## **BETHUNE COLLEGE**

## **DEPARTMENT OF BOTANY**

## PROGRAMME SPECIFIC OUTCOME (PG-SEMESTER)

Name of	Year of	Status of	Programme	Course specific outcome
the	Introductio	implementation	outcome	-
Programm	n	in CBCS		
e		Curriculum(YES		
		/NO)		
M.Sc.	2015	NO	1. To develop	PAPER I:
Botany			students'	Group A & B:
Botany (Semester)			students' proficiency in classical and modern aspects of plant science from theoretical and practical point of view 2. To motivate the students for research or administrative jobs	<ul> <li>Group A &amp; B:</li> <li>1. To develop a detailed idea on Phycology , its classical and applied parts</li> <li>2. To develop a detailed idea on Microbiology, its classical and applied parts</li> <li>PAPER II: Group A &amp; B:</li> <li>1. To develop a detailed idea on classical mycology and applied mycology</li> <li>2. To develop a detailed idea on plant pathology, plant disease epidemiology and management.</li> <li>PAPER III: Group A &amp; B:</li> </ul>
				<ol> <li>To perform experiments individually and identify algae upto genus level from different sources.</li> <li>To provide hands on training on microscopy, staining, and applied phycological methods to fulfill the needs of future research.</li> <li>To be acquainted with good laboratory practices and safety measures and able to perform experiments individually</li> <li>To provide hands on training on sterilization, staining, and microbiological methods to fulfill the needs of future research.</li> </ol>

	DADED IV.
	Group A & B: 1. To get hands on training on laboratory safety, Mycological and applied mycological techniques to fulfill the needs of future research. 2. To get hands on training on laboratory safety, plant pathogen culture, fungicides and disease management
1. To develop students' proficiency in classical and modern aspects of plant science from theoretical and practical point of view 2. To develop knowledge about the diverse floral resource 3. To develop individual and leadership qualities to work in a team	<ul> <li>PAPER V: Group A&amp; B: 1.To develop a detailed idea on Bryophytes and Pteridophytes their application &amp; conservation 2. To develop a detailed idea on Gymnosperms and their application &amp; conservation 3. To develop a detailed idea on Paleobotany and Palynology, its classical and applied parts 4. To get a detailed idea on basic geology.</li> <li>PAPER VII: 1. To develop a detailed idea taxonomy, biosystematics and their applied parts</li> <li>PAPER VIII: Group A and B: 1. To develop a detailed idea on Plant physiology and biochemistry</li> <li>PAPER IX: Group A and B: 1. To perform experiments individually and Bryophytes, Pteridophytes and Gymnosperms upto genus level from different sources.</li> <li>2. To provide hands on training on techniques to study fossils and pollens to fulfill the needs of future research.</li> <li>PAPER X: 1. To able to work-out on plant specimens s from representative families locally available 2. Training in identification of</li> </ul>

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		specimens described in classes using relevant literatures and
		herbaria and able to prepare keys
		needs of future research.
		DADED VI.
		Group A and B:
		1. To able to prepare buffers and
		solutions and handle sophisticated instruments
		2. To get a hands on training on
		physiological and biochemical techniques to fulfill the needs of
		future research.
	1. To develop	PAPER XIII:
	ecological and	Group A and B: 1. To develop a detailed idea on
	environmental	Cell Biology and its applied
	2. To explore the	parts. 2 To develop a detailed idea on
	world of	classical and applied genetics
	important plants	3. To gain a detailed knowledge
	3. Develop the	on genomies
	different	PAPER XIV:
	instruments	<b>Group A and B:</b> 1. To develop a detailed
	independently	knowledge on Molecular
		Biology and Plant Biotechnology
		PAPER XV: Group A and B:
		1. To develop a detailed
		knowledge on Ecology and
		2. To develop a detailed idea on
		Plant anatomy
		classification & Pharmacological
		actions of plant drugs
		PAPER XVI:
		Group A and B:
		individually with the modern
		tools and techniques on cell
		biology to fulfill the needs of future research.
		2. To able to handle
		sophisticated instruments 3 To provide hands on training
		on basic and applied genetics

		techniques
		<ul> <li>PAPER XVII:</li> <li>Group A and B:</li> <li>1. To get a hands on training on plant tissue culture and molecular biology tools &amp; techniques to fulfill the needs of future research.</li> <li>2. To able to design and perform individual experiments and able to handle sophisticated instruments.</li> </ul>
		<ul> <li>PAPER XVIII: Group A and B:</li> <li>1. To explore and identify medicinal plants and their active plant parts to fulfill the needs of future research.</li> <li>2. To get a hands on experiments of Plant anatomy to fulfill the needs of future research.</li> </ul>
	<ol> <li>Develop the ability to handle different instruments independently</li> <li>To equip students to take up research, teaching, industry oriented and administrative jobs</li> <li>To develop professional qualities and management skills.</li> <li>To be trained in laboratory ethics, documentation methods and research methodologies</li> </ol>	<ul> <li>PAPER XX: Group A and B:</li> <li>1. To develop a detailed knowledge on Plant Breeding and Biometry to fulfill the needs of future research.</li> <li>2. To gain a detailed knowledge on Instrumentation and Computer Application to handle modern and sophisticated instruments and for future research.</li> <li>PAPER XXI:</li> <li>1. To develop a detailed knowledge on one of the 4 Special papers: Cytogenetics and Genomics, Molecular Biology and Plant Biotechnology, Plant Physiology and Biochemistry, Taxonomy of Angiosperms</li> <li>PAPER XXII:</li> <li>1. To develop hands on training on Biostatistical methods</li> <li>PAPER XXII:</li> </ul>
		1. To get a hands on training on on one of the 4 Special papers:

		Cytogenetics and Genomics,
		Molecular Biology and Plant
		Biotechnology, Plant Physiology
		and Biochemistry, Taxonomy of
		Angiosperms to fulfil the needs
		for future research.
		2. To inculcate scientific mind to
		design a project and acquainted
		with modern tools, techniques,
		computer, presentation and
		motivated for future research.



Head

Department of Botany