

QP Code: 312019

Reg. No.....

**Third Year B.Sc. Medical Microbiology Supplementary Examinations  
August 2025**

**Immunology, Immuno Chemistry and Serology I**

**(2016 Scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay**

**(2x15=30)**

1. Define immunity. Classify immunity. Describe the adaptive immunity and its types with example for each.
2. Define immune response. Describe in detail the mechanism and difference between humoral and cell-mediated immune response.

**Short Essay**

**(2x10=20)**

3. Define complement. Write in detail about classical complement pathway.
4. Define antigen-antibody reactions. Describe in detail about agglutination with types and examples for each.

**Short Answers**

**(6x5=30)**

5. ELISA.
6. Discuss the mechanism of discrimination of self and non-self-molecules.
7. Define immunogenicity. Explain their characteristics of immunogenicity.
8. Describe genetic organization of MHC I and MHC II.
9. Describe the types of antibodies and their individual role in immune response.
10. Describe the role of TNF and IFN in immune system.

**Comment on**

**(10x2=20)**

11. Biological effects of complement.
12. Eosinophils.
13. Dendritic cells.
14. Coombs test.
15. Role of mucus membrane in immunity.
16. Vectors.
17. Prozone phenomenon.
18. Abnormal immunoglobulins.
19. Two uses of HLA typing.
20. Haptens.

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