

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.

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

SEMESTER - III

20UPBCT3005 - Cell Biology and Molecular Biology

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. With neat diagram describe the ultra structure of a eukaryotic cell.
2. Describe the different types of plastids.
3. Give an account of the various microbodies and their functions.
4. Explain gene regulation in prokaryotes using Lac operon model.
5. Explain the working of a PCR.
6. Explain the role of restriction enzymes and their applications.
7. Describe feedback inhibition.
8. Write about the various types of ribosomes and their functions.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Describe the ultrastructure and functions of the cell wall.
10. Illustrate and explain the various models of plasma membrane.
11. Give a detailed account of the various non-living cell inclusions.
12. Explain the working of tryp operon.
13. Describe the protocols involved in recombinant DNA technology.
