Exam. Code : 107403
Subject Code : 2264

B.Sc. Biotechnology 3rd Semester

BASIC CONCEPTS IN IMMUNOLOGY

Paper—BT-5

Time Allowed—3 Hours] [Maximum Marks—40

Note :—Section A (1×8 marks) is compulsory. Section B (5×4 marks) : Attempt any **FIVE** questions. The answer should not exceed **2** pages. Section C (6×2 marks) : Attempt any **TWO** questions. The answer should not exceed **5** pages.

SECTION—A

Give a brief account of the following :—

1. Hapten.
2. Epitope.
3. Null cells.
4. Eosinophils.
5. Complement system activators of alternate pathway.
6. High affinity antibodies.
7. Nomenclature of the MHC class I and II antigens.
8. Give the role of Class I MHC molecules.

SECTION—B

1. How adaptive immune response occurs ?
2. What is specificity and cross reactivity of immune reaction ?
3. Give the structure of Thymus.
4. Describe the heterogeneity of Lymphoid cells.
5. What are complement fixing antibodies ?
6. What do you understand by affinity and avidity of antibodies ?
7. Describe the structure of MHC class I molecules.
8. Give a detailed structure of T cell antigen receptor.

SECTION—C

1. Describe the approaches to study immune response.
2. Define secondary lymphoid organs and explain in detail lymph node and spleen.
3. Classify immunglobulins and give in detail their functions.
4. Give a detailed structure of Class II MHC molecules.