

**24P316**

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Name: .....

Reg.No: .....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025**

(CBCSS - PG)

(Regular/Supplementary/Improvement)

**CC19PZOL3C09 - MICROBIOLOGY AND BIOTECHNOLOGY**

(Zoology)

(2019 Admission onwards)

Time : 3 Hours

Maximum : 30 Weightage

**Part-A**

Answer any **four** questions. Each question carries 2 weightage.

1. Explain the process of peptidoglycan synthesis.
2. What is Candidiasis?
3. Distinguish between cheese and yogurt and explain its production.
4. Define AFLP.
5. Explain about DNA sequencing.
6. Define culture media.
7. Discuss insect pest control methods using hormone mimics.

**(4 × 2 = 8 Weightage)**

**Part-B**

Answer any **four** questions. Each question carries 3 weightage.

8. Explain taxonomic ranks and phylogenetic studies in microbial taxonomy.
9. Differentiate between sterilization and disinfection.
10. Illustrate the details of expression vectors with suitable examples.
11. Illustrate the process of Chromosome jumping.
12. Discuss the importance of PCR for mutagenesis.
13. Describe the procedure of virus mediated lipofection method.
14. Discuss the details of GEO's.

**(4 × 3 = 12 Weightage)**

**Part-C**

Answer any **two** questions. Each question carries 5 weightage.

15. Explain bacterial cell structure.

16. Discuss the details applications of Biotechnology in animal and human healthcare.
17. Discuss the details of cloning procedure.
18. Discuss the details of IPR and patenting of biological materials.

**(2 × 5 = 10 Weightage)**

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