Lecture Plan

Name of the college: Government college of arts science and commerce Sanquelim-Goa

Name of Faculty: Anuja Naik

Subject: Botany (plants in everyday life)

Paper code: BOT-111 Program/Course: F.Y B.Sc. Division: A

Academic year: 2024 - 2025 Semester: I Total Lectures: 30

Course Objectives: This course is designed to give an overview of how plants are indispensable to humans. It gives a broad exposure to the various aspects of plant resource & its utilization.

Course 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. Create awareness on conservation of medicinal plants and use of natural plant products as alternatives to synthetic products.

Month	Lect From:	tures To:	No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	Exerci se/ Assign ment	ICT Tools	Reference books
July	17/07/2024	20/07/2024	1	Module 1: Plant services to humans in everyday life. Introduction to science of Botany, plant resources in everyday life.	Students are able to explain the role of plants in human everyday life.	Studen ts are suppos e to write 5 names of plants after identif ying	Power point present ation	Economic and medicinal botany by v. verma

						local plants in their surrou nding
				Role of plants: Air purifier (photosynthesis)	Students explain the role of plants in air purifying with the help of	
				plants used in rituals/festivals; Pollution removal (phytoremediation and its types),	process photosynthesis also students list the plants used in rituals and festivals and define the	
	22/07/202	27/02/2021	2		different types of phytoremediation	
					Students identify the lichens as pollution indicator and also explain the	
	29/07/24	31/07/24	1	pollution indicator (lichens), nutrient source (litter manure, organic manure).	nutrient source from litter manure and organic manure Students are able	
	1/08/24	3/08/24	1	Familiarizing the students to identify plants based on morphology of plant parts.	to identify the different morphological characters of the plant parts.	
August	5/08/24	10/08/24	2	Identify common wild	Students identify	

			plants using live plants/herbarium/photograph s etc. Common wild plants and their utilization: Identification and utilization of following plants: Hirda (Terminalia chebula), Behda (Terminalia bellirica), Matti (Terminalia elliptica), Kinal (Terminalia paniculata),	the common plants from their surrounding and also identify the plants based on its mophology Students identify and state the uses of Hirda (Terminalia chebula), Behda (Terminalia bellirica), Matti (Terminalia elliptica), Kinal (Terminalia paniculata), Students identify and state the uses of Savar (Ceiba	Studen ts are suppos	
			(Terminalia elliptica), Kinal (Terminalia paniculata), Savar (Ceiba pentandra), Kate-savar (Bombax ceiba), Bhillo mad (Caryota urens), Arjun/Pandruk (Sterculia foetida), Kumyo (Careya	elliptica), Kinal (Terminalia paniculata), Students identify and state the uses of Savar (Ceiba pentandra), Kate- savar (Bombax ceiba), Bhillo mad (Caryota urens), Arjun/Pandruk (Sterculia foetida), Kumyo (Careya		
12/08/24	17/08/24	2	Asale (Microcos paniculata), Charan (Buchanania cochinchinensis), Chunna (Ziziphus rugosa) and Kanna (Carissa carandas).	arborea), Students identify and state the uses of Asale (Microcos paniculata), Charan (Buchanania cochinchinensis), Chunna (Ziziphus rugosa) and Kanna (Carissa carandas).	identif ying local plants in their surrou nding from their parents	

			Grandma's herbal pouch: Following plants to be studied with respect to botanical source, part of the plant used, and medicinal uses: Tulsi (Ocimum sanctum), Adulsa (Adhatoda vasica),	Students are able to recognize the plants and their medicinal uses of Tulsi (Ocimum sanctum), Adulsa (Adhatoda vasica),
19/08/24	24/08/24	2	Ale (Zingiber officinale), Halad (Curcuma longa), Kate kuvar (Aloe vera), Kirayte (Andrographis paniculata), Ganjan (Cymbopogon citratus),	Students are able to recognize the plants and their medicinal uses of Ale (Zingiber officinale), Halad (Curcuma longa), Kate kuvar (Aloe vera), Kirayte (Andrographis paniculata), Ganjan (Cymbopogon citratus)
26/08/24	31/08/24	2	Ottalao (Coleus aromaticus), Vaikhand (Acorus calamus), Punarnava (Boerhaavia diffusa), Paripat (Oldenlandia corymbosa) and Gulvel (Tinospora cordifolia).	Students are able to recognize the plants and their medicinal uses of Ottalao (Coleus aromaticus), Vaikhand (Acorus calamus), Punarnava (Boerhaavia diffusa), Paripat (Oldenlandia corymbosa) and Gulvel (Tinospora cordifolia).

				Module 2: Plant resources and utilization-I (including brief description of plants and/or plant parts used). a. Cereals: Rice, Wheat, Maize	Students identify describe and state the use of cereals-Rice, Wheat and Maize Students identify describe and state the use of millets-	Studen ts are told to
	00/00/24	14/00/24		b. Millets: Ragi, Jowar	Ragi, Jowar and	get
	09/09/24	14/09/24	2	Bajra	Bajra	cereal crops for studyin
					Students identify describe and state the use of	g the morph ologica
				c. Legumes: Bengal gram, Green gram, Red	Legumes: Bengal gram, Green gram,	charact
				Black gram and Cowpea.	Red gram. Students identify describe and state the use of Black gram and Cowpea.	ers
				d. Cash crops: Cashew,	Students identify describe and state the use of Cash crops: Cashew and	
	23/09/24	28/09/24	2	Sugarcane.	Sugarcane.	
October				cocoa	Students identify describe and state the use of cocoa	
				e. Plantation crops:	Students identify describe and state the use of	
	1/10/24	5/10/24	2	Coconut,	Plantation crops:	

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					Coconut		
					Students identify		
					describe and state		
				Banana,	the use of Banana		
					Students identify		
					describe and state		
					the use of Mango		
	7/10/24	12/10/24	2	Mango and Jackfruit	and Jackfruit		
					Students identify		
					describe and state		
					the use of Edible		
				f. Edible oils:	oils: Groundnut		
				Groundnut, Coconut,	and Coconut		
				Grounding, edecinac,	Students identify		
					describe and state		
					the use of		
					Soyabean and Palm		
	14/10/24	19/10/24	2	Soyabean and Palm Oil.	Oil		
	11/10/21	19/10/21		Soyubcuir unu i unii on.	Students identify	Studen	
					describe and state	ts are	
					the use of Starch	told to	
				g. Starch and tuber	and tuber crops:	get	
				crops: Potato, Sweet	Potato, Sweet	differe	
				potato and Yam	potato and Yam	nt	
				potato ana ram	potato ana ram	vegeta	
						ble in	
						their	
					C4 1 4- : 1 4: C	syllabu	
					Students identify	s for	
					describe and state	studyin	
					the use of	g the	
				h Vanatable Dod	Vegetable crops:	morph	
				h. Vegetable crops: Red	Red amaranth,	ologica	
				amaranth, Radish,	Radish, Lady's	ologica	
				Lady's finger, Teren, 1	finger, Teren, 1	charact	
	21/10/24	22/10/24	2	hour Kudduki, Ankur	hour Kudduki,		
	21/10/24	22/10/24	2	and Taikhil	Ankur and Taikhil	ers.	