

Topic: Anatomical Adaptations in Hydrophytes

B.Sc. Botany Sub. II

Group: B

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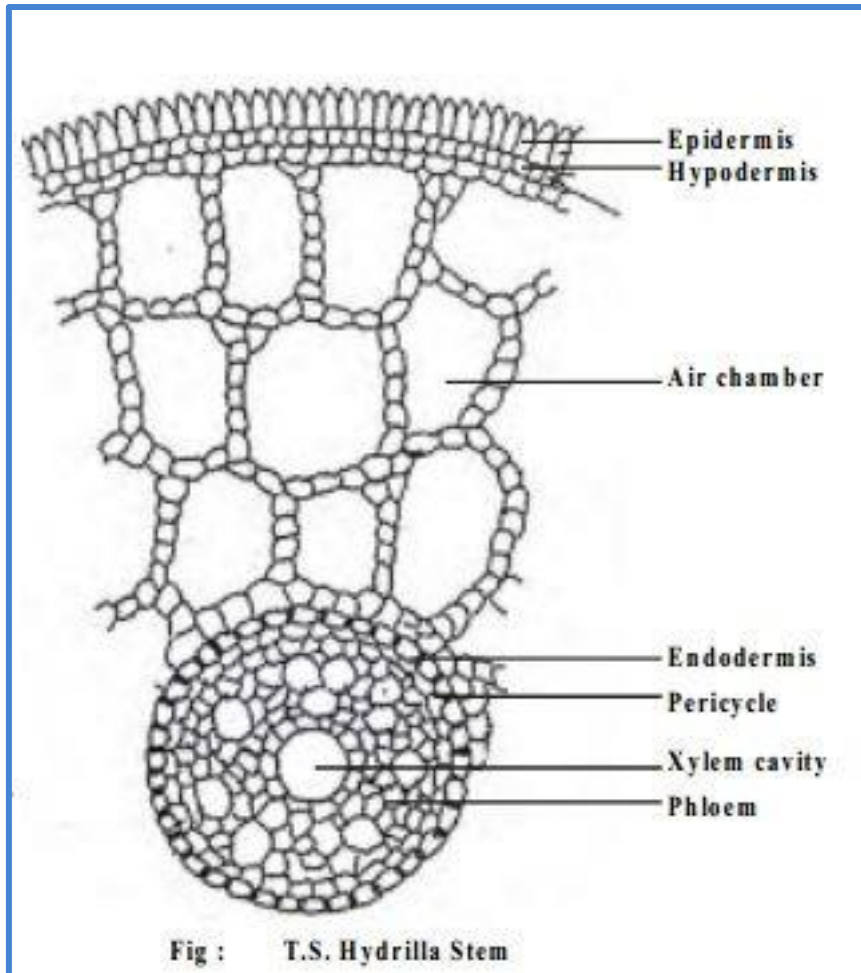
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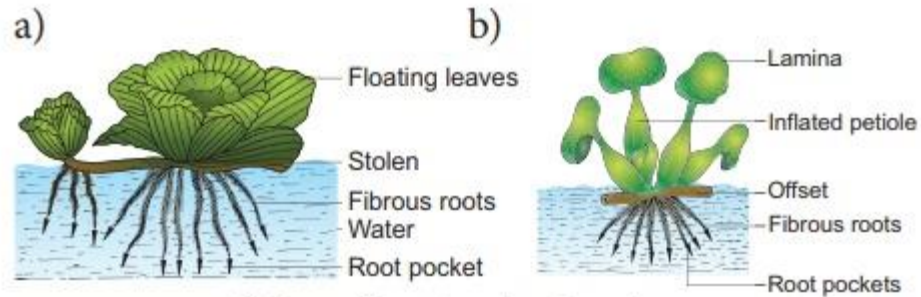
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Anatomical adaptations in Hydrophytes

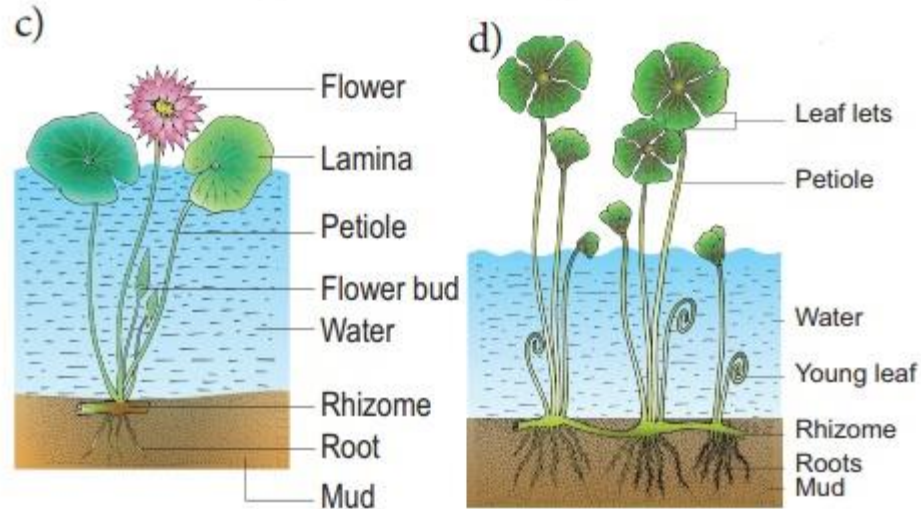
- Excessive development of parenchyma and elaborate system of aerenchyma (air space).
- Poor development of vascular and mechanical tissues.
- Cuticle absent or poorly developed.
- Stomata are completely absent in submerged leaves.
- Chlorophyll found in all the tissues.
- Mucilage canals and mucilage cells are present which secrete mucilage to protect the plant body.
- The reserve food is in the form of starch grains which occur in cortex and pith.
- Cystoliths (sclereids) of various shapes are seen in leaves and other tissues.





i) Free floating hydrophyte

a) *Eichhornia* b) *Pistia*



ii) Rooted floating hydrophyte

c) *Nymphaea* d) *Marsilea*