Exam. Code : 107404

Subject Code : 1862

B.Sc. (Biotechnology) 4ᵗʰ Semester

BT–5 : IMMUNOTECHNOLOGY

Time Allowed—3 Hours]　　　　　　　[Maximum Marks—40

Note :— (1)　Section A is compulsory. (**1×8= 8**)

　　　　(2)　Section B : Attempt any **FIVE** questions. (**4×5= 20**)

　　　　(3)　Section C : Attempt any **TWO** questions. (**6×2 = 12**)

SECTION—A (Compulsory)

Give a brief account of the following :

1.　Properties of T dependent antigens.

2.　Give the division of T cells in to subsets based upon their markers.

3.　Principle of RIA.

4.　Principle of the method of ELISA for the detection of antigens.

5.　How extracellular bacteria are killed by immune response ?

6.　Immune invasion.

7.　Adjuvants.

8.　What is the requirement of passive immunization ?

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SECTION—B

1. Which are the surface markers on mature T helper cells ?
2. How T cells are typed ?
3. How to quantify the antigens by single immunodiffusion methods ?
4. Describe the agglutination method of a pathogenic bacteria and its significance.
5. What are the immunopathological consequences of parasitic infections ?
6. How immunity works to eradicate polio virus ?
7. What are the advantages and disadvantages of Active immunization with whole organism attenuated vaccines ?
8. Which routes are followed for immunizing through vaccines ? Give one example each.

SECTION—C

1. Compare and contrast the various types of haemagglutination based methods as an immunodiagnostic tool.
2. How body responds to intracellular bacteria and eradicate them ?
3. The purified macromolecules are better materials to prepare vaccines than the whole microorganisms vaccines. Comment.
4. Which markers help T cells to recognize antigens and how ?

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