

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. (PBPB) END SEMESTER EXAMINATIONS NOVEMBER - 2023

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. Illustrate and explain the ultra structure of cell wall.
2. Explain the structure and functions of Dictyosomes.
3. Differentiate between the active and passive transport in a Plasma Membrane.
4. Elucidate the structure & functions of Peroxisomes.
5. State the structural types and properties of starch grains in plants.
6. What is auto regulation? Add a note on allosteric regulation.
7. Deduce the principle and mechanism of a PCR analyzer.
8. Why is cosmid better than plasmid? Evaluate.

Section C

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

9. Distinguish between the features of prokaryotic cell to a eukaryotic cell.
10. Mitochondrion is a power house of the cell – Justify .
11. What is a cytoskeleton? Discuss its types the statement.
12. Assess the concept of lac operon with respect to gene regulation.
13. Classify restriction enzymes and state their roles in G.E.
