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 20PPBCT2005 - Cell Biology

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

- 1. Explain the working of Sodium-Potassium pump.
- 2. Describe the structure of Nucleus.
- 3. Classify the cell divisions based on their function.
- 4. Describe the fine structure of chromosome.
- 5. Elucidate the function of dictyosomes in an eukaryotic cell.
- 6. Predict the need of chloroplast in a plant cell.
- 7. Show the importance of prophase I of meiosis.
- 8. Distinguish inversion from translocation.

Section C

- I Answer any **TWO** questions $(2 \times 10 = 20 \text{ Marks})$
- 9. Describe the fluid mosaic model of plasma membrane.
- 10. Classify the intracellular organelles based on membrane.
- 11. Distinguish mitochondria and chloroplast based on their structure.
- 12. Give an account on Meiosis.

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

13. Distinguish various banding techniques.
