

20U519

(Pages: 2)

Name:

Reg.No:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U ZOL5 B07 - BIOTECHNOLOGY MICROBIOLOGY AND IMMUNOLOGY

(Zoology - Core Course)

(2019 Admission onwards)

Time : 2.5 Hours

Maximum : 80 Marks

Credit : 4

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. Write any four properties of a good vector.
2. Comment on restriction endonuclease.
3. What are transgenic animals?
4. What is an oncomouse?
5. Define FISH.
6. Write an account on Mycoplasma.
7. What is chemostat?
8. What are bioinsecticides?
9. Comment on Bacterial diseases.
10. Comment on Rabies.
11. What are the hallmarks of adaptive immunity?
12. What is agglutination?
13. Name the different classes of antibody with its specific heavy chain.
14. Define Rheumatoid arthritis.
15. What are tumour specific antigens? Give example.

(Ceiling: 25 Marks)

Part B (Paragraph questions)

Answer *all* questions. Each question carries 5 marks.

16. Comment on the scope and importance of biotechnology.
17. Write a short note on cell cultures.
18. Briefly explain molecular pharming.
19. What is a sterilant?
20. Distinguish between pour plate and spread plate method.
21. Distinguish between a virulent and temperate phage.
22. What all are the major lymphoid organs?
23. Describe the primary and secondary immunodeficiency diseases.

(Ceiling: 35 Marks)

Part C (Essay questions)

Answer any *two* questions. Each question carries 10 marks.

24. Comment on (a) Lipofection (b) Electroporation.
25. Explain the role of microorganisms in the production of industrial products.
26. Elaborate the structural and functional differences of T, B and NK lymphocytes.
27. What are MHCs? Write an essay on the distribution, structure and functional aspects of MHC.

(2 × 10 = 20 Marks)
