



**M.Sc. II Semester Degree Examination, September/October - 2022**  
**21BTH2C5L : IMMUNOLOGY AND IMMUNODIAGNOSTICS**

Time : 3 Hours

Maximum Marks : 70

**Instructions :** (1) Answer **any five** of the following questions with Question No. 1 is **compulsory**, each question carries **equal** marks.  
 (2) Draw neat diagrams wherever necessary.

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|----|-----|---|---|
| 1. | (a) | Explain types of immunity.                                      | 7 |
|    | (b) | Explain structure and function of primary lymphoid organs.      | 7 |
| 2. | (a) | Explain the theory of antibody formation.                       | 7 |
|    | (b) | Write a note on T-Cell maturation.                              | 7 |
| 3. | (a) | Describe the structure of MHC class II molecule.                | 7 |
|    | (b) | Discuss on various antigen processing pathways.                 | 7 |
| 4. | (a) | Give a detailed explanation on Type-I hypersensitive reactions. | 7 |
|    | (b) | Write a note on tumor Immunology.                               | 7 |
| 5. | (a) | Explain production of monoclonal antibodies.                    | 7 |
|    | (b) | Describe radial immune assay.                                   | 7 |
| 6. | (a) | Explain organization of Ig genes.                               | 7 |
|    | (b) | Discuss about ADCC.   | 7 |
| 7. | (a) | Write Mechanism and role of CD4+ T cells.                       | 7 |
|    | (b) | Explain western blotting technique.                             | 7 |
| 8. | (a) | Write classical pathway of Complement system.                   | 5 |
|    | (b) | Write a note on Apoptosis.                                      | 5 |
|    | (c) | Briefly explain NK cells.                                       | 4 |

