Exam. Code : 107404
Subject Code : 2245

B.Sc. (Bio-Technology) Semester—IV

IMMUNOTECHNOLOGY

Paper : BT–5

Time Allowed—3 Hours] [Maximum Marks—40

Note :– **Section A** is compulsory. Section B attempt any **FIVE** questions. The answer should not exceed **2** pages. Section C attempt any **TWO** questions. The answer should not exceed **5** pages.

SECTION–A
(Compulsory)

Give a brief account of the following :

1. Markers on the T helper cells.
2. T independent antigens and response to them.
3. ELISA principle for detecting antigens.
4. Haemagglutination inhibition test principle.
5. Immunity against Tuberculosis causing microorganism.
6. By Oral Polio Vaccine which type of immunity develops.
7. How attenuation is carried out ?
8. Merits of Passive immunization. 8×1=8

SECTION–B

1. How cell mediated immune response occurs to T dependent antigens ?
2. What is the role of MHC in antigen presentation to T cells ?
3. Describe the principle and methodology of Rock immunoelectrophoresis.
4. Describe the methodology, principle and significance of Immunoblotting.
5. How body protects against AIDS virus ?
6. How immune response is evaded by parasites ?
7. Describe the properties of a good active immunization vaccine.
8. Contrast and compare the active and passive immunization.

5×4=20

SECTION–C

1. Describe the structure and functions of various molecules on the surface of T cells in antigen reception.
2. Write the various haemagglutination techniques and their significance.
3. What are the immunopathological consequences of parasitic infections ?
4. Write an account on the vaccines prepared from purified macromolecules.

6×2=12