

# KONGUNADU ARTS AND SCIENCE COLLEGE

(AUTONOMOUS), COIMBATORE 641029

## DEPARTMENT OF BOTANY

### Minutes of the Board of Studies

The 18<sup>th</sup> Board of Studies meeting was held on 27.03.2026. The Chairman welcomed and outlined the proposed 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 2026-2027 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
III	26UBO303	<b>Core Paper 3 – Anatomy and Embryology of Angiosperms</b>	Revised the syllabus by including the topics: ✓ Anomalous Secondary growth – Dicotyledons – <i>Mirabilis jalapa</i> in <b>Unit III</b> .
IV	26UBO4CM	<b>Core Practical 2: Anatomy, Embryology of Angiosperms, Cytology, Genetics and Plant Breeding</b>	Revised the syllabus by incorporating new practical topic: ✓ Anomalous secondary thickening - Dicot – <i>Mirabilis jalapa</i>
V	26UBO506	<b>Core Paper 6: Taxonomy of Angiosperms and Economic Botany</b>	Revised the syllabus by incorporating the topic: ✓ AJC Bose Indian Botanical Garden in <b>Unit II</b> .
I	26UBO1A1	<b>Allied-1 Botany: 1</b>	Revised the syllabus by incorporating the topic ✓ General Characters of Pteridophytes in <b>Unit IV</b>
II	26UBO2A2	<b>Allied-2 Botany: 2</b>	Revised the syllabus by incorporating the topic ✓ Primary structure of dicot and monocot leaf in <b>Unit I</b> .
<b>Introduction of New Major Elective Paper: Industrial Botany</b>			

In UG programme, the following Core papers have been revised and reshuffled as per the suggestions provided by the Members of Board of Studies and are as follows

- **Core Paper 8 – Microbiology and Plant Pathology** has been shifted from semester V to VI as **Core Paper 11 - Microbiology and Plant Pathology (26UBO611)** and Core Paper 8 has been renamed as **Biophysics and Biostatistics (26UBO508)**
- **C.Pr.4 (26UBO5CO)** has been renamed as **Taxonomy of Angiosperms, Economic Botany, Plant Ecology, Phytogeography, Resource Conservation, Biophysics and Biostatistics**, while **C.Pr.5 (26UBO6CP)** is titled as **Biochemistry, Bioinstrumentation, Plant Physiology, Microbiology and Plant Pathology**.

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 2026-2027 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 2026-2027 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	26PBO102	<b>Core Paper 2: Plant Diversity – II</b>	Revised the syllabus by including the topics, ✓ <b>Paleobotany:</b> Introduction and contribution of Birbal Sahni to Paleobotany. Economic importance of fossils - fossils for fuel

			and as industrial raw materials. Study of organ genera: <i>Sphenophyllum</i> , <i>Calamostachys</i> , <i>Pentoxylon</i> , and <i>Medullosa</i> in <b>Unit V</b>
I	26PBO103	<b>Core Paper 3: Microbiology and Plant Pathology</b>	Revised the syllabus by including the topics, <ul style="list-style-type: none"> <li>✓ Symptoms, causal organisms and control measures of <i>Fusarium</i> – wilt disease of cotton, bacterial soft rot disease of carrot and Yellow Vein Mosaic Disease in bhendi in <b>Unit V</b></li> </ul>
II	26PBO204	<b>Core Paper: 4 – Anatomy, Embryology of Angiosperms and Microtechniques</b>	Revised the syllabus by including the topic <ul style="list-style-type: none"> <li>✓ Rhytidome and lenticel in <b>Unit II</b></li> </ul>
II	26PBO2CM	<b>Core Practical 2: Anatomy, Embryology of Angiosperms, Microtechniques, Cell Biology, Genetics, Plant Breeding, Bioinstrumentation, Research Methodology and Biostatistics</b>	Revised the syllabus by including certain new practical topics: <ul style="list-style-type: none"> <li>✓ Study of shoot apex of <i>Hydrilla</i></li> <li>✓ To study and observe KRANZ Anatomy of leaf by sectioning - <i>Euphorbia</i> and Sugar cane leaf</li> <li>✓ Sectioning and observation of nodal types. Nodal anatomy- Unilacunar, Trilacunar, Multilacunar</li> <li>✓ Study of anomalous secondary growth in <i>Bignonia</i></li> </ul>

