

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. K. Sheenmehdi

Year 2023-2024

Title of the Paper : C.P.8: Microbiology and Plant Pathology

Subject Code : 22PB0308

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.06.2023 To : 16.08.2023	<u>Unit I:</u> Introduction to Microbiology: Historical account, Scope of Microbiology. Major groups and classification - five Kingdom concept and three domain system. Prokaryotic and Eukaryotic organisms	10 hours	19.06.2023 to 16.08.2023	—	<i>[Signature]</i>	<i>[Signature]</i>
II From : 24.08.2023 To : 18.10.2023	<u>Unit II:</u> Bacteria: Morphology, classification (Bergey's Manual), ultrastructure, chemical composition of cell wall. Bacterial reproduction - conjugation, transformation and transduction. Culture methods - pour plate, spread plate, streak	11 hours	24.08.2023 to 18.10.2023	—	<i>[Signature]</i>	<i>[Signature]</i>

Plate and stab inoculation, Bacterial growth curve.

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. K. Chennammal

Year 2023 - 2024

Title of the Paper : C.P.1: Plant Diversity I

Subject Code : 23PBD101

Semester : ODD / ~~EVEN~~

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>10.8.2023</u> To : -	<u>Unit I: Algae: History, Details of habit, habitat and distribution of algae. Systems of classification in algae, classification of algae by Fritsch (1945). General characters - thallus organization, algal pigments, reproduction and life cycle patterns in algae. Thallus organization, reproduction and life cycles of Cyanophyceae, Chlorophyceae and Xanthophyceae.</u>	<u>21 hours</u>	<u>16.08.2023</u>	-	<u>[Signature]</u>	<u>[Signature]</u>
II From : <u>13.09.2023</u> To : -	<u>Unit II: Lichens: Brief history of lichens. General features, distribution, classification and structural organization of thallus</u>	<u>10 hours</u>	<u>13.09.2023</u>	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. K. Thennayagi Year 2023 - 2024
 Title of the Paper : C.P. Plant Diversity 2 Subject Code : 23PB0101 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.09.2023 To :	<u>Unit I</u> :- Thallus organization, reproduction and life cycle patterns of Bacillariophyceae, Phaeophyceae and Rhodophyceae. Recent insights of algal phylogeny and evolution. Ecological and economical aspects of algae. Algae as pollution indicators. Algal blooms. Centers of algal Research in India. Contribution of Indian Phycologists	21 hours	19.09.2023 to	—	<u>[Signature]</u>	<u>[Signature]</u>
II From : 17.10.2023 To :	<u>Unit II</u> :- Lichens - Nature of dual organisms, Interrelationships of Phycobiont and Mycobionts in lichen thallus organization. Structure, reproduction and life cycle patterns of Ascolichen	10 hours	17.10.2023	—	<u>[Signature]</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. K. Jeyamurthy

Year 2023 - 2024

Title of the Paper : C.P. Plant Diversity I

Subject Code : 23V.B0101

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 30.06.2023 To : 16.08.2023	<u>Unit IV</u> : Dematiomycetes - Cercofoma, Myrmecophaga and their significance <u>Unit V</u> lichens : Habits and habitats, Role of Physcia and Mycotoxins.	4 hours + 10 hours				
II From : 24.08.2023 To : 18.10.2023	<u>Unit I</u> Outline classification of lichens by Alexopoulos and Mims (1979). Thallus Anatomy and reproduction of Ascomycetes. Economic importance of lichens	11 hours.				

ACADEMIC PLANNING

Year 2023- 2024

Semester: ODD / EVEN

Deletion, digital footprints - Digital footprint eg. How to protect your
on encrypted Disk? How to erase your footprint? - Breach Ex

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. P. S. V. A. T. T. 1

Year 2023- 2024

Title of the Paper: Anatomy, Embryology of Angiosperms and Micro techniques

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
Unit II From: 10/8/2023 To:	Anomalous Secondary growth in dicot and monocot stem in Aristolochia, Beyerhaara, Piper and Draceana - Nodes - types and evolution. Kranz anatomy - anatomical features of CAM plants and leaf abscission.	11 hours	10/8/23	—	P. S. V. A. T. T. 1	9
Unit - III From: 30/9/2023 To:	Development of anther, types of tapetum, role of tapetum in pollen wall development, pollen wall morphogenesis, pollen sterility, pollen-stigma compatibility, megasporogenesis, female gametophyte development, embryo sac.	21 hours	30/9/23	—	P. S. V. A. T. T. 1	
Unit IV	Experimental embryology (embryo rescue and anther culture) and parthenocarp	2 hours	2 hours		P. S. V. A. T. T. 1	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. P. SUMATHI

Year 2023- 2024

Title of the Paper: Fundamentals of Computer Subject Code: 23UB.D.SOS

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
Unit-I	Introduction to Computer - applications Types, generations, capabilities - components of computer, hardware - CPU, input and output devices, memory units, auxiliary storage devices.	12 hours	19/6/23	—	Staff	HOD
From: 19/6/23 To: 17/8/23			12 hours			
Unit II	Computer architecture, Number system, Software - classification of Software. Language - machine language - high level language - Compilers, translators. Operating system / DOS / windows. Internet - WWW, E-mail, browsers and search engines.	12 hours	18/8/23	—	Staff	HOD
From: 18/8/23 To: 16/10/23			12 hours			
Unit - III	windows - 2010 an overview. Ms Excel - preparation of worksheets and charts, Ms Power point, features and slide presentation.	6 hours	6 hours			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. P. SEMATHI

Year 2023-20 24

Title of the Paper: Allied I Botany Subject Code: 22UB01A1

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
Unit - II From: <u>19/6/2023</u> To: <u>17/8/23</u>	Mycology and Plant Pathology: Classification by Alexopoulos and Mims (1979) (outline only) Structure, Reproduction and Lifecycle of the following genera: <u>Albugo</u> and <u>Agaricus</u> . <u>Tikka</u> disease of ground nut and <u>Litsea</u> Canker. Economic importance of fungi.	15 hours	<u>19/6/2023</u> to <u>15 hours</u>	—	<u>P. S.</u>	<u>P. S.</u>
Unit - III From: <u>18/8/23</u> To: <u>17/10/23</u>	Bryophytes: Classification by Smith (1955) (outline only). Structure, Reproduction and Lifecycle of <u>Marchantia</u> and <u>Funaria</u> . Economic importance of Bryophytes.	15 hours	<u>18/8/23</u> to <u>15 hours</u>	—	<u>P. S.</u>	<u>P. S.</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Biology

Name of the Teacher : Dr. K. KARUNAKA

Year 2023 - 2024

Semester : QBD / EVEN

Title of the Paper : Cytopology, Genetics & Plant Breeding Subject Code : 21.V.2.2.5.07

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	<u>Unit - III</u> Genetics - field of genetics, Mendel's experiments, Mendel's laws of inheritance, monohybrid and dihybrid cross. Gene interaction - incomplete dominance, Codominance, Collaborator genes, Duplicate genes and lethal genes	15 Hrs	19.06.2023 to 16.08.2023	-	<u>K. Karthika</u>	<u>G</u>
II	<u>Unit - IV</u> Multiple alleles. Linkage - complete and incomplete, crossing over - mechanism, kinds & controlling factors, Cytoplasmic inheritance in plants - male sterility in maize. <u>Unit - V</u> - Cell division - cell cycle, Amitosis, Mitosis & Meiosis and their significances	15 Hrs	25.08.2023 to 18.10.2023	-	<u>K. Karthika</u>	<u>S</u>

To : 18.10.2023

From : 25.08.2023

To : 16.08.2023

From : 19.06.2023

KONGUNNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Year 2023 - 2024

Semester : ODD / EVEN

Department : Botany

Name of the Teacher : Dr. K. KARUNAKA

Title of the Paper : L.P. 3: Anatomy & Embryology of Angiosperms

22080303

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.06.2023 To : 16.08.2023	Unit - IV Angiosperm life cycle. Microsporangium - structure and development of anther, wall of microsporangium, Tapetum - structure, types and functions, Pollen morphology - NPC formulae, pollen wall features, pollen kit. Megasporangium - structure types of ovule, ultrastructure of mature embryo sac (Polyspermy)	15 Hrs	19.06.2023 to 16.08.2023	-	K. Karthik	
II From : 25.08.2023 To : 18.10.2023	Unit - V Fertilization - Double fertilization. Endosperm - Nucleolus, Cellulose, Helical and Ruminant types. Haustorial behavior of endosperm and function. Embryogeny : types, Embryogeny in Dicotyledons (Capsella bursa-pastoris) & Monocotyledons (Najas lacustris) Polyembryony & Pauchocarpus - Classification, types & applications. Apomixis - Types and significance.	15 Hrs.	25.08.2023 to 18.10.2023	-	K. Karthik	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. K. KA. R. S. H. I. K. A.

Year 2023 - 2024

Title of the Paper : L. B. 3 : Anatomy & Embryology of Angiosperms

22 UB 0303

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	Unit - IV Angiosperm life cycle. Microsporangium - structure and development of anther, wall of microsporangium, Tapetum - structure, types and functions, Pollen morphology - NPC formula, pollen wall features, pollen kit. Megasporangium - structure types of ovule, ultrastructure of mature embryo sac (Polyspermy)	15 Hrs	19.06.2023 to 16.08.2023	-	Staff	HOD
					K. Karthik	N. N.
II	Unit - V Fertilization - Double fertilization. Endosperm - Nuclear, Cellular, Helobial and Ruminate types. Haustorial behavior of endosperm and function. Embryogeny : types, Embryogeny in Dicotyledons (Capsella brassicasteris) & Monocotyledons (Maize Zea mays) Polyembryony & Paucicary - Classification, types & applications. Apomixis - Types and significance.	15 Hrs	25.08.2023 to 18.10.2023	-	Staff	HOD
					K. Karthik	N. N.

From : 25.08.2023

To : 18.10.2023

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. K. KARUNAKA

Year 2023 - 2024

Title of the Paper : C.P.S. Anatomy, Embryology of Angiosperms and Microtechniques Subject Code : 22P80103

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	HOD
I From : 16/8/2023 To :	<u>Unit-I</u> - Introduction to complex tissue: Primary xylem and its components. Secondary xylem - arrangement of vessels, wood parenchyma and its types, xylem rays, Dendrochronology - growth rings, anomalies in ring growth, cross dating and skeleton plots, Reaction wood - Compression wood and tension wood, Primary and secondary phloem	21 Hrs	16/8/2023 to 18/10/2023	-	<u>K. Karthik</u>	<u>[Signature]</u>
II From : To :	and its components, Differences and phylogenetic trends of xylem and phloem. <u>Unit-II</u> - Normal secondary growth in dicot stem. Vascular cambium - origin, types - storied & non storied cambium, cork cambium, wound healing activity.	10 Hrs		-	<u>K. Karthik</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Setback Name of the Teacher : Dr. X. KARUNAKA
C.P. 4 - Anatomy, Embryology & Microtechniques Subject Code : 22P30103

Year 2023 - 2024

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	<u>Unit - 0</u> Microtechniques : Fixing and killing of plant tissues - Chemical and physical fixative reagents, Methods of tissue processing - Dehydration, clearing and infiltration, embedding, sectioning, Mounts, Microtome - Types of microtome	21 Hrs	16/8/2023 to 18/10/2023	-	<u>X. Karthik</u>	<u>X. Karthik</u>
II	and knives, single and double staining, mounting, labeling and storage of slides. Histochemical staining techniques, special techniques - Smear, Squash and Maceration.			-	<u>X. Karthik</u>	<u>X. Karthik</u>
From : To : 18.10.2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY

Name of the Teacher: Dr. S. MOOORTHY

Year 2023 - 2024

Title of the Paper: Major Subject: Forestry Subject Code: 21UB0501

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19.6.2023 To: 16.8.2023	Unit - V plants as sources of food, fodder, fibres, spices, beverages, drugs. Animals.	06 hours	19.6.2023 16.8.2023	NIL	P. Jeyaraj	P. Jeyaraj
II From: 25.8.2023 To: 18.10.2023	Unit - V plants as sources for insecticides, timber, resins and dyes. Major Botanical Gardens - Kerala.	06 Hours	25.8.2023 18.10.2023	NIL	P. Jeyaraj	P. Jeyaraj

