DEPARTMENT OF BOTANY

B.Sc., Botany

List of Core and Elective, Supportive/ Allied Courses

Supportive / Allied Courses (Compulsory)

Theory:

1. 24UZO301 - Animal Diversity
2. 24UZO302 - Occupational Zoology
3. 24UCH301 - General Chemistry
4. 24UCH302 - Applied chemistry

Laboratory:

1. 24UZO351 - Animal diversity and Occupational Zoology Lab
2. 24UCH351 – Volumetric and Organic Qualitative Analysis Lab

Core Courses(Compulsory)

Generic/Cluster Theory:

Track 1: Biological Sciences

1. 24ULS401 – Cell and Molecular Biology
2. 24ULS403 - Developmental Biology and Genetics

Track 2: Bioregulation

3. 24ULS404 - IPR, Bioethics and Biosafety

Track 3: Technology

4. 24ULS402 - Introductory Bioinformatics and Biostatistics

Generic/Cluster Laboratory

5. 24ULS451 - Practical in Cell and Molecular Biology
6. 24ULS452 - Developmental Biology and Genetics Lab

Discipline Centric Core Theory:

Track 1: Biological Sciences

1. 24UBO501 - Microbiology and Plant diversity I
2. 24UBO502 - Plant Pathology and Plant Disease Management
3. 24UBO503 - Bryophytes, Pteridophytes, Gymnosperm and Paleobotany
4. 24UBO504 - Plant Anatomy and Embryology
5. 24UBO505 - Morphology, Taxonomy and Economic botany
6. 24UBO506 - Plant Drug Technology and Pharmacognosy
7. 24UBO507 - Plant Physiology, Biochemistry and Biophysics
8. 24UBO508 - Plant Breeding, Plant Ecology and Phytogeography

Discipline Centric Core Laboratory

1. 24UBO551 - Microbiology and Plant diversity I Lab
2. 24UBO552 - Plant pathology and Plant Disease Management Lab
3. 24UBO553 - Plant Diversity, Taxonomy, Economic Botany and Pharmacognosy Lab
4. 24UBO554 - Plant Physiology, Biochemistry ,Biophysics, Plant breeding, Plant Ecology and Phytogeography Lab

Elective Courses (Optional)

Generic/Cluster Elective: (Choose Any one Course)

Track 1: Biological science

1. 24ULS602 - Basics of forensic science

Track 3: Technology

2. 24ULS601 - Basics of Nanotechnology

Track 4: Biobusiness

3. 24ULS603 - Mushroom Cultivation and Technology
4. 24ULS604 - Ethnobotany and Traditional Knowledge

Discipline Centric Elective Courses (Choose anyone track)

Track 5: Higher Studies

- 24UBO701 – K: Advances in Plant Science
- 24UBO751 – S : Practice in Plant Science
- 24UBO702 - P: Nanotechnology in Plant Science

Track 6: Teaching

- 24UGP791 - K: Educational Psychology
- 24UBO703- S: Teaching in Botany
- 24UGL792- P: Teaching, learning and Assessment

Track 7: Employment - Government Sector

- 24UBO704 - K: Introduction to Forestry
- 24UBO752- S: Practice in Botanical survey
- 24UBO705- P: Biodiversity Conservation and Management

Track 8: Employment

- 24UBO706 - K: Fundamentals of Pharmaceutical Biotechnology
- 24UBO753 - S: Quality Control and Management
- 24UBO707 - P: Pharmacognosy

Track 9: Entrepreneurship

- 24UBO708 - K: Upskilling
- 24UBO754 - S: Incubation
- 24UBO709 - P: Start ups

****K: Knowledge; S: Skill; P: Professional;**

Open (Interdisciplinary) Elective Theory

- 24UBO801 - Nursery Business and Eco-Tourism
- 24UBO802 - Food Innovation and Plant-Based Diets
- 24UBO803 - Natural Dyeing and Eco-Textiles
- 24UBO804 - Aromatherapy and Essential Oils

Foundation Optional Course

- 24UFCO901: Value Education
- 24UFCO902: Indian Constitution
- 24UFCO903: Human Rights
- 24UFCO904: Gender Studies

Compulsory Course

- 24UFC901: Environmental Studies

Ability Enhancement Course

- 24UAB361- Life Skills
- 24UAB371-Soft and Quantitative Skills

Technical Skills

- 24UBO381: Testing and Servicing of Electronic Components

Part -V Courses

- 24UHW951-Health and wellness
- Co-curricular Activities
- Extra-curricular Activities
- Extension Activities

Value Added Courses

1. 24UBOVA01 Ethnobotany and Traditional Plant Knowledge
2. 24UBOVA02 Hydroponics
3. 24UBOVA03 Basic Nanotechnology

Add on Courses

4. 24UBOAD01 Floriculture
5. 24UBOAD02 Plant Ecology and Global Change
6. 24UBOAD03 Advanced Techniques in Plant Biotechnology

Programme: B.Sc., Botany
Semester-wise Distribution of Courses, Credits and Contact Hours

