

(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 9590**

Roll No.

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**B.Tech.**  
**(SEMESTER-IV) THEORY EXAMINATION, 2011-12**  
**IMMUNOLOGY**

**Time : 3 Hours ]**

**[ Total Marks : 100**

**Note :** Attempt questions from each section as indicated.

**Section – A**

1. Attempt **all** parts of the following :

**10 × 2 = 20**

- Give any example of innate immunity.
- Where does hematopoiesis take place ?
- Define Hapten.
- What is IFCA ?
- On which chromosome MHC molecule is found ?
- Name any MHC molecule found in human system.
- Name any test based on precipitation reaction.
- Name any use of monoclonal antibody.
- Which type of hypersensitivity is involved in bee bite ?
- Why immunity fails to detect tumours ?

**Section – B**

2. Attempt any **three** parts of the following :

**3 × 10 = 30**

- Describe how do Cell Mediated Immunity works.
- What factors affect the immunogenicity ?

- (c) Explain the structure and function of MHC class I molecule.
- (d) Write the principle and function of ELISA.
- (e) Explain the immune mechanism of graft rejection.

**Section – C**

Attempt **all** questions :

**12.5 × 4 = 50**

3. How do T and B cell matures ?

**OR**

Explain the molecules involved in immune system.

4. Explain the structure and function of different types of Antibodies found.

**OR**

Explain the structure of an Immunoglobulin molecule.

5. Explain the process of Western Blotting.

**OR**

Explain on what principle Vaccine works.

6. How do our immune system fight against viral infections ?

**OR**

How do HIV defeats our immune system ?

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