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY

Name of the Teacher: Dr. D. MURPHY

Year 2023- 2024

Title of the Paper: Plant Ecology, phytogeography and Resource Conservation

Subject Code: 21460508

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19.6.2023 To: 16.8.2023	<u>Unit II</u> Community Succession. Kinds and Causes, structural and functional changes in communities. (Hydroseral and Xerosere - Lithosere). Climate Concept morphological and Anatomical Adaptations of Hydrophytes, Xerophytes, Halophytes and Epiphytes. <u>Unit IV</u> Phytogeographical realms of the world, origin & utilization of plants.	15 hours 7 hours	19.6.2023 16.8.2023	Nil		
II From: 25.8.2023 To: 18.10.2023	<u>Unit IV</u> Age and Area hypothesis. Theory of Island biogeography, Continental drift. Endemism, plant distribution, migration and barriers. <u>Unit V</u> Resource conservation - Types of Resources. Important Environmental Acts in India.	8 hours 7 hours	25.8.2023 18.10.2023	Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. D. MOORTHY

Year 2023 - 2024

Title of the Paper : Cell Biology, Genetics and Plant Breeding

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19.6.2023 To: 16.8.2023	Unit V Introduction and objectives of plant breeding. Breeding methods. pure line selection, mass selection and clonal selection. Achievements of crop improvement sugar cane and cotton.	06 hours	19.6.2023 16.8.2023	NIL		
II From: 25.8.2023 To: 18.10.23	Unit VI Hybridization, Heterosis, rational and International organizations for crop improvement	06 hours	25.8.2023 18.10.2023	NIL		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. P. MOORTHY

Year 2023 - 2024

Title of the Paper : E.P.C. Applied Botany Subject Code : 22 E.P.C. 3 X 1

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 17.6.2023 To :	Unit - II Principles of Garden Designs. Styles of gardens. English garden, Italian garden. French garden and its layout. Unit III. Nursery Management and Routine garden operations. Definition of Nursery. Different types of Nursery. Flat beds, raised beds, gutter beds. Their merits and demerits.	4 hours		Nil		
II From : To :	Unit I. Different Nursery Techniques and their management. Propagation methods. Advantages and disadvantages of each method. Unit II. Persian garden, Japanese, mixed gardens. Important famous gardens in India. Unit III. Selection of containers and accessories for floral products and decorations. Dry flowers - Design and Arrangements.	2 Hours 2 hours 3 hours		Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

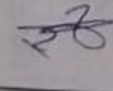
Department : BOTANY

Name of the Teacher : DR. D. MOORTHY

Year 2023 - 2024

Title of the Paper : Food Science and Nutrition Subject Code :

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 000000 To :	Unit III. Vegetables - classification. Composition and nutritive values. Storage. Fungi as food. Mushroom. Algae - Spirulina. Role of vegetables in cooking.	8 hours		n/c		
II From : To :	Fruits - classification, composition and nutritive values - storage of fruits Enzymatic browning - prevention Non-Enzymatic browning. Unit V Food preservation methods.	7 hours		n/c		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

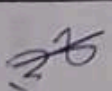
Name of the Teacher : Dr. R. Meenakshi

Year 2023 - 2024

Title of the Paper : Plant Diversity II

Subject Code : 22 PBO 102

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.6.2023 To :	Unit II General features and distribution of pteridophytes. Classification of pteridophytes by Soren (1966) General characters of Psilotorids, Lycopods, Sphenocladids, Pterocladids.	21 hours.		N/C		
II From : To :	Unit III Reproductive methods in pteridophytes. Origin and evolution, Vascular organization and stele evolution in pteridophytes. Heterosporous origin of seed habits. Evolution of Sperms. Ecological and economic importance of pteridophytes.	21 hours.		N/C		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

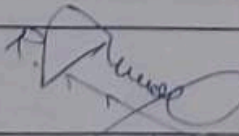
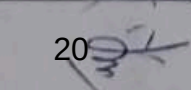
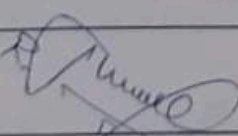
Name of the Teacher: Dr. P. Thirumana Sampathan

Year 2023- 2023

Title of the Paper: Plant. Biotechnology

Subject Code: 22PBO309

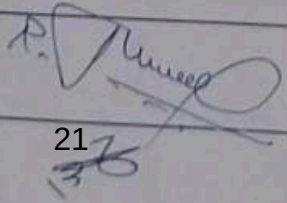
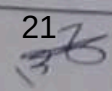
Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19/6/23 To: 17/8/23	<u>Unit-II</u> Plant cell and Tissue culture; Tissue culture media - MS, BS, Knudson and White's (composition and preparation), plant growth regulators, micropropagation, callus culture (Coronagereis), Cell culture - single cell and suspension culture, somatic embryogenesis and artificial seeds, Protoplast culture -	18 hrs	19/6/23 to	- Nil -		
II From: 18/8/23 To:	<u>Unit-IV</u> Isolation and somatic hybridization, haploid production; anther and pollen culture and somaclonal variation, Application of plant transformation; Nutraaceuticals - Golden Rice and Flavr Savr, herbicide resistance - EPSP and glyphosate, Biotic stress resistance - bacteria, virus, fungi and insect	9 hrs	17/8/23 to 18/8/23	- Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BIOLOGY Name of the Teacher: P.T. Anandaraman Year 2023-2023
 Title of the Paper: Plant Biochemistry Subject Code: 22PBD303 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : To: <u>19/10/23</u>	<u>Unit - V</u> Plant molecular farming and metabolic engineering: plant fibroblasts, biodegradable plastics and edible vaccine. metabolic engineering for plant secondary metabolites - introduction, alkaloid, terpenoid and flavonoid biosynthesis	<u>18 hrs</u>	<u>to</u> <u>19/10/23</u>	<u>Nil</u>		
II From : To :						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. R. Thirumangalakudi

Year 2023 - 2023

Semester: ODD / EVEN

Title of the Paper: Taxonomy and Biostatistics Subject Code: 22-PBA-207

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	<u>Unit-II</u> Taxonomic databases [TROPICOS, IPNI and POWO], Taxonomic tools - flora, monographs, revisions, icons and journals, Key - dichotomous keys and their uses, Botanic Gardens, Sources of taxonomic information - embryology, cytology, chemotaxonomy, RET Species - India, Tamil Nadu and IUCN criteria-2012	6 hrs 6 hrs	19/6/23 to 17/8/23	- Nil -	Staff	HOD
II						

From: 18/8/23
To: 17/10/23

[Signature]
22

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

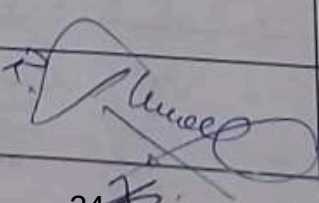
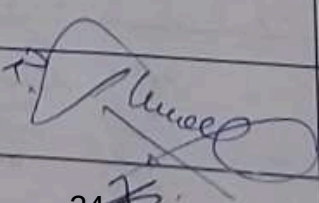
Name of the Teacher: Dr. R. Thirumangalakudi

Year 2023-2023

Title of the Paper: Major Elective - 2
Bio Technology

Subject Code: ZLUBAS.E2

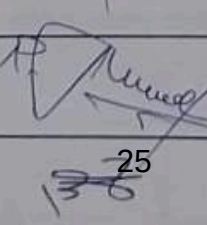
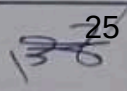
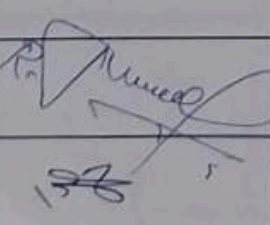
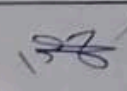
Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	<u>Unit - III</u> methods of gene transfer in plants - Agrobacterium (Ti and Ri plasmid), mechanism of T-DNA transfer, bare gun (particle bombardment) method	6 hrs	to 19/10/23	Nil		
From : To : 19/10/23						
II						
From :						
To :						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. K. J. Nirmala Sankaran Year 2023 - 2023
 Title of the Paper: Medical Botany & Human Welfare Subject Code: 210.B.D.5.X.1 Semester: odd / even

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	<u>Unit-I</u> Indian systems of medicine - Ayurveda, unani, siddha and homeopathy. classification and evaluation of crude drugs. Drugs adulteration.	6 hrs	19/6/23 to 17/8/23	Nil -		
II	<u>Unit-II</u> Morphological, histological studies and chemical constituents, therapeutic and other pharmacological uses of bark - <u>Cinchona</u> , leaves - <u>Adathoda</u> and flower - <u>Clove</u> <u>Unit-IV</u> Fruits and seeds - <u>Gooseberry</u> and <u>Poppy seeds</u> . Under ground stem - <u>Ginger</u> , <u>Unorganized drugs</u>	6 hrs	18/8/23 to 19/10/23	Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. P. Himansu Sekharia

Year 2023 - 2024

Title of the Paper : Food science and Nutrition

Subject Code : Major Elective - 2

Semester : Odd / Even

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	Signature of HOD
I	<u>Unit - IV</u> Sugar - nutritive values, properties Sugar related products, Role of sugar in cooking. Spices - General functions of spices - Asafoetida, clove, Garlic, Turmeric Role of spices in cooking.	18 hrs	16/8/23	Nil	<i>[Signature]</i>	<i>[Signature]</i>
II	<u>Unit - V</u> Beverages - classification, coffee, Tea, cocoa - processing, adulteration. Fruit beverages - types. Food adulteration - types of adulterants, Food preservation - principles and methods.	18 hrs	20/10/23	Nil	<i>[Signature]</i>	<i>[Signature]</i>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

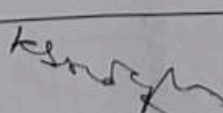
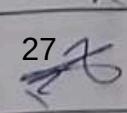
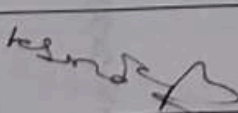
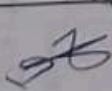
Name of the Teacher: K. Sumanth Bhanu Raj

Year 2023- 2024

Title of the Paper: Anatomy, Embryology of Angiosperms and Mammals

Subject Code: 23.PBD.103

Semester: ODD / ~~EVEN~~

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	<u>Unit-IV</u> - Fertilization, Control of fertilization, development of dicot and monocot embryo - Endosperm development, types of endosperm	8 h		- Nil -		
II	<u>Unit-IV</u> - Haustoria of endosperm, Apomixis, polyembryony - types and causes, Seed formation, dormancy and germination	8 h		- Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: K. Soundhararajan

Year 2023-2024

Semester: ODD / ~~Even~~

Title of the Paper: C.R.V. Plant Diversity-I Subject Code: 23VB0101

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	Unit-III - Fungi - General characters of fungi, structure and reproduction of fungi. Outline classification of fungi by Alexopoulos and Mims (1979). Detailed study of occurrence, structure and reproduction of life cycle of <u>toxicetes</u> - <u>Albugo</u> .	15 h	20.06.2023 to 16.08.2023	- Nil -	Staff	HOD
II	Unit-III - Detailed study of occurrence, structure, reproduction and life cycle of <u>Zygomycetes</u> - <u>Pilobolus</u> . Unit-IV - Thallus structure, reproduction and life cycle of <u>Ascomycetes</u> - <u>Saccharomyces</u> , <u>Basidiomycetes</u> - <u>Puccinia</u> . Economic importance of fungi	15 h	25.08.2023 to 18.10.2023	- Nil -	Staff	HOD

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: K. Sowdhamini

Year 2023-2024

Title of the Paper: Anatomy and Embryology of Angiosperms

Subject Code: 22UB0303

Semester: ODD / EVEN

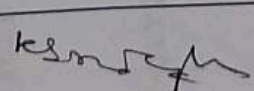
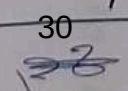
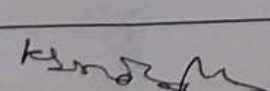
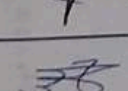
Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	<u>Unit-I</u> → Scope and Significance of Plant Anatomy, Apical organization, origin and structure of meristem (Angiosperm). Features of Apical organization	7h	19.06.2023 to 16.08.2023	- Nil -	Staff	HOD
II	<u>Unit-I</u> Structure and function of simple tissues and complex tissues.	7h	25.08.2023 to 18.10.2023	- Nil -	Staff	HOD

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: K. SOMNATH ARARAJAN Year 2023 - 2024

