

Semester Lecture Plan (Theory)												
Name of the college: Government College of Arts, Science & Commerce, Sanquelim												
Name of Faculty: Ms. Rutika Rajesh Vasta						Subject: Botany						
Paper code: BOT-205			Program/Course: S.Y.B.Sc.			Division: A						
Academic year: 2025-2026			Semester: 2			Total Lectures: 15						
Course Objectives: This course aims to Help in developing skill in the field of palynology												
Course Outcome: Students will be able to analyse the Recall definitions and identify the different types of pollen grains from flower.												
Month	Lectures		No. of lectures allotted	Topic, subtopic to be covered			Exercise/Assignment	ICT tools	Reference books			
	from	to										
December 2025	01/12/2025	06/12/2025	1	Definition and brief history of palynology.			Learnt about different types of pollen grain	Chalk and board; Powerpoint presentation	Bhattacharya, K and Majumdar, MR (2021). A Text book of Palynology. New Central Book Agency (P) Ltd., Kolkata, India.			
	08/12/2025	13/12/2025	1	Pollen development								
	15/12/2025	20/12/2025	0	Goa Liberation Day								
	22/12/2025	27/12/2025	0	Christmas Vacation								
December 2025- January 2026	29/12/2025	03/01/2026	1	pollen morphology: pollen units (monad, dyad, tetrad, polyads, massulae, pollinia) polarity, symmetry, shape, size and aperture (NPC);								
January 2026	05/01/2026	10/01/2026	1	sporoderm stratification								
	12/01/2026	17/01/2026	1	ISA								

	19/01/2026	24/01/2026	1	Exine ornamentation, Pollen wall proteins		Erdtman, G (1969). Handbook of Palynology: Morphology, Taxonomy, Ecology – An Introduction to the Study of Pollen Grains and Spores. Hafner Pub. Co., New York. Li, R (2021). Forensic Biology. CRC Press, U.S.A	
	26/01/2026	31/01/2026	1	Pollen viability, Estimation of pollen viability,			
February 2026	02/02/2026	07/02/2026	1	pollen storage (short and long term) and germination; palynogram.	-		
	09/02/2026	14/02/2026	1	ISA			
			1	Applications of palynology: Palynotaxonomy - definition, pollen morphological characters of taxonomic importance	-		
	16/02/2026	21/02/2026	1	Aeropalynology - definition, intramural and extramural, pollen transport in the atmosphere, pollen calendar,	-		
	23/02/2026	28/02/2026	1	circadian rhythm in pollen emission; pollen allergens and allergic diseases in humans			
March 2026	02/03/2026	07/03/2026	1	Melittopalynology - definition, pollen load, role of pollen in honey industry (raw/artificial honey, uni-floral/multi-floral honey, bee pollen in health care)			
	09/03/2026	14/03/2026	1	Paleopalynology - definition, study of fossil pollen and spores and their significance in paleobotany, coal and oil explorations			
	16/03/2026	21/03/2026	1	Forensic palynology - definition, significance of pollen in forensic science			
	23/03/2026	28/03/2026	1	Revision			

* Assessment Rubrics

Component	Max Marks
ISA 1	5
ISA 2	5
ISA 3	NA

Practical	25
Project	NA
Semester End Exam	20