(Pages : 3)

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Fifth Semester B.Sc. Degree Examination, February 2021

First Degree Programme Under CBCSS

Zoology

Core Course VII

ZO 1542 : IMMUNOLOGY AND MICROBIOLOGY

(2018 Admission – Regular)

Time : 3 Hours

Max. Marks : 80

I. Answer the following questions (**in one** or **two** sentences, **1** mark each.

1. Father of Immunology
2. Antigens
3. Passive Immunity
4. MALT
5. Mitogens
6. Haptens
7. Causative organism of malaria
8. Prions
9. Corona virus
10. Microbial toxins

(10 × 1 = 10 Marks)

P.T.O.

II. Answer any **eight** of the following (Answer in **one** paragraph). Each question carries **2** marks.

11. Mention the scope and importance of immunology.

12. Mast cells

13. Macrophages

14. Cytokines

15. Thymus gland

16. Epitopes

17. Opsonisation

18. AIDS

19. Autoimmune diseases

20. Attenuated vaccines

21. Toxoids

22. Viroids

23. Archaea

24. Azotobacter

25. Mention two examples of pathogenic microbes

26. MHC.

(8 × 2 = 16 Marks)

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

27. Classify immunity with examples.

28. Comment on the major organs and tissues of the immune system.

29. Draw the structure of a typical immunoglobulin.

30. Briefly discuss major types of hyper sensitivity.

31. Mention the factors affecting graft survival.

32. Explain the structure of a typical bacterium.

33. How microbiology helps in agriculture?

34. Discuss any two examples for normal human microbiota.

35. Discuss microbe-human host interactions.

36. Discuss any two viral diseases in man.

37. Discuss any two bacterial diseases in man.

38. Give an account on Malaria.

(6 × 4 = 24 Marks)

IV. Answer any **two** of the following (Each carries **15** marks).

39. Elaborate on various applications of microbiology.

40. Classify viruses and bacteria with suitable examples.

41. Discuss the symbiotic associations of microbes with plants and animals.

42. Describe immune deficiency diseases in man.

43. Explain immune response. Comment on types of immune responses.

44. Give an account on immunisation. Add a note on types of immunisation.

(2 × 15 = 30 Marks)