

16/10/2019

Immunology

B7

Q.P. Code:

2 ½ Hours

Total Marks: 75

1. Attempt **all** questions.
2. **All** questions carry **equal** marks.
3. Draw **neat labeled diagrams** wherever necessary.
4. Use of **log tables** and **non-programmable calculator** is **allowed**.
5. 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. Give an example of a cytokine secreted by macrophage.
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 co receptor of 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. What is chromogenic substrate?
16. What is agglutination titre?
17. Southern Blotting technique is used for detection of _____
 - a. Proteins
 - b. DNA fragments
 - c. mRNA
 - d. None of above
18. What does ELISA stand for?
19. What is Prozone Effect?
20. Define Precipitation reaction

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

08

Q 2 B	Describe the lectin complement pathway in detail.	07
OR		
Q 2 C	Give a brief account on mononuclear phagocytes and add a note on phagocytosis	08
Q 2 D	Describe the mucosa 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	Diagrammatically explain double immunodiffusion	08
Q 4 B	Explain ELISPOT Assay	07
OR		
Q 4 C	What is Flow Cytometry	08
Q 4 D	Describe Immunoprecipitation reactions with suitable example	07
Q 5	Write short note on any three of the following	15
a	T lymphocytes	
b	Complement Deficiencies	
c	B- cell maturation	
d	Precipitation Reactions	
e	Western Blotting	