Exam. Code : 107403
Subject Code : 2205

B.Sc. (Biotechnology) 3rd Semester

BASIC CONCEPTS IN IMMUNOLOGY

Paper : BT—5

Time Allowed—3 Hours] [Maximum Marks—40

Note :— Section A : **All** questions are compulsory. (**8** marks)

Section B : Attempt **5** questions. Each question carries **4** marks and hence total **5** questions. (**20** marks)

Section C : Attempt **two** questions. Each question carries **6** marks. Total marks for this section are **12.**

SECTION—A

1. Give a brief account of the following :
   (i) Antigen
   (ii) Phagocytosis
   (iii) Microscopic structure of Eosinophil
   (iv) GALT
   (v) Avidity between antigen and antibody

   (vi) Types of antigen antibody interaction
   (vii) CD4
   (viii) Which antigens fall under class II antigens ?

SECTION—B

2. Describe the features of adaptive immunity.
3. How the specificity of antigen antibody reaction was shown by Landsteiner ?
4. Give the functions of macrophages.
5. Draw and describe the morphological features of thymus.
6. How the antibodies are digested and studied structurally ?
7. How lysis occurs by alternate pathway of complement ?
8. Draw the structure of MHC Class II antigens.
9. What is the role of class I antigens MHC ?

SECTION—C

10. Describe the humoral immune response.
11. What are Secondary lymphoid organs ? Give in detail the structure and functions of Lymph node.
12. Describe the structure of Immunoglobulin M and its function.
13. Give a detailed structure of antigen presentation and receipt by TCR.