

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2026

(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 carbohydrate derivatives.
2. Differentiate between macromolecules and micro molecules with suitable example.
3. Provide the details of denaturation of proteins.
4. Define nucleotides with example.
5. What is meant by amino acids? Give one example.
6. Mention the ecological and physiological significance of secondary metabolites.
7. Describe the importance of nitrogen bases.
8. Write a short note on non-protein amino acids.
9. Differentiate between catabolism and anabolism.
10. Write notes on steroids with special reference to cholesterol.
11. What is a dipeptide? Mention its formation.
12. What are the derivatives of nucleotides?

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 marks)

13. Briefly describe the structure and properties of fatty acids.
14. Explain multienzyme complex.
15. Describe α and β oxidation of fatty acids.
16. Write notes on primary, secondary, tertiary and quaternary structure of proteins.
17. Describe the synthesis of triglyceride.
18. What are the methods involved in the transformations of amino acids?
19. Explain glycolysis.

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

20. What are carbohydrates? Briefly discuss the classification and function.
21. Explain the mechanism of enzyme action.

(1 × 10 = 10 Marks)