

(Pages : 4)

P – 2565

Reg. No. :

Name :

Fifth Semester B.Sc. Degree Examination, December 2022

First Degree Programme under CBCSS

Zoology

Core Course – VII

ZO 1542 : IMMUNOLOGY AND MICROBIOLOGY

(2018 Admission)

Time : 3 Hours

Max. Marks : 80

I. Answer the following questions in **one** or **two** sentences

1. Write a brief note on Prions.
2. What is protoplast?
3. Cite an example for microbial toxin.
4. Name the flagellar protein.
5. What is bacteremia?
6. Define an epitope.
7. What is non-specific immunity?
8. Who discovered the first rabies Vaccine?
9. Largest Immunoglobulin.
10. Expand ELISA.

(10 × 1 = 10 Marks)

P.T.O.

II. Answer **any eight** of the following questions not exceeding **one** paragraph. Each one carries **2** marks.

11. Write on Candidiasis.
12. What are haptens?
13. Widal test.
14. Give the functions of macrophages.
15. Briefly write on BCG Vaccine.
16. Write any two examples of normal human microbiota.
17. Mention bioremediation.
18. Write a note on the types of Immunoglobulins.
19. What is capsid? Write any one function.
20. Describe blue green algae.
21. Write a brief account on passive immunity.
22. What are cytokines?
23. Comment on killer cells.
24. Give any four functions of immunoglobulins.
25. Define environmental Microbiology.
26. What are metachromatic granules?

(8 × 2 = 16 Marks)

III. Answer **any six** of the following questions not exceeding **120** words. each one carries **4** marks.

27. Explain nosocomial infections.
28. Write on the modes of transmission of infectious diseases.
29. Sketch and label the structure of virus.
30. What are the biological effects of complements?
31. Classify algae and briefly mention each.
32. What is hybridoma technology?
33. DNA Vaccines.
34. MHC.
35. Write an account on Ornithosis.
36. Write a note on Viral replication.
37. Explain Gram staining.
38. Describe complement fixation test.

(6 × 4 = 24 Marks)

IV. Answer **any two** of the following questions each one carries **15** marks.

39. Write on the epidemiology, transmission and treatment of HIV.
40. Write an essay on the Clinical applications of Agglutination and Precipitation test to detect diseases.

41. Explain the General properties, structure, classification and cultural characteristics of mycoplasma.
42. Give a brief overview of the structural organization of a typical bacterium. Illustrate your answers.
43. Write an account on Autoimmune disease.
44. What is Microbiology? Write on its history. Explain the various fields and scope of Microbiology?

(2 × 15 = 30 Marks)
