QP Code: P25DRIS019

Reg. No : .....
Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

I SEMESTER (CBCSS - PG) DEGREE EXAMINATIONS, NOVEMBER 2025
(Regular/Improvement/Supplementary)
M. Sc Biology
BIO1C03 : IMMUNOLOGY
2024 Admission Onwards

Time: 3 Hours **Maximum Weightage: 30**

Part A

*Short answer type questions. Answer **any four**. Weightage **2** for each.*
(4x2 = 8 Weightage)

1. Explain HAT in hybridoma technology.
2. What is SCID?
3. What is meant by an autograft?
4. Identify how lymph node act as a lymphoid organ.
5. Explain 3 biological functions of cytokines.
6. Evaluate the importance of using adjuvants in enhancing immunogenicity.
7. Assess the function of T cells in an immune response.

Part B

*Short essay-type questions. Answer **any four**. Weightage **3** for each.*
(4x3 = 12 Weightage)

8. List the key steps involved in the process of apoptosis.
9. How agglutination is used in diagnostics?
10. Which type of virus causes AIDS explain in detail?
11. Briefly explain Delayed type hypersensitivity reaction.
12. Examine how Karl Landsteiner's discovery of blood groups improved safety of medical procedures today.
13. How to differentrate a cell that has undergone necrosis or apoptosis in an experimental condition?
14. Evaluate the role played by antibodies in humoral immune system.

Turn Over

Part C

*Essay-type questions. Answer **any two**. Weightage **5** for each.*
(2x5 = 10 Weightage)

15. Explain SLE, RA, MS diseases.
16. Describe how an antigen processing and presentation is done by the immune system.
17. Analyze the biological consequences of complement activation.
18. Evaluate live, killed and attenuated vaccines according to their preparation procedure.

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