

**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. END SEMESTER EXAMINATION APRIL/NOV - 2021**  
**SEMESTER - VI**

**16UPBCT6012 & UPB/CT/6012 - Plant Physiology, Biochemistry and Biophysics**

<b>Total Duration : 3 Hrs</b>	<b>Total Marks : 75</b>
MCQ : 30 Mins	MCQ : 15
Descriptive : 2 Hrs.30 Mins	Descriptive : 60

Section B

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

1. Write a short note on absorption spectrum.
2. Describe the oxidative phosphorylation.
3. Describe the biological nitrogen fixation with suitable example.
4. Explain the structure and properties of enzymes.
5. Describe the bioluminescence and explain its mechanism
6. Describe Photorespiration and its significance.
7. Describe the Michaelis constant and its significance.
8. Enumerate the significance of Nitrogen in plant life.

Section C

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

9. Write an essay on the Hatch-Slack pathway with suitable illustration.
10. Explain the glycolysis pathway in detail.
11. Describe various types of PGR and its application in Agriculture.
12. Write an essay on the mechanism of coenzyme and its classification.
13. Explain the process of Formation and breakdown of ATP.