

B.Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2025**SEMESTER 6 : ZOOLOGY****COURSE : 19U6CRZOO11 - MICROBIOLOGY AND IMMUNOLOGY***(For Regular 2022 Admission and Supplementary 2021/2020/2019 Admissions)*

Time : Three Hours

Max. Marks: 60

PART A**Answer All (1 mark each)**

1. Define immunology.
2. What are prions?
3. Define secondary infection.
4. Expand DPT.
5. What is a hapten?
6. How did Robert Koch prove germ theory?
7. The receptor type present on TH cell.
8. Give the scientific name of baker's yeast.

(1 x 8 = 8)**PART B****Answer any 6 (2 marks each)**

9. List out the symptoms of influenza.
10. Give four methods of dry heat applications for sterilization.
11. Comment on the phase of decline of bacterial growth.
12. Define carriers in a disease. Give an example.
13. Comment on Candidiasis.
14. Differentiate primary and secondary response.
15. Comment on anaphylaxis.
16. How do chemicals inactivate microbes?

(2 x 6 = 12)**PART C****Answer any 4 (4 marks each)**

17. Elaborate on the different culture techniques used in microbiology labs.
18. Comment on the significance of ELISA. Brief on sandwich and indirect ELISA.
19. Briefly explain the various mechanisms involved in innate immunity.
20. Brief on the pathogen, symptoms and prophylaxis of dermatophytosis.
21. Briefly explain the physical methods of sterilization.
22. Briefly explain the process of MHC antibody synthesis.

(4 x 4 = 16)**PART D****Answer any 2 (12 marks each)**

23. Explain the role played by microbes in various field of our life.
24. What is hypersensitivity? Explain in detail each type.
25. Define immunity. Give its classification. Add a brief note on each type.
26. Elaborate the structure of viruses and add a note on its replication.

(12 x 2 = 24)