**STUDY MATERIAL**

**Semester – II (Hons) CC - IV , unit - 5**

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**XEROPHYTIC & HYDROPHYTIC CHARACTERS OF *Equisetum* sp**

The anatomical features of *Equisetum* spshow both the xerophytic & hydrophytic characters. These characters are described bellow –

1. **XEROPYYTIC CHARACTERS :-**
2. Presence of thick coat of cuticle all over the epidermal layer of stem.
3. Photosynthetic stem having chlorenchymatous cortex.
4. Stem behaving as leaves.
5. Presence of small scale like leaves with limited number of chloroplast.
6. Presence of sunken stomata in groove of stem.
7. Stiff epidermis and presence of ridges & furrows.
8. Deep seated rhizome.
9. **HYDROPYTIC CHARACTERS :-**
10. Vascular tissues especially xylem is poorly developed.
11. Vascular cannels are present in the inner cortex region, which always contain air thus forming an aerating systems.
12. Presence of large pith cavity surrounded by a few remaining pith parenchyma cells.
13. The central pith cavity and carinal cavity usually contain water in them.