Sem	Part	Course Type	Course Code	Course Title	Contact Hrs.	Credits	Int. Marks	Ext. marks	Total marks
	I	Language Tamil / Hindi	24UGT101/ 24UGH101	Tamil Illakkiya Varalaru-I/ Hindi - I	6	3	25	75	100
	II	English	24UGE201	General English - I	6	3	25	75	100
	III	Generic Cluster Core – I	24ULS401	Cell and Molecular Biology	4	4	25	75	100
		Generic Cluster core Laboratory - I	24ULS451	Practical in Cell and Molecular Biology	4	2	25	75	100
		Allied Course I	24UZO301	Animal Diversity	4	3	40	60	100
		Allied Laboratory	24UZO351	Animal Diversity and Occupational Zoology Lab	-	-	-	-	-
	IV	Foundation Course	24UFO901	Value Education	2	2	25	75	100
Total					**30**	**17**	**-**	**-**	**600**
II	I	Language Tamil / Hindi	24UGT102/ 24UGH102	Tamil Illakkiya Varalaru – II / Hindi - II	6	3	25	75	100
	II	English	24UGE202	General English - II	6	3	25	75	100
	III	Core Course I	24UBO501	Microbiology and Plant Diversity I	4	4	25	75	100
		Core Laboratory I	24UBO551	Microbiology and Plant Diversity I Lab	4	2	40	60	100
		Allied Course II	24UZO302	Occupational Zoology	4	3	25	75	100
		Allied Laboratory I	24UZO351	Animal Diversity and Occupational Zoology Lab	4	2	40	60	100
			24UBO591	Field Work	-	2	40	60	100
	IV	Foundation Course	24UFC905	Environmental Studies	2	2	25	75	100
Total					**30**	**21**	**-**	**-**	**800**
III	I	Language Tamil / Hindi	24UGT103/ 24UGH103	Tamilaga Varalarum Panpadum / Hindi - III	6	3	25	75	100
	II	English	24UGE203	General English - III	6	3	25	75	100
	III	Generic Cluster Core – II	24ULS402	Introductory to Bioinformatics and Biostatistics	4	4	25	75	100
		Core Course - II	24UBO502	Plant Pathology and Plant Disease Management	4	4	25	75	100
		Core Laboratory II	24UBO552	Plant pathology and Plant Disease Management Lab	4	2	40	60	100
		Allied Course III	24UCH301	General Chemistry	3	3	25	75	100
	IV	Ability Enhancement	24UAB361	Life Skills Management	2	2	25	75	100
	V		24UHW951	Health & Wellness	1	1	-	-	100
Total					**30**	**22**	**-**	**-**	**800**
IV	I	Language Tamil / Hindi	24UGT104/ 24UGH104	Tamilum Ariviyalum/ Hindi - IV	6	3	25	75	100
	II	English	24UGE204	General English - IV	6	3	25	75	100
	III	Generic Cluster Core – III	24ULS403	Developmental Biology and Genetics	4	4	25	75	100
		Generic Cluster core Laboratory – II	24ULS452	Developmental Biology and Genetics Lab	4	2	40	60	100

		Allied Course IV	24UCH302	Applied Chemistry	4	3	25	75	100
		Allied Laboratory II	24UCH351	Volumetric and Organic Qualitative Analysis Lab	4	2	40	60	100
			24UCA592	Internship	-	2	40	60	100
	IV	Ability Enhancement	24UAB371	Soft and Quantitative Skills	2	2	25	75	100
Total					**30**	**21**	**-**	**-**	**800**
V	III	Core Course III	24UBO503	Bryophytes, Pteridophytes, Gymnosperm and Paleobotany	4	4	25	75	100
		Core Course IV	24UBO504	Plant Anatomy and Embryology	4	4	25	75	100
		Core Course V	24UBO505	Morphology, Taxonomy and Economic botany	4	4	25	75	100
		Core Course VI	24UBO506	Plant Drug Technologyand Pharmacognosy	4	4	25	75	100
		Core Laboratory V	24UBO553	Plant Diversity, Taxonomy, Economic Botany and Pharmacognosy Lab	4	2	40	60	100
		Discipline Centric Elective I	-	Choose a knowledge course from any one track	4	4	25	75	100
		Discipline Centric Elective Laboratory I	-	Choose a skill course from the selected track	4	2	40	60	100
	IV	Ability Enhancement	24UBO381	Technical Skill Digital Herbarium	2	2	40	60	100
Total					**30**	**26**	**-**	**-**	**800**
VI	III	Generic Cluster Core IV	24ULS404	IPR, Bioethics and Biosafety	5	4	25	75	100
		Core Course VII	24UBO507	Plant Physiology, Biochemistry and Biophysics	5	4	25	75	100
		Core Course VIII	24UBO508	Plant Breeding, Plant Ecology & Phytogeography	5	4	25	75	100
		Core Laboratory VI	24UBO554	Plant Physiology, Biochemistry and Biophysics, Plant Breeding, Plant Ecology & Phytogeography Lab	4	2	40	60	100
		Generic/ Cluster Elective I	-	Choose a generic elective course offered by Biotechnology Department	4	4	25	75	100
		Discipline Centric Elective II	-	Choose a professional course from the selected track	4	4	25	75	100
			24UBO593	Project	5	5	40	60	100
		Open (Interdisciplinary) Elective I	-	Courses offered by Botany Department to students outside Botany Department	3	3	25	75	100
Total					**30**	**30**	**-**	**-**	**800**
	V			Co-curricular Activities	-	1			-
				Extra-curricular Activities	-	1			-
				Extension Activities	-	1			-
					-	**3**			**-**

TOTAL CREDITS: 17+21+22+21+26+30+3 = 140 Credits

TOTAL MARKS: 600+800+800+800+800+800 = 4600 Marks