PG Even Semester Exam, May 2025

Microbiology

2nd Semester

COURSE NO. MBCC- 552

[Molecular Biology and Recombinant DNA Technology]

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer five questions, selecting one from each unit.

UNIT-I

1. Describe the structure of DNA with suitable diagram. 14
2. Write notes on: 7x2=14
   a. Secondary structure of +-RNA
   b. DNA polymerase

UNIT-II

3. Describe the types of DNA damage with examples. 14
4. Write notes on : 7x2=14
   a. Recombination repair
   b. Photo reactivation

Turn over

UNIT-III

5. Describe translation powers in E. Coli. 14
6. Write notes on: 7x2=14
   a. RhO dependant termination
   b. Aminoacylation process

UNIT-IV

7. Describe in details construction of genomic library. 14
8. Write notes on: 7x2=14
   a. Cosmid
   b. Phagemid

UNIT-V

9. Describe different principles of real-time PCR methods. 14
10. Write notes on : 7+7=14
    a. Primer design
    b. Recombinant vaccine

★★★

2025/SEM/EVEN/09/27/MIB-552/314

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