

TM244355X

Reg. No : .....

Name : .....

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024

2022 ADMISSIONS REGULAR

SEMESTER IV - ZOOLOGY

ZO4E02TM20 - Molecular Immunology

Time : 3 Hours

Maximum Weight : 30

**Part A**

**I. Answer any Eight questions. Each question carries 1 weight**

**(8x1=8)**

1. Establish the definition of haptens.
2. Formulate a brief note on MALT.
3. Elaborate on Toll like receptors with suitable examples.
4. Compile the causes and consequences of hereditary angioedema.
5. Outline the principle of agglutination. Quote examples.
6. Differentiate between acute and chronic inflammation.
7. Discuss on H – 2 complex in mouse.
8. Infer the causes and symptoms of ataxia.
9. Distinguish between IPV and OPV.
10. Comment on general immunosuppressive therapy.

**Part B**

**II. Answer any Six questions. Each question carries 2 weight**

**(6x2=12)**

11. Discuss on monoclonal antibodies and its clinical applications.
12. Describe the structure and functions of immunoglobulins.
13. Comment on RAST.
14. Emphasize on complement fixation.
15. Explain delayed Type IV hypersensitivity reaction.
16. Differentiate between acute Arthus reaction and serum sickness.
17. Discuss on any three systemic autoimmune diseases.
18. Narrate the two stages in the process of cell mediated graft rejection.

**Part C**

**III. Answer any Two questions. Each question carries 5 weight**

**(2x5=10)**

19. Write an elaborate essay on innate immunity and its defensive barriers.
20. Describe in detail the different pathways of complement activation.
21. Demonstrate the pathways employed in processing and presenting antigens in CMI.
22. Describe the different types of vaccines used widely today. Add a note on its risks and effectiveness.

