

J.J. College of Arts and Science (Autonomous)
Sivapuram Post, Pudukkottai – 622 422
(Re-Accredited by NAAC with B⁺⁺ Grade – 4th Cycle)
Affiliated to Bharathidasan University, Tiruchirappalli

PG and Research Department of Botany
Minutes of the Meeting of the Board of Studies

Meeting No: 10

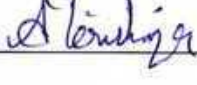
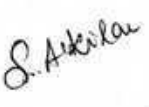
Date: 21.03.2024

Time: 11.00 a.m.

The meeting of the Board of Studies in Botany (U.G. and P.G.) for the seventh revision of the syllabi to be implemented from 2023 - 2024 was convened at 11.00 a.m. in the Department of Botany on Thursday, 21.03.2024.

The list of the members of the Board of Studies in Botany is as given below

S. No.	Name	Designation	Signature
1.	Dr. M. Arumugam Head, Department of Botany J.J.College of Arts and Science (Autonomous) Pudukkottai- 622 422.	Chairman	
2.	Dr. A. Lakshmi Prabha Professor Department of Botany Bharathidasan University Tiruchirappalli – 620 024	University Nominee	
3.	Dr. M. Jothi Basu Assistant Professor in Botany Directorate of Distance Education Alagappa University Karaikudi – 630 003 E-mail: jothibas77@gmail.com	Subject Experts Outside the Parent University	Absent
4.	Dr. P. Abirami Assistant Professor Department of Botany Seethalakshmi Aachi College for Women Pallathur, Sivagankai- District E-mail: abirami.harini2011@gmail.com	Subject Experts Outside the Parent University	
5.	Dr. A. Nagasathya Assistant Professor and Head Department of Zoology Government Arts College for Women (Autonomous), Pudukkottai	Special Invitee for Zoology (Allied)	
6.	Dr. A. N. Sundar	Faculty Member	
7.	Ms. K. Thamaraichelvi	Faculty Member	Absent

8.	Dr. J. Mohammed Hussain	Faculty Member	
9.	Dr. S. Vinoth Ponpandian	Faculty Member	
10.	Dr. A. Krishnapriya	Faculty Member	
11.	Mr. N. Selvam Kallukudiyiruppu Melnilavayal Po Thirumayam Tk Pudukkottai – 622 202	Representative From Industry / Corporate	
12.	S. Akila Lena Vilakku Thirumayam Tk Pudukkottai Dist.	Post Graduate Meritorious Alumnus	

The Chairman, Dr. M. Arumugam chaired the meeting and welcomed all the members to the meeting. After a brief introduction, the members discussed various aspects of the syllabi and the following resolutions were passed.

General Resolutions passed in the BoS Meeting:

1. In his notification No: 1616, dated 10.08.2021, the Chief Secretary, Department of Higher Education, Government of Tamil Nadu, has given the Autonomous Colleges, the freedom to retain / reframe their syllabi, Course Structure etc., in keeping with their perceptions on Institutional / local needs.
2. The College Council at its meeting held on 16.09.2023 resolved that our Institution will gratefully accept the academic freedom and empower the Boards of Studies either to retain or to reframe their Curriculum for various Programmes under CBCS and UGC - LOCF.
3. However, the Course Structure for the U.G. & P.G. programmes at Institutional level will have to follow a uniform pattern with minor variations depending on discipline specific needs.
4. It is resolved to modify and follow a total of 43 courses, 4300 marks and 141 credits for the U.G. Programmes and 21 courses, 2100 marks and 90 credits for the P.G. Programmes.

Distribution of Courses - U.G.

Sl. No.	Part	Courses	No. of Courses	No. of Credits	Marks
1.	I	Language Courses (Part – I)	4	12	400
2.	II	English Courses (Part – II)	4	12	400
3.	III	Core Courses	14	65	1400
4.		Project Work	1	04	100
5.		Discipline Specific Elective Courses	8	24	800
6.	IV	Internship	1	02	100
7.		Skill Enhancement Courses	7	14	700
8.		Value Education	1	02	100
9.		Environmental Studies	1	02	100
10.		Foundation Course	1	02	100
11.	V	Gender Studies	1	01	100
12.		Extension Activity	-	01	-
Total			43	141	4300

Distribution of Courses - P.G.

