

LSC 501 (Immunology and Immunotechnology)**Instructions:**

All questions are compulsory.

Illustrate your answers with neat diagrams wherever necessary

1. (A) What is acquired immunity? Discuss active and passive immunity. [7]
- OR
- (A) Discuss components of immune system. Discuss various cells involved in developing immunity.
- (B) What is Complement System? Discuss how properdin pathway of complement is working for killing pathogens. [7]
- OR
- (B) Discuss Tumor Immunity and its importance.
2. (A) Give a detail account on: Antigenic Structure of Bacteria. [7]
- OR
- (A) What is Immunoglobulin? Explain physical, chemical and biological properties of various types of immunoglobulins along with their significance.
- (B) What do you mean by antigenicity? Explain basic properties and criteria for antigenicity. [7]
- OR
- (B) Explain Major Histocompatibility Complex and Human Leucocyte Antigen Complex and their immunological significance.
3. (A) Discuss various immunological tests based on precipitation reaction and their applications. [7]
- OR
- (A) Define Vaccine. Explain various types of Vaccines with suitable examples.
- (B) Describe RIA and its significance. [7]
- OR
- (B) Give a detailed account on "Agglutination Tests".
4. Describe **Any Two**: [14]
- (A) Cytolytic and cytotoxic hypersensitivity.
- (B) Auto-immune diseases.
- (C) Immunodeficiency and its types.
- (D) Transplantation immunity and its significance.
5. Answer **very briefly** only [14]
- 1 Explain: CMI.
 - 2 Mention two families of cytokines.
 - 3 Explain – Isoantigens and their significance.
 - 4 Explain – Dendritic cells and their importance.
 - 5 What is ELISA? Explain its use.
 - 6 Mention hazards of Vaccines.
 - 7 Define Reaginic Hypersensitivity with example.