

Lecture Plan		
Name of the college: Government College of Arts, Science and Commerce, Sanquelim, Goa.		
Name of Faculty: Ms. Shubha Shivdas Kauthankar	Subject: Botany	
Paper code: BOT 111-Plants in Everyday Life	Program: F.Y.B.Sc.	Division: -
Academic year: 2025- 2026	Semester: I	Total Lectures: 45
Course Objectives: 1. The course deals with an overview of how plants are indispensable to humans. 2. It gives a broad exposure to the various aspects of plant resource & its utilization.		
Course Outcome: 1. Recall various economically and medicinally important plant species used in day-to-day life. 2. Explain the uses of economically important plants and illustrate the processing of various plant parts. 3. Analyze the utilization of various plant resources in day-to-day life. 4. Apply theoretical knowledge in utilization, and report generation of economical and medicinal plants. 5. Create awareness on conservation of medicinal plants and use of natural plant products as alternatives to synthetic products.		
Student Learning Outcome: 1. Recall various economically and medicinally important plant species used in day-to-day life. 2. Explain the uses of economically important plants and illustrate the processing of various plant parts. 3. Analyze the utilization of various plant resources in day-to-day life. 4. Apply theoretical knowledge in utilization, and report generation of economical and medicinal plants. 5. Create awareness on conservation of medicinal plants and use of natural plant products as alternatives to synthetic products.		

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
June 2025	23/06/2025	28/06/2025	3	Module 1: Plant services to humans in everyday life	To study the uses of plants in different fields	Powerpoint presentation	1. Kochhar, SL (2012). Economic Botany in the Tropics. MacMillan India Ltd., New Delhi. 2. Purohit, SS and Vyas, SP (2008). Medicinal Plant Cultivation: A Scientific Approach. Agrobios, India. 3. Rao, RS (1985-1986). Flora of Goa, Diu, Daman & Nagar-Haveli. 2 Volumes. Botanical Survey of India.
				Introduction to science of Botany, plant resources in everyday life.			
				Role of plants: Air purifier (photosynthesis)			
June 2025 - July 2025	30/06/2025	05/07/2025	3	Plants used in rituals/festivals; Pollution removal (phytoremediation and its types)	To study the basic morphological features of any two plants.	Powerpoint presentation	
				pollution indicator (lichens), and nutrient source (litter manure, organic manure).			
				Familiarizing the students to identify plants based on morphology of plant parts.			
July 2025	07/07/2025	12/07/2025	3	Identify common wild plants using live plants/ herbarium/photographs etc.	To study wild plants	Powerpoint presentation	
				Common wild plants and their utilization: Identification and utilization of following plants: Hirda (<i>Terminalia chebula</i>), Behda (<i>Terminalia bellirica</i>), Matti (<i>Terminalia elliptica</i>), Kinal (<i>Terminalia paniculata</i>), Savar (<i>Ceiba pentandra</i>), Kate-savar (<i>Bombax ceiba</i>),			
				Bhillo mad (<i>Caryota urens</i>), Arjun/Pandruk (<i>Sterculia foetida</i>), Kumyo (<i>Careya arborea</i>), Asale (<i>Microcos paniculata</i>),			