Title of the Paper: Microbiology and Plant Pathology Subject Code: 22 PBO 308 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19-06-2023 To : 16-08-2023	<u>Unit-IV - Plant pathology - History of plant pathology - Physiological effect of pathogens on plants, classification and factors responsible for plant diseases - concepts in epidemiology - Koch's postulates - host parasite interactions, genetic basis of disease resistance and pathogenecity - structural, physiological and biochemical defense mechanisms in plants, determination of diseases - integrated disease management.</u>	<u>22-0 h</u>	<u>19.06.2023 to 16.08.2023</u>	<u>- Nil -</u>		
II From : 25-08-2023 To : 18.10.2023	<u>Unit-V - Common plant diseases of India - Symptoms, causal organisms and control measures of Red Rot of Tea, Red Rot of Sugarcane.</u> <u>Unit-III - Fermentation - Aender and Arrand's fermentation, Industrial production of Antibiotics - penicillin, Erythromycin - amylase, organic acid - lactic acid, Bifidus - ethanol, Biotin, Biotin - PAB, microbial cell - Baker's yeast, waste water treatment, detection of coliform bacteria, membrane filtration technique, multiple tube fermentation, MTT, Microbiology - Chemical composition of milk, microbes in milk.</u>	<u>22-0 h</u>	<u>25-08-2023 to 18.10.2023</u>	<u>- Nil -</u>		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

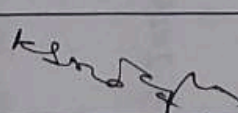
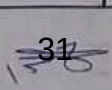
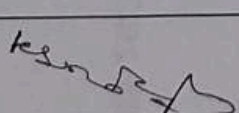
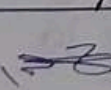
ACADEMIC PLANNING

Department: Botany
 Name of the Teacher: K. Sumantharaj

Year 2023-2024

Title of the Paper: Elective - Biotechnology Subject Code: 21UB05E2

Semester: ODD / ~~EVEN~~

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19.06.2023 To: 16.08.2023	<u>Unit-IV</u> - Microbial Biotechnology - Benefits, - Advantages, mass cultivation and Application techniques of <u>Escherichia</u> , and <u>Aspergillus</u> , <u>Azolla</u> and <u>VAM</u> . Environmental Biotechnology - waste water treatment.	8 h	19.06.2023 to 16.08.2023	- Nil -		
II From: 25.08.2023 To: 18.10.2023	<u>Unit-IV</u> - Treatment of paper and dairy effluents - oxidation ponds, Source of alternate fuel - biomass and biomass production of biogas and its Advantages. <u>Unit-III</u> - Electing techniques to detect the transgenes in transgenic plants - Southern, Northern and western blots.	8 h	25.08.2023 to 18.10.2023	- Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Biology

Name of the Teacher : Dr. M. Arundhathi

Year 2023 - 2024

Title of the Paper : Major Elective - Forestry

Subject Code :

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	Conservation System - Inverte and Inverte, Classification of some of the Ecosystems Importance	12 hours	16.08.2023 to 18.10.2023	—	<u>M. Arundhathi</u>	<u>[Signature]</u>
To: 18.10.2023						
II	<u>Unit III</u> Social and Age Justice, Selection of species Role of multipurpose trees, Food, Fodder, Energy and waste protection, Sacred groves, definition and importance, Significance of sacred trees, Terminalia Online, Age mena	12 hours	16/08/2023 to 18/10/2023	—	<u>[Signature]</u>	<u>[Signature]</u>
From: 16.08.2023						
To: 18.10.2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. H. Abhail Kather

Year 2023 - 2024

Title of the Paper : Major Studies - Forestry

Subject Code :

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 16/08/2023 To :	<u>Unit I :</u> Introduction to forest ; General introduction to forest , Natural , Man-made forest , Classification of forest (Champion and Seth, 1968), Tropical , Subtropical , Temperate , Evergreen , Semi-Evergreen	12 hours	16/08/2023 to 18/10/2023	—	<u>H. Abhail Kather</u>	<u>H. Abhail Kather</u>
II From : To :	<u>Unit : II</u> Silviculture - Concept , Scope : Clearfelling , Uniform shelter , wood selection , Coppice , Deciduous forest , Mangrove Forest - Species.	12 hours	16/08/2023 to 18/10/2023	—	<u>H. Abhail Kather</u>	<u>H. Abhail Kather</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. M. A. Anand Kollan Year 2023 - 2024

Title of the Paper : EC - Applied Herbarium Subject Code : 22PB0341 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	HOD
I From : 19.08.2023 To : 16.10.2023	<u>Unit V</u> Cut Flowers — Identification and Selection of flowers and Plant Parts, Value addition in Cut flowers, flower arrangement, Styles, Ikebana, Moenchana, free style, bouquets flower baskets, garlands, Selection of Containers and accessories for floral Products and decoration	06 hours 19.06.2023 to 16.10.2023		—	<u>M. A.</u>	<u>[Signature]</u>
II From : To :						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. H. Abdul Kader

Year 2023-2024

Title of the Paper : EDC - Applied Horticulture

Subject Code : 22PB03X1

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	Unit I: Landscaping: Importance and Scope of Landscaping Aesthetic, functional uses of Plants for landscape and Pollution Control. Landscaping for specific areas (Home gardens, Public Parks, Educational institution)	06 hours	25.08.2023 to 19.10.2023	—	Staff	HOD
II	Unit II: Gardening: Definition, objectives and Scope - different types of gardening - Aesthetic types of gardens (Roses, water, house, vertical and terrarium)	06 hours	25.08.2023 to 18.10.2023	—	Staff	HOD

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. H. V. Abhailatha

Year 2023 - 2024

Title of the Paper : Allen-Mayer Herbal Medicine

Subject Code : 21U1305E1

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	<u>Unit I</u> Medicinal Plants : History of medicinal plants - Some important terms used in herbal medicine. Medico - Ethnopharmacological Sciences in India. Vitis, Shigella, Indian medicine system - Ayurveda (Ayurveda, Unani, Siddha and Homeopathy) and Modern Medicines	12 hours	25.08.2023 to 18.10.2023	—	Staff	HOD
II	(Chinese and Tibetan Medicines) - Principles and diagnostic methods					
From :						
To :						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. H. V. Anand Kumar

Year 2023 - 20 24

Title of the Paper : Non-Medical Herbal Medicine

Subject Code : 210305E1

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.06.2023 To : 16.08.2023	Unit II Calculation of Medicinal Plants: Medicinal plants in Trade - Calculte. Practices and therapeutic use Pharmacological uses of feeding drugs: Cinchona officinalis, Gymnopaean Martini, Rauwolfia Serpentina, Gelsemium Septentia,	12 hours	19.06.2023 to		Mr. H. V. Anand Kumar	37
II From : To : 16.08.2023	Withania Somnifera and Zingiber officinale, Factors influencing the calculation of medicinal Plants, Herbal Nervous for heart, Respiratory SKs, Cancer, Immune and Cardiovascular Nephropathy and Cosmeceuticals.	16.08.2023				

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: D. N. V. Anandappa

Year 2023 - 2024

Title of the Paper: Crop & Taxonomy

Subject Code: 21070507

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	Fiber: Yielding plants (<i>Gossypium hirsutum</i>) Sugar yielding plants (<i>Saccharum officinarum</i>) Food crops - (<i>Cassia</i> , Paddy and Pulses Soybean). Apices and Condiments	15 hours	25.08.2023 to 19.10.2023	—	<u>[Signature]</u>	<u>[Signature]</u>
II	(<i>Piper nigrum</i> and <i>Centella longa</i>).					
From :						
To :						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. H. Abdul Kader

Year 2023- 2024

Title of the Paper: Course Paper - 6 Taxonomy of Angiosperms & Economic Botany

Subject Code: 21U39-506

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	<u>Unit II</u> Aims and objectives of taxonomy. Herbarium technique and uses. Nomenclature. CWH - Regional herbarium - MH. Botanical Survey of India. Nomenclature - ICBN, Binomial - Principles. Typification.	15 hours	19.06.2023 to 16.08.2023	—		<u>H. A. Kader</u>
II	<u>Unit V</u> Agriculture, Effective and valid publications. Retention and rejection of names. <u>Economic botany</u> Study of Botany, Cultivation and utilization.					

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Biology Name of the Teacher : D. H. Prabhu Kulkarni

Year 2023 - 2024

Title of the Paper : Core Paper 7: Taxonomy and Biodiversity Subject Code : 22PB0307

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.06.2023 To : 16.08.2023	Unit I : Historical account of the Classification of organisms up to the present day. Systems of Classification - detailed Study of Bertholom and Huxley (1802 - 1853) Bentley (1915), Huxley (1954 - 1960)	21	19.06.2023			
II From : To :	Cuvier (1795) and Agassiz (1830). Merit and demerits. Rev. history, Principles, typification, Principles and priority and their limitation, Effects and valid publication, author citation, notation, choice of nomenclature of names and names of taxa. Homology and its determination	Hours to 16.08.2023				

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. P. Ravathi

Year 2023 - 2024

Title of the Paper : Plant Diversity - I

Subject Code : 23UBD101

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I From : 20.06.2023 To : 16.08.2023	UNIT II Oecumen, thallus structure, reproduction and life cycle of Rhodophyceae - Polyisipponia, Economic Importance of Algae	7 hrs	20.06.2023 to 16.08.2023	—	Staff	HOD
II From : 25.08.2023 To : 18.10.2023	UNIT II Oecumen, thallus structure, reproduction and life cycle of Bacillariophyceae - Diatoms, Phaeophyceae - Sargassum	8 hrs	25.08.2023 to 19.10.2023	—	Staff	HOD

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. P. REMATHIL

Year 2023 - 2024

Title of the Paper : C. P. 8: Plant Ecology, Phytogeography and Resource Conservation Subject Code : 21UBO508

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	UNIT I : Principles of Ecology. Climatic factors - role and importance of light, temperature, wind and rainfall on the growth of plants. Ecologic factors, Biotic factors - characters of community and methods of studying plant communities (qualitative & quantitative). Ecosystem - Basic structure and function. Pollution - causes and possible control measures.	15 hrs	19.06.2023 to 16.08.2023	—	Staff	HOD
From : 19.06.2023 To : 16.08.2023						
II	UNIT III : Pollution - water, soil, noise and radioactive pollution. Plants - indicators of pollution. Disaster Management UNIT V : Resource conservation - types of resources, conservation of soil, agricultural resources, water, range, forest and freshwater bodies.	15 hrs	25.08.2023 to 18.10.2023	—	Staff	HOD
From : 25.08.2023 To : 18.10.2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. P. R. V. MATHI

Year 2023 - 2024

Title of the Paper : Major Elective I: Biotechnology Subject Code : 21UB05E2

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	UNIT V: Bioethics - Principles, Scope and Importance. Biosafety - Definition of Biosafety, Requirements, Biosafety for human health and Environment, Use of Genetically modified Organisms and their Release into the environment.	7 hrs	19.06.2023 to 16.08.2023	-	Staff	HOD
II	UNIT V: Biosafety assessment Procedures for biotech foods & related Products, Various committees for Genetically Engineered organisms in India - RDAC, GEAC, RCGM, IBSC, SBCC & DLC. UNIT III: Applications of Genetic Engineering - Golden Rice, Flavr Savr, Bt cotton & herbicide resistance	8 hrs	25-08-2023 to 18-10-2023	-	Staff	HOD

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. P. R. Eswarath

Year 2023 - 2024

of the Paper : C.P.I.: Plant Diversity-I

Subject Code : 23PBO101

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	UNIT III Fungi: History, General features, Occurrence and distribution, fungal taxonomy, mode of nutrition, classification of fungi by Alexopoulos and Mims (1979). Range of thallus structure, Reproduction and types of fruitification & types of spores. Thallus organization, Reproduction & life cycle pattern of Mycomycetes and Concomycetes	15 hrs	16.08.2023 to 13.09.2023	-	Staff	HOD
From: 16.08.2023 To: 13.09.2023						
II	UNIT IV: Thallus organization, Rep. & life cycle pattern of Zygomycetes UNIT V: Ascomycetes, Basidiomycetes, Deuteromycetes. Homothallism and Heterothallism. Fungi as symbionts - recent insights of fungal physiology and evolution. Ecological & Economic importance of fungi UNIT V: Ecological and economic aspects of lichens. Pollution indicators. Identification of lichens using ICT tools: Artificial Intelligence (AI), MATLAB Software, Image Processing technique	15 hrs	19.09.2023 to 17.10.2023	-	Staff	HOD
From: 19.09.2023 To: 17.10.2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: D. R. P. REVATHI

