

**KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS),
COIMBATORE 641029**

DEPARTMENT OF BOTANY

Minutes of the Board of Studies

The 17th Board of Studies meeting was held on 17.03.2025. The Chairman welcomed and outlined the changes to be made in the following for the board approval.

ITEM 1. To consider revision in the Curriculum, Scheme of Examination and Syllabi of UG Programme in Botany for the students to be admitted from the academic year 2025-2026 and onwards.

The following were the proposed changes made in UG Programme in Botany and they were as follows:

IN UG PROGRAMME

Semester	Course Code	Name of the Course	Changes Made
I	25UBO202	Core Paper: 2 – Plant Diversity - II	Revised the syllabus by including the topics: ✓ Classification of Bryophytes (Smith, 1955) in Unit I . ✓ Classification of Gymnosperms (Sporne, 1965) in Unit IV .
V	25UBO505	Core Paper 5: Fundamentals of computer and Bioinformatics	Revised the syllabus by including the topics: ✓ Genomics – Definition, Basic Principles, Working Methodology, Types of Genomics – Structural genomics, Functional genomics, Comparative genomics, Epigenomics, Metagenomics and Pharmacogenomics, Applications of Genomics in Unit IV . ✓ Proteomics – Definition and

			<p>principles, working methodology, Types - Expression proteomics, Functional proteomics, Structural proteomics, and Quantitative proteomics, Applications of Proteomics in Unit IV.</p> <p>✓ Primary and Secondary database and Scoring matrices (PAM & BLOSUM) in Unit V.</p>
V	25UBO507	<p>Core Paper 7: Plant Ecology, Phytogeography and Resource Conservation</p>	<p>Revised the syllabus by incorporating the topics:</p> <p>✓ Remote sensing techniques in Ecology in Unit V.</p> <p>✓ Carbon Sequestration in Unit V.</p>
V	25UBO508	<p>Core Paper 8: Microbiology and Plant Pathology</p>	<p>Revised the syllabus by including the topics:</p> <p>✓ Three kingdom concept, Bacteria – General characteristics with emphasis on morphology, size and shape in Unit I.</p> <p>✓ Microbiological techniques – sterilization, culture methods - culture media (Agar and broth) preparation, pour plate, spread plate and streak plate methods. staining techniques (Gram staining) and Bacterial growth curve in Unit II.</p> <p>✓ Different symptoms of plant diseases in Unit IV.</p>

V	25UBO5CO	Core Practical 4: Taxonomy of Angiosperms, Economic Botany, Plant Ecology, Phytogeography, Resource Conservation, Microbiology and Plant Pathology	Revised the syllabus by incorporating new practical topic ✓ Pure culture technique – Pour plate, streak plate and spread plate methods.
VI	25UBO609	Core Paper 9: Biochemistry and Bioinstrumentation	Revised the syllabus by incorporating the topics: ✓ Simple, compound, stereoscopic, phase contrast and dark field in Unit IV . ✓ Transmission Electron Microscopy (TEM) and scanning electron microscope (SEM) in Unit IV .
VI	25UBO611	Core Paper 11: Biophysics and Biostatistics	Revised the syllabus by including the topic: ✓ Law of absorption in Unit I
VI	25UBO6CP	Core Practical 5: Biochemistry, Bioinstrumentation, Plant Physiology, Biophysics and Biostatistics	Revised the syllabus by including the experiment: ✓ Effect of Absciscic acid (ABA) on stomatal movement

The Members resolved to approve the revised changes made in Curriculum, Scheme of Examination and Syllabi of UG Programme in Botany for the students to be admitted from the academic year 2025-2026 and onwards.

ITEM 2: To consider revision in the Curriculum, Scheme of Examination and Syllabi of PG Programme in Botany for the students to be admitted from the academic year 2025-2026 and onwards.

The following were the proposed changes made in PG Programme in Botany and they were as follows:

IN PG PROGRAMME

Semester	Course Code	Name of the Course	Changes Made
I	25PBO103	Core Paper 3: Microbiology and Plant Pathology	Revised the syllabus by including the topics, gram staining in Unit I . Mycoplasma – Little leaf of brinjal, Nematode - Root knot diseases in tomato in Unit V .
II	25PBO204	Core Paper 4 – Anatomy, Embryology of Angiosperms and Microtechniques	Revised the syllabus by including the topics ✓ Tissues – Meristems - process of differentiation of cells and simple tissues in Unit I .
II	25PBO205	Core Paper 5 - Cell Biology, Genetics, Plant Breeding and Biostatistics	Revised the syllabus by incorporating the topics: ✓ Multiple Comparison Test ✓ Box plot and Principal Component Analysis (PCA) – Statistical packages (SPSS & R) in Unit V
II	25PBO2CM	Core Practical 2: Anatomy, Embryology of Angiosperms, Microtechniques, Cell Biology, Genetics, Plant Breeding, Biostatistics, Bioinstrumentation and Research Methodology	Revised the syllabus by including certain new experiments: ✓ Statistical packages (SPSS & R). ✓ Soxhlet apparatus. ✓ Clevenger apparatus. ✓ Reference management tool – Zotero.

