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. Introduction2.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 2022September 2022September 2022September 2022September 2022October 2022October 2022October 2022October 2022September 2022October 2022November 2022November 2022December 2022December 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. |