LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

M.Sc. DEGREE EXAMINATION – **ZOOLOGY**

SECOND SEMESTER - APRIL 2015

ZO 2819 - IMMUNOLOGY

Part A

Date : 21/04/2015 Time : 01:00-04:00

Dept. No.

Max.: 100 Marks

Answer ALL the questions

- 1. Relate somatic variation theory to immune system.
- 2. Expand GTP, MALT, IDDM and FADD.
- 3. Define antigen presenting cells.
- 4. Describe a method to identify human T cells.
- 5. Explain autoimmunity.
- 6. What are anti idiotypic antibodies ?
- 7. Write the characteristics of innate immunity.
- 8. Differentiate interferon from opsonin.
- 9. Explain reticular dysgenesis.
- 10. Pick out the points of evolution of adaptive innate system.

Part B

Answer any FOUR questions

- 11. Describe the structure, characteristics and functions of IgG and IgM.
- 12. Give an account on the applications of Monoclonal antibodies.
- 13. Describe the role of cytokines in immunogenic reaction.
- 14. Explain the immune responses shown to viral, bacterial and parasite infections.
- 15. Discuss the role of secondary lymphoid organs in immunity.
- 16. Write notes on AIDS.

Part C

Answer any TWO questions

- 17. a. What is MHC restriction?
 - b. Explain its immunologic significance.
- 18. a. Define antigen processing.
 - b. Elucidate various steps in processing and presentation of antigens by cytosolic pathway.
- 19. a. Mention the evidences that implicate CD4+ , T cells, MHC and TCR in autoimmunity.
 - b. What are the modern methods used in the treatment of autoimmune disease?
- 20. a. Give an account of the different types of vaccine.
 - b. Highlight the advantages and disadvantages of vaccines.



(10×2=20 Marks)

(4×10=40 Marks)

(2×20=40 Marks)