

Code No: 07A62305

R07

Set No. 2

III B.Tech II Semester Examinations, December 2010

IMMUNOLOGY

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Describe the role of TNF in cancer therapy.
(b) Give an account of proto oncogenes. [8+8]
2. Compare and contrast between MHC Class- I and MHC class-II. [16]
3. Explain the general structure of Immunoglobulin. [16]
4. Explain the process involved in the activation of B cells. [16]
5. Give a brief account on the five types of Hypersensitive reactions. [16]
6. What is meant by complement? What are the different pathways of Complement system? Explain them in detail. [16]
7. Discuss the roles of spleen and lymph node as secondary lymphoid organs. [16]
8. Explain about the development and differentiation of B cells. [16]

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R07**Set No. 4**

III B.Tech II Semester Examinations, December 2010

IMMUNOLOGY

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Write about the multi-gene families involved in TCR production. [16]
2. Discuss in detail about different classes of Immunoglobulins? [16]
3. Discuss the functions of secondary lymphoid organs in detail? [16]
4. (a) How are B lymphocytes activated by T-cell independent Antigens?
(b) What is ADCC, and what is its role in the effector phase of humoral immunity? [8+8]
5. (a) Explain about the antigenicity and antigenic determinants.
(b) Discuss the role of biological system to immunogenicity? [8+8]
6. Give an account on the functional classification of cancer-associated genes? [16]
7. How can you classify autoimmune diseases? Explain Localised autoimmune diseases. [16]
8. Discuss the following
(a) NK Cells
(b) Cytokines
(c) Kupffer cells
(d) CD antigens. [4+4+4+4]

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R07**Set No. 1**

III B.Tech II Semester Examinations, December 2010

IMMUNOLOGY

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. What are T- lymphocytes? Discuss the types of T-cells in detail. [16]
2. Give an account on the overview of the immune system? [16]
3. Discuss the following
 - (a) Peyer's patches
 - (b) GALT
 - (c) Interleukin [4+4+8]
4. What are the conditions that lead to modification of self antigens, which leads to autoimmune disorders? [16]
5. Write in detail about HLA genes and antigens. [16]
6. Describe the preparation and characterization of monoclonal antibodies using Hybridoma technology. [16]
7. What is the role of cross-priming in graft recognition? Explain the importance of drugs in transplantation. [16]
8. Define antibody. Describe about their structure in detail with a neat diagram? [16]

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R07

Set No. 3

III B.Tech II Semester Examinations, December 2010

IMMUNOLOGY

Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. What is Thymus? Discuss the structure & function of thymus? [16]
2. Write in detail about CLIP in endocytic pathway. [16]
3. What are Immunotoxins? Explain about their therapeutic significance. [16]
4. Discuss the following
(a) CDs
(b) Mast cells
(c) granulocytes. (5+6+5)
5. (a) Write a short note on acute phase reactants
(b) Give an account of Haptens in detail. [8+8]
6. Define affinity and determine antibody affinity by equilibrium dialysis method? [16]
7. Explain how immune cells detect the presence of pathogens and cancer cells (pattern recognition receptors, antigen receptors, antigen presentation pathways, NK cell receptors). [16]
8. Describe how defects in immune cell regulation can lead to immunodeficiency diseases or autoimmune diseases. [16]