Year 2023- 2024

Title of the Paper: NME 1: Herbal Medicines Subject Code: 22PB03N1

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	UNIT III: Pharmacognosy: History, definition, scope and future. Source and classification of Natural drugs. Analytical Pharmacognosy - methods of drug evaluation, biological testing of herbal drugs. Authentication of drugs plant drug quality control - significance, status, challenges. Plant derived drugs in market - <u>Taxol, Camptothecin, Vincristine and Vinorelbine</u>	15 hrs	19.06.2023 to 16.08.2023	-		
From: 19.06.2023 To: 16.08.2023						
II	UNIT IV: Major plant Primary & Secondary metabolites Nature, classification, distribution, biosynthesis and functions of <u>Carbohydrates</u> . UNIT IV: <u>Lipids, volatile oils, Resins, Alkaloids, Flavonoids, Phenolics, terpenoids and steroids</u> . Factors influencing production of secondary metabolites UNIT V: Herbal wealth: Intellectual Property Rights (IPR): Choice of IPR, Patents, Trade secrets, Trade mark, Copyright, GIAT (Geographical Indication and Trademark) and its relevance to International Trade.	15 hrs	25.08.2023 to 18.10.2023	-		
From: 25.08.2023 To: 18.10.2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

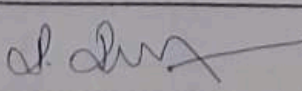
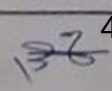
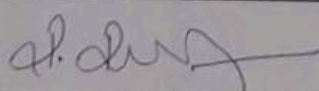
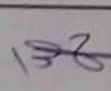
ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. R. REKKA

Year 2023 - 2024

Title of the Paper : CORE PAPER 6 - TAXONOMY OF ANGIOSPERMS AND ECONOMIC PLANTS Subject Code : 21UB0506

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	Signature of HOD
I From : 03.07.2023 To : 16.08.2023	UNIT : I - AIMS and Objectives of Taxonomy. Systems of Classification - Natural (Bentham and Hooker), Phylogenetic (Engler and Prantl) and Modern (Takhtajan) Merits and Demerits, Guidelines for the identification of plant specimen. UNIT : II - Detailed Study of the following families with reference to the morphology, taxonomy and their economic importance. Annonaceae, Apocynaceae, Rutaceae, Anacardiaceae, Caesalpiniaceae, Mimosaceae	22.5 hours	03.07.2023 To 16.08.2023	-		
II From : 24.08.2023 To : 16.10.2023	Unit III : Detailed Study of the following families with reference to the morphology, taxonomy and their economic importance. Myrtaceae, Lauraceae, Rubiaceae, Asteraceae, Sapotaceae and Apocynaceae. Unit IV : Detailed Study of the following families with reference to the morphology, taxonomy and their economic importance. Solanaceae, Acanthaceae, Verbenaceae, Lamiaceae, Amaranthaceae, Euphorbiaceae, Hydrocharitaceae, Orchidaceae, Zingiberaceae, Liliaceae, Araceae and Poaceae	22.5 hours	24.08.2023 To 16.10.2023	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : A. R. REKKA

Year 2023 - 2024

Title of the Paper : CORE PAPER 7 - Cytology, Genetics

Subject Code : 21UB0507

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	UNIT I: Cell wall - Structure, function, biosynthesis and growth, cell differentiation, plasma Membrane architecture, Sites for ATPase Membrane transport - Ion carriers, Channels, Pumps and aquaporins, receptors, Plasmodesmata. Structure role in movement of molecules and macromolecules, comparison with gap junction	9 hours	03.07.2023 To	-	Staff	HOD
From : 03.07.2023 To : 16.08.2023			16.08.2023			
II	UNIT I: cell organelles - Mitochondria, Endoplasmic reticulum, Golgi apparatus, Chloroplast, ribosome, Nucleus and chromosomes UNIT - II: DNA as a genetic material, Structure, properties, replication and dispersive (conservative, semi-conservative and dispersive methods) and functions. RNA - Types and functions	9 hours	24.08.2023 To	-	Staff	HOD
From : 24.08.2023 To : 16.10.2023			16.10.2023			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. R. REKKA Year 2022 - 2023
 Title of the Paper : CORE PAPER - II Subject Code : 23PB0102
PLANT DIVERSITY - II Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 16.08.2023 To : 17.10.2023	UNIT - IV - Gymnosperms : General characters, distribution and Origin of Gymnosperms. Classification of Gymnosperms by Sporne (1965). General Structure and Inter-relationships of Pteridospermales, Bennettiales, Pentoxylales and Ginkgoales	21 Hours	16.08.2023 to 17.10.2023	—		
II From : 16.08.2023 To : 17.10.2023	UNIT - V - General Structure and inter-relationships of Cycadales, Coniferales, and Gnetales. Angiospermic characters of Gnetales. Phylogenetic trends and affinities of various classes. Ecological and economic importance of Gymnosperms. Distribution of living Gymnosperms in India	21 Hours	16.08.2023 to 17.10.2023	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY

Name of the Teacher : Dr. R. BEKKA

Year 2022 - 2023

Department : BOTANY
CORE PAPER 7 : TAXONOMY AND
Title of the Paper : BIODIVERSITY

Subject Code : 22PBD307

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I	UNIT III : Description and Economic importance of the following families - Euphorbiaceae, Sapindaceae, Rosaceae, Combretaceae, Lythraceae, Passifloraceae and Alzaceae	10.5 Hrs	03.07.2023 To 16.08.2023	-	Staff	HOD
From : 03.07.2023 To : 16.08.2023						
II	UNIT IV : Species and genus concept, Numerical taxonomy, molecular taxonomy, RFLP, RAPD and DNA Bar coding. Evolutionary relationship among Angiospermic taxa	10.5 Hrs	24.08.2023 To 16.10.2023	-	Staff	HOD
From : 24.08.2023 To : 16.10.2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Biology

Name of the Teacher : Dr. M. PARVATHI

Year 20 23 - 20 24

Title of the Paper : Plant Anatomy & Embryology Subject Code : 23.U.B.A.303

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19.06.2023 To: 17.08.2023	Unit-II Epidermal tissue - Dermal: Stomata types and function: Trichomes - Types and functions, Structure and function, Structure and function of Secretory trichomes in Datura and Nepenthes, salt glands, Collectors. Floral and extra floral nectaries resin ducts, oil glands and latexiferous tissue (articulated and non articulated) Primary structure and Commercial importance of Coir, Jute and Cotton.	15 hrs	19.06.2023	—	<u>[Signature]</u>	<u>[Signature]</u> 50
II From: 18.08.2023 To: 17.10.2023	Unit-III Vascular Cambium and Secondary Structure and function, Anomalous Secondary growth - Dictyoderm - Bougainvillea - Pachycaulis and Nephrolepis. Monocotyledons - Dracaena. Wood Pores, non Pores, Pattern and distribution Physical, Chemical and mechanical properties Plant fibres - Distribution, Structure and Commercial importance of Coir, Jute and Cotton	15 hrs	18.08.2023	—	<u>[Signature]</u>	<u>[Signature]</u>
			16.10.2023			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

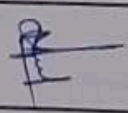
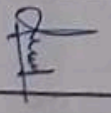
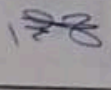
Name of the Teacher : Dr. M. PAVITHRA

Year 2022-2024

Title of the Paper : Allied Botany

Subject Code : 23.V.B.A.

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.06.2023 To : 17.08.2023	Unit - I <u>Phylogeny</u> : classification by Fritsch (1945) outline only, structure, Reproduction and life cycle of the following Genera : Oscillatoria, Chlorella and Chlamydomonas. Importance of Algae.	15	19.06.2023 to 17.08.2023	—		
II From : 18.08.2023 To : 17.10.2023	Unit - IV Pteridophytes : classification by Presnott (1954) outline only. Structure Reproduction & life cycle of Lycopodium and Adiantum. Importance of Pteridophytes.	15	18.08.2023 to 16.10.2023	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. M. PARVEEN Year 20 23. 20 24

Title of the Paper : Microbiology of Plant Pathology Subject Code : 22.P.B.O.308 (P4) Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.06.2023 To : 17.06.2023	Unit - II Classification of plant viruses (outline) General morphology and Symmetrical structures of viruses. Morphology of Bacteriophages (T) Ultra structure of TMV and HN. Viral replication and Hydrogenic cycle in TMV Even Phage isolation & Purification of viruses	21hrs	19.06.2023 — 17-08-2023	—		
II From : 18-08-2023 To : 16.10.2023	Unit - I Powdery mildews of grapes, Black rust of wheat, Bacterial blight disease of Paddy, Bunchy Top of Banana - General Principles of Plant Quarantine - Sanitary & Phytosanitary Measures - Protection of plant viruses (TMV) - Genetically modified Varieties.	21hrs	18-08-2023 — 16.10.2023	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Biology

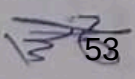
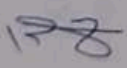
Name of the Teacher : Dr. M. P. RAVINDRAN

Year 2023 - 2024

Title of the Paper : Plant Diversity-I

Subject Code : 23PB6101

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 19.08.2023 To : 17.10.2023	<u>Unit - V</u> <u>Lichens</u> : Brief history of lichens. General features, distribution, classification and structural organization of thallus. Nature of dual organism, Interrelationships of Mycobiont and Phycobiont in lichen thallus	10 hrs	19.08.2023 to 17.08.2023	—		 53
II From : 19.08.2023 To : 17.10.2023	<u>Unit - V</u> <u>Structure Reproduction and life cycle patterns of Algae, Basidiomycetes and Euteleomycetes. Ecological and economic aspects of lichens.</u> <u>Lichens as Pollution indicators</u>	11 hrs	18.08.2023 to 16.10.2023	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY

Name of the Teacher: DR. S. DHANDAPANT

Year 2023-2024

Title of the Paper: ALLIED-1 BOTANY-I

Subject Code: 23UB01A1

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I 3rd From: July, 2023 To: 11th August, 2023	UNIT-V: Gymnosperms: * Classification by K.R. Sporne (1962) (outline only), Structure, Reproduction and life cycle of lycas.	8 HOURS	3rd July 2023 To 11th August 2023	-	<i>[Signature]</i>	<i>[Signature]</i>
II From: 30th August, 2023 To: 16th OCTOBER, 2023	Unit-V: Gymnosperms: * Structure, Reproduction and life cycle of Gnetum. * Economic importance of Gymnosperms.	7 HOURS	30th August, 2023 To 16th OCTOBER 2023	-	<i>[Signature]</i>	<i>[Signature]</i>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BESTANT

Name of the Teacher: DR. S. DHANDEPANI

Year 2023- 2024

Title of the Paper: PLANT BIOTECHNOLOGY / Subject Code: 22PB0309

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>JULY, 2023</u> To : <u>AUGUST, 2023</u>	UNIT-I : Introduction to Plant Biotechnology - Scope and Importance; Genome Organization; Nucleus, Chloroplast and Mitochondria. Molecular markers : RFLP, RAPD, AFLP and Microsatellites (SSR/STR). Model plant : Arabidopsis and Tobacco. UNIT-III : Genetic Transformation and Vectors; Agrobacterium characteristics; T ₁ and R ₁ phenotypes and mechanism of T-DNA transfer. Physical and chemical methods of Gene Transfer.	18 Hours 10 hours	03/07/2023 ↓ 16/08/2023	-	<i>[Signature]</i>	<i>[Signature]</i>
II From : <u>AUGUST, 2023</u> To : <u>OCTOBER, 2023</u>	UNIT-II : Binary and Cosmids vector systems. Canv and Gemini viruses. Marker genes and Gene Silencing. Chemopast transformation. Unit-IV : Application of Plant Transformation. Abiotic Stress resistance - Drought, salt and Sulf. Terminator Technology and Marker free transgenics.	10 Hours 9 Hours	30/08/2023 TO 10/11/2023	-	<i>[Signature]</i>	<i>[Signature]</i>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY

