Curriculum Planner

(Department of Botany, Kalindi College)

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

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

**Paper** : **Economic Botany Practical**

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

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| Topic (Practical) | Approximate (schedule) |
| 1. Cereals: Wheat (habit sketch, L.S/T.S. grain, starch grains, micro-chemical tests), Rice (habit sketch, study of paddy and grain, starch grains, micro-chemical tests). Millets and Pseudocereals (specimens / photographs and grains) 2. Legumes: Soybean, Groundnut, (habit, fruit, seed structure, micro-chemical tests). 3. Fruits: Mango (habit sketch, L.S. fruit, micro-chemical tests in ripe fruit); Citrus (habit sketch, T.S. hesperidium, W.M. vesicle, micro-chemical tests including test for vitamin C) 4. Sugars and starches: Sugarcane (habit sketch; cane juice- micro-chemical tests); Potato (habit sketch, tuber morphology, T.S. tuber to show localization of starch grains, W.M. starch grains, micro-chemical tests). 5. Spices: Black pepper, Fennel and Clove (habit and sections L.S./T.S.). 6. Beverages: Tea (plant specimen, tea leaves), Coffee (plant specimen, beans). 7. Oils and fats: Coconut- T.S. nut, Mustard–plant specimen, seeds 8. Essential oil-yielding plants: Habit sketch of Rosa, Vetiveria, Santalum and Eucalyptus (specimens/photographs). 9. Rubber: specimen, photograph/model of tapping, samples of rubber products. 10. Drug-yielding plants: Specimens of Cinchona, Digitalis, Papaver and Cannabis (male & female plant). 11. Tobacco: specimen and products of Tobacco. 12. Fiber-yielding plants: Cotton (specimen, whole mount of seed to show lint and fuzz; whole mount of fiber and test for cellulose), Jute (specimen, transverse section of stem, test for cellulose and lignin on transverse section of stem and fiber) | August 2022September 2022September 2022September 2022September 2022October 2022October 2022October 2022October 2022November 2022November 2022November 2022 |
| Mock Test and Revision of selected topics | December 2022 |

**References**

1. Kochhar, S.L. (2012). Economic Botany in Tropics. New Delhi, India: MacMillan & Co.

2. Wickens, G.E. (2001). Economic Botany: Principles & Practices.The Netherlands: Kluwer Academic Publishers.

3. Chrispeels, M.J. and Sadava, D.E. (1994) Plants, Genes and Agriculture.Jones & Bartlett - Publishers.