



DCBT-501

V Semester B.Sc. Degree Examination, December/January-2025/26

(NEP Scheme)

BIOTECHNOLOGY

Genetic Engineering

Paper : V

Time : 2½ Hours

Maximum Marks : 60

Instructions :

Draw a neat labelled diagram wherever necessary.

SECTION-A

I. Write a short note on the following.

(5×2=10)

- 1) PBR 322
- 2) qPCR
- 3) cDNA Library
- 4) YAC
- 5) CRISPR.



SECTION-B

II. Answer any FOUR of the following.

(4×5=20)

- 6) Explain the generation of genomic library.
- 7) Give the characteristic features of expression vector.
- 8) Write a short note on southern hybridization.
- 9) Discuss the production of hGH
- 10) Explain the different methods of gene transfer.

[P.T.O.]



(2)

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SECTION-C

III. Answer any Three of the following.

(3×10=30)

- 11) Describe the steps in PCR. Add a note on its applications.
- 12) What are modifying enzymes. Explain different types of modifying enzymes.
- 13) Discuss the screening and selection methods of recombinant cells.
- 14) Discuss the production of Hepatitis B Vaccines and interferons.
- 15) Write a note on .
 - a) Cre/10x
 - b) Micro injection.