III	25PBO309	Core Paper 9 – Plant Physiology	Revised the syllabus by including the topics ✓ Recent advances in plant physiology - Plant phenomics and metabolomics in Unit V .
III	25PBO3CN	Core Practical 3 - Taxonomy, Biosystematics, Biophysics, Biochemistry and Plant Physiology	Revised the syllabus by including certain new experiments: ✓ Extraction & Quantification of total phenolics, Alkaloids and Flavonoids.
IV	25PBO410	Core Paper 10: Ecology, Bioenergetics and Natural Resource Management	Revised the syllabus by including the topics: Carbon credits and Carbon currency in Unit III . Bioremediation in Unit IV .
IV	25PBO411	Core Paper 11: Plant Biotechnology	Revised the syllabus by including the topics: ✓ Direct and Indirect Gene Transfer Methods ✓ Hairpin RNAi Plants ✓ Small RNAs for crop management ✓ Introduction to Genome Editing ✓ Basic principle, methodology and applications of CRISPR / Cas9 for crop improvement in Unit III
IV	25PBO412	Core Paper 12: Bioinformatics	Revised the syllabus by including the topics ✓ Genomics – Definition, Basic Principles, Working Methodology, Types of

			<p>Genomics – Structural genomics, Functional genomics, Comparative genomics. Epigenomics, Metagenomics and Pharmacogenomics, Application of genomics in Unit III</p> <p>✓ Proteomics – Definition and principles, working methodology, Types - Expression proteomics, Functional proteomics, Structural proteomics, and Quantitative proteomics, Applications of Proteomics. Plant Metabolomics: Definition, Principle, workflow, Techniques and Application for crop improvement in Unit III</p>
IV	25PBO4CO	<p>Core Practical 4: Ecology, Bioenergetics, Natural Resource Management, plant Biotechnology and Bioinformatics</p>	<p>Revised the syllabus by including practical topics:</p> <ul style="list-style-type: none"> ✓ Water analysis: BOD, COD & Organic carbon. ✓ Soil Respiration ✓ Primer designing Tools – Primer 3 and IDT-Oligo analyser

<p>Major Elective: Bioinoculant and Solid Waste Management</p>	<p>✓ The title of the Major Elective Paper "Biofertilizer and Solid Waste Management" has been changed as "Bioinoculant and Solid Waste Management"</p>
<p>Major Elective: Applied Microbiology</p>	<p>✓ The Major Elective Paper- Applied Microbiology has been moved to Non-Major Elective and replaced with Biotechnology and Nanobiology from Non-Major Elective Paper.</p>
<p>Non-Major Elective 1: Herbal Medicine</p>	<p>Revised the syllabus by incorporating the topics relevant to Indian Knowledge system (IKS) such as</p> <ul style="list-style-type: none"> ✓ Folk and Tribal Medical Practices - medicinal benefits of Tulasi, Arjuna and Sandalwood in Unit I. ✓ Medicinal plants in trade-cultivational practices, Therapeutic and pharmaceutical uses of the following plants: <i>Piper nigrum</i>, <i>Piper betle</i> <i>Azadirachta indica</i>, <i>Curcuma longa</i> and <i>Aloe vera</i> in Unit II.

In PG Programme, the following Core Papers has been revised and reshuffled as per the suggestions provided by the Members of Board of Studies and are as follows

- ✓ Core Paper 3 – Anatomy, Embryology of Angiosperms and Microtechniques has been moved from Semester I to II as Core Paper 4.
- ✓ Core Paper 4 – Bioinformatics has been moved from Semester II to IV as Core Paper 12.
- ✓ Core Paper 6 – Ecology, Bioenergetics and Natural Resource Management has been moved from Semester II to IV as Core paper 10.
- ✓ Core Paper 8 – Microbiology and Plant Pathology has been moved from Semester III to I as Core Paper 3.
- ✓ Core Paper 9 – Plant Biotechnology has been moved from Semester III to IV as Core Paper 11.
- ✓ Core Paper 10 – Biophysics and Biochemistry has been moved from Semester IV to III as Core paper 8.
- ✓ Core Paper 11 – Plant Physiology has been moved from Semester IV to III as Core Paper 9.
- ✓ Core Paper 12 – Bioinstrumentation and Research Methodology has been moved from Semester IV to II as Core Paper 6.

