

D 130279

(Pages : 2)

Name.....

Reg. No.....

FIFTH SEMESTER CBCSS-UG DEGREE EXAMINATION**NOVEMBER 2025**

(2019 Syllabus)

Zoology

ZOL 5B 07T—BIOTECHNOLOGY, MICROBIOLOGY AND IMMUNOLOGY

Time : Two Hours and a Half

Maximum : 80 Marks

Section A*Short answer type.**All questions can be answered.**Each question carries 2 marks.**(Ceiling 25)*

1. Define Plasmid.
2. What are stem cells ?
3. Indicate the significance of Gene Therapy.
4. Recall the function of Enrichment media.
5. Comment on Rabies.
6. What are Prions ?
7. Comment on Spread plate method.
8. Mention the relevance of Bioinsecticides.
9. What are Oncogenic viruses ?
10. Comment on the role of Lymph nodes.
11. Expand and write note on ADCC.
12. What is Hashimoto's thyroiditis ?
13. List out the factors determining immunogenicity of a molecule.
14. Comment on ART.
15. What is the role of T cells in immune system ?

(Ceiling 25 marks)

Turn over

Section B

*Paragraph / Problem type
All questions can be answered.
Each question carries 5 marks.
(Ceiling 35 marks)*

16. Give an account of molecular markers used in Biotechnology.
17. Explain the structure of a bacterial cell.
18. Give a description of preparation and sterilization of animal cell culture media.
19. Write a note on industrial application of Microbiology.
20. Differentiate Gram-positive and Gram-negative bacteria.
21. Compare active and passive immunity.
22. Describe T cell activation.
23. Recall the cells of immune system with their functions.

(Ceiling 35 marks)

Section C

*Essay type.
Answer any two of the following questions.
Each question carries 10 marks .*

24. Give an account of transgenic animals.
25. List out and explain the enzymes used in genetic engineering.
26. Evaluate the epidemiology of AIDS.
27. Write an essay on tumor immunology.

(2 × 10 = 20 marks)