III	26PBO309	<b>Core Paper 9 – Plant Physiology</b>	<p>Revised the syllabus by including the topics</p> <ul style="list-style-type: none"> <li>✓ Classification of stress plant responses to biotic and abiotic stress factors. Mechanism of biotic and abiotic stress tolerance, HR and SAR, water deficit and drought resistance, salinity stress, metal toxicity, freezing and heat stress, oxidative stress. Seed dormancy- causes and methods to break seed dormancy physiology of seed germination - abscission and senescence in <b>Unit III</b></li> </ul>
IV	26PBO412	<b>Core Paper 12: Bioinformatics</b>	<p>Revised the syllabus by including following new topics in <b>Unit V</b>.</p> <ul style="list-style-type: none"> <li>➤ <b>Tools and Databases:</b> Introduction, Key Features and Applications of Database - TAIR (<i>Arabidopsis</i>), Oryzabase (Japan), RAP-DB (Rice Annotation Project Database), RGAP (Rice Genome Annotation Project), Phytozome (Plant Comparative Genomics), Sol Genomics Network (SGN), PRGdb (Plant Resistance Genes database), PlantCyc (Plant Metabolic Pathways Network (PMPN)).</li> </ul>

			<p><b>Tools:</b> MEGA (Phylogenetics), TBtools (Toolkit for Biologists), Integrated DNA Technologies (IDT), CRISPR-P, R/Phyton for Omics analysis. <b>Plant Promoter Database:</b> PlantPAN 4.0 (Plant Promoter Analysis Navigator), PPDB (Plant Promoter Database) and PlantCARE.</p>
IV	26PBO4CO	<p><b>Core Practical 4 - Ecology, Bioenergetics, Natural Resource Management, Plant Biotechnology and Bioinformatics</b></p>	<p>Revised the syllabus by including following experiments in Bioinformatics</p> <ol style="list-style-type: none"> <li>1. Gene Annotation and Functional Analysis using TAIR (<i>Arabidopsis thaliana</i>).</li> <li>2. Gene Information Retrieval and Functional Annotation using Oryzabase (<i>Oryza sativa</i> Database).</li> <li>3. Metabolic Pathway Analysis using PlantCyc Database.</li> <li>4. Promoter Analysis and Transcription Factor Binding Site Prediction using PlantPAN 4.0.</li> <li>5. Cis-Regulatory Element Analysis of Plant Promoters using PlantCARE</li> </ol>
<p><b>Introduction of New Major Elective Paper: Industrial Botany</b></p>			

**In PG programme**, the following papers have been revised and reshuffled as per the suggestions provided by the Members of Board of Studies and are as follows

- In **Core Paper 5 - Cell Biology, Genetics, Plant Breeding and Biostatistics**, Unit V contents of Biostatistics has been removed, and the paper has been renamed as **Core Paper 5 – Cell Biology, Genetics and Plant Breeding (26PBO205)** and their content has been transferred and incorporated to Unit V of **Core Paper 6** renamed as **Bioinstrumentation, Research Methodology and Biostatistics (26PBO206)**.

**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 2026-2027 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 2026-2027 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 2026-2027 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 2026-2027 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 2026-2027 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 2026-2027 and onwards.

**ITEM 7:** To consider the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Herbal Cosmetics and Face Yoga for the students to be admitted from the academic year 2026-2027 and onwards.

The Members resolved to approve the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Herbal Cosmetics and Face Yoga for the students to be admitted from the academic year 2026-2027 and onwards.

**ITEM 8:** To consider the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Naturopathy and Health Care for the students to be admitted from the academic year 2026-2027 and onwards.

The Members resolved to approve the existing Curriculum, Scheme of Examination and Syllabi of Certificate Programme in Naturopathy and Health Care for the students to be admitted from the academic year 2026-2027 and onwards.

**ITEM 9:** To consider the revised Curriculum, Scheme of Examination and Syllabi of PG Diploma Programme in Biodiversity for the students to be admitted from the academic year 2026-2027 and onwards.

