EVEN Semester Lecture Plan (Theory)

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

Name of Faculty: Dr. Nisha Kevat	**Subject:** Botany – (Plants in Everyday Life)
Paper code: BOT - 111	**Program/Course: F.Y B.Sc.**
Division: - --	
Academic year: 2025 - 2026	**Semester: II**
Total Lectures: Theory (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	Lectures From:	To:	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/Assignment	ICT Tools	Reference books
Week 1 December	1/12/25	6/12/25	02	**Lecture 1** **Module 1: Plant services to humans in everyday life** Introduction to science of Botany, plant resources in everyday **Lecture 2:** Introduction to science	Students list five plant-based products they use daily and mention their plant source. Students list five plant-based products they use	Power point presentation You tube Videos Google forms for	• Billings S and Collingwood S (2013). The Big book of home remedies. Lulu.com

				of Botany, plant resources in everyday life.	daily and mention their plant source	quiz	publisher. • Buckley, C (2020). Plant Magic: Herbalism in Real Life. Roost Books Publishers, New York. • Chrispeels, MJ and Sadava, DE (1994). Plants, Genes and Agriculture. Jones & Bartlett Publishers. • Fuller, KW and Gallon, JA (1985). Plant Products and New Technology. Clarendon Press, Oxford, New York. • Hill, AF (1952). Economic Botany: A Textbook of Useful Plants and Plant Products. McGraw Hill Publishing Company Ltd., New Delhi. • Kochhar, SL (2012). Economic Botany in the Tropics. MacMillan India Ltd., New Delhi. • Purohit, SS and Vyas, SP
Week 2 December	8/12/25	13/12/25	02	**Lecture 3: Role of plants:** Air purifier (photosynthesis); **Lecture 4** plants used in rituals/festivals;	Students draw a simple diagram showing how plants purify air through photosynthesis. Students list three plants commonly used in local rituals or festivals.	Power point presentation You tube videos	
Week 3 December	15/12/25	20/12/25	02	**Lecture 5:** Pollution removal (phytoremediation and its types), **Lecture 6:** pollution indicator (lichens), and nutrient source (litter, manure, organic manure).	Students write one example of a plant used in phytoremediation and the pollutant it removes. Students identify one lichen as a pollution indicator and one plant-based nutrient source.	Power point presentation You tube videos	
Week 4 January	2/01/26	3/01/26	02	**Lecture 7:** Familiarizing the students to identify plants based on morphology of plant parts. **Lecture 8:** Familiarizing the students to identify plants based on morphology of plant parts.	Students observe a plant and note the morphology of root, stem, and leaves. Students classify a plant based on leaf shape, venation, and arrangement.	Power point presentation You tube videos	
Week 5 January	5/01/26	10/01/26	02	**Lecture 9:** Identify common wild plants using live plants. **Lecture 10:** Identify common plants for herbarium and photographs.	How do you extract oil from orange peel? Name 1 step in coir processing.	Power point presentation You tube videos	
Week 6 January	12/01/2026	17/01/26	02	**Lecture 11:** **Common wild plants and their utilization:** Identification and utilization of following plants: Hirda (*Terminalia chebula*), Behda(*Terminalia bellirica*), Matti (*Terminalia elliptica*), Kinal	Students identify Hirda, Behda, Matti, Kinal, Savar and Kate-savar using pictures/ herbarium sheets and note one local use of each.	Power point presentation You tube videos	

				(*Terminalia paniculata*), Savar (*Ceiba pentandra*), Kate-savar (*Bombaxceiba*), Bhillo mad (**Lecture 12:** Bhillo mad (*Caryota urens*), Arjun/Pandruk (*Sterculia foetida*), Kumyo (*Careya arborea*), Asale (*Microcos paniculata*), Charan (*Buchanania cochinchinensis*), Chunna (*Ziziphus rugosa)*and Kanna (*Carissa carandas*).	Students match plant names with their common uses using a simple worksheet on Bhillo mad, Arjun, Kumyo, Asale, Charan, Chunna and Kanna.		(2008). Medicinal Plant Cultivation: A Scientific Approach. Agrobios, India. • Rao, RS (1985-1986). Flora of Goa, Diu, Daman & Nagar-Haveli. 2 Volumes. Botanical Survey of India. • Shailesh, R (2019). Everyday Ayurveda: The complete book of Ayurvedic home remedies. Notion Press, India. • Sambamurty AVSS and Subramanyam NS (1989). A Textbook of Economic Botany. Wiley Eastern Ltd., New Delhi. • Sen, S (2009). Economic Botany. NCBA Publishers, New Delhi. • Sharma, OP (1996). Hill's Economic Botany. Tata McGraw Hill Publishing Company Ltd., New Delhi.
Week 7 January	19/01/2026	24/01/26	02	**Lecture 13: 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*), **Lecture 14:** /Adulsa (*Adhatoda vasica*),Ale (*Zingiber officinale*),Halad (*Curcuma longa*),Kate kuvar(*Aloe vera*),Kirayte (*Andrographis paniculata*),Ganjan(*Cymbopogon citratus*),Ottalao (*Coleus aromaticus*),	Students list the plant part used and one medicinal use of Tulsi based on a classroom discussion. Students prepare a table showing medicinal uses of Adulsa, Ale, Halad, Kate kuvar, Kirayte, Ganjan and Ottalao.	Power point presentation You tube videos	
Week 8 January	27/01/2026	31/01/26	02	**Lecture 15**: Vaikhand (*Acorus calamus*),Punarnava(*Boerhaavia diffusa*),Paripat (*Oldenlandia corymbosa*)and Gulvel (*Tinospora cordifolia*). **Lecture 16:** **Module 2: Plant resources and utilization-I** (including brief description of plants and/or plant parts used).	Students identify Vaikhand, Punarnava, Paripat and Gulvel and write one traditional use of each. Students observe samples/pictures of rice, wheat and maize and record the plant part used as food.	Power point presentation You tube videos	

