

Reg. No. : .....

Name : .....

Fifth Semester B.Sc. Degree Examination, December 2021

First Degree Programme Under CBCSS

Zoology

Core Course VII

ZO 1543 : IMMUNOLOGY AND MICROBIOLOGY

(2019 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions in a word or **one** or **two** sentences. **Each** question carries **1** mark.

1. What is MALT?
2. Who is the father of modern immunology?
3. What are Epitopes?
4. What is precipitation reaction?
5. Define humoral immune response
6. What are auto immune disorders?
7. What is HLA?
8. What is AIDS?
9. What is MHC?
10. What are Opsonins?

(10 × 1 = 10 Marks)

## SECTION – B

Answer **any eight** questions. **Each** question carries **2** marks. Answer not to exceed **one** paragraph.

11. Distinguish between species and racial immunity.
12. What is passive immunity?
13. What are NK cells?
14. Comment on the functions of Dendritic cells.
15. What is a complete antigen?
16. What are immunoglobulins?
17. What is Opsonisation?
18. What are Cytokines?
19. Define immunological memory.
20. Define Auto Immunity.
21. What are vaccine conjugates?
22. What is Bergey's system of classification?
23. Mention different groups in Fungi.
24. Illustrate the structure of a typical bacterium.
25. What is medical microbiology?
26. Name the disease caused by Giardia. What are its symptoms?

**(8 × 2 = 16 Marks)**

## SECTION – C

Answer **any six** of the following. (Answer not to exceed **120** words). Each question carries **4** marks.

27. Discuss the symbiotic and pathogenic microbes in plants.
28. Comment on the normal human microbiota of various organs.

29. Describe the modern method of classification of Eubacteria.
30. Differentiate between Type I and Type II Hypersensitivity.
31. What is transplantation immunity? Classify different types of transplants.
32. Write a short note on the viral diseases in man.
33. Describe the role of T cells and B cells in immune response.
34. Discuss the mechanism of Auto immunity. Add a note on Auto immune diseases.
35. Comment on Antigen Antibody reactions.
36. Describe the scope and importance of microbiology.
37. Comment on the mechanism of Graft rejection.
38. Describe any two fungal diseases in man.

**(6 × 4 = 24 Marks)**

#### SECTION – D

Answer **any two** questions. (Not more than **three** pages). Each question carries **15** marks.

39. Discuss different types of Immunity with examples.
40. Comment on the various organs of Immune system.
41. Describe the structure of immunoglobulin with a diagram. Add a note on the different classes with its functions.
42. Comment on microbial diseases in man with examples.
43. Write an essay on vaccination procedures and types of vaccines.
44. Discuss the scope and applications of microbiology in various fields.

**(2 × 15 = 30 Marks)**