Name of the Teacher: DR. S. DHANDAPANT

Year 2023 2024

Semester: ODD / EVEN

Title of the Paper: FUNDAMENTALS OF COMPUTER Subject Code: 21UB0505

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	HOD
I From : JULY, 2023 To : AUGUST, 2023	<u>UNIT-IV</u> : Introduction to Bioinformatics. Regulation of gene expression in prokaryotes and Eukaryotes. Protein structure - Primary, Secondary, Tertiary and Quaternary (outline only). Biological databases, Importance and classification (outline only), Gene finding methods. <u>UNIT-V</u> : Sequence alignment, evolutionary basis of sequence alignment, global & local alignment, searching for similarities using scoring matrices and gap penalty.	6 HOURS	05/07/2023 To 16/08/2023	-	G.Dharpaj	56
II From : AUGUST, 2023 To : NOVEMBER, 2023	<u>UNIT-VI</u> : Biochemical visualization, Phylogenetic analysis and computer aided drug designing. <u>Unit-VII</u> : Database languages, database independence and database administrator. Data warehousing and data mining. Basic concept of photoshop.	6 HOURS	30/08/2023 To 10/11/2023	-	G.Dharpaj	57

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY

Name of the Teacher: DR. G. DHANDAPANI

Year 2023- 2024

Title of the Paper: SBS-1 - CYBER SECURITY Subject Code: 22UGCZS1

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>JULY, 2023</u> To : <u>AUGUST, 2023</u>	<u>UNIT-III: Internet Mobile Phone and E-commerce Security Issues: Data theft - Punishment of data theft - Theft of Internet hours - Internet Safety tips for children and parents. Mobile Phone Privacy - E-commerce security issues.</u> <u>Unit- IV: Email and Social media issues: Aspects of Social media - The Vicious cycle of unhealthy Social media use.</u>	<u>9 HOURS</u>	<u>30/06/2023</u> <u>To</u> <u>14/08/2023</u>		<u>G. Dhandapani</u>	<u>G. Dhandapani</u>
II From : <u>AUGUST, 2023</u> To : <u>NOVEMBER, 2023</u>	<u>UNIT-IV: Modifying social media use to improve mental health. Computer Virus - Antivirus - Firewalls.</u> <u>UNIT-V: Cyber Forensics, and Digital Evidence: What does digital footprint Mean? - web Browsing and Digital Footprints - If examples - How to protect your Dfs? - How to erase your Footprints? - Browser Extensions and Search Engine deletion.</u>	<u>8 HOURS</u>	<u>31/08/2023</u> <u>To</u> <u>17/10/2023</u>		<u>G. Dhandapani</u>	<u>G. Dhandapani</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY

Name of the Teacher: DR. G. DHANAPATI

Year 2023- 2024

Title of the Paper: PLANT DIVERSITY-II

Subject Code: 23PB0102

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
I From : AUGUST, 2023 To : NOVEMBER 2023	UNIT-I: Bryophytes: * General Features and Distribution * Classification of bryophytes (Smith, 1955) * General characters of Hepaticopsida, Anthocerosida and Bryopsida * Structure and Evolution of gametophyte and Sporophyte	21 Hours	AUGUST, 2023 To NOVEMBER 2023	-	G. Dhanapati	
II From : To :	* Ecological and Economic importance of bryophytes * Fossil bryophytes			-	G. Dhanapati	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department:BATANY.....

Name of the Teacher:DR. S. Dhandapani.....

Year 2023-2024

Title of the Paper: ME-2: FOOD SCIENCE AND NUTRITION

Subject Code: ...25.PB.OTE.2.....

Semester: ODD / ~~EVEN~~

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : AUGUST, 2023 To : NOVEMBER 2023	UNIT: I * Introduction of food science - Classification according to function, food groups (CAMP) - Classification: * Cereals and Cereal products - Composition, nutritive value and processing of Rice, wheat and Maize; * Fermented products - Bread - Ingredients; * Unfermented products - Cakes - classes and ingredients	15 HOURS	AUGUST 2023 TO SEPTEMBER 2023	-	G.Dhandapani	59
II From : OCTOBER, 2023 To : NOVEMBER 2023	UNIT II: 1) PULSES : Nutrient values, processing and products of Black gram, Soybean and Matar. Values of Pulses. 2) NUTS AND OILSEEDS: Coconut and Groundnut - Nutritive value, processing and products. Role of nuts and oils in cooking.	15 HOURS	OCTOBER, 2023 TO NOVEMBER 2023	-	G.Dhandapani	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

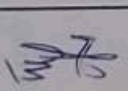
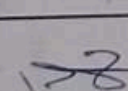
Core Paper - 7

Name of the Teacher : Dr. V. ARAVINDAN

Year 2023 - 2024

Title of the Paper : Botany and Biotechnology Subject Code : 22 B0207

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of Staff	Signature of HOD
I From : 19/06/2023 To : 16/08/2023	Historical account of classification - Detailed study of systems of classifications - Bertholm and Hooker, Bessey, Hutchinson, Cronquist and APG. - Description and economic importance of Menispermaceae, Polygalaceae, Pitturiaceae.	22.5 hours	19/06/2023 to 16/08/2023	Nil		
II From : 25/08/2023 To : 18/10/2023	- Description and economic importance of Oxalidaceae, Tiliaceae, Zygophyllaceae, Meliaceae, Vitaceae, Aristolochiaceae, Loranthaceae, Moraceae, Orchidaceae, Dioscoreaceae, Comeliaceae, Araceae and Cyperaceae. - Biogeomorphology - origin and scope, Biogeomorphologic categories, population concept and species concept.	22.5 hours	25/08/2023 to 18/10/2023	Nil		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Major Elective -

Name of the Teacher : Dr. V. ARAVINDHAN

Year 2023 - 2024

Title of the Paper : Botany

Subject Code : 220305E1

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	Introduction to Forest laws - Forest laws, necessity, general principles, Indian Forest act 1927, Forest conservation act 1980, Indian Forest law (1986), Wildlife Protection act (1972).	15 hours	19/06/2023 to 16/08/2023	Nil		
To: 16/08/2023						
From: 19/06/2023						
II	Endangered species act, social forestry and agroforestry - selection of species, Silviculture - concept, scope, classification, uniform grades, wood selection, coppice	15 hours	25/08/2023 to 18/10/2023	Nil		
To: 18/10/2023						
From: 25/08/2023						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: DR. V. ARAVINDHAN Year 2023-2024
 Title of the Paper: Plant Diversity-I Subject Code: 23.0.B.O.1.01 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: <u>20/06/2023</u> To: <u>16/08/2023</u>	- Algae - Introduction and general characters, detailed study of habits, habitat, distribution, asexual and sexual reproduction, outline classification of Algae by Fritsch. - Detailed study of occurrence, thallus structure, reproduction and life cycle of Nocton.	<u>15</u> hours	<u>20/06/2023</u> to <u>16/08/2023</u>	<u>Nil</u>	<u>R</u>	<u>[Signature]</u>
II From: <u>25/08/2023</u> To: <u>18/10/2023</u>	- Occurrence, thallus & structure, reproduction and life cycles of major Conjugate and Diatoms.	<u>15</u> hours	<u>25/08/2023</u> to <u>18/10/2023</u>	<u>Nil</u>	<u>R</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. V. ARAN EMDIPATHAN

Year 2023- 2024

Title of the Paper: Botany Departmental Course Medicinal Botany and Herbarium Subject Code: 23U.B0.5X.1

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 19/08/2023 To: 16/08/2023	Botanical features, medicinal uses and cultivated practices of <u>Euphorbia officinalis</u> , <u>Gelsemium</u> , <u>Euphorbia</u> and <u>Rumex crispus</u> . Drugs acting on central nervous system. <u>Papaver somniferum</u> , <u>Atropa belladonna</u> , <u>Valeriana officinalis</u> .	15 hours	19/08/2023 to 16/08/2023	Nil	A	Dr
II From: 25/08/2023 To: 18/09/2023	Drugs used to gastric-intestinal tract. <u>Zingiber officinale</u> , <u>Curcuma longa</u> , <u>Ulmus rubra</u> . Cardiac-vascular drugs <u>Paeon</u> , <u>ginseng</u> , <u>Panax brevifolia</u> , <u>Digitalis purpurea</u> , <u>unorganized drugs</u> - <u>Guggul</u> , <u>Fenugreek</u> and <u>Castor oil</u> .	15 hours	25/08/2023 to 18/09/2023	Nil	A	Dr

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. K. Ghenmaychi

Year 2023-2024

Title of the Paper: C.P.2 - Plant Diversity I

Subject Code: 23VB0202

Semester: ~~ODD~~ / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	<u>Unit I :-</u> Bryophytes: Introduction and general Characters of Bryophytes. Classification of Bryophytes (K.R. Dorne, 1935), Occurrence, Structure, reproduction and life cycle of Marchantia, Anthoceros.	19 hrs	04.12.2023 to 09.02.2024	—		
II From : 19.02.2024 To : 03.04.2024	<u>Unit II :-</u> Occurrence, Structure, reproduction and life cycle of Funaria, Economic importance of Bryophytes. <u>Unit IV :- Gymnosperms :-</u> Introduction and general characters of Gymnosperms. Classification of Gymnosperms (Coulter and Chamberlain, 1956). Detailed Study	23 hrs	19.02.2024 to 03.04.2024	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. K. Chennamathi Year 2023- 2024

Title of the Paper: S.P.2 - Plant Diversity II Subject Code: 23.VB0202 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signaure of	
					Staff	HOD
I From : <u>19.02.2024</u> To : <u>03.04.2024</u>	<u>of the structure and reproduction of cycas</u>	<u>28 hrs</u>	<u>19.02.2024</u> <u>to</u> <u>03.04.2024</u>	<u>—</u>		
II From : To :						

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. K. Anemayhi

Year 2023-2024

Title of the Paper: Major Elective: Applied Microbiology

Subject Code: 231B0254

Semester: ~~ODD~~ / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>04.12.2023</u> To : <u>09.02.2024</u>	<u>Unit I :- Fundamental of Microbiology:</u> Scope of microbiology, Culture of bacteria, Pure culture techniques, Culture media and preparation - solid and liquid - preservation of cultures - sterilization - principles, methods of sterilization - physical and chemical method	15 Hours	<u>04.12.2023</u> to <u>09.02.2024</u>	-	<u>[Signature]</u>	<u>[Signature]</u>
II From : <u>19.02.2024</u> To : <u>03.04.2024</u>	<u>Unit II :- Industrial microbiology</u> Fermentation - aerobic and anaerobic fermentation, Production of microbial products, alcohol, lactic acid, penicillin, L-lysine, L-Protease and riboflavin	15 Hours	<u>19.02.2024</u> to <u>03.04.2024</u>	-	<u>[Signature]</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. K. Chenmayhi Year 2023-2024

Title of the Paper: C.P.10 - Biophysics and Biochemistry Subject Code: 22PB0410 Semester: ODD / EVEN ☒

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	<u>Unit II :-</u> <u>Carbohydrates:</u> Introduction to Carbohydrates - Classification and Properties - Monosaccharides, Disaccharides and polysaccharides. Linear / open chain and ring forms of monosaccharides. Isomerism, Structural and functional Polysaccharides, Biosynthesis of Carbohydrates and their regulation	11 hours	04.12.2023 to 09.02.2024	-		
II From : 19.02.2024 To : 03.04.2024	<u>Unit III :-</u> <u>Lipids:</u> Classification and Properties - Simple, Complex and derived lipids - fatty acids - types, Nomenclature - isomerism - Biosynthesis of fatty acids, fatty acid oxidation (α - and β oxidation)	10 hours	19.02.2024 to 03.04.2024	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. P. SUMATHI

Year 2023 2024

Title of the Paper: Bioinformatics Subject Code: 23PB0204

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
Unit III From : 4.12.23 To : 9.2.24	Protein Structure ; Primary, Secondary, tertiary and quaternary structures, domain, motifs and protein families. Protein Prediction Artificial Intelligence and its impact in Bioinformatics.	21 hours		—	<u>LS</u>	<u>JS</u>
Unit IV From : 19.2.24 To : 3.4.24	Sequence alignment - definition, Types and methods - Pairwise (local and Global) and Multiple Sequence Alignment. Methods of Scoring matrices - PAM, BLOSUM and Gap penalty, Sequence similarity search using Blast and Fast - FASTA	21 hours		—	<u>LS</u>	<u>JS</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. P. SUNDHI Year 2023-2024
 Title of the Paper: Plant Physiology Subject Code: 22.PB.O411 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
Unit I From : 04.12.2023 To : 9.02.2024	Water relations - structure and properties of water - water transport - diffusion, osmosis and imbibition. Water potential. Absorption of water, active and passive absorption. Water relations of plants - structure and phytochemical properties of water, soil and plant atmosphere, stomatal physiology and regulations.	21 hours	4.12.23 to 9.2.24	—	<u>PS</u>	<u>PS</u>
Unit II From : 19.2.24 To : 3.4.24	Transpiration - types, mechanism and factors affecting transpiration. Ascent of sap theories, mechanism and factors influencing on ascent of sap. Mineral salt absorption - mechanism and types.	12 hours	19.2.24 to 3.4.24	—	<u>PS</u>	<u>PS</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. P. Sowath Year 2023 2024
 Title of the Paper: Allied Botany 2 Subject Code: 23UBO 2A2 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
Unit III From : 4.12.23 To : 9.2.24	Taxonomy of Angiosperms: Bentham and Hooker's classification (outline only) Nomenclature - ICN (study of the following families with their economic importance - Annonaceae, Asteraceae, Apocynaceae, Lamiaceae, Amaranthaceae, Liliaceae and Poaceae). Herbarium techniques.	15 hours	4.12.23 to 9.2.24	—	<u>PS</u>	<u>PS</u>
Unit IV From : 19.2.24 To : 3.4.24	Environmental Biology: Scope and Significance of environmental studies. Structure and functions of ecosystem. Vegetational types of Southern India. Pollution - Air, Water, and noise. Soil conservation methods.	15 hours	19.2.24 to 3.4.24	—	<u>PS</u>	<u>PS</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. P. S. V. MATHI Year 2023 2024
 Title of the Paper: Seed Biology Subject Code: 21.VB0623 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4.12.23 To : 5/2.24	seed germination, factors affecting germination- Methods of seed germination test (using paper, Sand and Soil) - Seed viability (Tetrazolium test)	12 hours 4.12.23 to 5.2.24		—		
II From : 14.2.24 To : 3.4.24	Vigour (Direct and indirect test), Concept of Seed Vigour.					

