

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086

(For candidates admitted during the academic year 2006 – 07)

SUBJECT CODE: BY/PC/IM35

M. Sc. DEGREE EXAMINATION, NOVEMBER 2007

BIOTECHNOLOGY

THIRD SEMESTER

COURSE : CORE  
PAPER : IMMUNOLOGY  
TIME : 3 HOURS

MAX. MARKS: 100

**SECTION – A**

**ANSWER ALL QUESTIONS:**

**20 x 1 = 20**

**DEFINE / EXPLAIN THE FOLLOWING. EACH WITH IN 50 WORDS.**

1. Lysozyme
2. GALT
3. Mast cells
4. Lymphocyte clones
5. Immunoglobulin domains
6. F<sub>C</sub>
7. IgM
8. Zone of Equilibrium
9. Plasma cells
10. MHC
11. Antigen presenting cells
12. Cytokines
13. TH cells
14. Human leucocyte antigens
15. Radioimmunoassay
16. ELISA
17. Active immunization
18. Immunoprophylaxis
19. Hyperimmune serum
20. Anaphylactic shock.

**SECTION – B**

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

21. What is anamnesis? Explain its immunological significance.
22. Distinguish between primary and secondary lymphoid organs with suitable examples.

23. How will you isolate antibodies by affinity chromatography?
24. Explain the role of interferons during viral infection.
25. Write a short note on B and T cell mitogens.
26. “Passive immunity lacks memory response”- Discuss.

### SECTION – C

**ANSWER ANY TWO QUESTIONS. EACH IN ABOUT 1500WORDS (2 x 20 = 40)**

27. Give a detailed account on various methods of classification of antigens. Add a note on salient features of antigenic determinants.
28. What are ‘Magic Bullets’? Explain the conventional method of their production and applications.
29. “Excessive immune reactivity is injurious to health”- Discuss this phenomenon with a suitable example.
30. Elucidate immunological basis for vaccine development, and explain the method of preparation and efficacy of any two vaccines.

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