

B.Sc. Sem.-6 Examination**CC-309****Biochemistry****April-2025****Time : 2-30 Hours]****[Max. Marks : 70**

- Q1(a) Explain : Portals of entry for microbes (07)
- Q1(b) Discuss mode of action of : 1.Diphtheria toxin. 2. Cholera toxin (07)
- OR
- Q1(a) Discuss followings as microbial factors of invasiveness (08)
1. Hyaluronidase.2.protein-A 3. Leucocidin. 4. Capsule
- Q1(b) State only six differences between exotoxin and Endotoxin (06)
- Q2(a) Write a note on: Inflammatory response as host defense mechanism (08)
- Q2(b) What is phagocytosis? Describe the process (06)
- OR
- Q2(a) Write a note on: Classical pathway of complements activation (08)
- Q2(b) What is primary and secondary immune response? Explain (06)
- Q3(a) What is SIRD & DIRD? Explain and state their use in immunology (08)
- Q3(b) Discuss: Agglutination inhibition reaction with suitable example (06)
- OR
- Q3(a) Write a note on RIA technique with its applications (07)
- Q3(b) What is Hybridoma technique? Explain (07)
- Q4(a) Discuss: Type I hypersensitivity (08)
- Q4(b) Define Vaccine and briefly explain about Recombinant vaccines (06)
- OR
- Q4(a) What is graft? Discuss various types of grafts in immunology (07)
- Q4(b) Explain: Type IV hypersensitivity (07)
- Q5 **ANSWERY ANY SEVEN** (14)
- 1 Define: 1.Primary pathogen. 2.Invasiveness
 - 2 Give examples of neurotoxin and Cytotoxin
 - 3 State two functions of complements
 - 4 What is Lysozyme? State its mode of action
 - 5 What are haptens? Give an example
 - 6 Which antibody has maximum antigen binding sites? What is its shape
 - 7 Give full form of : 1.DPT 2.MMR
 - 8 What is the contribution of Edward Jenner and Milstein & Kohler
 - 9 Write full form of ELISA and name the commonly used enzymes in this technique?
 - 10 Draw and label precipitin curve
 - 11 What is the chemical nature of ; 1. Complements 2: Interferon
 - 12 What is complete and incomplete adjuvant?
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