

Seat No. : \_\_\_\_\_

**AD-129**

April-2023

**B.Sc., Sem.- VI**

**CC-309 : Biochemistry**

**(Immunology)**

**Time : 2:30 Hours]**

**[Max. Marks : 70**

**Instructions :** All questions carry equal marks.

1. (A) Write a note on organs of immune system. **8**  
(B) What is the effect of followings on host system ? **6**
  - (1) Leucocidin.
  - (2) Hyaluronidase.
  - (3) Protein A
- OR**
- (A) Discuss the mode of action of : (1) Tetanus toxin (2) Cholera toxin **8**  
(B) State six differences between Endotoxin and Exotoxin. **6**
2. (A) Explain : Mode of action of interferon. **6**  
(B) Describe alternative pathway of complement activation. **8**
- OR**
- (A) Explain : Inflammatory response as a defense mechanism of host. **8**  
(B) Write differences between Humoral and cell mediated immune response. **6**
3. (A) Discuss : Precipitin curve of antigen & antibody reaction. **7**  
(B) Explain : Agglutination inhibition reaction with example. **7**
- OR**
- (A) What is RIA ? Discuss in detail. **7**  
(B) Explain Hybridoma technique and state its two applications. **7**
4. Write a note on : (ANY TWO) **14**
  - (1) Type II hypersensitivity
  - (2) Recombinant vaccine and its uses
  - (3) Types of Graft rejection and the mechanism of rejection
  - (4) Type IV Hypersensitivity

5. Answer the followings : (ANY SEVEN)

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- (1) Define : (1) LD<sub>50</sub> (2) Primary pathogen
  - (2) What is Toxoid? How it is prepared ?
  - (3) What is an endogenous pyrogen ? Give an example.
  - (4) In which body fluids lysozyme is present ? Where it acts ?
  - (5) Name the sugar and protein of MBL.
  - (6) What is an adjuvant ? Give an example.
  - (7) Define : (1) Affinity (2) Avidity
  - (8) What is Passive immunization ? Give one example.
  - (9) State the full form of ELISA and name the enzyme used in this technique.
  - (10) Define vaccine and state the full form of MMR.
  - (11) What is Allograft and Isograft ?
  - (12) Define Hypersensitivity. Give an example of Type III hypersensitive reaction.
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