QP CODE: 21000413

Reg No : .....

Name : .....

M Sc DEGREE (CSS) EXAMINATION, MARCH 2021

Third Semester

Faculty of Science

M Sc ZOOLOGY

CORE - ZL010304 - IMMUNOLOGY

2019 Admission Onwards

A7B0D01C

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What are dendritic cells? Mention their significance in the immune system.
2. Distinguish between N-addition and P-addition of nucleotides
3. Discuss why monoclonal antobodies are preferred over polyclonal antibodies for invitro applications
4. Cross-reactivity is often observed among polysaccharide antigens that contain similar oligosaccharide residues.' Justify the statement.
5. Explain ELISA.
6. What is allergy?
7. What is MHC? Mention its pattern of inheritance.
8. What are antigen presenting cells? Give examples
9. What are the advantages and disadvantages of using live attenuated organism as vaccines?
10. Give a brief account on chronic rejection.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Write notes on T cell and B cell receptors
12. What are Adjuvants ? Explain with example.
13. Describe the activation and control of the alternate pathway of complement system.
14. Explain lymphocyte extravasation
15. Make notes on the biological significance of MHC
16. What is congenital immunodeficiency? Cite an example
17. Indicate the role of CD 4+ T cells in the host response to tuberculosis.
18. Explain why some organs are more amenable to clinical transplantation than others?

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain the structural and functional aspects of different classes of antibodies
20. Explain the regulatory mechanisms preventing the assembly of different convertases in the complement system and their significance.
21. Explain the properties and therapeutic uses of cytokines.
22. What is autoimmunity? Describe different types of autoimmune diseases.

(2×5=10 weightage)