



List of Courses which focuses on Professional Ethics, Gender, Human Values, Environment & Sustainability and other value framework

Department : Botany

Programme Name : M.Sc.

Academic Year :

Courses which focuses on Professional Ethics, Gender, Human Values, Environment & Sustainability and other value framework:

Sr. No.	Course Code	Name of the Course
01.	OPNBO01	Ecosystem Services and Biodiversity
02.	BOPBTT7	Ecology and Environment
03.	BOPCTT11	Research methodology paper
04.	BOPBTD1	Algae, Environment and Human Welfare
05.	BOPBTD4	Environmental Microbiology
06.	BOPBTD5	Herbal Product Development and Formulation
07.	BOPBTD8	Environmental Biology
08.	BOPBTD10	Biodiversity and Conservation
09.	BOPBTD11	Ethnobotany and Traditional knowledge
10.	BOPBTD16	Environmental Pollution
11.	BOPBTD19	Global Change Biology
12.	BOPBTD23	Plant Diversity, Uses and Conservation
13.	XXXXXXXXXXXXXX	
14.	XXXXXXXXXXXXXX	
15.	XXXXXXXXXXXXXX	
16.	XXXXXXXXXXXXXX	
17.		
18.		



Scheme and Syllabus

DEPARTMENT OF BOTANY
SCHOOL OF STUDIES IN LIFE SCIENCE

M.Sc. (BOTANY)

SEMESTER I

Semester	Course Opted	Course Code	Name of the course	Credit	Hour / week	End semester marks	Internal Marks	Total marks
Semester I	Core-1	BOPATT1	Advances in Virus, bacteria and Algae	3	3	70	30	100
	Core-1 Lab	BOPALT1	Lab based on core 1	2	4	70	30	100
	Core-2	BOPATT2	Applied Mycology and Advance Phytopathology	3	3	70	30	100
	Core-2 Lab	BOPALT2	Lab based on core 2	2	4	70	30	100
	Core-3	BOPATT3	Advances in Bryophytes, Pteridophytes and Gymnosperm	3	3	70	30	100
	Core-3 Lab	BOPALT3	Lab based on core 3	2	4	70	30	100
	Open Elective	OPNBO01	Ecosystem Services and Biodiversity	3	3	70	30	100
	OE Lab	OPNBO01L	Lab based on OE	2	4	70	30	100
			TOTAL		20			

SEMESTER II

Semester II	Core-4	BOPBTT4	Cell and Molecular Biology	3	3	70	30	100
	Core-4 Lab	BOPBLT4	Lab based on core 4	2	4	70	30	100
	Core-5	BOPBTT5	Taxonomy of Angiosperm	3	3	70	30	100
	Core-5 Lab	BOPBLT5	Lab based on core 5	2	4	70	30	100
	Core- 6	BOPBTT6	Plant Biochemistry	3	3	70	30	100
	Core- 6 Lab	BOPBLT6	Lab based on core 6	2	4	70	30	100
	Core- 7	BOPBTT7	Ecology and Environment	3	3	70	30	100
	Core- 7 Lab	BOPBLT7	Lab based on core 7	2	4	70	30	100



Research Methodology	BOPCTT11	Research methodology paper	2	2	70	30	100
Educational Tour (one week duration) (BOPBLF1)			2				
Total			24				900

SEMESTER III

Semester III	Core- 8	BOPCTT8	Plant Anatomy and Reproductive Biology	3	3	70	30	100
	Core- 8 Lab	BOPCLT8	Lab based on core 8	2	4	70	30	100
	Core- 9	BOPCTT9	Genetics and Cytogenetics	3	3	70	30	100
	Core- 9 Lab	BOPCLT9	Lab based on core 9	2	4	70	30	100
	Core- 10	BOPCTT10	Plant physiology	3	3	70	30	100
	Core- 10 Lab	BOPCLT10	Lab based on core 10	2	4	70	30	100
	Discipline specific Elective- 1	BOPCTD	DSE from the Basket 1	3	3	70	30	100
	Discipline specific Elective Lab	BOPCLD	Lab based on DSE 1	2	4	70	30	100
Total			20				800	

SEMESTER IV

Semester IV	Discipline specific Elective -2	BOPDTD	DSE from the Basket 2	3	3	70	30	100
	Discipline specific Elective Lab	BOPDLD	Lab based on DSE 2	2	4	70	30	100
	Discipline specific Elective -3	BOPDTD	DSE from the Basket 3	3	3	70	30	100
	Discipline specific Elective Lab	BOPDLD	Lab based on DSE 3	2	4	70	30	100
	Seminar	BOPDST5		2				50
	Dissertation/ Project work	BOPDDT1	Dissertation/ Project work followed by seminar	6		140	60	200
	TOTAL			18				650



1. Continuous Internal assessment should be evaluated by two components: Seasonal test + assignment
2. Expert lectures, online seminars – webinars will be conducted for the completion of course
3. Any additional Labs based on theory course will be added whenever necessary.



Discipline specific Elective offered by Botany

(Discipline specific Elective Basket)

Basket 1 (Semester II)	Basket 2 (Semester III)	Basket 3 (Semester IV)
Algae, Environment and Human Welfare	Agricultural Microbiology	Environmental Pollution
Biofertilizer and Biopesticides Technology	Biodiversity and Conservation	Ethno-Pharmacognosy and Nutraceuticals
Bioinformatics and Evolutionary Biology	Ethnobotany and Traditional knowledge	Food Microbiology
Environmental Microbiology	Herbal Cosmetics	Global Change Biology
Herbal Product Development and Formulation	Microbial Technology	Microbial Genetics
Microbial Physiology	Plant Propagation and Nursery Development	Plant Functional Genomics
Plant Stress Biology	Plant Tissue Culture and Application	Plant Systematics
Environmental Biology		Plant Diversity, Uses and Conservation

Course- baskets are dynamic in nature. Courses present in one basket can be shifted to another basket as per the requirement and availability of resources.