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. K. KARSHIKA Year 2023-2024
 Title of the Paper : C.P.10. Plant Physiology Subject Code : 21UB0610 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4/12/2023 To : 5/2/2024	<u>Unit - I</u> Plant - water relationship - structure, properties and biological significance of water, water potential and its components, physical forces involved in absorption of water - diffusion, osmosis, imbibition, Absorption of water - mechanism and affecting factors	15 hrs		—	K. Karsika	
II From : 12/2/2024 To : 3/4/2024	Absorption of minerals - mechanism (Active & Passive). <u>Unit - II</u> Ascent of sap - path and mechanism; Translocation of organic solutes - directions, path, mechanism, assimilates partitioning and controlling factors.	15 hrs		—	K. Karsika	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. K. KARTHIKA Year 2023 - 2024
C.P. 5 - Cell biology, Genetics, Plant Breeding
 Title of the Paper : and Dissection Subject Code : 23PB0205 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>4/12/2023</u> To :	<u>Unit - I</u> structure and functions of cell organelles and nucleus. Chromosome - structure, Molecular organization of chromosome, Special type of chromosome - Lamp brush chromosome, Polygene chromosome and super numerary chromosome, Chromosomal aberration - Numerical and Structural variations. Genes - Features of	32 Hrs		-	<u>K. Karthika</u>	<u>[Signature]</u>
II From : To : <u>5/2/2024</u>	gene concept, molecular structure of gene, gene function. Genetic code - salient features & Wobble hypothesis. Cell cycle & Cell division. <u>Unit - II</u> - Mendelism - Basic principles, Gene Interaction, Quantitative inheritance, Sex Determination : Mechanism (Genetical, Metabolical, Hormonal & Environmental sex determination				<u>K. Karthika</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. K. KARTHIKA Year 2023 - 2024
C.P. 5 - Cell Biology, Genetics, Plant Breeding and
 Title of the Paper : Discretative Subject Code : 23PBO205 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 12/2/2024 To :	<u>Unit - II</u> Sex linked inheritance - X linked, Y linked and XY linked, Sex influenced and Sex limited characters, Cytoplasmic inheritance: Plastid inheritance, Cytoplasmic male sterility, Mitochondrial inheritance and Inheritance in haploid organisms. <u>Unit - III</u>	31 Hrs		-	K. Karthika	[Signature]
II From : To : 3/4/2024	Mutation: Detection of mutation - Lethal mutation & visible mutation. Molecular basis of mutation, Physical and Chemical mutagens. Biochemical genetics: Biochemical mutation in Bacteria & Neurospora. Population genetics: Gene pool, gene frequencies, Hardy - Weinberg law, factors affecting gene frequencies. Chromosome mapping - Two point & 3 point test cross, Interference				K. Karthika	[Signature]

& Coincidence.

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : ZOOLOGY Name of the Teacher : DR. K. KARTHIKA Year 2023 - 2024
C.P. 4 - Cytology, Genetics & Plant Breeding
 Title of the Paper : _____ Subject Code : 22UB0401 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4/12/2023 To : 5/2/2024	<u>Unit - III</u> Genetics - field of genetics, Mendel's experiments, Mendel's laws of inheritance, Monohybrid and Dihybrid cross. Gene Interaction - Incomplete dominance, Codominance, Collaborator genes, Epistasis, Complementary genes, Duplicate genes and Lethal genes.	15 Hrs		-	K. Kartika	
II From : 12/2/2024 To : 3/4/2024	<u>Unit - IV</u> Multiple alleles - Blood groups in man, Rh factor, Linkage - Complete and incomplete, Crossing over - mechanism, kinds and controlling factors, Cytoplasmic inheritance in plants - male sterility in maize.	15 Hrs		-	K. Kartika	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. P. MOORTHY

Year 2023- 2024

mushroom cultivation Technology :

Title of the Paper : Subject Code :

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : A.12.2023 To : A.2.2024	<u>unit V</u> Common Fungal and bacterial diseases of button, oyster and paddy straw mushrooms and their control measures, post harvesting techniques - packing, transport, short term and long term storage of mushrooms. (Canning, drying, freeze drying, Sun drying and pickling). Commercial value of mushrooms.	12	A/12/2023 to 9.2.2024		<u>S. Jeyaraj</u>	<u>[Signature]</u>
II From : 19.2.2024 To : 3/4/2024.	<u>unit IV</u> systematic position, morphology and life cycle of Paddy straw mushroom. [varietal]. Cultivation - farm designing, spawn preparation - spawn production technology. Preparation and the planting of spawn from master spawn. multiplication of spawn from mass culture and Harvesting	12	19.2.2024 to 3/4/2024		<u>S. Jeyaraj</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany

Name of the Teacher : Dr. P. MURTHY

Year 2023 - 2024

Title of the Paper : Horticulture

Subject Code : 21VB0611

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 1.12.2023 To : 9.2.2024	<u>unit I</u> Introduction of Horticulture. History, Scope and divisions of horticulture. methods of vegetative propagation. cutting, layering, Grafting and budding. manures - organic, pancha Kavya, and inorganic. Irrigation. <u>unit: II</u> post harvest handling of fruits and vegetables. preservation of fruits and vegetables.	18 Hours.	1.12.2023 to 9.2.2024			
II From : 19.2.2024 To : 3.4.2024	<u>unit III</u> cultivation of medicinal plants Gloriosa superba and Aloe vera. Extraction of Sarsaparilla and papain. <u>unit III</u> Growth regulators in Horticulture. plant protection measures for horticultural crops. Bioinsecticides and Biopesticides.	18 Hours.	19.2.2024 To 3.4.2024			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : B.Sc. T.A.N.Y. Name of the Teacher : Dr. P. M. SATHY Year 2023-2024
Ecology, Bioenergetic and
 Title of the Paper : Natural Resource Management Subject Code : ZSPBO206 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>1.12.2023</u> To : <u>9.2.2024</u>	Unit IV - Environmental pollution and Education - Air, water, soil, noise and radiation pollution, causes and possible control measures. Climate change Global warming, green house effect, ozone depletion, Acid rain, Environmental education - principle. Environmental education programmes in India, Environmental organizations and Agencies, Man and Biosphere and national and International organisations.	21 hours.	<u>1.12.2023</u> TO <u>9.2.2024</u>		<u>[Signature]</u>	<u>[Signature]</u>
II From : <u>19.2.2024</u> To : <u>3.4.2024</u>	Unit V. Natural Resource Conservation and Management Soil Conservation, Erosion and control, water stand ards, quality and management. Surface water, ground water development, BOD and COD water conservation and waste water reuse. disaster management, global gas tragedy, Tsunami, land slide, Flood and Earth quake,	12 hours	<u>19.2.2024</u> TO <u>3.4.2024</u>		<u>[Signature]</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. D. MOORTHY Year 2023-2024
 Title of the Paper : Biofertilizer and Solid Waste Management Subject Code : 23.PBO2E3 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>4.12.2023</u> To : <u>9.2.2024</u>	<u>Unit II</u> Cyanobacteria [The blue green algae] Anabaena Azolla association, nitrogen fixation, factors affecting growth, VA-mycorrhizal association, types of mycorrhizal association, taxonomy, occurrence and distribution phosphorus nutrition, growth and yield - colonization of Vam - isolation and inoculum production of VAM. influence on growth and yield of crop plants. organic farming, green manuring and organic fertilizers. recycling of biodegradable municipal, Agricultural and Industrial wastes of. Bio composting - methods, types and methods of vermin composting and its field application.	15 Hours	<u>4.12.2023</u> To <u>9.2.2024</u>			
II From : <u>19.2.2024</u> To : <u>3.4.2024</u>	<u>Unit III</u> Resource Recovery and policies for solid waste management. 3R - Reduce, reuse, recycle and recover. biological processing - composting, anaerobic digestion, aerobic treatments. Reductive dehalogenation, mechanical biological treatment. green techniques for waste management. Municipal Solid waste (Management and Handling) rules 2000, Hazardous waste management and Handling rules 1989, Bio medical waste rules 1989, plastic waste (Management and Handling) rules 2011, E-waste (Management and Handling) rules 2016.	15 Hours	<u>19.2.2024</u> To <u>3.4.2024</u>			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. P. MOORTHY Year 2023 2024
Biochemistry and Biotechnology.
 Title of the Paper : _____ Subject Code : 21VB0609 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>4.12.2023</u> To : <u>9.2.2024</u>	Unit <u>II</u> Carbohydrates - classification, monosaccharides - structure (glucose) open chain and cyclic (or, ring structure. Biological functions. Disaccharides - (sucrose) glycosidic linkage, and biological functions. Polysaccharides (cellulose). Lipids classification, structure, properties and functions.	14 hours.	<u>4.12.2023</u> TO <u>9.2.2024</u>			
II From : <u>19.2.2024</u> To : <u>3.4.2024</u>	Fatty acids, - saturated and unsaturated. Unit <u>III</u> Amino acids, structure, classification properties and biosynthesis	9 hours.	<u>19.2.2024</u> TO <u>3.4.2024</u>			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. R. Thiruganandam

Year 2023- 2024

Title of the Paper: SBS-II - Plant Tissue Culture
Concept and applications

Subject Code: 22UB0452

Semester: ODD / ☒ EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4/12/23 To : 17/2/24	<u>Unit-I</u> plant tissue culture - history, organization of tissue culture laboratory, glass goods and instruments, preparation of stock solution. <u>Unit-III</u> micropropagation - nodal and shoot tip culture, anther and pollen culture.	6 hrs 4 hrs	4/12/23 to 17/2/24	N/A	R. Thiruganandam	SB
II From : 19/2/24 To : 12/4/24	cell culture : single cell and cell suspension culture <u>Unit-V</u> somaclonal variation: definition, mechanism, isolation of somaclonal variants, phenotypic character, cytological study	2 hrs 4 hrs	19/2/24 to 12/4/24	N/A	R. Thiruganandam	SB

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. R. S. Thirumangalakudi

Year 2023 2024

Title of the Paper: Biochemistry and Bioinstrumentation

Subject Code: 210B0609

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>4/12/23</u> To : <u>12/2/24</u>	<u>Unit-IV</u> Principle, working mechanism, types and applications: pH meter, microscopy - Light and electron, centrifugation, autoclave and laminar air flow chamber, principle, working mechanism and applications: Colorimetry and UV-visible spectrophotometry	<u>18 hrs</u>	<u>4/12/23</u> to <u>12/2/24</u>	<u>Nit</u>	<u>R. S. Thirumangalakudi</u>	<u>Dr. R. S. Thirumangalakudi</u>
II From : <u>13/2/24</u> To : <u>05/4/24</u>	<u>Unit-V</u> Principle, working mechanism and applications: paper chromatography, Thin layer chromatography, ion exchange chromatography, affinity chromatography and lyophilization	<u>18 hrs</u>	<u>13/2/24</u> to <u>05/4/24</u>	<u>Nit</u>	<u>R. S. Thirumangalakudi</u>	<u>Dr. R. S. Thirumangalakudi</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. R. S. Thirumangalakudi Year 2023- 20 24