The Members resolved to approve the revised changes made in Curriculum, Scheme of Examination and Syllabi of PG Programme in Botany for the students to be admitted from the academic year 2025-2026 and onwards.

ITEM 3: To consider Curriculum, Scheme of Examination and Syllabi of new Certificate programmes, Herbal cosmetics and Face Yoga & Naturopathy and Healthcare for the students to be admitted from the academic year 2025-2026 and onwards.

S. No	Introduction of New Certificate Programme	Justification
1.	Herbal Cosmetics and Face Yoga	<ul style="list-style-type: none"> ▪ Students will be able to explore the therapeutic aspects of herbal cosmetics and ancient face yoga methods. ▪ This programme will envisage students with various Indian traditional herbs and their therapeutic significance as well as equip them with entrepreneurship skills.
2.	Naturopathy and Health Care	<ul style="list-style-type: none"> ▪ This programme aids an excellent opportunity for the students to gain knowledge on natural therapies and lifestyle changes on common health related problems in real time situation. ▪ Will provide a holistic approach and practical experience on Naturopathic treatments and therapies.

The Members resolved to approve the introduction new Certificate programmes on Herbal cosmetics and Face Yoga & Naturopathy and Healthcare for the students to be admitted from the academic year 2025-2026 and onwards and to conduct classes and examination through Blended mode as per the recommendation by the Members.

ITEM 4: To consider the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Bonsai for the students to be admitted from the academic year 2025-2026 and onwards.

The Members resolved to approve the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Bonsai for the students to be admitted from the academic year 2025-2026 and onwards.

ITEM 5: To consider the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Eco farming techniques for the students to be admitted from the academic year 2025-2026 and onwards.

The Members resolved to approve the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Eco Farming Techniques for the students to be admitted from the academic year 2025-2026 and onwards.

ITEM 6: To consider the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Herbal Science and Analytical Techniques for the students to be admitted from the academic year 2025-2026 and onwards.

The Members resolved to approve the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Herbal Science and Analytical Techniques for the students to be admitted from the academic year 2025-2026 and onwards.

ITEM 7: To consider the existing Curriculum, Scheme of Examination and Syllabi of PG Diploma Programme in Biodiversity for the students to be admitted from the academic year 2025-2026 and onwards.

The Members resolved to approve the existing Curriculum, Scheme of Examination and Syllabi of PG Diploma Programme in Biodiversity for the students to be admitted from the academic year 2025-2026 and onwards.

ITEM 8: To suggest the panel of names for appointment of examiners.

The Members of the Board of studies approved and authorise the chairman to submit the panel of examiners for question paper setting, evaluation and practical examination.


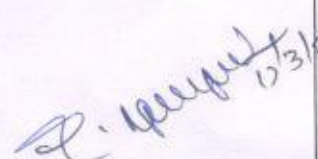
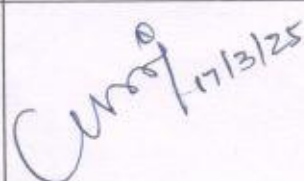

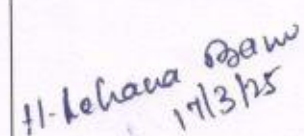
ITEM 9: Other academic activities in the department.

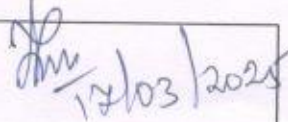
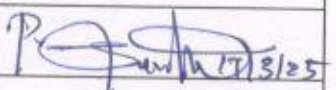
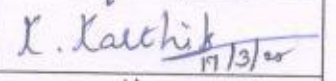
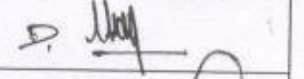
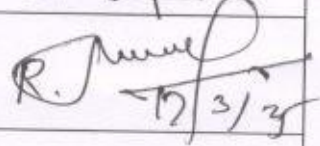
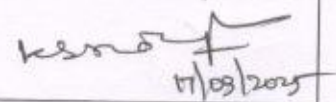
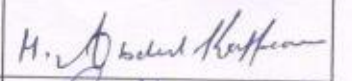
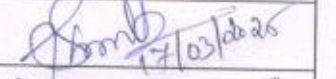
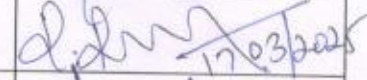