Sl. No.	Types of the Courses	No. of Courses	No. of Credits	Marks
1.	Core Courses	12	58	1200
2.	Project Work	01	10	100
3.	Discipline Specific Elective Courses	05	15	500
4.	Internship	01	03	100
5.	Skill Enhancement Courses	02	04	200
Total		21	90	2100

5. The Revised Syllabus has been implemented from the Academic Year 2023 – 2024 onwards. In the previous Boards of Studies meeting, the Syllabus for first two Semesters have been passed. Now in the light of the Government Communication, cited in Point No. 1, the Chairmen of the Boards of Studies have introduced some changes in the Syllabus for Semester I and Semester II. Such modifications are approved and passed by this Board.
6. The Course Structure mentioned in Point No: 4 for U.G. & P.G. Programmes have already been approved.
7. In the present revision and modification, the General instructions on Curriculum Design, Course Structure, Uniformity of standards etc., given by the UGC - LOCF, AICTE, NAAC, TANSCH and the Parent University have been scrupulously followed.
8. Following the suggestion given by the Honorable members of the Academic Council in its last meeting, a course on Gender Studies has been included in all UG programmes.
9. Resolved to include various online courses like SWAYAM - MOOCs with extra credits. The credits thus earned will be reflected in the Cumulative Mark Statement of the students.
10. Resolved to continue offering Value Added Courses.
11. Implement the following guidelines on Curriculum Design given by NAAC
 - a. Specific mention has been made of Programme Outcomes (POs), Programme Specific Outcomes (PSOs), Course Outcomes (Cos), Programme Educational Objectives (PEOs) and Course Objectives (Cos) in the syllabus.
 - b. Relationship Matrix for CO, PO and PSO for all the courses implemented.
 - c. Curriculum addresses local, Regional, National and Global needs.
 - d. Courses also focus on Gender, Environment and Sustainability, Human values and Professional Ethics.
12. Details of the Courses newly introduced in UG & PG are included in as appendices.

The Following courses are newly introduced.

Specific Resolutions passed in the BoS Meeting of UG & PG Botany.

1. It is resolved that the new Courses Introduced in B.Sc.

Sem	SLNO	Course code	Course Title	Year of Introduction
UG				
Sem- I	1	U1R3BOCC1	Plant Diversity – I Algae	2024
	2	U1R3SEC 1:2	Environmental Biotechnology	2024
	3	U1R3SEC 1:3	Nursery and Landscaping	2024
	4	U1R3BOFC1	Foundation Course Basics of Botany	2024
Sem- II	5	U2R3BOCC3	Plant Diversity – II – Fungi, Bacteria, Viruses, Plant Pathology and Lichens	2024
	6	U2R3BOSEC2:1	Mushroom Cultivation	2024
	7	U2R3BOSEC2:2	Herbal Medicine	2024
	8	U2R3BOSEC2:3	Global Climate Change	2024
	9	U2R3BOSEC 3:1	Botanical Garden and Landscaping	2024
Sem- III	10	U3R3BOCC5	Plant Diversity – III : Bryophytes, Pteridophytes, Gymnosperms and Paleobotany	2024
	11	U3R3BOSEC4:1	Herbal Technology	2024
	12	U3R3BOSEC4:2	Entrepreneurial Opportunities in Botany	2024
Sem- IV	13	U4R3BOCC7	Anatomy and Embryology of Angiosperms.	2024
	14	U4R3BOSEC5:1	Cultivation of Algae	2024
	15	U4R3BOSEC5:2	Fermentation Technology	2024
	16	U4R3BOSEC6:1	Environmental Impact Analysis	2024
	17	U4R3BOSEC6:2	Global Climate Changes	2024
Sem- V	18	U5R3BOCC9	Plant Morphology, Taxonomy and Economic Botany	2024
	19	U5R3BOCC10	Cell Biology, Molecular Genetics and Plant breeding	2024
	20	U5R3BOCC11	Plant Ecology and Phytogeography	2024
	21	U5R3BODSE5:1	Plant Biotechnology	2024
	22	U5R3BODSE5:2	Horticulture	2024
	23	U5R3BODSE6:1	Bio Nanotechnology	2024
	24	U5R3BODSE6:2	Forestry	2024

