

Answer in *one* word :

9. Flow of water through cell walls and intercellular spaces.
10. The force of attraction between water and walls of xylem.
11. A biliprotein that can exist in two inter-convertible forms, involved in flower initiation.
12. A completed succession that has reached the final stage.

(12 × ¼ = 3 weightage)

Part B (Short Answer Questions)

Answer all questions.

13. Write note on DPD.
14. Define Osmosis.
15. Which are the different types of transpiration ?
16. Comment on Emerson effect.
17. Explain Chloroplast dimorphism in C4 Plants.
18. What is Stratification ?
19. What is meant by vernalization ?
20. What is an ecosystem ?
21. What is hydrosere ?

(9 × 1 = 9 weightage)

Part C (Paragraph Questions)

Answer any five questions.

22. Write explanatory notes on imbibition and diffusion.
23. Write an account on Root pressure theory.
24. Explain CO₂ fixation in C4 plants.
25. Describe non-cyclic photophosphorylation.
26. Explain the physiological role of Auxins.
27. Write an account on the physiology of fruit ripening.
28. Explain the role of biotic factors in an ecosystem.

(5 × 2 = 10 weightage)

Part D (Essay Questions)

Answer any two questions.

29. Explain Glycolysis with a schematic diagram.
30. Discuss the statement that "Transpiration is a necessary evil".
31. Describe the morphological, anatomical and physiological adaptations in halophytes.

(2 × 4 = 8 weightage)