

BOARD QUESTION PAPER

Ch.: 6. Plant Water Relation Subject : Biology **Total Marks: 25** Class : XII Time: 1 Hr. Section A Select & write the most appropriate answer from the given alternatives for Q.1.: each sub-question. 4 Which special type of tissue is present in epiphytic roots? i) b) Lenticel c) Aerenchyma d) Haustoria a) Velamen In double layered cell wall of root hair, outer layer is of ii) d) suberin a) cellulose b) pectin c) cutin A root hair is derived from cell. iii) c) endodermal d) pericycle a) epidermal b) cortical iv) D.PD. is now known as b) solute potential a) water potential c) pressure potential d) osmotic potential Q.2.: Write the answer in ONE sentence: 2 What is the mechanism of imbibition? i) ii) What is radial and tangential translocation? Section B Attempt any THREE. 6 Q.3.: Give function of turgor pressure. Draw well labelled diagram of Structure of root hair Q.4.: O.5.: What are adhesive and cohesive forces?. Q.6: Enlist macronutrients and micronutrients required for plant growth. Section C 9 Attempt any THREE. Q.7: Write shorts notes on Lenticular transpiration. Q.8: Give reason: Absorption of water by roots from soil is with physical processes inhibition, diffusion and osmosis.

- **Q.9:** Distinguish between the Diffusion and Osmosis.
- **Q.10:** Complete the table.

E v e n t	Physical process
1)Soaking of Seeds	
2)Water entering guard cells	
3)Exchange of gases	
4)Loss of water in liquid form	
5)Water coming out through earthen pot	
6)Loss of water in vapour form	

Section D

: Answer the following: (ANY 1)

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- Q.11: Explain the principles of cohesion tension theory and its limitations?
- Q.12: Write a note on macronutrients and micronutrients required for plant growth.

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