	25	U5R3BOINT	Internship	2024
Sem- VI	26	U6R3BOCC13	Plant Physiology and Biochemistry	2024
	27	U6R3BODSE7:1	Computer Applications in Botany	2024
	28	U6R3BODSE7:2	Forensic Botany	2024
	29	U6R3BODSE8:1	Vermitechnology	2024
	30	U6R3BODSE8:2	Natural Resource Management	2024
	31	U6R3BOSEC7:1	Botany for Competitive Examinations	2024
	32	U6R3BOSEC7:2	Aquatic Botany	2024

2. It is resolved that the new Courses Introduced in M.Sc.

Sem	SLNO	Course code	Course Title	Year of Introduction
PG				
Sem- I	1	P1R3BODSE1:1	Microbiology, Immunology and Plant Pathology	2024
	2	P1R3BODSE1:2	Conservation of Natural Resources and Policies	2024
	3	P1R3BODSE1:3	Mushroom Cultivation	2024
	4	P1R3BODSE1:4	Phytopharmacognosy	2024
	5	P1R3BODSE2:1	Algal Technology	2024
	6	P1R3BODSE2:2	Ethnobotany, Naturopathy and Traditional Healthcare	2024
	7	P1R3BODSE2:3	Horticulture	2024
	8	P1R3BODSE2:4	Herbal Technology	2024
Sem- II	9	P2R3BODSE3:1	Medicinal Botany	2024
	10	P2R3BODSE3:2	Phytochemistry	2024
	11	P2R3BODSE3:3	Research Methodology, Computer Applications & Bioinformatics	2024
	12	P2R3BODSE3:4	Biopesticide Technology	2024
	13	P2R3BODSE4:1	Applied bioinformatics	2024
	14	P2R3BODSE4:2	Intellectual Property Rights	2024
	15	P2R3BODSE4:3	Nanobiotechnology	2024
	16	P2R3BOSEC1:1	Agriculture and Food Microbiology	2024

	17	P2R3BOSEC1:2	Biostatistics	2024
Sem- III	18	P3R3BOCC7	Cell and Molecular Biology	2024
	19	P3R3BOCC8	Genetics, Plant Breeding and Biostatistics	2024
	20	P3R3BODSE 5:2	Bio-instrumentation	2024
	21	P3R3BOSEC2:1	Intellectual Property Rights	2024
	22	P3R3BOINT	Internship	2024

13. Environmental science and value education course to be following in III and IV semesters respectively.
14. Resolved to have the following Courses in the last four semesters.

[Signature]

[Signature] 21/3/24

Dr.(Mrs.) A.LAKSHMI PRABHA
PROFESSOR
DEPARTMENT OF BOTANY
BHARATHIDASAN UNIVERSITY
TIRUCHIRAPPATTUR - 620 024.

[Signature]

[Signature] 21/3/24

Dr P.ABIRAMI. M.Sc., M.Phil., PhD.,
Assistant Professor,
Department of Botany,
Seethalakshmi Achi College for Women
Pallathur, Sivagangai Dt.

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PG and Research Department of Botany

