

D 140811

(Pages : 2)

Name.....

Reg. No.....

**FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
APRIL 2026**

Botany

BOT 4C 04—PLANT PHYSIOLOGY, ECOLOGY AND GENETICS

(2019 Syllabus)

Time : Two Hours

Maximum : 60 Marks

Section A*Answer all questions.**Each question carries 2 marks.**Ceiling : 20 Marks.*

1. Define Imbibitions.
2. What is transpiration pull ? Explain its role in plants.
3. What is meant by red drop ?
4. Define water potential.
5. Find the function and deficiency symptoms of Nitrogen.
6. Definition of Plant growth.
7. Describe two important physiological adaptations seen in halophytes
8. What are the significance of Photosynthesis ?
9. Define Monohybrid cross.
10. Write any *two* morphological adaptations of xerophytes with example.
11. What is meant by symbolisation ?
12. What is test cross ? Give example with ratio.

Turn over

Section B

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

13. Brief account on the plant cell organelles.
14. Describe the K⁺ ion theory of stomatal movement.
15. Give an account of cyclic photophosphorylation.
16. Give a brief account on synthetic auxins with examples.
17. Explain Calvin cycle.
18. Describe the morphological and anatomical adaptations of Hydrophytes.
19. With example describe the Epistasis.

Section C

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

20. Define plant succession. Describe the process and types of succession with suitable plant examples.
21. With the help of schematic diagram describe the cyclic and non cyclic Photophosphorylation.

(1 × 10 = 10 marks)