

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2022
(Regular/Improvement/Supplementary)

ZOOLOGY
FZOL3C09 - MICROBIOLOGY & BIOTECHNOLOGY

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries *two* weightage.

1. Write notes on cosmides.
2. Highlight the features of a bacterial growth curve.
3. Write notes on alcoholic fermentation.
4. Comment on RAPD.
5. Briefly explain the lysogenic cycle of viruses.
6. Enumerate the advantages and disadvantages of cloning.
7. Write a brief account on microbial remediation.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

8. Briefly describe the different microbial nutritional types.
9. Explain the different physical methods for the control of microorganisms.
10. Explain the working and uses of biogas plant.
11. Give an account on molecular probes.
12. Explain Western blotting and add notes on its applications.
13. Write notes on IPR.
14. Describe the role of biotechnology in pollution control.

(4 × 3 = 12 weightage)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Write an essay on human diseases caused by bacteria.
16. Explain the structure of bacterial cell wall with short notes on peptidoglycan synthesis.
17. Give a detailed account on PCR technology, its procedure, types and applications.
18. Write an essay on the construction and screening of Genomic and cDNA library.

(2 × 5 = 10 weightage)