

Reg. No

Name

M. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019**SEMESTER 3 : ZOOLOGY****COURSE : 16P3ZOOT12 : IMMUNOLOGY***(For Regular - 2018 Admission and Supplementary - 2016/2017 Admissions)*

Time : Three Hours

Max. Marks: 75

Section A**Answer any 8 (2 marks each)**

1. What are 'Scavenger receptors'?
2. How does functional flexibility enhance antibody diversity?
3. What is an isotype?
4. List out the non covalent interactions that forms the basis of Ag-Ab binding.
5. What is Precipitation curve?
6. Outline the alternate pathway of complement activation.
7. What are the main functions of cytokines?
8. Briefly explain DTH.
9. Give a account of MHC polymorphism.
10. Write a note on CGD.
11. What are toxoids?
12. What is Immune electron microscopy?

(2 x 8 = 16)

Section B**Answer any 7 (5 marks each)**

13. Explain thymic selection.
14. How do 'Haptens' increase immunogenicity?
15. Elucidate the structure and formation of IgA.
16. Describe the major antigen antibody reactions?
17. Prepare an account of antibody dependent pathway of complement activation.
18. Discuss the role of IgE in type 1 hypersensitivity.
19. Brief explain how MHC expression is regulated in the body.
20. Comment on the biological significance of MHC.
21. Write a note on 'Purified macromolecules' as vaccines.
22. Briefly outline the major immunological techniques.

(5 x 7 = 35)

Section C**Answer any 2 (12 marks each)**

23. Elaborate the types of cells involved in an immune reaction. Add note on its production and maturation.
24. Explain the two antigen processing and presentation pathways?
25. What is autoimmunity? Mention the different types with suitable examples.
26. Write an essay on the components and mechanism of type 1 hypersensitivity.

(12 x 2 = 24)