

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. - END SEMESTER EXAMINATIONS APRIL - 2022

SEMESTER - II

20PPBET2003 - Molecular Biology and Genetic Engineering

Total Duration : 3 Hrs.

Total Marks : 60

**Section A**

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

1. Describe the Scope of Molecular Biology.
2. What is Chargaff's rule ? Explain.
3. Write short note on Transcription in B.
4. Narrate the fine structure of Gene.
5. How to construct cDNA libraries?
6. What are the important role of Restriction enzymes in cloning?
7. What is BAC and YAC? Discuss.
8. Explain briefly DNA finger printing and DNA foot printing.

**Section B**

**Part A**

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

9. Differentiate the structure of DNA and RNA.
10. Write an essay on Replication of DNA.
11. Give an account on Recombinant DNA Technology.
12. Illustrate the different types of Vectors.

**Part B**

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

13. Describe the basic principles and application of any two PCR Technique.

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