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**School of Basic Sciences**  
**Bachelor of Science Honours in Chemistry**  
**Semester End Examination - Nov 2023**

**Duration : 180 Minutes**  
**Max Marks : 100**

**Sem V - C2UE503B - Plant Physiology and Metabolism**

General Instructions

*Answer to the specific question asked*

*Draw neat, labelled diagrams wherever necessary*

*Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Explain the mechanism of Stomatal movement. K1 (2)
- 2) How do plants control the opening and closing of stomata during day and night? K2 (4)
- 3) Write elaborative notes on- carbon fixation. K2 (6)
- 4) Describe biological nitrogen fixation (examples of legumes and non-legumes). K3 (9)
- 5) Describe the principle of oxidation. K3 (9)
- 6) Explain the importance of enzymes in plant biochemical reactions. K5 (10)
- 7) What is CAM- Reaction? Mention the importance CAM. K4 (12)
- 8) Discuss the role of the Krebs cycle in plant respiration. K5 (15)
- 9) Explain the process of lignin biosynthesis and its role in plant cell walls. K5 (15)
- 10) Give a detailed account on dietary supplements and antioxidants K6 (18)