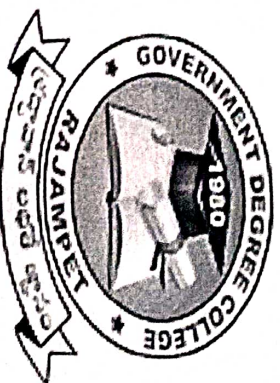


GOVERNMENT DEGREE COLLEGE RAJAMPETA
DEPARTMENT OF BOTANY



ANNUAL CURRICULAR PLAN

2023-2024

S.BHASKARRAO

LECTURER IN BOTANY

GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Semester Curricular Plan (Lecturer wise):2023-2024

Name of the Lecturer: S.Bhaskarao		Academic Year-2023-2024		Class: II B.Sc (BZCA/BCCS)		Subject: BOTANY		Semester: III		Paper: Anatomy, embryology of Angiosperm and Plant ecology / Biodiversity		Remarks	
Sl. No	Month	Week	Syllabus topic	Additional Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				
					Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted		If not, alternate date
		1	2+2	Organization of apical meristems Tunica-carpus theory and Histogen theory	Types of meristematic tissues								
		2	2+2	Tissue system :Epidermal tissue system, ground and Vascular tissue system									
		3	4+4	Anomalous secondary growth in Boerhaavia and Dracaena	Anomalous secondary growth in Myricitrus	Seminar	1	4th					
SEP		4	4+4	Study of timbers of economic importance : teak, Red Sander and rose wood	Structure of wood								
		5	3+2	Microsporogenesis and development of male gametophyte. Structure of ovule	Types of Pollen Grain								

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OVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Semester Curricular Plan (Lecturer wise): 2023-2024

Name of the Lecturer: S.Bhaskarrao				Academic Year-2023-2024 Class: II B.Sc (BZC&BCCS)				Subject: BOTANY Semester: III Paper: Anatomy, embryology of Angiosperm and Plant ecology, Biodiversity								
no	Month	Week	Hours available	Syllabus topic	Additional Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				Remarks		
						Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date			
OCT		1	4+4	meiosis: megasporogenesis, monosporic (Polygonum), bisporic (Allium) and tetrasporic (Peperomia) types of embryo sacs. Outlines of pollination, pollen - pistil interaction and fertilization.	Orca type of Embryosac						Group Discussion	1	yes			
		2	4+4	Endosperm Types and biological importance: Free nuclear cellular, helobial and Ruminate Development of Dicot (Capsella bursa-pastoris) embryo. Ecology: definition, branches and significance of ecology.		Seminars	2	yes								
		3	0+0													
				Dasara holidays												
		4	4+4	Ecospstem: Concept and components, energy flow, food chain, food web, Ecological pyramids.	Precipitation	Seminar	1	Yes								
		5	0+0	Plants and environment: Climatic (light and temperature), edaphic and biotic factors.												

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Semester Curricular Plan (Lecturer wise):2023-2024

Name of the Lecturer: S.Bhaskarrao

Academic Year:2023- 2024 Class: II B.Sc (BZCBBCS)

Subject: BOTANY Semester: III Paper :Anatomy ,embryology of Angiosperm and Plant ecology ,Biodiversity

Month	Week	Hours available	Syllabus topic	Additional Input/ Value Addition Provided /taught	Curricular Activity					Co-curricular Activity				Remarks
					Activity Conducted	Hours allotted	Whether conducted	If not, alternate date		Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	
NOV	1	4+4	Ecological succession:Hydroserie and Xerosere. . Population ecology: Natality, mortality, growth curves, ecotypes, ecads	Types of Ecotones										
	2	4+4	Community ecology: Frequency, density, cover, life forms, biological spectrum		Seminar	1	Yes							
	3	4+4	Concepts of productivity: GPP, NPP and Community Respiration Secondary production, P/R ratio and Ecosystems.							Quiz	1	No		
	4	4+4	Biodiversity: Basic concepts, Convention on Biodiversity - Earth Summit. Value of Biodiversity; types and levels of biodiversity and Threats to biodiversity											
	5	2+2	Biodiversity Hot spots in India, Biodiversity in North Eastern Himalayas and Western Ghats	Biodiversity Hot Spots in World										