Title of the Paper : Major Elective-2: Biodegradables and solid waste management Subject Code : 22PB02E2 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>4/12/23</u> To : <u>16/2/24</u>	<u>Unit-IV</u> solid waste management: Different techniques used in collection, storage, transportation and disposal of solid waste [municipal, hazardous and biomedical], Landfill (traditional and sanitary landfill design)	8 hrs	<u>4/12/23</u> to <u>16/2/24</u>	- Nil -		
II From : <u>19/2/24</u> To : <u>10/4/24</u>	Thermal treatment [pyrolysis and incineration], drawbacks in waste management techniques; concept of integrated waste management	8 hrs	<u>19/2/24</u> to <u>10/4/24</u>	- Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. R. Thiruganarajam

Year 2023 - 2024

Title of the Paper : Biophysics and Biochemistry Subject Code : 22PB0410

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>4/12/23</u> To : <u>12/2/24</u>	<u>Unit-I</u> Electromagnetic radiation - Nature, absorption, absorption spectrum and action spectrum, law of absorption, interaction with matter, role of electrons in absorption of light.	<u>11 hrs</u>	<u>4/12/23</u> <u>to</u> <u>12/2/24</u>	<u>- Nil -</u>	<u>R. Thiruganarajam</u>	<u>[Signature]</u>
II From : <u>19/2/24</u> To : <u>05/04/24</u>	Electron multiplicity, Excitation, deexcitation and path of deexcited electrons, Bioluminescence, fluorescence and phosphorescence	<u>10 hrs</u>	<u>19/2/24</u> <u>to</u> <u>05/04/24</u>	<u>- Nil -</u>	<u>R. Thiruganarajam</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. R. Thimmarasampandan Year 2023-2024

Title of the Paper: Bioinstrumentation and Research methodology Subject Code: 22PB0412 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: <u>4/12/23</u> To: <u>14/2/24</u>	<u>UNIT-I</u> principle, working mechanism, types and applications: pH meter, Microscopy - light and electron, Centrifugation, autoclave, laminar air flow chamber, principle, working mechanism and applications: colorimetry, UV-visible spectrophotometry, fluorimetry, flame photometry, Biophotometer & microplate reader	23 hrs	<u>4/12/23</u> to <u>14/2/24</u>	<u>Nil</u>	<u>R. Thimmarasampandan</u>	<u>SB</u>
II From: <u>15/2/24</u> To: <u>10/4/24</u>	<u>UNIT-II</u> - principle, working mechanism and applications: Paper chromatography, thin layer chromatography, column chromatography, Ion exchange chromatography, molecular exclusion chromatography, affinity chromatography, High performance liquid chromatography, Gas chromatography, Lyophilization. <u>UNIT-III</u> : Distillation and its types, Soxhlet apparatus and Clevenger apparatus, Sonicator, rotary vacuum evaporator and magnetic stirrer	22 hrs	<u>15/2/24</u> to <u>10/4/24</u>	<u>Nil</u>	<u>R. Thimmarasampandan</u>	<u>SB</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. K. SUNDHARARAJAN Year 2023-2024
 Title of the Paper : Bioinformatics Subject Code : 23 PBO204 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4/12/2023 To : 5/02/2024	<u>Unit - I</u> - Introduction to Bioinformatics, Phytoinformatics, central dogma of molecular biology, Gene structure and information content, promoter sequences, Genetic code, open reading frames, introns and exons. Gene finding methods, tools and problems in gene finding.	21 h.	04.12.2023 to 05.02.2024	-		
II From : 14/02/2024 To : 03/04/2024	<u>Unit - II</u> - Regulation of gene expression in prokaryotes and eukaryotes. Transcription factors, Classification of Biological Databases, Sequence, Structural, Specialized and Literature databases. <u>Unit - V</u> - Application of Bioinformatics in various fields.	21 h. + 3 h.	14.02.2024 to 03.04.2024	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. K. SOWNDHARARAJAN Year 2023-2024

Title of the Paper : Biophysics and Biochemistry Subject Code : 22PBO410 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit - IV</u> - Amino acids:- General structure optical isomerism, classification (based on side chain and polarity) - Properties - non protein amino acids - Biosynthesis of amino acids. Proteins - Introduction - structure and configuration of proteins - different bonding systems - classification proteins based on chemical nature and solubility - properties - denaturation. Nucleic acids - Nitrogenous base - purine and pyrimidine biosynthesis. DNA and RNA structure and types. Biosynthesis of nucleotides.	21 h	04.12.2023 to 05.02.2024			
II From : 14/02/2024 To : 03/04/2024	<u>Unit - V</u> - Enzymes - Introduction to enzymes - classification, chemical nature and properties, theories of enzyme action, enzyme inhibitors and factors affecting enzyme activity - Michaelis-Menten's Constant. Coenzyme - FAD, NAD. Vitamins - classification, chemical nature, structure and biochemical properties of vitamins A, D, E and K and B complex.	21 h	14.02.2024 to 03.04.2024			

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. K. Soundhararajan Year 2023 2024
 Title of the Paper : Major Theme - 4 - Seed Biology. Subject Code : 21VB06E3 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit - I</u> - Scope of seed biology - Structure of monocot and dicot seeds/grains. Albuminous (endospermic) and ex-albuminous seeds. Chemical composition - cereals (paddy).	8h	04.12.2023 to 05.02.2024		K. Soundhararajan	[Signature]
II From : 14/02/2024 To : 03/04/2024	<u>Unit - I</u> - Chemical composition - oil seed (castor), - Fibre (cotton) and pulses (Bean). <u>Unit - IV</u> - Seed dormancy - primary and secondary dormancy.	8h.	14.02.2024 to 03.04.2024		K. Soundhararajan	[Signature]

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. K. SUNDHAR ARAJAN Year 2023-2024
 Title of the Paper : Plant Diversity - II Subject Code : 23UB0202 Semester : ODD / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit - V</u> - Geological time scale, fossilization and types. 1 Radiocarbon dating. Study of the fossils - <u>Rhynia</u>, <u>Lepidodendra</u>	15 h.	04.12.2023 to 05.02.2024		testary	BB
II From : 14/02/2024 To : 03/04/2024	<u>Unit VI</u> - Study of the fossils - <u>Leptocarpus</u> and <u>Williamsonia</u> <u>Unit - IV</u> - Detailed study of the structure and reproduction of <u>Gnetum</u>. Economic importance of <u>Gymnosperms</u>	15 h.	14.02.2024 to 03.04.2024		testary	BB

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. H. A. Abdul Kaffar Year 2023- 2024
and Natural Resource Management
 Title of the Paper: C.P. 6 - Ecology, Biodiversity Subject Code: 23.P.B.Q.206 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/23 To : 09/02/24	Unit - V Natural Resource Conservation and Management Biodiversity - International and national scenarios, Importance, Ecological Principles and applications in Conservation of biodiversity, ex situ and in situ	11 hours =	04/12/23 to 09/02/24	—	<u>AK</u>	<u>SK</u>
II From : 19/02/24 To : 03/04/24	Conservation of species, Biosphere Reserve, Sanctuaries, national parks, world heritage sites	11 hours =	19/02/24 to 03/04/24	—	<u>AK</u>	<u>SK</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: D. H. Abdul Kaffoor

Year 2023- 2024

Title of the Paper: Care paper - II. Plant Physiology Subject Code: 22PB0411

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 09/02/2024	Phytohormones - Fruit ripening - Introduction Climacteric and non-climacteric Fruits, Role of ethylene in fruit ripening, Symptoms of fruit ripening, Environmental Control of Fruit ripening, Circadian rhythms - Biological	21 hours	04/12/2023 to 09/02/2024	—	<u>AK</u>	<u>AK</u>
II From : 19/02/2024 To : 03/04/2024	Clock, Plant movements - tropic and Tragic movements, Photomorphogenesis - Phytochrome and Cryptochrome response in plants		19/02/2024 to 03/04/2024	—	<u>AK</u>	<u>AK</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. H. J. Abdul Kaffar

Year 2023-2024

Title of the Paper: C.P.II - Horticulture

Subject Code: ZLUB0611

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 07/02/2024	Unit - II Landscaping - Types of gardens - Japanese. Styles of garden - Formal and Informal garden Components - Shrubbery, Fernery, arches and Pergolas, edges and hedges, climbers and	18 hours	04/12/2023 to 07/02/2024	—	AK	JK
II From : 10/02/2024 To : 03/04/2024	Creeper, Carpet & Succulents. Special type of garden. Rock garden and Rocked gloves. Lawn mowing, Tennis courts and tennis techniques Unit - IV Floriculture - Cultivation of Flowers, Jasmine and Rose. Cut flowers and flower arrangements.	18 hours	10/02/2024 to 03/04/2024	—	AK	JK

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. H. Abdul Kaffar

Year 2023- 2024

Title of the Paper: SBS-III. Cultivation and Marketing of medicinal plants Subject Code: Z1UB06S3

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 09/01/2024	Unit - II A general account on the Morphology of cultivation, therapeutic uses of plants. Rhizome - <i>Curcuma longa</i> , Root tubers - <i>Asparagus racemosus</i> , Twigs - <i>Adaptada vasica</i> .	06 hours	04/12/2023 to 09/01/2024	—	<u>AK</u>	<u>JP</u>
II From : 10/02/2024 To : 03/04/2024	Unit - III Cultivation of Medicinal plants : Leaves - <i>Andropogon</i> , <i>Paniculata</i> , Bark - <i>Cinchona officinalis</i> , Flower bud - <i>Syzygium Caryophyllatum</i> - Fruits - <i>Phyllanthus emblica</i> , Seed - <i>Origanum limonella</i> .	08 hours	10/02/2024 to 03/04/2024	—	<u>AK</u>	<u>JP</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: Dr. H. A. Abdul Kaffar

Year 2023- 2024

Title of the Paper: C.P.H. Horticulture

Subject Code: 21103064

Semester: ODD / EVEN ☒

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 09/02/2024	Cultivation of Plantation Crops - Tea and Cardamom. Basics of greenhouse design, different types of structures - glasshouse, Shadonet, Poly tunnels - design and development of low cost greenhouse structure.	18 hrs	04/12/2023 12/12/2023 to 09/02/2024 05/01/2024	—		
II From : 19/02/2024 To : 03/04/2024	Unit - III Olericulture - Cultivation of vegetables - Bhendi and Tomato. Pomology - Cultivation of Fruits - Banana and Grapes. Growth regulators in horticulture. Plant Protection Measures for horticultural crops, Bio insecticides and Biopesticides.	18 hours	19/02/2024 to 03/04/2024	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. P. Revathi Year 2023-2024
 Title of the Paper : C.P.10: Biophysics and Biochemistry Subject Code : 22.PB.O.A.10 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>04/12/2023</u> To : <u>09/02/2024</u>	UNIT II Bioenergetics - Energy and work, laws of Thermodynamics	$\frac{15}{2}$	<u>04/12/2023</u> to <u>09/02/2024</u>	-		
II From : <u>19/02/2024</u> To : <u>03/04/2024</u>	Energy transductions in biological systems- Redox couple, redox potential, ATP bioenergetics, NADP/NAPH redox couple, mitochondrial bioenergetics and chloroplast bioenergetics	$\frac{15}{2}$	<u>19/02/2024</u> to <u>03/04/2024</u>	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. P. Revathi

