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 - IV 20PPBCT4010 - PLANT PHYSIOLOGY AND BIOCHEMISTRY

Total Duration : 3 Hrs.

Total Marks : 60

Section A

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

- 1. How hormones and growth regulators affect plants growth?
- 2. Describe the structure and classification of carbohydrates.
- 3. Explain the primary structure of enzymes.
- 4. Distinguish between C3 and C4 plants.
- 5. Discuss in detail about the Kerb's cycle.
- 6. Explain the photoperiodism and its function.
- 7. Write short notes on cyclic phosphorylation.
- 8. Differentiate short day and long day plants.

Section B

Part A

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

- 9. Explain biosynthesis, translocation and physiological effect of cytokinin.
- 10. Describe the structure and properties of proteins.
- 11. Describe the classification of enzymes.
- 12. Explain the interaction between photosynthetic pigment and radiant energy.

Part B

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

13. Write an essay on mechanism of biological nitrogen fixation.