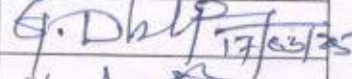

- ✓ The board resolved to introduce “Health and Wellness Programme” (25UHW401) in the 4th semester for UG students and extra credits will be provided for the students who has successfully completed.
- ✓ SWAYAM/MOOC’s is made mandatory for both UG & PG students and extra credits will be provided for the students who has successfully completed.
- ✓ Inclusion of certain topics related to Indian Knowledge System (IKS) in Non-Major Elective 1: Herbal Medicine.
- ✓ Certain topics related to AI tools relevant to Plant Science has been included in the Core Paper 4 (Cytology, Genetics and Plant Breeding), Core Paper 6 (Taxonomy of Angiosperms and Economic Botany), Core Paper 7 (Plant Ecology, Phytogeography and Resource Conservation) and Core Paper 10 (Plant Physiology) in UG Programme and in PG programme, Core Paper 6 (Ecology, Bioenergy and Natural Resource Management) and Core Paper 7 (Taxonomy and Biosystematics) topics relevant to AI has been included.
- ✓ Text Books / Reference Books/Online Resources have been updated in the syllabi.

As per the suggestions and recommendations given by the various Stakeholders on the above items discussed, the revised scheme of Curriculum / Scheme of Examination / Syllabi and Panel of Examiners are to be followed is annexed herewith for the implementation from the commencement of the Academic year 2025 – 2026.

The Members after careful scrutiny of the changes to be made unanimously accorded approval for the proposed changes/modifications. They also resolved to authorize the Chairman of Board of Studies to place the changes/modifications now approved by the BOS before the Standing Committee on Academic affairs and Academic Council.

Signature of the Board Members

S. NO	NAME	DESIGNATION	SIGNATURE
1.	Dr. T. Muthukumar (University Nominee)	Professor, Department of Botany, Bharathiar University, Coimbatore – 641046. Email id: tmkum@buc.edu.in Mobile No: 9942436855	
2.	Dr. S. Murugesan (Subject Experts)	Assistant Professor, Department of Botany, Periyar University, Salem – 636007, Email id: drsmbtupu@gmail.com Mobile No: 9003479566, 9486131494	
3.	Dr. S. Basker (Subject Expert)	Assistant Professor, Department of Botany, Governments Arts College (Autonomous), Salem – 636007 Email: biobasker@gmail.com Mobile : 9994062256	
4.	Dr. V. Chandarasekar (Industrialist)	Sterline Medplast, 60/5, Dhanam Nagar Main Road, Karayampalayam, Mylampatty, Coimbatore – 641062, Email: drchandrasedkar@sterline.in Mobile No: 9944436076, 7708107057	
5.	Dr. H. Rehana Banu (Meritorious Alumni)	Assistant Professor, Department of Botany, PSGR Krishnammal College for Women,, Coimbatore – 641004, Email: rehanabanu@psgrkew.ac.in Mobile No: 9629226949	

6.	Dr. K. Thenmozhi (Chairman)	Assistant Professor & Head	 17/03/2025
7.	Dr. P. Sumathi (Member)	Associate Professor	 17/3/25
8.	Dr. K. Karthika (Member)	Assistant Professor	 17/3/25
9.	Dr. D. Moorthy (Member)	Assistant Professor	 17/3/25
10.	Dr. R. Thirugnanasampandan (Member)	Assistant Professor	 17/3/25
11.	Dr. K. Sowndhararajan (Member)	Assistant Professor	 17/03/2025
12.	Dr. H. Addul kaffoor (Member)	Assistant Professor	 17/03/2025
13.	Dr. P. Revathi (Member)	Assistant Professor	 17/03/2025
14.	Dr. R. Rekka (Member)	Assistant Professor	 17/03/2025
15.	Dr. M. Parveen (Member)	Assistant Professor	 17/03/2025
16.	Dr. G. Dhandapani (Member)	Assistant Professor	 17/03/25
17.	Dr. V. Aravindhyan (Member)	Assistant Professor	 17/03/25
18.	S N. Bala Ajay Raj (221BO001)	Student Representative	S.N. Bala Ajay Raj
19.	S. Indhujaa (232BO001)	Student Representative	Indhujaa S.