Course Structure for B.Sc. Botany
UG Botany 2023 – 2024

	Part	Course code	Course Title	Credit	Hrs/ Week	Marks CIA Ext		Total Marks
Sem- I	I	U1R3TL1/ HL1/FL1	Language - I (Tamil/Hindi/French)	3	6	25	75	100
	II	U1R3EL1	Language - II (English)	3	6	25	75	100
	III	U1R3BOCC1	Plant Diversity – I Algae	5	5	25	75	100
		U1R3BOCC2P	Major Practical-I (Covering CC1)	5	5	40	60	100
		U1R3BODSE1	Allied Zoology Course – I	3	4	25	75	100
	IV	U1R3SEC 1:1/1:2/1:3	1:1. Organic farming 1:2. Environmental Biotechnology 1:3. Nursery and Landscaping	2	2	25	75	100
		U1R3BOFC1	Foundation Course Basics of Botany	2	2	25	75	100
	Total			23	30			700
Sem- II	I	U2R3TL2/ HL2/FL2	Language - I (Tamil/Hindi/French)	3	6	25	75	100
	II	U2R3EL2	Language - II (English)	3	6	25	75	100
	III	U2R3BOCC3	Plant Diversity – II – Fungi, Bacteria, Viruses, Plant Pathology and Lichens	5	5	25	75	100
		U2R3BOCC4P	Major Practical-II - Fungi, Bacteria, Viruses, Plant Pathology and Lichens	5	5	40	60	100
		U2R3BODSE2P	Allied Zoology Practical -II	3	4	40	60	100
	IV	U2R3BOSEC 2:1/2:2/2:3	2:1 Mushroom Cultivation 2:2 Herbal Medicine 2:3 Global Climate Change	2	2	25	75	100
		U2R3BOSEC 3:1/3:2	3:1 Botanical Garden and Landscaping 3:2 Organic Farming	2	2	25	75	100
	Total			23	30			700
Sem- III	I	U3R3TL3/ HL3/FL3	Language Course – III (Tamil/Hindi/French)	3	6	25	75	100
	II	U3R3EL3	Language Course – III (English)	3	6	25	75	100

	III	U3R3BOCC5	Plant Diversity – III : Bryophytes, Pteridophytes, Gymnosperms and Paleobotany	5	5	25	75	100
		U3R3BOCC6P	Major Practical – III (Covering CC5)	5	5	40	60	100
		U3R3CHDSE3	Allied Chemistry Theory	3	4	25	75	100
	IV	U3R3VE	Value Education	2	2	25	75	100
		U3R3BOSEC 4:1/4:2	4:1 Herbal Technology 4:2 Entrepreneurial Opportunities in Botany	2	2	25	75	100
	Total			23	30			700
Sem- IV	I	U4R3TL4/ HL3/FL4	Language Course – IV (Tamil/Hindi/French)	3	5	25	75	100
	II	U4R3EL4	Language Course – IV (English)	3	5	25	75	100
	III	U4R3BOCC7	Anatomy and Embryology of Angiosperms.	5	5	25	75	100
		U4R3BOCC8P	Major Practical – IV (Covering CC7)	5	5	40	60	100
		U4R3CHDSE4P	Allied Chemistry Practical	3	5	40	60	100
	IV	U4R3BOSEC 5:1/5:2	5:1 Cultivation of Algae 5:2 Fermentation Technology	2	2	25	75	100
		U4R3BOSEC 6:1/6:2	6:1 Environmental Impact Analysis 6:2 Global Climate Changes	2	2	25	75	100
		U4R3ES	Environmental Studies	2	1	25	75	100
	Total			25	30			800
Sem- V	III	U5R3BOCC9	Plant Morphology, Taxonomy and Economic Botany	5	5	25	75	100
		U5R3BOCC10	Cell Biology, Molecular Genetics and Plant breeding	4	5	25	75	100
		U5R3BOCC11	Plant Ecology and Phytogeography	4	5	25	75	100
		U5R3BOCC12P	Major Practical –V (Covering CC9, 10 & 11)	4	5	40	60	100
		U5R3BODSE 5:1/5:2	5:1 Plant Biotechnology 5:2 Horticulture	3	5	25	75	100
		U5R3BODSE 6:1/6:2	6:1 Bio Nanotechnology 6:2 Forestry	3	5	25	75	100
	IV	U5R3BOINT	Internship	2	-	-	-	100
	Total			25	30			700
Sem- VI	III	U6R3BOCC13	Plant Physiology and Biochemistry	4	6	25	75	100
		U6R3BOCC14P	Major Practical – VI (Covering CC13)	4	5	40	60	100
		U6R3BOCC15PW	Project Work	4	6	-	-	100
		U6R3BODSE 7:1/7:2/7:3	7:1 Computer Applications in Botany 7:2 Forensic Botany	3	5	25	75	100

		U6R3BODSE 8:1/8:2	8:1 Vermitechnology 8:2 Natural Resource Management	3	3	25	75	100
	IV	U6R3BOSEC 7:1/7:2	7:1 Botany for Competitive Examinations 7:2 Aquatic Botany	2	3	25	75	100
		U6R3GS	Gender Studies	1	2	25	75	100
		-	Extension Activity	1	-	-	-	-
	Total			22	30	-	-	700
	Grand Total			141	-	-	-	4300

