

NOTE:

1. Attempt all questions.
2. All questions carry equal marks.
3. Draw neat labeled diagrams wherever necessary.
4. For Q 2, Q 3 and Q 4 attempt A and B OR C and D.

Q 1 Do as directed (Any fifteen)

15

1. Name the largest lymphatic vessel.
2. Name the macrophage like cell in the lung
3. Name the congenital birth defect in humans in which thymus fails to develop
4. Define naive cells
5. Which cell develops into macrophage after settling in tissues?
6. Name the C3 convertase in the lectin complement pathway.
7. Give the significance of factor H.
8. State true / false: HLA codes for MHC.
9. What is ITAM?
10. State true/ false: Invariant Chain is involved in the endocytic pathway for antigen processing.
11. Give an example of a co-receptor of a T cell.
12. State true/ false: T helper cells secrete IL2 after activation.
13. State true/ false: TCR is a homodimer made of alpha chain.
14. Define: Thymus Independent Antigens
15. Give one example of substrate used in ELISA.
16. Give One Example of complete Antibodies.
17. When was radioimmunoassay developed?
18. What is the full form of ELISA?
19. State true/false: In a flow cytometer the particles are analyzed all at a time.
20. _____ molecules are manufactured by the body that help fight antigens
 - a) antigen
 - b) antigen enzyme conjugate
 - c) antibody enzyme conjugate
 - d) antibody

Q 2 A Give a brief account on lymph node and spleen. 08

Q 2 B Describe the alternative complement pathway in detail. 07

OR

Q 2 C Write a note on regulation of the complement system. 08

Q 2 D Describe the mucosal associated lymphoid tissue in brief 07

Q 3 A Write a note on the experimental evidence proving Self MHC restriction of T-cell. 08

Q 3 B Discuss the cytosolic pathway for Antigen processing and presentation. 07

OR

Q 3 C Discuss the process of activation of T cells. 08

Q 3 D Describe the structure of BCR with its co-receptors. 07

Q 4 A Describe Immunoprecipitation reactions with suitable example 08

Q 4 B What are the applications of flow cytometry in immunodiagnostics? 07

OR

Q 4 C What is a cross-reactivity in immunology? 08

Q 4 D Explain complement fixation test. 07

Q 5 Write short note on any three of the following 15

a) Mononuclear phagocytes

b) Complement Deficiencies

c) B- cell maturation

d) Direct ELISA

e) Blood Grouping
