BHARATHIDASAN UNIVERSITY   **TIRUCHIRAPPALLI - 620 024.**

B.Sc. BOTANY

CHOICE BASED CREDIT SYSTEM –

LEARNING OUTCOMES BASED CURRICULUM FRAMEWORK (CBCS - LOCF)

(Applicable to the candidates admitted from the academic year 2022-23 onwards)

(Naan Mudhalvan scheme has been implemented from 2nd to 4th semester for the 2023-2024 Batch)

Sem.	Part	Course	Title	Ins. Hrs	Credit	Exam Hours	Marks Int.	Marks Ext.	Total
I	I	Language Course – I (Tamil $ / Other Languages + #)		6	3	3	25	75	100
	II	English Course - I		6	3	3	25	75	100
	III	Core Course – I (CC)	Algae, Fungi, Lichens and Bryophytes	5	5	3	25	75	100
		Core Practical – I (CP)	Algae, Fungi, lichens, Bryophytes	4	4	3	40	60	100
		First Allied Course – I (AC)		4	4	3	25	75	100
		First Allied Practical (AP)		3	-	-	-	-	-
	IV	Value Education		2	2	3	25	75	100
		TOTAL		**30**	**21**	**-**	**-**	**-**	**600**
II	I	Language Course - II (Tamil $ / Other Languages + #)		6	3	3	25	75	100
	II	English Course - II		4	3	3	25	75	100
	III	Core Course – II (CC)	Microbiology, Plant Pathology and Plant Protection	5	5	3	25	75	100
		Core Practical – II(CP)	Microbiology, Plant Pathology and Plant Protection	4	4	3	40	60	100
		First Allied Practical (AP)		3	2	3	40	60	100
		First Allied Course – II (AC)		4	4	3	25	75	100
		Add on Course – I ##	Professional English – I	6*	4	3	25	75	100
	IV	Environmental Studies		2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Language Proficiency for Employability - Overview of English Language Communication	2	2	3	25	75	100
		TOTAL		**30**	**29**	**-**	**-**	**-**	**900**

III	I	Language Course – III (Tamil $ / Other Languages + #)		6	3	3	25	75	100
	II	English Course - III		6	3	3	25	75	100
	III	Core Course – III (CC)	Pteridophytes, Gymnosperms and Paleo botany	5	5	3	25	75	100
		Core Practical - III (CP)	Pteridophytes, Gymnosperms and Paleo botany	4	4	3	40	60	100
		Second Allied Course – I (AC)		4	4	3	25	75	100
		Second Allied Practical – I (AP)		3	-	-	-	-	-
		Add on Course – II ##	Professional English - II	6*	4	3	25	75	100
III	IV	Non-Major Elective I @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level **or** b) Special Tamil if Tamil language was studied upto 10th & 12th st	Biofertilizers and Biopesticides	2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Digital Skills for Employlability – Microsoft Digital Skills	-	2	3	25	75	100
		TOTAL		**30**	**27**	**-**	**-**	**-**	**800**
IV	I	Language Course –IV (Tamil $ / Other Languages + #)		6	3	3	25	75	100
	II	English Course – IV		6	3	3	25	75	100
	III	Core Course - IV (CC)	Plant Anatomy and Embryology	5	5	3	25	75	100
		Core Practical - IV (CP)	Plant Anatomy and Embryology	4	4	3	40	60	100
		Second Allied Practical – I (AP)		3	2	3	40	60	100
		Second Allied Course – II (AC)		4	4	3	25	75	100
	IV	Non-Major Elective II @ - Those who choose Tamil in Part I can choose a non-major elective course offered by other departments. Those who do not choose Tamil in Part I must choose either a) Basic Tamil if Tamil language was not studied in school level **or** b) Special Tamil if Tamil language was studied upto 10th & 12th std.	Horticulture	2	2	3	25	75	100
	VI	Naan Mudhalvan Scheme (NMS) @@	Organic Food Production Technqiques	-	2	3	25	75	100
		TOTAL		**30**	**25**	**-**	**-**	**-**	**800**