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Semester Curricular Plan (Lecture wise):2023-2024

Name of the lecturer: S. Sushant Academic Year 2023-2024 Class III B.Sc (PCRBIOCS) Subject: BOTANY Semester III Paper: Anatomy, embryology of Angiosperm and Plant ecology, Biodiversity

Sl. No.	Topic	Status topic	Additional Input/ Value Addition Provided / Taught	Curricular Activity				Co-curricular Activity				Remark
				Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	
1	Principles of conservation	Principles of conservation										
2	Threat categories, RED data book	Threat categories, RED data book										
3	Role of NBPGR and NSA in the conservation of Biodiversity	Role of NBPGR and NSA in the conservation of Biodiversity										
4	Reintroduction	Reintroduction										
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Annual Curricular Plan (Lecturer wise):2023-24

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Annual Curricular Plan (Lecturer wise) 2023-24 14333339

Name of the Lecturer: S. Bhaskar Academic Year: 2023 - 2024 Class: II BZC Subject: BOTANY Semester: Cell biology, Genetic and plant breeding

no	Month	Week	Hours available	Syllabus topic	Additional Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				Remarks
						Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	
		1	1+2	Prokaryotic vs Eukaryotic chromosomes,		<i>Seminar</i>	1	<i>yes</i>						
	Feb	3	4+2	morphology of a eukaryotic chromosomes, euchromatin and heterochromatin, Karyotypes and ideogram		<i>Seminar</i>	1	<i>yes</i>						
		3	4+4	brief account of chromosomal aberration structure and numerical changes, organization of DNA (chromosome, solenoid and Nucleosome models)						<i>Quiz</i>	1			
		4	4+4	Mendel's laws of inheritance, incomplete dominance and CO dominance multiple alleles,		<i>Internal examination</i>								
		5	3+2	An A brief account of linkage and crossing over, Chromosomal mapping 2-point and 3-point test cross		<i>Seminar</i>	1	<i>yes</i>						

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Annual Curricular Plan (Lecturer wise):2023-24

Name of the Lecturer: S, Bhaskarrao Academic Year: 2023 - 2024 Class: II BZC Subject: BOTANY Semester: Cell biology, Genetic and plant breeding

Month	Week	Hours available	Syllabus topic	Baddition al Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				Remarks
					Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	
march	1	1+2	Concepts of material inheritance.		11 nd internal examination								
	2	3+2	Watson and crick models of DNA, Brief account on DNA Replication, Brief account of Transcription,		Seminar	1			Group discussion	1	NO		
	3	4+4	Brief account on Transcription types and function of RNA, Gene concepts and gene code and translocation,										
	4	4+4	Regulation of gene expression in prokaryotes-lac operon. Plant breeding and its scopes. Genetic basis of plant breeding.		Seminar	1							
	5	2+4	plant introduction and acclimatization. Definition, procedure, application and uses; advantages and limitation of mass selection,						Mentor & make programme	1	Yes	-	-

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Annual Curricular Plan (Lecturer wise):2023-24

ie of the Lecturer: S, Bhaskarrao Academic Year: 2023 - 2024 Class II BZC Subject: BOTANY Semester: Cell biology, Genetic and plant breeding

Month	Week	Hours available	Syllabus topic	Baddition al Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				Remarks	
					Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date		
April	1	4+4	Definition, application and uses; advantages and limitation of Pure line selection and clonal selection.		Seminar	1	yes		Debate	1	NO			
	2	3+2	Hybridization-schemes, and technique; Heterosis (hybrid Vigour)											
	3	4+4	A brief account molecular breeding- DNA markers Inplant breeding, RAPD, RFLP,											
	4													
	5													

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Annual Curricular Plan (Lecturer wise):2023-24

