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QP CODE: 25022227

Reg No	:	
Name	:	

## M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

## **Third Semester**

M.Sc BIOINFORMATICS

## CORE - BT010301 - IMMUNOLOGY

2019 ADMISSION ONWARDS

E8C4D565

Time: 3 Hours

Weightage: 30

### Part A (Short Answer Questions)

Answer any eight questions.

Weight 1 each.

- 1. What is peyers patches?
- 2. What are CTLs?
- 3. Differentiate between Class 1 and Class 2 MHC molecules.
- 4. How cytokines mediate cell communications?
- 5. What is the outcome if thymus fails to develop in an individual?
- 6. What is immunomodulation?
- 7. Explain briefly SCID.
- 8. What is GVH response?
- 9. Explain immunoprophylaxis.
- 10. What are second generation vaccines?

(8×1=8 weightage)

#### Part B (Short Essay/Problems)

Answer any **six** questions.

Weight **2** each.

- 11. Write a short note on several innate immune mechanisms .
- 12. Discuss and distinguish between B cell and T cell epitope.
- 13. Comment on endocytic pathway of processing antigens.





- 14. Explain biological functions of complement.
- 15. Explain the role of T reg cells in peripheral tolerance.
- 16. Explain antibody mediated cytotoxic hypersensitivity reactions.
- 17. Briefly describe current therapies for autoimmune diseases.
- 18. Explain the application of ArrayPitope in immunology.

(6×2=12 weightage)

#### Part C (Essay Type Questions)

Answer any **two** questions. Weight **5** each.

- 19. Give a detailed account on types, sources and mode of transmission of infection.
- 20. Explain VDJ recombination mechanism in detail.
- 21. Explain in detail the sequence of events in B cell activation.
- 22. What is immunological surveillance.Explain several mechanisms by which tumor cells evade the immune system.

(2×5=10 weightage)