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-2023 SEMESTER - III 20UPBCT3005 - Cell Biology and Molecular Biology

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

- 1. Describe the ultra structure of cell wall.
- 2. Illustrate and explain the structure of Endoplasmic reticulum.
- 3. Explain the working of PCR.
- 4. Describe the regulation in feed back inhibition.
- 5. What are ribosomes? State the different types and its functions.
- 6. Relate how lac operon functions in glucose and lactose mediums.
- 7. Explain Microtubules with structure and functions.
- 8. Discuss the various techniques in gene manipulation.

Section C

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

- 9. Explain Eukaryotic cell organisation.
- 10. Give a detailed account of the structure and functions of chloroplast.
- 11. Describe the various types of microbodies.
- 12. Explain gene regulation seen in Tryp-operon.
- 13. Write about recombinant DNA technology and evaluate its advantages and disadvantages in the current scenario.
