

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

M.Sc. PBPBT - END SEMESTER EXAMINATIONS APRIL - 2024

SEMESTER - II

20PPBET2003 - Molecular Biology and Genetic Engineering

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Describe Nucleic acid and its function.
2. Discuss Restriction enzymes with an example.
3. Classify Shuttle Vectors with examples.
4. Explain Southern and Northern Blotting.
5. Classify Exons and Introns.
6. Elucidate the Different types of Restriction enzymes used for cloning.
7. Illustrate Artificial Chromosome Vectors.
8. Distinguish between PCR and Real Time PCR.

Section C

I - Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Illustrate detailed structure of DNA with suitable diagram.
10. Prepare and explain the steps involved in DNA replication.
11. Determine the Construction of genomic and cDNA libraries.
12. Evaluate any two Plasmid vectors with suitable diagrams.

II - Compulsory question ($1 \times 10 = 10$ Marks)

13. Ascertain Antisense RNA technology and its applications.