Signature of the Chairman of the Board


21/3/25
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KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
COIMBATORE – 641 029
DEPARTMENT OF BOTANY
ANNEXURE - I
(Comprehensive Revision of Syllabus – Revised Courses)
(2025 – 2026)

Sl. No.	Semester	Course Code	Name of the Course	Existing/ Revised	% of Modification	Employability/ Entrepreneurship/ Skill Development
UG PROGRAMME						
1.	I	25UBO202	Core Paper: 2 – Plant Diversity - II	Revised	5%	Skill Development
2.	V	25UBO505	Core Paper 5: Fundamentals of computer and Bioinformatics	Revised	20%	Skill Development
3.	V	25UBO507	Core Paper 7: Plant Ecology, Phytogeography and Resource Conservation	Revised	5%	Skill Development
4.	V	25UBO508	Core Paper 8: Microbiology and Plant Pathology	Revised	20%	Skill Development
5.	V	25UBO5CO	Core Practical 4: Taxonomy of Angiosperms, Economic Botany, Plant Ecology, Phytogeography, Resource Conservation, Microbiology and Plant Pathology	Revised	5%	Skill Development

6.	VI	25UBO609	Core Paper 9: Biochemistry and Bioinstrumentation	Revised	5%	Skill Development
7.	VI	25UBO611	Core Paper 11: Biophysics and Biostatistics	Revised	5%	Skill Development
8.	VI	25UBO6CP	Core Practical 5: Biochemistry, Bioinstrumentation, Plant Physiology, Biophysics and Biostatistics	Revised	5%	Skill Development
PG PROGRAMME						
1.	I	25PBO103	Core Paper 3: Microbiology and Plant Pathology	Revised	5%	Skill Development
2.	II	25PBO204	Core Paper 4 – Anatomy, Embryology of Angiosperms and Microtechniques	Revised	20%	Skill Development
3.	II	25PBO205	Core Paper 5 - Cell Biology, Genetics, Plant Breeding and Biostatistics	Revised	5%	Skill Development
4.	II	25PBO2CM	Core Practical 2: Anatomy, Embryology of Angiosperms, Microtechniques, Cell Biology, Genetics, Plant Breeding, Biostatistics, Bioinstrumentation and Research Methodology	Revised	5%	Skill Development
5.	III	25PBO309	Core Paper 9 – Plant Physiology	Revised	20%	Skill Development
6.	III	25PBO3CN	Core Practical 3 - Taxonomy, Biosystematics, Biophysics, Biochemistry and Plant Physiology	Revised	5%	Skill Development
7.	IV	25PBO410	Core Paper 10: Ecology, Bioenergetics and Natural Resource	Revised	5%	Skill Development

			Management			
8.	IV	25PBO411	Core Paper 11: Plant Biotechnology	Revised	5%	Skill Development
9.	IV	25PBO412	Core Paper 12: Bioinformatics	Revised	5%	Skill Development
10.	IV	25PBO4CO	Core Practical 4: Ecology, Bioenergetics, Natural Resource Management, plant Biotechnology and Bioinformatics	Revised	5%	Skill Development

% of Change: Change of entire course (5 units): 100%; Change of One unit: 20%; Small Change: 10%; Minor Change: 5%



Signature of the Chairman of the Board

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KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
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DEPARTMENT OF BOTANY
ANNEXURE - II
(INTRODUCTION OF NEW COURSE)
(2025 – 2026)

Sl. No.	Semester	Course Code	Name of the Course	% of Modification	Employability/ Entrepreneurship/ Skill Development
CERTIFICATE PROGRAMME IN HERBAL COSMETICS AND FACE YOGA					
1.	I	25CHF101	Core Paper1- Herbal Cosmetics	100%	Entrepreneurship
2.	I	25CHF102	Core Paper 2 Face Yoga	100%	Entrepreneurship
3.	I	25CHF1CL	Core Practical1 Herbal Cosmetics and Face Yoga	100%	Entrepreneurship
4.	I	25CHF1IT	Case Study Analysis	100%	Entrepreneurship
CERTIFICATE PROGRAMME IN NATUROPATHY AND HEALTH CARE					
1.	II	25CNH101	C.P.1- Natural Cure Therapies	100%	Entrepreneurship
2.	II	25CNH102	C.P. 2 Health Care and Herbal Remedies	100%	Entrepreneurship
3.	II	25CNH1CL	C.Pr.1 Natural Cure Therapies and Herbal Remedies	100%	Entrepreneurship
4.	II	25CNH1IT	Case Study Analysis	100%	Entrepreneurship



Signature of the Chairman of the Board

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