

## Third Semester M.Sc. Degree Examination (CSS) - Zoology

ZY3CT 14 Course XIV – IMMUNOLOGY

Time: 3Hours

Total Weight: 30

### Section I -Short answer type questions

Weight -1

Answer any 10 out of 12

1. What are CDRs?
2. Differentiate between hapten and antigen.
3. Mention the effect of papain and pepsin on immunoglobulins.
4. Write a note on attenuated vaccines with an example.
5. Briefly explain the HLA locus.
6. Mention the role of NK cells in immunity
7. Comment on the terms: cross reactivity, sensitivity, specificity and reliability.
8. Differentiate between Allograft and Autograft.
9. What is the role of inflammatory cells in immunity?
10. Comment on the characteristic features of SLE.
11. What is meant by serum sickness?
12. Write a note on PRRS.

### Section – II Short essay type questions

Weight-2

Answer any 5 out of 8

13. Describe the factors affecting immunogenicity.
14. Explain the role of MHC proteins in cell mediated lysis.
15. Give an account on the applications of monoclonal antibodies.
16. Describe the role of cytokines in immunogenic reactions.
17. Explain the immune responses shown to viral, bacterial and parasitic infections.
18. Discuss the role of secondary lymphoid organs in immunity.
19. Give an account on HAT medium and its applications in immunology.
20. What are the roles played by mast cells and basophils in allergy?

### Section III- Long essay type questions

Weight-5

Answer any 2 out of 3

21. a) Mention the evidences that implicate CD4<sup>+</sup>T cells, MHC, and TCR in autoimmunity.  
b) What are the modern methods used in the treatment of autoimmune diseases.
22. Give an account of the different types of vaccines available today. Highlight their advantages and disadvantages.
23. Explain the genetic basis of antibody diversity.