Year 2023- 2024

C.P : 2
Title of the Paper : Plant Diversity II Subject Code : 23UB0202

Semester : ODD / EVEN ☒

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09/02/2024	UNIT II Pteridophytes : Introduction and General Characters of Pteridophytes. Classification of Pteridophytes (Riener, 1954). Occurrence, Structure, reproduction and life cycle of <i>Lycopodium</i> , <i>Selaginella</i>	22.5 hrs	04/12/2023 to 09/02/2024	—		
II From : 19/02/2024 To : 03/04/2024	UNIT III Occurrence, structure, reproduction and life cycle of <i>Ophioglossum</i> and <i>Adiantum</i> . Vascular organization and Stelar evolution in Pteridophytes. Heterosporous and Seed habit, Apogamy and Apospory. Economic Importance of Pteridophytes.	22.5 hrs	19/02/2024 to 03/04/2024	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Ecology, Bioenergetics and
 Title of the Paper : P. 6: Natural Resource Conservation Name of the Teacher : Dr. P. Revathi Year 2023 - 2024
 Subject Code : 23PB0206 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>04/12/2023</u> To : <u>09/02/2024</u>	UNIT I : Population and Community Ecology - Ecology - concepts and applications, biotic community concepts, characteristics and structure of population, ecological variants and methods of studying plant communities. Ecological niches, edge effect and Ecotone	15 hrs	04/12/2023 to 09/02/2024	-		
II From : <u>19/02/2024</u> To : <u>03/04/2024</u>	UNIT II Ecosystem Ecology - Structural and functional characteristics of ecosystem, major ecosystems of world, biogeochemical cycle - cycling and reservoir pool, gaseous (Nitrogen & Carbon) and sedimentary pattern (Sulphur & P) of cycling. Nutrient cycling and agricultural patterns in tropical and temperate regions. Plant indicators of conditions, Uses, and Procupes.	15 hrs	19/02/2024 to 03/04/2024	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. P. Reshmi Year 2023 - 2024

Title of the Paper : C. P. 10 - Plant Physiology Subject Code : 21VBO610 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09/02/2024	UNIT V Plant growth regulatory substances - Distribution, biosynthesis and physiological effects of Auxins, Gibberellins. Factors controlling photosynthesis, Photorespiration	15	04/12/2023 to 09/02/2024	-		
II From : 19/02/2024 To : 03/04/2024	Distribution, biosynthesis and Physiological effects of cytokinins, Ethylene and Abscissic acid. Physiology of flowering: photoperiodism - phytochrome, Vernalization, Seed dormancy	15	19/02/2024 to 03/04/2024	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. P. Revathi Year 2023- 2024
 Title of the Paper : ME : 6 Mushroom cultivation Technology Subject Code : Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 09/02/2024	UNIT I Mushroom an Introduction - Importance, Identification and classification of Mushrooms, Nutraaceutical properties, Food value and composition, Medicinal value of Mushrooms, Identification of Mushrooms, Classification of edible mushrooms, Medicinal Mushrooms, Poisonous Mushrooms.	15 2	04/12/2023 to 09/02/2024	-		
II From : 19/02/2024 To : 03/04/2024	UNIT II Systematic position, morphology and life cycle of white button mushroom (<i>Agaricus bisporus</i>) Cultivation - farm designing, spawn Preparation - spawn production Technology, Preparation of the planting spawn from master spawn, Multiplication of spawn from Mass culture and harvesting	15 2	19/02/2024 to 03/04/2024	-		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. R. REKKA Year 2023- 2024
CORE PAPER 5: CELL BIOLOGY, GENETICS,
 Title of the Paper PLANT BREEDING & BIostatistics Subject Code : 23PBD 205 Semester : ODD / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	<u>UNIT-IV : PLANT BREEDING</u> - Introduction History, Major objectives - principles - Important achievements of plant breeding, self and cross pollinated crops- pure line selection, mass selection methods; line breeding, pedigree, clonal selection, Incompatibility - male sterility, Mutation Breeding- methods, limitation & crop improvement	21 Hrs		NIL		
II From : 19.02.2024 To : 03.04.2024	<u>UNIT V - BioStatistics</u> - Measures of central tendencies - Mean (only arithmetic) median and mode. Measures of deviation - mean deviation, Variance, standard deviation, Standard error and Co-efficient of Variation. Probability of distribution - Binomial, Poisson and Normal distribution. Linear regression and Correlation. Tests of Statistical	21 Hrs		NIL		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. P. Rekha Year 2023-2024
CORE PAPER 12: BIOINSTRUMENT
 Title of the Paper : AND RESEARCH METHODOLOGY Subject Code : 22PB0412 Semester : ODD / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 04.02.2024	UNIT- IV - Introduction to Research methodology, Definition and objectives of Research, Research methodology:- Process of research and its criteria, Elements of Research and Importance of Research and Importance of Research methodology. Types of Research- Descriptive Vs. Analytical, Applied, Vs. fundamental, Quantitative, Qualitative, Conceptual, Empirical	18 hrs		NIL		
II From : 14.02.2024 To : 03.04.2024	UNIT- V i- Literature Collection and Database - Structure and preparation of thesis, Bibliography, Reference management Software, Scientific paper writing, Manuscript types, preparation, Submission and proof correction - Presentation of research findings in conferences - Ethical issues in publications	18 hrs		NIL		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. R. Rekka Year 2023-2024
CORE PAPER 4 : CYTOLOGY, GENETICS
 Title of the Paper : AND PLANT BREEDING Subject Code : 22UB0404 Semester : ODD / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	UNIT-II : DNA as a genetic materials, Structure properties, replication of DNA (Conservative Semi-Conservative and dispersive methods). and Functions, RNA-Types, and Function	7.5 hrs	7.5hrs	NIL	<i>[Signature]</i>	<i>[Signature]</i>
II From : 19.02.2024 To : 03.04.2024	UNIT II : CELL DIVISION : Cell Cycle, Amitosis, Mitosis and Meiosis and their significances	7.5 hrs	7.5hrs	NIL	<i>[Signature]</i>	<i>[Signature]</i>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. R. REKKA Year 2023- 2024
 Title of the Paper : CORE PAPER: 10 PLANT PHYSIOLOGY Subject Code : 21UB0610 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	UNIT -III - Photosynthesis - Pigment types, Pigment System PS-I & PS II, Mechanism- Light reaction, Dark reaction - Calvin Cycle, Hatch and Slack pathway and CAM PATHWAY. RESPIRATION : Glycolysis, Anaerobic [Fermentation] and aerobic (Krebs cycle) and ATP Synthesis and Respiratory Quotient, Factors influencing respiration	15 hrs	15 hrs	NO		
II From : 19.02.2024 To : 03.04.2024	UNIT IV : Nitrogen Metabolism: Nitrogen cycle, Biological Nitrogen fixation - Symbiotic and Non-Symbiotic. Formation of root nodules in leguminous plants, role of nitrogenase enzyme and Leg- haemoglobin. Factors controlling Biological nitrogen fixation	15hrs	15 hrs	NO		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : Dr. M. Parvathi Year 2023 - 2024
 Title of the Paper : C.P.1. Plant Physiology Subject Code : 22PBOH1 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : <u>04.12.2023</u> To : <u>09.02.2024</u>	Unit - IV Stress Physiology : Classification of stress - abiotic & biotic stress factors. Stress effects - Morphological, biochemical, Physiological changes, associated with stress due to heat, water, salinity and metal. Stress resistance & Mechanism	21 hrs	21 hrs	Nil -		
II From : <u>19.02.2024</u> To : <u>03.04.2024</u>	Unit - IV Mechanism of Photosynthesis - Light reaction, Carbon fixation in C₃ & C₄ plants. Outline of CAM pathway. Photorespiration, Respiration. Glycolysis, Krebs cycle and PPP pathway. ATPase and Mechanism of ATP synthesis, Biological Nitrogen fixation - Symbiotic & Non-symbiotic.	21 hrs	21 hrs	- Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Biology Name of the Teacher : Dr. M. PARVEEN Year 2023 - 2024
 Title of the Paper : Major Elec: Biofertilizers & Solid Waste Subject Code : 23PBOE3 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	Unit I General account about microbes used as biofertilizers, Rhizobium - isolation - identification, Mass cultivation, Carrier based inoculants, Symbiosis and Azospirillum - isolation, Mass cultivation, Carrier based inoculants, Azotobacter - classification characteristics, Gpp response to Azotobacter inoculum, maintenance and mass cultivation	15 hrs	15 hrs	-		
II From : 19.02.2024 To : 03.04.2024	Unit II Solid waste management & Different techniques used in collection, storage transportation and disposal of solid waste (Municipal, hazardous, and biomedical waste), land fill design, thermal treatment (pyrolysis and incineration) of waste material, draw backs in waste management techniques. Concept of integrated waste management	15 hrs	15 hrs	-		

Department :
 Title of the Paper :

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : DR. M. PARVEEN Year 2023 - 2024
 Title of the Paper : Allied - 2 Botany - 2 Subject Code : 23UB02A2 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	Unit-I Anatomy : Scope and Significance of Plant anatomy. A brief account of meristems and tissues (Simple and Complex tissue) Primary structure of dicot and Monocot stem and Root.	15 hrs	15 hrs	NIL		
II From : 19.02.2024 To : 03.04.2024	Unit-II Embryology : Microsporogenesis Development of Male gametophyte Megasporogenesis, Dev. of female gametophyte (Polygonum type) Structure of mature embryo sac Types of embryo sac- Polygonum type (8 nuclei) & Oenothera type. Types of endosperm Dev. of Dicot embryo Capsella type.	15 hrs	15 hrs	NIL		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : B.T.A.N.Y. Name of the Teacher : Dr. M. PARVEEN

Year 2023 2024

Title of the Paper : Mushroom Cultivation Technology Subject Code : 21UB06E4

Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.12.2024	Unit II Systematic Position, morphology and life cycle of white button mushroom (<i>Agaricus bisporus</i>) cultivation farm design, spawn preparation - spawn production Technology, preparation of the planting spawn from waste spawn, Multiplication of spawn, Mass cultivation and harvesting	18 hrs	18 hrs	- Nil -		
II From : 19.02.2024 To : 03.04.2024	Unit III Systematic position, Morphology and life cycle of oyster mushroom (<i>Pleurotus sajor caje</i>), cultivation farm designing, spawn preparation of the planting spawn from mother spawn, Multiplication of spawn from Mass cultivation and harvesting	18 hrs	18 hrs	Nil -		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY Name of the Teacher: D. V. N. P. RAVEN Year 2023-2024

Title of the Paper: Cytology, Genetics, Plant Breeding Subject Code: 22.U.B.D.401 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04.12.2023 To : 09.02.2024	Unit - I Introduction and objectives of plant breeding, breeding Method - Pure line Selection, Mass Selection and Clonal Selection. Hybridization techniques	7hr	7 1/2	—		
II From : 19.02.2024 To : 03.04.2024	Hybridization, National & International organization for crop improvement, achievements in crop improvement Sugarcane & Cotton	7hr	7hr	—		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : DR. G. DHANDAPANI Year 2023 - 2024
 Title of the Paper : BIOINSTRUMENTATION AND RESEARCH METHODOLOGY Subject Code : 22PB0412 Semester : ODD / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4 th DECEMBER 2023 To : 5 th FEBRUARY, 2024	UNIT-III: * Agarose Gel Electrophoresis (AGE) * Polyacrylamide Gel Electrophoresis (PAGE) * Immunoelectrophoresis.	5 HRS	4 th DECEMBER 2023 To 5 th FEBRUARY 2024 [5 HRS]	-	G.Dhandapani	DR
II From : 14 th FEBRUARY, 2024 To : 8 th APRIL, 2024	UNIT-III: * Capillary electrophoresis * PCR and its types and * Gel documentation system	4 HRS	14 th FEBRUARY 2024 To 8 th APRIL, 2024 [4 HRS]	-	G.Dhandapani	DR

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : DR. G. DHANDAPANI Year 2023 - 2024
 Title of the Paper : ME-2: APPLIED MICROBIOLOGY Subject Code : 23PBS2E4 Semester : ODD / EVEN ☒

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 4 th DECEMBER, 2023 To : 8 th FEBRUARY, 2024	UNIT-III : Food Microbiology: Microbial flora of fresh food - Botulism - Mycotoxins - food preservation methods - Microbiology of milk and milk products (yoghurt and cheese) - Fermented fruits and vegetables - Single cell protein (Spirulina and Chlorella). UNIT-IV : Environmental Microbiology: Microbes in water, air and soil environment - Interactions between microbes and plants: rhizosphere, phyllosphere.	15 HRS 8 HRS	4 th DECEMBER 2023 To 8 th FEBRUARY 2024 [23 HRS]	-	G.Dh.D.P.	
II From : 12 th FEBRUARY, 2024 To : 12 th APRIL, 2024	UNIT-IV : Mycorrhizae - biodegradation of pesticides and pollutants in soil - role of microorganisms in sewage treatment. UNIT-V : Medical Microbiology: Distribution and significance of normal human microbial flora. Infections - Source of infections - