

Seat No. : _____

AD-106

April-2016

B.Sc., Sem.-VI

CC-309 : Biochemistry

Time : 3 Hours]

[Max. Marks : 70

Instructions : (1) All questions carry equal marks.

(2) Draw diagram where it is necessary.

1. (a) Write a note on : Cells and organs of immune system. **7**

(b) What are endotoxins ? Discuss their mode of action. **7**

OR

(a) Discuss : Microbial enzymes as virulence factor. **7**

(b) Write differences between endotoxin and exotoxin. **7**

2. (a) Discuss inflammatory response as a host defense mechanism. **6**

(b) What are complements ? Discuss : Alternative pathway of complement activation. **8**

OR

(a) Explain : Mechanism of action of interferon. **6**

(b) Write a note on structure & functions of Immunoglobulin. List various types of Igs. **8**

3. Explain : (any two) **14**

(1) Agglutination inhibition test

(2) Compliment fixation test

(3) Radioimmunoassay technique

OR

Explain : (any two) **14**

(1) Type I Hyper sensitive reaction

(2) Hybridoma technique

(3) Immunoelectrophoresis

4. Write a note on : (any **two**) **14**
- (1) Specialized transduction
 - (2) Chromosome mapping
 - (3) Congugation & F⁻X Hfr
5. Answer the following :
- (1) Define : Invasiveness. B. Secondary pathogen. **2**
 - (2) What is active & passive immunization ? **2**
 - (3) What is interferon ? List various types of interferon. **2**
 - (4) Define adjuvant with example. **2**
 - (5) Which immune response is faster primary or secondary ? Why ? **2**
 - (6) What is antibody titer ? **1**
 - (7) List two applications of ELISA. **2**
 - (8) What is an epitop ? **1**
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