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Course Structure for M.Sc. Botany

Sem	Course code	Course Title	Credit	Hrs/ Week	Marks CIA Ext		Total Marks
Sem-I	P1R3BOCC1	Plant Diversity - I: Algae, Fungi, Lichens and Bryophytes	5	7	25	75	100
	P1R3BOCC2	Plant Diversity - II: Pteridophytes, Gymnosperms and Paleobotany	5	7	25	75	100
	P1R3BOCC3	Practical I- Covering CC1 and CC2	4	6	40	60	100
	P1R3BODSE 1:1/1:2/1:3/1:4	1. Microbiology, Immunology and Plant Pathology 2. Conservation of Natural Resources and Policies 3. Mushroom Cultivation 4. Phytopharmacognosy	3	5	25	75	100
	P1R3BODSE 2:1/2:2/2:3/2:4	1. Algal Technology 2. Ethnobotany, Naturopathy and Traditional Healthcare 3. Horticulture 4. Herbal Technology	3	5	25	75	100
	Total		20	30	-	-	500
Sem II	P2R3BOCC4	Taxonomy of Angiosperms and Economic Botany	5	5	25	75	100
	P2R3BOCC5	Plant Anatomy and Embryology of Angiosperms	5	5	25	75	100
	P2R3BOCC6P	Practical II – (Covering CC4, CC5)	4	5	40	60	100
	P2R3BODSE 3:1/3:2/3:3/3:4	1. Medicinal Botany 2. Phytochemistry 3. Research Methodology, Computer Applications & Bioinformatics 4. Biopesticide Technology	3	5	25	75	100
	P2R3BODSE 4:1/4:2/4:3	1. Applied bioinformatics 2. Intellectual Property Rights 3. Nanobiotechnology	3	5	25	75	100

	P2R3BOSEC 1:1/1:2	1.Agriculture and Food Microbiology 2.Biostatistics	2	5	25	75	100
	Total		22	30	-	-	600
Sem - III	P3R3BOCC7	Cell and Molecular Biology	5	6	25	75	100
	P3R3BOCC8	Genetics, Plant Breeding and Biostatistics	5	5	25	75	100
	P3R3BOCC10P	Practical – III (CC7, CC8 and CC9)	5	5	60	40	100
	P3R3BODSE 5:1/5:2	1. Organic, Indoor and Terrace Gardening 2. Bio-instrumentation	3	4	25	75	100
	P3R3BOSEC 2:1/2:2	1. Intellectual Property Rights 2. Bio-Fertilizers and Agriculture Sustainability	2	4	25	75	100
	P3R3BOINT	Internship	3	-	-	-	100
	Total		28	30			700
Sem - IV	P4R3BOCC11	Plant Biotechnology and Green Nanotechnology	5	5	25	75	100
	P4R3BOCC12	Plant Ecology, Conservation Biology and Environmental Sustainability	5	5	25	75	100
	P4R3BOCC13PW	Project Work	10	20	-	-	100
	Total		20	30			300
	Grand Total		90	-	-	-	2100

15. It is resolved to introduce '**Internship Programme**' newly in the third semester for the Post-graduate students. Internship will be done by the students at the end of the II Semester.
16. It is resolved to approve the curricula, course structure, syllabi and textbooks for the UG and PG programmes in Botany.
17. It is resolved to continue with the present scheme for CIA in relation to assignments, Mid-semester, Model examinations and their comparative weightage.

18. For Part V one credit will be awarded for UG students based on the participation in Extension and Outreach activities duly supervised by the tutors concerned.
19. The Board approved the revised curricula, course structure, syllabi (including those for semester I and II already introduced in the academic year 2023-2024) and textbooks for the UG and PG programmes in Botany.

