 1. Discuss about Humoral immunity and Cell mediated immunity.
- 2. Write in detail about the principle and application of ELISA and RIA method.

II. Write notes on: $(7 \times 5 = 35)$

- 1. Write the importance of monoclonal antibody over the polyclonal antibody.
- 2. Write a note on Chemiluminescence assay.
- 3. Define vaccine and explain the production and purification of anyone viral vaccine.
- 4. Short note on synthetic peptides.
- 5. Explain the type of immune response.
- 6. Function of MHC complex.
- 7. Define immune system and explain the cell and organ which involved in the immune system.

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[M.PHARM 0922] SEPTEMBER 2022 Sub. Code: 2966 (APRIL 2022 EXAM SESSION)

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: $(2 \times 20 = 40)$

1. Explain in detail about hypersensitivity reactions and autoimmune diseases.

- 2. a) Define immunity and explain different types of immunity.
 - b) Write a detailed note on Western blotting technique principle, procedure and its applications.

II. Write notes on: $(7 \times 5 = 35)$

- 1. Hybridoma technique and its applications.
- 2. Write a note on immuno electrophoresis and Radioimmunoassay (RIA).
- 3. Function of Major Histocompatibility Complex.
- 4. Write note on vaccines. Explain the production method for any one-vaccine.
- 5. Discuss about different types of Immunoglobulins.
- 6. Write a note on Immunodiagnostics.
- 7. List out and explain various types of antigen and antibody reactions.
