

39

319245

C 40509

(Pages : 2)

Name.....

Reg. No.....

**SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2023**

(CBCSS—UG)

**Botany**

**BOT 6B 12—PLANT PHYSIOLOGY AND METABOLISM**

(2019 Admissions onwards)

Maximum : 60 Marks

Time : Two Hours

**Section A**

*Answer all questions.*

*Each questions carries 2 marks.*

*Ceiling : 20 Marks.*

1. Differentiate Cohesion and Adhesion.
2. Explain osmotic potential.
3. What is transpiration pull.
4. Describe carrier concept.
5. Differentiate Fluorescence and phosphorescence.
6. Give an account on Electromagnetic radiation.
7. Write a note on Red drop and Emerson Enhancement Effect.
8. Define Seismonastic Movement.
9. What is Phytochrome ?
10. Explain Amphibolic nature of Citric acid cycle.
11. Write a note on Chemiosmotic hypothesis.
12. Explain Cyanide Resistant Respiration.

Turn ov



**Section B**

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

13. Write a note on Water absorption mechanism in plants.
14. Explain the role and deficiency symptoms of any *five* Macro elements.
15. Explain two photosystems in plants.
16. Write an account on Biochemistry of Nitrogen fixation.
17. Explain Seed dormancy.
18. Write an account on Glycolysis.
19. Explain electron transport mechanism in plants.

**Section C**

*Answer any **one** question.  
The question carries 10 marks.*

20. Explain C3 and C4 Cycle. Add a note on factors influencing the rate of photosynthesis
21. Write an account on translocation and distribution of photoassimilates. Define Press hypothesis.

(1 × 10 = 10)