Practical Plan

Name of the college: Government College of Arts, Science & Commerce, Sanquelim-Goa

Name of Faculty: Dr Jyosna Gawas | **Subject:** Botany

Paper code: BOT-303 | **Program:** B.Sc. | **Batch:** I

Academic year: 2025-2026 | **Semester:** V | **Total Practicals/Labs:** 15

Credits: 01

Course Objectives: To provide students with skills in field plant taxonomy and ecology

Expected Course Outcome: To develop competence in botanical fieldwork by accurately identifying and documenting plant species using standard field tools, herbarium techniques, floristic keys, and digital applications

Student Learning Outcome: Students will be able to identify, collect, and document plant species in natural habitats using standard field tools, floristic keys, and digital methods while following ethical fieldwork practices.

Month	Practicals/Labs Scheduled Date	No. of Practicals/Labs planned	List of Experiments	Reference books
July	02/07/2025	1	Familiarization with common field tools used in botany (hand lens, trowel, secateur, GPS device, vasculum and plant press).	Leaf based identification for Trees of Sahyadri. By S. Inganhalekar
	09/07/2025	1	Familiarization with common field tools used in botany (hand lens, trowel, secateur, GPS device, vasculum and plant press).	
	16/07/2025	1	Study of canopy morphology of Garcinia indica, *Alstonia scholaris*, *Mangifera indica, Terminalia paniculata, Polyalthia longifolia* and *Sterculia foetida* (sketch to be drawn).	
	23/07/2025	1	Study of branching patterns of *Garcinia indica, Alstonia scholaris, Mangifera indica, Terminalia paniculata, Polyalthia longifolia* and *Sterculia foetida* (sketch to be drawn).	
	30/07/2025	1	Identification of species (any 5) of genus *Terminalia/ Ipomoea* using keys in Flora books.	

August	06/08/2025	1	Preparation and submission of one herbarium specimen each of angiosperm, bryophyte and pteridophyte.	Plant systematics: Theory and Practice by G Singh
	13/08/2025	1	Preparation and submission of one herbarium specimen each of angiosperm, bryophyte and pteridophyte.	
	20/08/2025	1	Identification of any five Fabaceae specimens using Flora books.	
September	03/09/2025	1	Demonstration of wet preservation of angiosperms, algae, fungi, bryophytes, pteridophytes and lichens.	
	10/09/2025	1	Preparation and submission of one herbarium specimen each of an alga, fungus and lichen.	
	17/09/2025	1	Collection of wild seeds and growing them in the nursery.	
	24/09/2025	2	Navigation in field using toposheet and compass in the campus.	
October	01/10/2025	2	Day field trip to mangrove forest area for in-field identification using Flora books. 7a. Identification of plants using automated image recognition apps (to be conducted during field trip). 7b. Demonstration of using GPS devices for location tagging during fieldwork (to be conducted during field trip).	
	08/10/2025	2	Field trip to area with natural vegetation for plant collection and in-field identification using Flora books. 5a. Identification of 10 trees using leaf-based keys (to be conducted during field trip). 5b. Creating digital logs and recording phenological data (to be conducted during field trip).	
	15/10/2025		Journal correction and certification	

Assessment Rubrics

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