H-56081

Seat No. _____

M. Sc. (Part-II) Examination

April / May – 2003

Biotechnology : Paper-VI

(Immunology & Immunotechnology)

Time : **3** Hours] [Total Marks : **75**

Instruction : All questions carry equal Marks.

1. Explain the functions of any 3 of the following:
(i) Natural Killer Cells (ii) Macrophages (iii) Dendritic cells (iv) Mast Cells (v) M cells (vi) T helper cells

2. Explain the structure and properties of antibodies generated in different kinds of secondary immune responses.

OR

Explain the antigenicity of an antibody injected as an antigen to another animal.

3. Explain any THREE of the following :

(i) Factors determining the immunogenicty
(ii) MHC locus
(iii) Use of Agglutination and Agglutination inhibition
(iv) MHC polymorphism
(v) Uses of Fluorescence associated Cell sorter
(vi) Selection strategy of hybridoma cell lines

4. How complement system gets activated ? What is the significance of cascade of complement system?

OR

How complement system is prevented from systemic anaphylaxis?

5. How does a B lymphocyte produce different types of antibodies with similar epitope binding ability?

OR

What is antigen presentation? Explain the processes involved in MHCI and MHC II antigens.
