Curriculum Planner

(Department of Botany, Kalindi College)

**Course** : **B. Sc. (H) Botany**

**Semester** : **III;**

**Paper** : **Anatomy of Angiosperms**

**Name of the Teacher: Dr. Sanavar Soham**

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| 1. Introduction  2.Study of anatomical details through permanent slides/temporary stain mounts/ macerations/ museum specimens with the help of suitable examples.  3. Apical meristem of root, shoot and vascular cambium.  4. Distribution and types of parenchyma, collenchyma and sclerenchyma.  5. Xylem: Tracheary elements-tracheids, vessel elements; thickenings; perforation plates; xylem fibres.  6. Wood: ring porous; diffuse porous; tyloses; heart- and sapwood.  7. Phloem: Sieve tubes-sieve plates; companion cells; phloem fibres.  8. Epidermal system: cell types, stomata types; trichomes: non-glandular and glandular.  9. Root: monocot, dicot, secondary growth.  10. Stem: monocot, dicot - primary and secondary growth; periderm; lenticels.  11. Leaf: isobilateral, dorsiventral, C4 leaves (Kranz anatomy).  12. Adaptive Anatomy: xerophytes, hydrophytes.  13. Secretory tissues: cavities, lithocysts and laticifers.  14. Revision & Mock Exam | August 2022  September 2022  September 2022  September 2022  September 2022  October 2022  October 2022  October 2022  October 2022  September 2022  October 2022  November 2022  November 2022  December 2022  December 2022 |
| **Suggested Readings**  1. Dickison, W.C. (2000). Integrative Plant Anatomy. Harcourt Academic Press, USA.  2. Fahn, A. (1974). Plant Anatomy. Pergmon Press, USA.  3. Mauseth, J.D. (1988). Plant Anatomy. The Benjammin/Cummings Publisher, USA.  4. Esau, K. (1977). Anatomy of Seed Plants. John Wiley & Sons, Inc., Delhi. | |