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

PAPER ID : 9590   Roll No.

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 : $10 \times 2 = 20$

    (a)   Give any example of innate immunity.

    (b)   Where does hematopoiesis take place ?

    (c)   Define Hapten.

    (d)   What is IFCA ?

    (e)   On which chromosome MHC molecule is found ?

    (f)   Name any MHC molecule found in human system.

    (g)   Name any test based on precipitation reaction.

    (h)   Name any use of monoclonal antibody.

    (i)   Which type of hypersensitivity is involved in bee bite ?

    (j)   Why immunity fails to detect tumours ?

Section – B

2.   Attempt any **three** parts of the following : $3 \times 10 = 30$

    (a)   Describe how do Cell Mediated Immunity works.

    (b)   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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