

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2015 – 2016 & thereafter)

SUBJECT CODE: 15BY/PC/IM34

M. Sc. DEGREE EXAMINATION - NOVEMBER 2017
BIOTECHNOLOGY
THIRD SEMESTER

COURSE : CORE
PAPER : IMMUNOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS:

(20 x 1 = 20)

1. Write the components of innate immune system.
2. Define antigenic determinants.
3. What are complement cascade?
4. Write the structure of B-cell receptors.
5. What is leukocyte extravasation?
6. What are the causes of allergy?
7. Define cell mediated immunity
8. What is autoimmune disease?
9. Write the importance of immunosuppressant drugs.
10. What is graft rejection?
11. What are adjuvants?
12. Define abzymes.
13. What is antibody affinity?
14. What are grafts?
15. What is hybridoma technology?
16. Define paratope.
17. What is agglutination?
18. What are granulocytes?
19. Mention the secondary organs of immune system.
20. What is antiserum?

SECTION – B**ANSWER ANY FOUR QUESTIONS.****(4 x 10 = 40)**

21. Give an account of MHC 1 pathway of antigen processing and presentation.
22. Give an account of different types of vaccines available today.
23. Write short notes on AIDS and secondary immune deficiencies.
24. Describe a. Cell mediated cytotoxicity and b. Role of cytokines in immunogenic reactions.
25. Give an account on adaptive immunity.
26. Write short notes on immunosuppressive therapy.
27. List the nature and applications of monoclonal antibodies.

SECTION – C**ANSWER ANY TWO QUESTIONS.****(2x20 = 40)**

28. Describe in brief about oncogenes and cancer immunotherapy.
29. What is auto-immunity? Give an account of methods used in treatment of autoimmune diseases.
30. Give an account on Western blotting and its applications.
31. List the types of complement pathways and explain any one in detail.
