

Code No: 07A62305

**R07**

**Set No. 2**

**III B.Tech II Semester Examinations, APRIL 2011**  
**IMMUNOLOGY**  
**Bio-Technology**

**Time: 3 hours**

**Max Marks: 80**

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

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1. Explain the significance of the following in allergic reactions.
  - (a) Histamine.
  - (b) Mast cells. [8+8]
2. Discuss the role of lymphatic system in immunity in detail? [16]
3. Describe the following:
  - (a) Autograft.
  - (b) Allograft. [8+8]
4. Explain different types of antigen-antibody interactions? [16]
5. Give an account of Antibody Dependent Cell mediated Cytotoxicity (ADCC). [16]
6. (a) What is Immunogenicity & antigenicity? Discuss  
(b) Discuss the properties of B- cell receptors? [6+10]
7. What is MHC? How is MHC involved in identifying self? Explain the critical role of MHC in maturation of T cells. [16]
8. Explain about the T & B cell interaction with surface molecules. [16]

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**Set No. 4**

**III B.Tech II Semester Examinations, APRIL 2011  
IMMUNOLOGY  
Bio-Technology**

**Time: 3 hours**

**Max Marks: 80**

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

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1. (a) Give an account of Recombination Signal Sequences (RSS) [8+8]  
(b) Write short notes on IgA.
2. What effect does thymectomy have on a neonatal mice & adult mice? Why do these effects differ? Explain. [16]
3. Give an account of different types of graft rejection reactions. [16]
4. (a) Discuss the role of MHC in detail?  
(b) Define endocytosis. Discuss  
(c) Interferons. (8+4+4)
5. Mention different cells with phagocytic ability and explain any two of them? [16]
6. Write a short note on the following:  
(a) Positive selection of T cells  
(b) Negative selection of T cells. [8+8]
7. Critically discuss current concepts concerning the immunopathogenesis of .  
(a) Systemic lupus erythematosus.  
(b) Graves disease. [8+8]
8. Write short notes on the following:  
(a) Role of complement protein in humoral immunity.  
(b) Immunoglobulin idiotype production. [8+8]

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**Set No. 1**

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IMMUNOLOGY  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Discuss the role of interferons in cancer therapy. [16]
2. Discuss the functions of secondary lymphoid organs in detail? [16]
3. What are the various cells involved in the immune response? Explain about their role in immune response? [16]
4. Discuss about the events between binding of the peptide and MHC by the TCR? Outline the main differences between IgM and TCR. [16]
5. (a) Define HAT medium and explain its role in hybridoma technology?  
(b) Give an account on the advantages of hybridoma technology? [8+8]
6. What are sequestered antigens? Explain their role in autoimmune diseases. [16]
7. Discuss about the different classes of immunoglobulins. Explain their role in Immunity. [16]
8. (a) Write a short notes on the significance of chemical composition of the molecules involved in Immunogenicity  
(b) Write a note on antigen presentation via class II MHC molecules. [8+8]

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**Set No. 3**

III B.Tech II Semester Examinations, APRIL 2011  
IMMUNOLOGY  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Write short notes on the following.
  - (a) Explain the significance of Thymidine Kinase in hybridoma technology.
  - (b) Give an account of chimeric antibodies. [8+8]
2. Discuss the significance of TAP in cytosolic pathway and accessory molecules of TCR. [16]
3. Discuss ELISA in detail along with its applications? [16]
4. What is antibody-mediated immunity? Discuss in detail? [16]
5. Give an account on the functional classification of cancer-associated genes? [16]
6. Write short notes on the following.
  - (a) Primary mediators of anaphylaxis.
  - (b) Secondary mediators of anaphylaxis. [8+8]
7. Discuss the differences between thymus & Bone marrow. & Explain the role of each one? [16]
8. (a) Give an account of Super antigens  
(b) Write a note on MHC class I molecules. [8+8]

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