Semester Lecture Plan (Theory)

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

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

Paper code: BOT-100 | **Program/Course:** F.Y.B.Sc. | **Division:** A

Academic year: 2024-2025 | **Semester: S** | **Total Lectures:** 15

Course Objectives: This course aims to increase the understanding about the diversity of morphological features

Course Outcome: Students will be able to analyse the morphological features of plants.

Month	Lectures		No. of lectures allotted	Topic, subtopic to be covered	Exercise/ Assignment	ICT tools	Reference books
	From	To					
July	15th	20th	1	Types of roots (Tap, fibrous and adventitious),	Observe the learnt characters in the plants around you	Chalk and board; Powerpoint presentation	Taxonomy of Vascular Plants by G. H. M Lawrence Plant systematics: Theory and Practice by G Singh Taxonomy of Practical Botany-II
	22nd	27	1	Stem (aerial and underground),			
July/August	27th	3rd	1	ISA; Parts of leaf			
August	5th	10th	1	Phyllotaxy – Alternate, spiral, opposite, whorled; leaf types - compound, simple; leaf venation - parallel and reticulate.			
	12th	17th	1	Shapes of leaves; leaf margins, leaf apex, vernation; inflorescence types – cymose and racemose			
	19th	24th	1	flower (parts, symmetries, functions of different parts of the flower, aestivation types			
	26th	31st	1	Fruit - Simple, Aggregate, Multiple; Seed and its structure,			
September	2nd	7th	1	Embryo; seed types; germination in *Ricinus* and *Cucurbita*;	-		

	9th	14th	1	Seed dispersal mechanisms.	Collect seeds with outgrowths		by A. M. Bendre & A. Kumar
	16th	21st	1	Tissues in plants: Meristems – types, positions, functions;	-		
	23rd	28th	1	Simple tissues– Parenchyma– its positions, functions	-		
Sept/Oct	30th	5th	1	Collenchyma, Sclerenchyma – their positions, functions			
October	7th	12th	1	Vascular tissue – xylem - positions, functions			
	14th	19th	1	Vascular tissue – phloem - positions, functions			
	21st	22nd	1	Revision			

* Assessment Rubrics

Component	Max Marks
ISA 1	7.5
ISA 2	NA
ISA 3	NA
Practical	NA
Project	NA
Semester End Exam	60