 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

 **M.Sc.** DEGREE EXAMINATION - **MEDICAL LAB. TECHNOLOGY**

SECOND SEMESTER – APRIL 2012

# ML 2811 - IMMUNOLOGY

 Date : 19-04-2012 Dept. No. Max. : 100 Marks

 Time : 9:00 - 12:00

Section A

Answer ALL the Questions: (10 ×2 = 20 Marks)

1. Categorize the cells of immune system.
2. What is immunological memory?
3. Write any four properties of an antigen.
4. Define cross reactivity.
5. What are haptens?
6. What is immune tolerance?
7. What is Crohn’s disease?
8. Mention the symptoms of multiple sclerosis.
9. Define avidity.
10. What is antibody cross reativity?

SECTION B

Answer any FOUR of the following: (4 ×10 = 40 Marks)

1. Write notes on granulocytes.
2. What are the two types of adaptive immunity? Explain.
3. How are monoclonal antibodies produced? Explain
4. Explain the category of hypersensitivity that best describes haemolytic disease of the newborn.
5. Elaborate immunological aspects of DiGeorge syndrome.
6. Describe the purpose and technique of immunodiffusion.

SECTION C

Answer any TWO of the following: (2 ×20= 40 Marks)

1. Write short notes on a) Bone marrow b) Thymus c) Spleen d) Lymph node.
2. Explain classical and alternative pathways of the complement system with suitable diagram.
3. Tabulate the vaccination schedule in children.
4. Discuss different types of ELISA.

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