V	III	Core Course - V (CC)	Cell and Molecular Biology	5	5	3	25	75	100
		Core Course – VI (CC)	Genetics, Biostatistics and Evolution	5	5	3	25	75	100
		Core Course – VII (CC)	Morphology, Taxonomy and Economic Botany	5	5	3	25	75	100
		Core Practical -V (CP)	Cell and Molecular Biology & Genetics Biostatistics and Evolution & Morphology Taxonomy and Economics Botany	4	4	3	40	60	100
		Major Based Elective – I (Any one)	1. Herbal Botany 2. Horticulture and Landscape Gardening	5	4	3	25	75	100
	IV	Skill Based Elective I	Techniques in Biology	4	2	3	25	75	100
		Soft Skills Development		2	2	3	25	75	100
		TOTAL		**30**	**27**	**-**	**-**	**-**	**700**
VI	III	Core Course - VIII (CC)	Plant Physiology, Biochemistry and Biophysics	6	5	3	25	75	100
		Core Course - IX (CC)	Plant Ecology, Phytogeography and Environmental Biotechnology	6	5	3	25	75	100
		Core Practical – VI (CP)	Plant Physiology, Biochemistry and Biophysics and Plant Ecology, Phytogeography and Environmental Biotechnology	4	4	3	40	60	100
		Major Based Elective - II (Any one)	1. Agribased Entrepreneurship 2. Mushroom Cultivation Technology	5	4	3	25	75	100
		Project		4	3	-	40	60	100
	IV	Skill Based Elective – II	Sea weed Technology	4	2	3	25	75	100
	V	Gender Studies		1	1	3	25	75	100
		Extension Activities **		-	1	-	-	-	-
		TOTAL		**30**	**25**	**-**	**-**	**-**	**700**
		GRAND TOTAL		**180**	**154**	**-**	**-**	**-**	**4500**

List of Allied Courses

First Allied Course	Second Allied Course
Zoology	Chemistry

$ For those who studied Tamil upto 10th +2 (Regular Stream).
+ Syllabus for other Languages should be on par with Tamil at degree level.

Those who studied Tamil upto 10th +2 but opt for other languages in degree level under Part- I should study special Tamil in Part – IV.

The Professional English – Four Streams Course is offered in the 2nd and 3rd Semester (only for 2022-2023 Batch) in all UG Courses. It will be taught apart from the Existing hours of teaching / additional hours of teaching (1 hour /day) as a 4 credit paper as an add on course on par with Major Paper and completion of the paper is must to continue his / her studies further. (As per G.O. No. 76, Higher Education (K2) Department dated: 18.07.2020).

* The Extra 6 hrs / cycle as per the G.O. 76/2020 will be utilized for the Add on Professional English Course.

@ NCC Course is one of the Choices in Non-Major Elective Course. Only the NCC cadets are eligible to choose this course. However, NCC Course is not a Compulsory Course for the NCC Cadets.

** Extension Activities shall be outside instruction hours.

@@ Naan Mudhalvan Scheme

SUMMARY OF CURRICULUM STRUCTURE OF UG PROGRAMMES

Sl. No.	Part	Types of the Courses	No. of Courses	No. of Credits	Marks
1.	I	Language Courses	4	12	400
2.	II	English Courses	4	12	400
3.		Core Courses	9	45	900
4.		Core Practical	6	24	600
5.		Allied Courses I & II	4	16	400
6.	III	Allied Practical	2	4	200
7.		Major Based Elective Courses	2	8	200
8.		Add on Courses	2	8	200
9.		Project	1	3	100
10.		Non-Major Elective Courses	2	4	200
11.		Skill Based Elective Courses	2	4	200
12.	IV	Soft Skills Development	1	2	100
13.		Value Education	1	2	100
14.		Environmental Studies	1	2	100
15.	V	Gender Studies	1	1	100
16.		Extension Activities	1	1	--
17.	VI	Naan Mudhalvan Scheme	3	6	300
		Total	**46**	**154**	**4500**

PROGRAMME OBJECTIVES:

On complete the course students will be able to:

(i) Demonstrate the range of plant diversity in term of structure function and environmental relationship; (ii) Understand the responsibilities relevant to the biodiversity conservation practices with the help of applying basic knowledge to assess plant diversity and its importance to the society, health, safety and environmental issues; (iii) Understand the role of plants in the functioning of global ecosystem; (iv) Equip the students with subject domain knowledge and technical skills pertaining to plants in a holistic manner; (v) Analyse the plant form by applying fundamental process of plant and knowledge of basic sciences; (vi) They are made aware about social and environmental issues, significance of plants and relevant to the national economy. Understand the issues of environmental contents and sustainable development.

- Understand the importance of biofertilizer and its importance.
- Understand the environmental sustainability goals as a responsible citizen.
- Demonstrate ability and attitude to acquire knowledge and skills in the advancing global scenario to apply them effectively and ethically for professional and social development.
- Utilize scientific knowledge to pursue higher studies in the relevant field.
- Handle ethical issues with social responsibility.
- Communicate effectively and collaborate successfully with peers to become competent professionals.

PROGRAMME OUTCOME:

The students will be able to:

- Able to communicate scientific ideas in writing and orally.
- Understand the impact of plant diversity in societal environment contents and need for sustainable development.
- The students able to understand different branches of Botany.
- They become competent enough in various analytical and technical skills related to plant sciences.
- They develop scientific temperament and research attitude.
- They able to analyse different plant forms and their anatomical and physiological characteristics.
- The students become qualified to take up teaching, research work in research institute or industry, entrepreneurship.

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