QP CODE: UV25C016

Reg No: ……

Name: ……

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20
III SEMESTER (CBCSS-VUG) DEGREE EXAMINATIONS, OCTOBER 2025
B. Voc Applied Biotechnology
SDC3APB14 : IMMUNOLOGY
2024 Admission Onwards

Section A

*Short answer type questions. **2** Marks each. **(Ceiling 25)***

1. Write any two types of lymphocytes and their main functions.
2. Which secondary organ of the immune system filters blood?
3. Define an Epitope.
4. Why B cells are called "*antibody-producing cells*"?
5. Why bone marrow is called a primary lymphoid organ?
6. What are adjuvants? Mention their role in immune response.
7. How would you use IgE knowledge to explain allergic reactions?
8. Predict what happens if C3 is missing in a person's blood.
9. Apply your knowledge to determine blood type if agglutination occurs with anti-B serum only.
10. Analyze why some infections trigger Type III Hypersensitivity.
11. Is antibody production alone enough to protect against viruses? Give reason.
12. Compare immunoglobulin superfamily molecules with antibodies in structure and function.
13. Examine how MAC formation leads to bacterial death.
14. Do you think the spleen is more important before birth or after birth? Give reasons.
15. Evaluate the importance of dietary iodine in patients with Hashimoto's Thyroiditis.

Turn Over

Section B

*Paragraph types questions. **5** Marks each.* ***(Ceiling 35)***

16. State the steps involved in preparing a human karyotype.
17. Describe the role of Hypersensitivity in hemolytic disease of a newborn. Identify the type of Hypersensitivity and comment on its immunological reactions.
18. Explain the differences between natural and artificial passive immunity.
19. Illustrate how would you monitor a patient's thyroid function during therapy.
20. A patient develops hemolytic reaction after a blood transfusion. Which type of Hypersensitivity is involved and why?
21. Analyze why some tumours resist Cytokine therapy.
22. Differentiate the advantages and disadvantages of inactivated vaccines.
23. Compare the principles and applications of RID and Ouchterlony methods.

Section C

*Essay-type questions. **10** Marks each. Answer **any two**.*

24. Describe the difference between Type IV and Type I Hypersensitivity.
25. Compare IgG and IgM in terms of structure and functions.
26. Predict the effect of combining monoclonal antibodies with chemotherapy.
27. Critically evaluate the coordination between primary and secondary lymphoid organs in generating an efficient immune response.

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