D6BBT2203 **Reg. No.....**

Name: .....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2025
(Regular/Improvement/Supplementary)

BOTANY
GBOT6B12T: PLANT BIOCHEMISTRY

Time: 2 Hours **Maximum Marks: 60**

SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 marks)

1. Describe the functions of simple and compound carbohydrates.
2. What is meant by precursor molecules?
3. Mention the bonds responsible for protein structure stability.
4. Differentiate between Nucleosides and Nucleotides.
5. Describe the properties of amino acids.
6. What is the physiological significance of secondary metabolites?
7. Illustrate the structure of Adenine and Thymine.
8. Write notes on the classification of amino acids based on side chain.
9. What is meant by Anapleurotic reactions?
10. Mention the structure of Glycerol.
11. What is ionization of amino acids?
12. Describe the functions of nucleotides.

SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)

13. Differentiate between simple and compound lipids.
14. Explain oxidative phosphorylation.
15. Describe hydrolysis of lipids.
16. Write notes on denaturation of proteins.
17. Briefly explain the saturated fatty acids in plants.
18. Write notes on hydrolysis of proteins to amino acids.
19. Explain citric acid cycle.

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Explain and illustrates the structure of oligosaccharides mentioned in syllabus.
21. Describe the classification of enzyme by IUB.

(1 × 10 = 10 Marks)