## In PG Diploma in Biodiversity

Semester	Course Code	Name of the Course	Changes Made
I	26PDB102	<b>Core Paper 2 – Values, Uses and Loss of Biodiversity</b>	<p>Revised the syllabus by including the following new topics</p> <ul style="list-style-type: none"> <li>➤ Consumptive and productive uses, social, ethical, aesthetic and other values.</li> <li>➤ Economic valuation of biodiversity.</li> <li>➤ Biodiversity and tourism in <b>Unit I</b></li> <li>➤ Climate change finger print on Biodiversity in <b>Unit IV</b></li> </ul>
I	26PDB103	<b>Core Paper 3 – Conservation and Management of Biodiversity</b>	<ul style="list-style-type: none"> <li>• Revised the content in <b>Unit II and Unit III</b></li> <li>• Revised the syllabus by including following new topics in <b>Unit IV</b></li> <li>➤ <i>In-situ</i> conservation – protected areas, biosphere reserves and national parks, animals and ecological significance, home gardens</li> </ul>
II	26PDB204	<b>Core Paper 4: Biodiversity Prospecting and Indigenous Knowledge System (IKS) and Biotechnology for Biodiversity</b>	Certain revisions have been made in <b>Unit I</b>
II	26PDB2CM	<b>Core Practical 2 – Biodiversity - II</b>	<p>Revised the syllabus by including the practical topic</p> <ul style="list-style-type: none"> <li>➤ Determination of relative abundance of birds (Point Count Method)</li> </ul>

The Members resolved to approve the revised Curriculum, Scheme of Examination and Syllabi of PG Diploma Programme in Biodiversity for the students to be admitted from the academic year 2026-2027 and onwards.

**ITEM 10:** 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 11:** Other academic activities in the department.

- Text Books / Reference Books/Online Resources have been updated in the syllabi.
- Extra credits shall be awarded for innovative products/ individual paper presentations and publications in reputed national/ international proceedings and in indexed journals by the UG & PG students for their original research contributions.
- Objective Capacity Testing has been introduced replacing assignment

As per the suggestions and recommendations given by 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 Academic year 2026 – 2027 and onwards.

The Members after careful scrutiny of the changes 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:**

<b>S. No.</b>	<b>NAME</b>	<b>DESIGNATION</b>	<b>SIGNATURE</b>
1.	<b>Dr. T. MUTHUKUMAR</b> (University Nominee)	Professor, Department of Botany, Bharathiar University, Coimbatore – 641046. Email: <a href="mailto:tmkum@buc.edu.in">tmkum@buc.edu.in</a> Mobile No: 9942436855	
2.	<b>Dr. S. MURUGESAN</b> (Subject Expert)	Assistant Professor, Department of Botany, Periyar University, Salem – 636007, Email: <a href="mailto:drsmbtupu@gmail.com">drsmbtupu@gmail.com</a> Mobile No: 9003479566; 9486131494	
3.	<b>Dr. S. BASKER</b> (Subject Expert)	Assistant Professor, Department of Botany, Governments Arts and Science College (Autonomous), Salem – 636007, Mobile No: 9994062256 Email: <a href="mailto:biobasker@gmail.com">biobasker@gmail.com</a>	
4.	<b>Dr. V. CHANDRASEKAR</b> (Industrialist)	Sterline Medplast, 60/5, Dhanam Nagar, Main Road, Karayampalayam, Mylampatty, Coimbatore-641062, Email: <a href="mailto:drchandrasedkar@sterline.in">drchandrasedkar@sterline.in</a> Mobile No: 9944436076; 7708107057	

5.	<b>Dr. H. REHANA BANU</b> (Meritorious Alumna)	Assistant Professor, Department of Botany, PSGR Krishnammal College for Women, Coimbatore – 641004, Email: <a href="mailto:rehanabanu@psgrkew.ac.in">rehanabanu@psgrkew.ac.in</a> Mobile No: 9629226949	
6.	<b>Dr. K. THENMOZHI</b> (Chairman)	Assistant Professor & Head	
7.	<b>Dr. P. SUMATHI</b> (Member)	Associate Professor	
8.	<b>Dr. K. KARTHIKA</b> (Member)	Assistant Professor	
9.	<b>Dr. D. MOORTHY</b> (Member)	Assistant Professor	
10.	<b>Dr. R. THIRUGNANASAMPANDAN</b> (Member)	Assistant Professor	
11.	<b>Dr. K. SOWNDHARARAJAN</b> (Member)	Assistant Professor	
12.	<b>Dr. H. ABDUL KAFFOOR</b> (Member)	Assistant Professor	
13.	<b>Dr. P. REVATHI</b> (Member)	Assistant Professor	
14.	<b>Dr. R. REKKA</b> (Member)	Assistant Professor	
15.	<b>Dr. M. PARVEEN</b> (Member)	Assistant Professor	
16.	<b>Dr. G. DHANDAPANI</b> (Member)	Assistant Professor	
17.	<b>Dr. V. ARAVINDHAN</b> (Member)	Assistant Professor	

18.	<b>Ms. S. GAYATHRI</b> (Reg. No. 242BO005)	PG-Student Representative	
19.	<b>Ms. M. RANJANI</b> (Reg. No. 231BO008)	UG-Student Representative	

**Signature of the Chairman of the Board**