

Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim-Goa				
Name of Faculty: Ms Vinita Baykar		Subject: Botany		
Paper code: BOT-112		Program: B.Sc.		Batch: III
Academic year: 2026– 2027		Semester: I		Total Practicals/Labs: 30
Credits: 01				
Course Objectives: 1. Familiarize students with the importance of plants in daily life, traditional practices, environmental management and sustainable resource utilization using modern plant-based technologies. 2. Identify economically important plants and their uses in value-added plant products. 3. Impart hands-on training in plant identification, preparation of herbal and eco-friendly products, extraction techniques, laboratory testing, and field-based study of local plant resources.				
Expected Course Outcome: 1. CO1: Recall the significance of plants in daily life, environmental management, traditional practices, plant resources, and valueadded products. 2. CO2: Explain plant-based services, morphological features for plant recognition, resource utilization, and preparation of plant-derived products. 3. CO3: Apply knowledge of plant resources, sustainable cultivation practices, and herbal products for healthy and sustainable living. 4. CO4: Analyze and evaluate the role of plants in sustainability, healthcare, food security, and value addition for societal well-being.				
Student Learning Outcome: Apply practical botanical techniques and sustainable practices to extract plant products, identify diverse local flora using digital tools, and manage organic resources effectively				
Month	Practicals/Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
July	8/7/26	1	Demonstration of decomposition of leaf litter to prepare organic manure.	Principles of Agronomy by Reddy et al

	15/7/26	1	Demonstration of decomposition of leaf litter to prepare organic manure.	Principles of Agronomy by Reddy et al
	22/7/26	1	Setting up a hydroponic unit to grow any one vegetable (demonstration).	
	29/7/26	1	Identification of common wild plants; plants from Grandma's herbal pouch	
August	5/8/26	1	cereals, millets, legumes, cash crops, plantation crops, essential oils, edible oils, tuber crops, vegetable crops, spices and timbers	Soilless Culture: Theory and Practice by Raviv
	12/8/26	1	a. Preparation of decoction of kirayte leaves b. Extraction of gel from Aloe vera	
	19/8/26	1	Extraction of essential oil from lemon grass / Eucalyptus leaves by distillation.	
	26/8/26	1	Extraction and cleaning of sisal fibre..	Botany for B.Sc. students, Economic Botany by Upadhyay
September	2/9/26	1	Preparation of herbal hair dye	
	9/9/26	1	Preparation of plant-based Holi colours (solid and liquid) using turmeric and beetroot.	
	16/9/26	1	Preparation of handmade paper from waste paper.	Everyday Ayurveda: The complete book of Ayurvedic home remedies by Shailesh
	23/9/26	1	Comparison of starch grains in tubers of potato and sweet potato using histochemical test.	
	30/9/26		Revision practicals	
October	7/10/26		Journal correction and certification	Economic Botany: A Textbook of Useful Plants and Plant Products by Hill
	14/10/26		Practical exam	
	9/8/26	1(6 hr)	Field trip	*date subjected to change

Assessment Rubrics

Component	Max Marks
ISA 1	NA
ISA 2	NA
ISA 3	NA
Practical	25
Project	NA
Semester End Exam	NA