

Seat No. : _____

MD-102

March-2025

B.Sc., Sem.-V

CC-MI-303 : Microbiology (Principles of Immunology)

Time : 2:30 Hours]

[Max. Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) Figures on the right indicate marks.
(3) Mention correct question number against the answer.
(4) Draw figures wherever necessary.

1. Describe the acquired specific immunity with suitable examples. **14**

OR

1. (A) Describe the characteristics and functions lymphocytes involved in immunity. **7**
(B) Write a note on characteristics and types of Immune response. **7**

2. Describe the Characteristics and functions of types of antibodies. **14**

OR

2. (A) Write note on types of antigens. **7**
(B) Discuss the production and applications of monoclonal antibodies. **7**

3. What are precipitation reactions ? Discuss the characteristics and application of precipitation reactions. **14**

OR

3. (A) Describe the ELISA test. **7**
(B) Write the types and applications of agglutination reactions. **7**

4. Enlist types of hypersensitivity and describe types-I hypersensitivity reactions. **14**

OR

4. (A) Write a brief note on autoimmunity. **7**
(B) Write a brief note on organ transplantations reactions. **7**

5. Give short and specific answers in **1-2** lines only : (any **seven**)

14

- (1) Write name of two representative cells of type MHC-I, antigen.
 - (2) What is specific immunity ?
 - (3) Write types of T cells.
 - (4) Write names of theories of antibody diversities.
 - (5) Write one function of F(ab) fragment.
 - (6) Define : Adjuvant: write one example.
 - (7) Write the name of one skin test and disease detected.
 - (8) Write names of two fluorescent dyes.
 - (9) Write names of two immune suppressive drugs.
 - (10) Enlist normal blood groups.
 - (11) Write major two types of immunodeficiency.
 - (12) Define : Tumour immunity.
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