



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION - ZOOLOGY**

**FOURTH SEMESTER – APRIL 2013**

**ZO 4954 - IMMUNOLOGY**

Date : 03/05/2013

Dept. No.

Max. : 100 Marks

Time : 1:00 - 4:00

**PART-A**

Answer **ALL** the following questions

**(10×2=20)**

1. Define Haematopoiesis.
2. What is Humoral immunity?
3. Define Transplantation.
4. What are Adjuvants?
5. Short notes on Erythroblastosis foetalis
6. Give a brief account on Cytokines
7. Comment on different types of Antibodies
8. Expand ELISA and RIA
9. What are super antigens?
10. Define Apoptosis.

**PART-B**

Answer **Any FOUR** of following Questions

**(4×10=40)**

11. Write notes on the major contributions of Louis Pasteur and Karl Landsteiner.
12. Describe the process of Antigen - Antibody reaction.
13. What are major Histocompatibility Complex? Explain in detail.
14. Briefly describe the Molecular biology of Antigens.
15. All Immunogens are antigens but not all antigens are immunogens- Discuss. What factors determine immunogenicity?
16. Explain the structure and function of lymphoid organs with neat illustration.

**PART-C**

Answer **Any TWO** of the following Questions

**(2×20=40)**

17. Highlight the role of Lymphocytes and macrophages in Immune system.
18. Explain the mechanism of T-cell maturation and developmental processes
19. Discuss in detail the types of Hypersensitivity reactions.
20. Write an essay on recent trends in Immunology.

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