



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIFTH SEMESTER – NOVEMBER 2016

PB 5406 - IMMUNOLOGY AND IMMUNOTECHNOLOGY

Date: 09-11-2016
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART – A

(10×2 = 20 Marks)

Answer the following, each within 50 words.

1. Cite the contribution of Alexander Fleming.
2. What is booster dose?
3. Define epitope.
4. Draw and label the antibody structure.
5. What is RIA?
6. Define opsonization.
7. List the primary lymphoid organs.
8. What is humoral immunity?
9. Write any two functions of monoclonal antibodies.
10. What is antisera?

PART – B

(5×7 = 35 Marks)

Answer the following, each within 500 words; draw diagrams and flowcharts wherever necessary.

11. a) Write briefly on the history of immunology.

Or

- b) Chart out the immunization schedule.

12. a) List out the features for antigenicity.

Or

- b) Describe the isolation of serum from blood.

13. a) Give a brief account of immunoelectrophoresis.

Or

- b) Write notes on immunodiffusion test.

14. a) Describe the MHCII pathway of antigen processing and presentation.

Or

- b) Write briefly on cytokines and their importance.

15. a) Chart out the principle and production of antisera.

Or

- b) Give a brief account on polyclonal antibodies and their applications.

PART – C

(3 x 15 = 45 Marks)

Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary

16. Give a detailed account on the cells of the immune system.
17. Write in detail on the different types of antibodies with examples.
18. Describe the agglutination techniques used in immunology.
19. Describe the classical pathway of the complement system.
20. Write in detail on the principle, production and applications of monoclonal antibodies.
