



DHH-003-013202

Seat No. _____

M. Sc. Biotechnology (Sem. II) (CBCS) Examination

May / June – 2015

BT - 208 : Immunology

(Core)

Faculty Code : 003

Subject Code : 013202

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1. Answer the following (Any SEVEN)

2x7=14

- Explain the process of Phagocytosis with a neat labeled diagram.
- Briefly discuss the role of interferon in cellular protection
- What are Haptens? Explain with example.
- Enlist various types of Agglutination reactions
- What do you mean by lymphoid system?
- What is MHC? Explain the structural organization of MHC-II molecule
- Define Immunodeficiency and enlist its various types
- What do you mean by HAT medium? What is its function?
- Draw a labeled diagram of Thymus.
- Write a brief description of IgM.

2. Answer the following (Any TWO)

7x2=14

- Write a detailed note on Innate Immunity
- Explain the mechanism of generation of Immunological diversity
- What are Vaccines? Discuss various types of vaccines in detail.

3. Answer the following

- Define ELISA and explain its mechanism and application **05**
- Write a note on Monoclonal Antibiotics **05**
- Discuss Secondary organs of Immune System **04**

OR

3. Answer the following

- Write a brief note on types and functions of Cytokines **05**
- Explain the mechanism of self and non-self discrimination by the immune system **05**
- Discuss various types of Precipitation reactions **04**

4. Answer the following (Any TWO)

7x2=14

- Write an essay on Acquired immunity
- Enlist factors affecting immunogenicity and discuss each in detail
- What is tolerance? Describe the mechanism of central and peripheral tolerance

5. Answer the following (Any TWO)

7x2=14

- a. Write an essay on Hypersensitivity
 - b. Discuss HLA typing methods
 - c. Write a detailed note on lymphocyte development and activation
 - d. Describe structure and functions of various classes of Antibody
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