Name of the Lecturer: S.Bhaskarrao Academic Year:2023 – 2024 Class:I Botany major Subject: BOTANYSemester: II Paper:Non vascular plants

Sno	Month	Week	Hour s avail able	Syllabus topic	B	Curricular Activity					Co-curricular Activity				Remarks
						Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date		
		3	3+2	General Characteristics of Algae, occurrence and Distribution, Cell structure, Pigments.											
	Jan														
		4	2+2	Algae flagella, reserve Food material, Classification of Algae, F.E. Fritsch and Lee											
		5	2+0	Thallus organization and Life cycle in Algae, Ecological and Economic Importance of Algae.											
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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Annual Curricular Plan (Lecturer wise): 2023-24-

Name of the Lecturer: S Bhaskarao Academic Year: 2023 – 2024 Class: I Botany Mojaor Subject: BOTANY Semester: II Paper : Non Vascular plants

S.no	Month	Week	Hour s avail able	Syllabus topic	Additional Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				Remarks
						Activity Conducted	Hours allotted	Whether conducted	If not, alternat e date	Activity Conducted	Hours allott ed	Whether conducted	If not, alternate date	
		1	1+2	Occurrence and structure of and Life cycle of Spirogyra.		1st Internal Examined	1	Yes						
		2	3+2	Occurrence and structure of and Life cycle of Ectocarpus and Vaucheria										
	Feb	3	3+2	Occurrence and structure of and Life cycle of Polysiphonia, Achnanthes, and Bacillariophyceae.		Seminar	1	Yes						
		4	3+2	Culture and cultivation of Chlorella, Culture and Cultivation of Chlorella General characteristics of fungi and Ainsworth Classification.						Quiz	1	No		
		5	2+2	Ainsworth Classification Thallus organization and Nutrition in Fungi.		Seminar	1	Yes						

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Annual Curricular Plan (Lecturer wise):2023-24

Name of the Lecturer: Academic Year:2023 - 2024 Class: I Botany Major Subject: BOTANY Semester: II Paper: Non Vascular Plants

Semester: II Paper: Non Vascular Plants														
S.no	Month	Week	Hours available	Syllabus topic	Additional Input/ Value Addition Provided /taught	Curricular Activity				Co-curricular Activity				Remarks
						Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	
		1	3+2	Thallus organization & Nutrition of fungi/ reproduction in fungi/Heterothallism.		Seminar	1	yes		-	-			
		2	3+0	Ecological and economic importance of fungi. Occurrence structure and reproduction and life cycle of phytophthora .						Group Discussions	4	NO		
		3	2+2	Occurrence structure and structure Reproduction and life cycle of phytophthora		Seminar								
		4	3+2	Occurrence structure and structure Reproduction and life cycle of penicillium, And Puccinia.										
		5	1+0	Occurrence structure and structure Reproduction of Sphen.		Find internal examples								

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GOVT. DEGREE COLLEGE, RAJAMPET, KADAPA DISTRICT

Annual Curricular Plan (Lecturer wise): 2023-24

Name of the Lecturer: Academic Year: 2023 - 2024 Class: I Botany Major Subject: BOTANY Semester: II paper: Non Vascular Plants

S.no	Month	Week	Hours available	Syllabus topic	Additional Input/ Value Addition Provided / Taught	Curricular Activity				Co-curricular Activity			Remarks
						Activity Conducted	Hours allotted	Whether conducted	If not, alternate date	Activity Conducted	Hours allotted	Whether conducted	
1.	April	1	3+2	Ecological & Economic importance of Lichens.	Seminal	1	48						
		2	2+2	General characteristics of Bryophytes: Substrata classification.									
		3	3+2	Occurrence morphology anatomy, reproduction and life cycles of Marchantia, Anthoceros.	Seminal	1	48						
		4	3+2	Occurrence morphology anatomy, reproduction life cycles of Funaria.						Mental Mental Program	1	NO	
		5	1+0	Funaria. General account on evolution of sporophytes in Bryophyte.	Seminal	1	48						

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