**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086**
(For candidates admitted during the academic year 2009 – 10)

**SUBJECT CODE: BY/PC/IM34**

**M. Sc. DEGREE EXAMINATION, NOVEMBER 2010**
**BIOTECHNOLOGY**
**THIRD SEMESTER**

**COURSE : CORE**
**PAPER : IMMUNOTECHLOGY**
**TIME : 3 HOURS** **MAX. MARKS: 100**

## SECTION – A

**ANSWER ALL QUESTIONS: (20 x 1 = 20)**
**DEFINE / EXPLAIN THE FOLLOWING. EACH IN ABOUT 50 WORDS.**

1. What are sequestered antigens?
2. What is the principle of Nephelometry?
3. State the importance of dendritic cells.
4. Name the chromosomes in which human antibody coding genes are present.
5. What kind of reactions soluble antigens generates?
6. What is MLR?
7. What are the beneficial aspects of anaphylactic reaction?
8. Give examples of the biomolecules that initiate C3 pathway.
9. Name the cells that are involved in generating immune response against viral antigens.
10. What is zeta potential?
11. What is hay fever?
12. What are abzymes?
13. What are the effector molecules of innate immune response?
14. What is exocytic pathway?
15. State the role of type I T helper cells.
16. What is NBT assay?
17. Name the lymphoid organ that is involved during septicemia.
18. What are toxoids? Give examples.
19. What are T Suppressor cells?
20. State the different principles of precipitation reactions.

## SECTION – B

**ANSWER ANY FOUR QUESTIONS. EACH IN ABOUT 600WORDS: (4 x 10 = 40)**

21. Describe the process of antigen processing and presentation.
22. What are cytokines and explain about their role in immune regulation.
23. Explain major histocompatibility complex molecules.
24. Explain about the applications of HAT medium.
25. Write about the classification of antibodies.
26. Write about the immune response against viral infection.

## SECTION – C

**ANSWER ANY TWO QUESTIONS. EACH IN ABOUT 1500WORDS :( 2x20 = 40)**

27. Explain about the anatomy and functions of lymphatic system.
28. Explain hypersensitivity.
29. Write about the assays that are required to be performed to match the tissue of donor and recipient before transplantation.
30. Write about the assays that are performed in lab which are based upon precipitation reactions and add a note about their result interpretation.

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