July 2025	14/07/2025	19/07/2025	3	Charan (<i>Buchanania cochinchinensis</i>), Chunna (<i>Ziziphus rugosa</i>) and Kanna (<i>Carissa carandas</i>). Grandma's herbal pouch: botanical source, part of the plant used, and medicinal uses: Tulsi (<i>Ocimum sanctum</i>), Adulsa (<i>Adhatoda vasica</i>), Ale (<i>Zingiber officinale</i>), Halad (<i>Curcuma longa</i>), Kate kuvar (<i>Aloe vera</i>), Kirayte (<i>Andrographis paniculata</i>), Ganjan (<i>Cymbopogon citratus</i>), Ottalao (<i>Coleus aromaticus</i>),	To study the locally available medicinal plants	Powerpoint presentation	4. Shailesh, R (2019). Everyday Ayurveda: The complete book of Ayurvedic home remedies. Notion Press, India.
July 2025	21/07/2025	26/07/2025	3	Vaikhand (<i>Acorus calamus</i>), Punarnava (<i>Boerhaavia diffusa</i>), Paripat (<i>Oldenlandia corymbosa</i>) and Gulvel (<i>Tinospora cordifolia</i>). Module 3: a. Spices: Chillies, Nutmeg, Clove, Black pepper, Cardamom, Star anise (<i>Chakriful</i>) and Dagad phul (<i>Parmotrema perlatum</i>).	To enlist the locally available spice plants	Powerpoint presentation	5. Sambamurty AVSS and Subramanyam NS (1989). A Textbook of Economic Botany. Wiley Eastern Ltd., New Delhi.
July- August 2025	28/07/2025	02/08/2025	3	b. Beverages: Tea (including processing). b. Beverages: Coffee (including processing). c. Eco-friendly use of plant parts: Banana fresh leaves, Arecanut spathe, Kumyo leaves (<i>Carea arborea</i>), Jackfruit leaves and Bamboo culm.	To study the steps of tea and coffee processing	Powerpoint presentation	

August 2025	04/08/2025	09/08/2025	3	ISA 01	To study the extraction method of essential oils	Powerpoint presentation
				d. Oils: Eucalyptus, Rose and Orange peel (including methods of extraction)		
				e. Fibres: Coir, Cotton, Jute, Banana and Sisal Including method of separation of spathe, drying and storing of fibre of banana and;		
August 2025	11/08/2025	16/08/2025	2	Collection, drying, processing and extraction of fibre from Agave leaf (demonstration/video)	To study the types of timber trees found in Goa	Powerpoint presentation
				f Timber: Teak (Sailo), Rose wood (Shisham), Matti and Bamboo.		
August 2025	18/08/2025	23/08/2025	3	g. Rubber: Hevea brasiliensis (including demonstration of rubber extraction process)	To study the method of preparation of herbal dyes	Powerpoint presentation
				Fibres: Coir, Cotton,		
				Herbal based hair dyes: Role of ingredients used in formulation;		
August 2025	25/08/2025	30/08/2025	1	preparation of herbal dyes;	-	

September 2025	02/09/2025	06/09/2025	3	Application of hair dye; evaluation and uses of hair dye (Henna, Bhringaraj, Hibiscus, Amla).	To study the plants used in herbal cosmetics	
				Including demonstration on preparation of herbal hair dye and evaluation/testing on hair wig.		
				Herbal cosmetics and aromatics: Introduction and scope, Extraction Methods-Maceration, infusion, decoction,		
September 2025	08/09/2025	13/09/2025	3	distillation and tinctures, Types of herbal preparations.	To enlist the plants used as cleansers	
				Plants used in cleansers (Neem, Cucumber, Rose), scrubs (Marigold, Neem),		
				wash (Rose –face wash, hibiscus & amla-hair wash & oil), packs and creams		
September 2025	15/09/2025	20/09/2025	3	ISA 02	To study the preparation of henna powder	
				Extraction of essential oil from lemon grass / orange peel or citrus fruit peel.		
				Preparation of Henna powder from Henna leaves and Aloe gel from Aloe vera.		
Septem ber 2025	22/09/2025	27/09/2025	3	Preparation of plant based holi colours./ ISA 03	To prepare holi colors at home	
				Paper making from plants: Paper industry and paper manufacturing;		

October 2025	28/09/2025	04/10/2025		Raw materials, Processing and kinds of paper, paper Industry in India.			
October 2025	06/10/2025	11/10/2025	3	Method of making of handmade paper with demonstration/video.	To prepare handmade paper at home	Powerpoint presentation	
				Demonstration on preparation of herbal formulation/herbal tea.			
				Field visit in the campus to identify the plants of economic importance and report preparation.			
October 2025	13/10/2025	18/10/2025	3	Revision	-	-	

*** Assessment Rubrics**

Component	Max Marks
ISA 1	10
ISA 2	10
ISA 3	10
Practical	-
Project	-
Semester End Exam	80