				a. **Cereals**: Rice, Wheat, Maize			• Simpson BB and Conner-Ogorzaly M (1986). Economic Botany - Plants in Our World. McGraw Hill, New York. • Singh V, Pande PC and Jain DK (2009). A Text Book of Economic Botany. Rastogi Publications, Uttar Pradesh. • Trivedi, PC (2006). Medicinal Plants: Ethnobotanical Approach. Agrobios, India. • Upadhyay, R (2025). Botany for B.Sc. students, Economic Botany, Ethnomedicine and phytochemistry/Commercial Botany and phytochemical Analysis. S. Chand and Company Ltd. Publishers, India. • Wickens, GE (2001). Economic Botany: Principles & Practices. Kluwer
Week 9 February	27/1/26	31/1/26	02	**Lecture 17:** Maize **Lecture 18:** b. **Millets:**Ragi, Jowar and	Students label parts of the maize plant and mention one use of maize. Students compare ragi and jowar by listing one nutritional benefit of each.	Power point presentation You tube videos	
Week 10 February	2/02/26	7/02/26	02	**Lecture 19:** Bajra **Lecture 20:** Bengal gram, Green gram, Red gram, Black gram	Students identify bajra grains and write one food product prepared from it. Students list one use each of Bengal gram, green gram, red gram and black gram.	Power point presentation You tube videos	
Week 11 February	9/02/26	14/02/26	02	**Lecture 21:** Green gram, Red gram, Black gram and Cowpea. **Lecture 22:** d. **Cash crops:** Cashew, Sugarcane and Cocoa.	Students differentiate green gram, red gram, black gram and cowpea using seed samples or images. Students identify cashew, sugarcane and cocoa and note the economic product obtained from each.	Power point presentation You tube videos	
Week 12 February	16/2/26	21/2/26	02	**Lecture 23:** Cocoa **Lecture 24:** e. **Plantation crops:**Coconut,	Students trace the journey of cocoa from plant to chocolate in a flowchart. Students list five uses of coconut in daily life.	Power point presentation You tube videos	

Week 13 February	23/2/26	28/2/26	02	**Lecture 25**: Banana, **Lecture 26**: Mango	Students observe banana plant parts and write one use of each part. Students list nutritional benefits of mango and one value-added product.	Power point presentation You tube videos	Academic Publishers, The Netherlands
Week 14 March	2/03/26	7/03/26	02	**Lecture 27:** Jackfruit. **Lecture 28**: f. **Edible oils:** Groundnut, Coconut,	Students identify jackfruit and mention its raw and ripe uses. Students identify sources of groundnut and coconut oil and note their uses.	Power point presentation You tube videos	
Week 15 March	9/03/26	14/3/26	02	**Lecture 29:** Soyabean and Palm Oil. **Lecture 30:** g. **Starch and tuber crops:** Potato, Sweet potato and Yam	Students list food and industrial uses of soybean and palm oil. Students classify potato, sweet potato and yam based on the type of underground stem.	Power point presentation You tube videos	
Week 16 March	16/3/26	21/3/26	02	**Lecture 31:** h. **Vegetable crops**: Red amaranth, Radish, Lady's finger, Teren, Kudduki, Ankur and Taikhilo. **1 hour** **Lecture 32:** Revisions	Students identify local vegetable crops from the list and write one use of any two. Students answer a short quiz covering key points from all previous lectures.	Power point presentation You tube videos	

Week 17 March	23/03/26	28/03/26	02	**Lecture 33:** Revisions **Lecture 34:** Revisions	REVISIONS		

***Assessment Rubrics**

Component	Maximum Marks
ISA I	**10**
ISA 2	**10**
ISA 3 (Two best of 3 ISA)	**10**
Practical	**NA**
Project	**NA**
Semester End Exam	**80**
Total	**100**