

Exam. Code : 107404

Subject Code : 2305

B.Sc. (Bio Technology) 4th Semester

BT-5 IMMUNOTECHNOLOGY

Time Allowed—3 Hours] [Maximum Marks—40

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

SECTION—A

(Compulsory)

Write a brief account of the following :

1. Properties of T independent antigens
2. Markers on T cells attained in the thymus
3. Principle of Radial immunodiffusion
4. Direct agglutination test of bacteria
5. How body responds to extracellular bacteria ?
6. Immune invasion
7. Freund's complete adjuvant composition
8. Attenuation

SECTION—B

1. Describe the differentiating markers on mature T helper cells and their functions.
2. Give the structure of TCR.
3. Write down the procedure of rocket immunoelectrophoresis.
4. How to perform Haemagglutination inhibition reaction and its significance ?
5. How body responds to viruses ?
6. What do you understand by immune invasion ?
7. What are the merits and demerits of passive immunization ?
8. Which methods are adopted to prepare whole organism vaccines ?

SECTION—C

1. How T cells recognize exogenous and endogenous antigens ?
2. Write down the procedure for sandwich ELISA.
3. Give an account of immunopathological consequences of parasitic infections like malaria and babesia.
4. How to make purified macromolecules vaccines ?