Teaching Plan for the Session 2025-26
Name of the Teacher: Dr. Anita Mazinder Buragohain
Designation: Associate Professor
Department: Botany

J.B. College (Autonomous)

Class/Semester	Title & Code of the Paper Allotted (Credit)	Method of Teaching	Teaching Material	Unit	Topic	Period/Hours Required	Details of the Contents	Remarks/Books
Semester-I	BOTMJ-011: Algae and Bryophyta (Credit: 4)	Lecture, PPT, Chalk & Talk	Textbook, Diagrams, Charts	Unit 6	Chlorophyta and Charophyta	10 Hours	General characteristics, Occurrence, Thallus organization, Cell structure, Reproduction, Life-cycles of Chlamydomonas, Volvox, Oedogonium, Coleochaete, Chara, Evolutionary significance of Prochloron	B.R. Vashishta, F.E. Fritsch
Semester-II	BOTMJ-021: Archegoniates (Credit: 4)	Lecture, PPT, Discussion	Textbook, Herbarium specimens	Unit 1 & 2	Introduction and Bryophytes	12 Hours	Unifying features of archegoniates, Alternation of generations, Classification, Morphology, Anatomy and Reproduction of Riccia, Marchantia	B.R. Vashishta, R.M. Sharma
Semester-III	BOTMJ-031: Plant	Lecture, Case study,	Charts, PPT	Unit 8	Phytopathology	10 Hours	Terms, Symptoms, Etiology, Disease cycle,	Rangaswami & Mahadevan

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	Pathology (Credit: 4)	Visual Aids					Host-pathogen relationship, Control, Citrus canker, TMV, Late blight, Black stem rust	
Semester-III	BOTMJ-032: Cell Biology (Credit: 4)	Lecture, PPT, Interactive session	Diagrams, Models	Unit 4	Cell Structure and Function	10 Hours	Prokaryotic and Eukaryotic cell features, Endosymbiotic theory, Membrane transport, Cell organelles, Nucleus	De Robertis, Powar
Semester-III	BOTMJ-033: Plant Anatomy (Credit: 4)	Lecture, Practical, Models	Histological slides	Unit 2 & 3	Shoot apex, Tissues	8 Hours	Theories of shoot apex, Tissue types, applications in systematics, forensics	Esau, Fahn
Semester-IV	BOTMJ-041: Economic Botany (Credit: 4)	Lecture, Group Discussion, Charts	Samples, Charts	Units 1-3, 5-6	Economic Botany	14 Hours	Origin of cultivated plants, Wheat, Rice, Millets, Legumes, Spices, Beverages	Kochhar, Sambamurty
Semester-IV	BOTMI-041: Plant Breeding (Credit: 4)	Lecture, Case studies, Charts	Breeding charts	Unit 3	Plant Breeding	10 Hours	Modes of reproduction, Breeding objectives, Achievements, Crop improvement methods	Chaudhary, Singh
Semester-V	BOTMJ-051: Plant Systematics (Credit: 4)	Lecture, Field Work, Herbarium	Field samples, Charts	Unit 2 & 4	Taxonomy, Classification	12 Hours	Taxonomic hierarchy, Systems of classification, APG III, Contributions of Taxonomists	Radford, Singh
Semester-V	BOTMJ-052:	Lecture,	Texts, Slides	Unit	Reproductive	9 Hours	History and scope,	Bhojwani,

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	Reproductive Biology (Credit: 4)	PPT, Diagrams		1 & 2	Development		Flower development and genetics	Maheshwari
Semester-V	BOTMJ-053: Plant Physiology (Credit: 4)	Lecture, Diagrams, Charts	Assay techniques	Unit 5	Growth Regulators	8 Hours	Discovery, bioassay and roles of Auxin, Cytokinin, Ethylene, etc.	Taiz & Zeiger
Semester-V	BOTMI-051: Classification (Credit: 4)	Lecture, Chart presentation	Diagrams, Charts	Unit 9	Classification Systems	7 Hours	Types of classification, Bentham & Hooker, Engler & Prantl	Simpson, Lawrence

Note: The period/hours mentioned are approximate and subject to adjustment based on the academic calendar and student requirements.