Appendix – I
New Courses Introduced in Botany
B.Sc. BOTANY

S.No.	Course Code	Title of the Course
1.	U1R3BOCC1	Plant Diversity – I Algae
2.	U1R3SEC 1:2	Environmental Biotechnology
3.	U1R3SEC 1:3	Nursery and Landscaping
4.	U1R3BOFC1	Foundation Course Basics of Botany
5	U2R3BOCC3	Plant Diversity – II – Fungi, Bacteria, Viruses, Plant Pathology and Lichens
6.	U2R3BOSEC2:1	Mushroom Cultivation
7.	U2R3BOSEC2:2	Herbal Medicine
8.	U2R3BOSEC2:3	Global Climate Change
9.	U2R3BOSEC 3:1	Botanical Garden and Landscaping
10.	U3R3BOCC5	Plant Diversity – III : Bryophytes, Pteridophytes, Gymnosperms and Paleobotany
11	U3R3BOSEC4:1	Herbal Technology
12.	U3R3BOSEC4:2	Entrepreneurial Opportunities in Botany
13.	U4R3BOCC7	Anatomy and Embryology of Angiosperms.
14.	U4R3BOSEC5:1	Cultivation of Algae
15.	U4R3BOSEC5:2	Fermentation Technology
16.	U4R3BOSEC6:1	Environmental Impact Analysis
17.	U4R3BOSEC6:2	Global Climate Changes
18.	U5R3BOCC9	Plant Morphology, Taxonomy and Economic Botany
19.	U5R3BOCC10	Cell Biology, Molecular Genetics and Plant breeding
20.	U5R3BOCC11	Plant Ecology and Phytogeography
21.	U5R3BODSE5:1	Plant Biotechnology
22.	U5R3BODSE5:2	Horticulture
23.	U5R3BODSE6:1	Bio Nanotechnology
24	U5R3BODSE6:2	Forestry
25	U5R3BOINT	Internship
26	U6R3BOCC13	Plant Physiology and Biochemistry

27	U6R3BODSE7:1	Computer Applications in Botany
28	U6R3BODSE7:2	Forensic Botany
29	U6R3BODSE8:1	Vermitechnology
30	U6R3BODSE8:2	Natural Resource Management
31	U6R3BOSEC7:1	Botany for Competitive Examinations
32	U6R3BOSEC7:2	Aquatic Botany

Appendix – II
New Courses Introduced in Botany
M.Sc. BOTANY

S.No.	Course Code	Title of the Course
1.	P1R3BODSE1:1	Microbiology, Immunology and Plant Pathology
2.	P1R3BODSE1:2	Conservation of Natural Resources and Policies
3.	P1R3BODSE1:3	Mushroom Cultivation
4.	P1R3BODSE1:4	Phytopharmacognosy
5.	P1R3BODSE2:1	Algal Technology
6	P1R3BODSE2:2	Ethnobotany, Naturopathy and Traditional Healthcare
7	P1R3BODSE2:3	Horticulture
8	P1R3BODSE2:4	Herbal Technology
9	P2R3BODSE3:1	Medicinal Botany
10	P2R3BODSE3:2	Phytochemistry
11	P2R3BODSE3:3	Research Methodology, Computer Applications & Bioinformatics
12	P2R3BODSE3:4	Biopesticide Technology
13	P2R3BODSE4:1	Applied bioinformatics
14	P2R3BODSE4:2	Intellectual Property Rights
15	P2R3BODSE4:3	Nanobiotechnology
16	P2R3BOSEC1:1	Agriculture and Food Microbiology
17	P2R3BOSEC1:2	Biostatistics
18	P3R3BOCC7	Cell and Molecular Biology
19	P3R3BOCC8	Genetics, Plant Breeding and Biostatistics
20	P3R3BODSE 5:2	Bio-instrumentation
21	P3R3BOSEC2:1	Intellectual Property Rights
22	P3R3BOINT	Internship

Signature
21/3/14

Signature
21/3/14

Signature
Dr P.ABIRAMI. M.Sc., M.Phil., Ph.D.,
 Assistant Professor,
 Department of Botany,
 Seethalakshmi Achi College for Women
 Pallathur, Sivagangai Dt.

Signature
Dr. M. Arumugam, M.Sc. M.Phil., Ph.D.
 Assistant Professor & Head
 PG and Research Dept. of Botany
 J.J. College of Arts and Science

Dr. (Mrs.) A. LAKSHMI PRABHA
 PROFESSOR
 DEPARTMENT OF BOTANY
 BHARATHIDASAN UNIVERSITY