

BETHUNE COLLEGE

DEPARTMENT OF BOTANY

PROGRAMME SPECIFIC OUTCOME (UG-CBCS)

Name of the Programme	Year of Introduction	Status of implementation in CBCS Curriculum (YES/NO)	Programme outcome	Course specific outcome
1. B.Sc. Botany (H) (Under CBCS)	2018	Yes	1. To identify algal and fungal specimens from their natural habitats 2. To be acquainted with good laboratory practices and safety measures. 3. To motivate the students for higher studies, research or administrative jobs	Sem-I: CC-1-1: 1.To provide basic knowledge of Biological sciences with special preference on Plant Science 2. To develop a basic knowledge on microscopy and staining techniques 3. To workout on algal specimens and hands on training on microbiological methods CC-1-2: 1.To workout on fungal specimens and plant pathological methods
			To familiarize with the natural habitats of different groups of plants and their identification	Sem-II: CC-2-3: 1. To develop knowledge on anatomy of different plant parts 2. To differentiate dicots and monocots based on their anatomy 3. To develop knowledge on double staining techniques and able to workout on plant specimens CC-2-3: 1. To gain a detailed knowledge on cryptogams and phanerogams 2. To workout on different bryophyte, pteridophyte and gymnosperm specimens
			To be aware of the evolutionary stages of past and present day flora including field studies	Sem-III: CC-3-5: 1. To gain a detailed knowledge on paleobotany and palynology 2. To workout on different pollen specimens CC-3-6: 1. To gain a detailed knowledge on reproductive biology of angiosperms. 2. To workout and get of a comprehensive idea on different reproductive parts angiosperms from field study. CC-3-7: 1. To be able to work

				<p>out, describe and identify plants upto genus from different angiosperm families included in the syllabus</p> <p>2. To develop skills and knowledge about field study and herbarium techniques.</p>
			<p>1. To develop awareness on biodiversity and environment and knowledge in community study</p> <p>2. To develop individual and leadership qualities to work in a team</p>	<p>Sem-IV: CC-4-8:</p> <p>1. To develop knowledge on ecology and environment.</p> <p>2. To develop knowledge on biodiversity and different biogeographical regions</p> <p>3. To gain a detailed knowledge on economic botany</p> <p>4. To develop hands on training on cytological techniques.</p>
			<p>To study cytological and biochemical functioning of a living cell</p>	<p>Sem-V: CC-5-11: 1. To develop knowledge on Cell biology</p> <p>2. To develop hands on training in studying cellular details</p> <p>CC-5-12: 1. To develop understanding of biochemical functioning of a cell and hands on training on different biochemical techniques</p>
			<p>1 To acquaint students with the physiological and metabolic functions of a plant cell</p> <p>2. To develop leadership qualities and management skills to take biological sciences as career</p>	<p>Sem-VI: CC-6-13 : 1. To gain knowledge and develop hands on training on different physiological techniques.</p> <p>CC-6-14 : 1. To gain knowledge and develop experimental setups to study plant metabolism.</p>
			<p>To enhance skills on the applied aspects of plant sciences particularly in the industrial sector</p>	<p>SEC-A: 1. To gain a detailed knowledge an applied phycology, mycology and microbiology</p> <p>SEC-B: 1.To gain a detailed knowledge on mushroom cultivation</p>
			<p>To enhance skills and develop entrepreneurship qualities in applied aspects of plant sciences</p>	<p>DSE-A: 1.To develop computational mind and solve biostatistical problems.</p> <p>2. To gain a detailed knowledge on industrial and environmental microbiology and develop hands on training on sterilization and microbial culture techniques.</p> <p>3. To explore the treasure of medicinal plants and gain knowledge on ethnobotany</p>

				<p>4. To gain a detailed knowledge on plant stress biology and its experimental aspects.</p> <p>5. To gain a detailed knowledge on plant tissue culture techniques and biotechnology to fulfil the needs of future research</p>
			<p>1.To design and perform a biological experiment individually</p> <p>2.To develop communication skills through presentations.</p>	<p>DSE-B: 1. To enhance knowledge on horticultural practices and post- harvest technology</p> <p>2. To know about research methodology to fulfil the needs of future research</p> <p>3. To develop skills on photomicrography and field photography</p> <p>4. To explore the knowledge on natural resources and their sustainable utilization</p>
2. B.Sc. Botany (General Course) (Under CBCS)	2018	Yes	<p>1. To provide theoretical and practical knowledge on the different domains of plant science</p> <p>2. To be acquainted with good laboratory practices and safety measures.</p> <p>3. To motivate the students for higher studies, research or administrative jobs</p>	<p>Sem-I: G-CC-1-1: 1. To provide basic knowledge on Plant Sciences</p> <p>2. To develop a basic knowledge on microscopy and staining techniques</p> <p>3. To gain a detailed knowledge on phycology, mycology, phytopathology, bryology ,anatomy and their practical aspects</p>
			To provide theoretical and practical knowledge on the different domains of plant science and their practical implementation	<p>Sem-II: G-CC-2-2: 1. To gain a detailed knowledge on pteridophytes, gymnosperms, paleobotany ,palynology, morphology and taxonomy.</p> <p>2. To develop knowledge on double staining techniques.</p> <p>3. Work out, describe and identify plants upto angiosperm families included in the syllabus</p> <p>4. To develop skills and knowledge about field study and herbarium techniques.</p>
			To understand plant cellular structure and functioning mechanism	<p>Sem-III: G-CC-3-3: 1. To develop knowledge on cell biology, genetics and microbiology</p> <p>2. To develop hands on training on gram staining and</p>

				cytological staining techniques. 3. To gain detailed knowledge on the preparation of slides for mitotic stages
			To be acquainted with good laboratory practices for further research	Sem-IV: BOT-G-CC-4-4: 1. To gain a detailed knowledge on plant physiology and metabolism 2. To develop hands on training on different plant physiological experiments.



Head

Department of Botany