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Name.....

Reg. No.....

# SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2024

(CBCSS-UG)

Botany

## BOT 6B 12—PLANT PHYSIOLOGY AND METABOLISM

(2019 Admission onwards)

Time: Two Hours

Maximum: 60 Marks

#### Section A

Answer all questions.

Each question carries 2 marks.

Ceiling: 20 Marks.

- 1. Define water potential.
- 2. What is Antitranspirants?
- Define ascent of sap.
- 4. Differentiate simple and facilitated diffusion.
- 5. Describe the structure of chloroplast.
- Briefly explain nitrogen assimilation.
- 7. Differentiate phloem loading and unloading.
- Define nyctinastic movement.
- 9. Explain Vernalization.
- 10. What is Metabolism?
- 11. Write a note on electron carriers.
- 12. Define oxidative phosphorylation.

Turn over

## Section B

Answer all questions. Each question carries 5 marks. Ceiling: 30 Marks.

- Write an account on mechanism of guard cell movement.
- Explain the role and deficiency symptoms of micro nutrients in plants.
- Describe CAM Pathway.
- Write an account on Light reaction in plants. 16.
- Explain various types of movements in plants. 17.
- 18. Describe Citric acid cycle.
- 19. Explain β Oxidation of fatty acids.

## Section C

Answer any one question. The question carries 10 marks.

- 20. Explain Biological Nitrogen. Add a note on biosynthesis of amino acids.
- 21. Describe C3, C4 and CAM cycle in plants.

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