

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 - 2023

SEMESTER - IV

**20PPBCT4010 - Plant Physiology and Biochemistry**

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

### Section B

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

1. State the physiological role of auxins.
2. Illustrate the physiological activity of ethylene.
3. Compute the synthesis and degradation of cellulose.
4. Explain the properties of enzymes.
5. List out photosynthesis pigments.
6. Relate C<sub>4</sub> and C<sub>3</sub> cycle.
7. Describe TCA cycle with its significance.
8. Ascertain the importance of nitrogen to plants.

### Section C

I - Answer any **TWO** questions ( $2 \times 10 = 20$  Marks)

9. Illustrate the effects of auxin on roots and root formation.
10. Describe the biosynthesis and functions of flavonoids.
11. Ascertain any three factors affecting enzyme activity.
12. Evaluate the mechanism and action of phytochrome.

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

13. Illustrate the importance of Glycolysis.

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