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## FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION APRIL 2024

Botany

BOT 4C 04-PLANT PHYSIOLOGY, ECOLOGY AND GENETICS

(2019 Admission onwards)

Time: Two Hours

Maximum: 60 Marks

## Section A

Answer all questions.

Each question carries 2 marks.

Ceiling: 20 Marks.

- 1. Define Imbibition.
- 2. What is meant by transpiration?
- 3. Explain cohesion tension theory.
- 4. What is Osmosis?
- 5. What is Photorespiration?
- 6. Define Growth.
- 7. What is Dormancy?
- 8. What is Vernalization?
- 9. Define Senescence.
- 10. What is Succession?
- 11. What is meant by test cross?
- 12. Differentiate heredity and variation.

Turn over

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## Section B

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

- 13. Write an account on stomatal movement.
- 14. Explain ascent of sap.
- 15. Write an account on light reaction.
- 16. Explain various factors influencing photosynthesis.
- 17. Write an account on ecological adaptation of hydrophyte.
- 18. Write a note on Mendel's experiment.
- 19. Explain complementary genes.

## Section C

Answer any one question.

The question carries 10 marks.

- 20. Explain Dark reaction in plants and write the factors affecting photosynthesis.
- 21. Write an account on ecological adaptations of Xerophyte, Halophyte, Epiphyte and parasite.

 $(1 \times 10 = 10 \text{ mark})$ 

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