

III B.Tech II Semester Supplementary Examinations, Apr/May 2008

IMMUNOLOGY

(Bio-Technology)

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. What is meant by immunity and explain about the various components involved in the immune system. [4+12]
2. Explain about gene regulation in anti body production. [16]
3. Write a short notes on: [8+8]
 - (a) congenic.
 - (b) MHC class I
 - (c) MHC class II
 - (d) MHC class III
4. What a short notes on: [8+8]
 - (a) interferons.
 - (b) interlevkines.
 - (c) T_c cells.
 - (d) T_H cells.
5. Define hybridoma and explain monoclonal antibody production? [3+13]
6. Discuss ELISA in detail along with its applications? [16]
7. Give an account on type I hypersensitivity? [16]
8. Define autoimmunity and explain with suitable examples? [8+8]

Code No: RR322305

Set No. 2

III B.Tech II Semester Supplementary Examinations, Apr/May 2008

IMMUNOLOGY

(Bio-Technology)

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. How the various types of immune cells are originated. [16]
2. Define antibody and describe about their structure in detail with a neat diagram? [12+4]
3. Explain about the MHC and what is their role in Humoral and cellular immunity. [5+11]
4. (a) What Macrophages and what is its role in cell mediated immunity. [8+8]
(b) What are langerhance cells and what is its role in cell mediated immunity.
5. Define hybridoma and explain monoclonal antibody production? [3+13]
6. Explain the process of T_H cell activation in detail? [16]
7. Explain type II hypersensitivity with examples? [16]
8. Describe different types of systemic autoimmune diseases and explain in detail about anyone of them? [4+12]

Code No: RR322305

Set No. 3

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IMMUNOLOGY

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Time: 3 hours

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**Answer any FIVE Questions
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1. (a) What are adjuvants and what is their contribution to immunogenicity. [2+6]
(b) Explain about the antigenicity and antigenic determinants. [4+4]
2. Define immunoglobulin and explain about its structure and function. [3+8+5]
3. What are monoclonal antibodies and explain its importance? [12+4]
4. What are interferons and explain about various types of cytokines . [8+8]
5. Define hybridoma and explain monoclonal antibody production? [3+13]
6. Explain different types of forces that causes antigen - antibody interactions? [16]
7. Explain the blood transfusion mechanism in detail? [16]
8. Define immunotoxins & explain their roles in terms of therapy? [8+8]

Code No: RR322305

Set No. 4

III B.Tech II Semester Supplementary Examinations, Apr/May 2008

IMMUNOLOGY

(Bio-Technology)

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. What are the various cells involved in the immune response and explain about their role in immune response. [3+13]
2. Explain about gene regulation in anti body production. [16]
3. What are monoclonal antibodies and explain its importance? [12+4]
4. (a) What Macrophages and what is its role in cell mediated immunity. [8+8]
(b) What are langerhance cells and what is its role in cell mediated immunity.
5. (a) Explain the process for enrichment of Hematopoietic stem cells? [8+8]
(b) Give an account on the clinical applications of stem cells?
6. (a) Give an account on the properties of cytokines? [8+8]
(b) Discuss the functions of cytokines in detail?
7. Give an account on type I hypersensitivity? [16]
8. Describe different types of systemic autoimmune diseases and explain in detail about anyone of them? [4+12]
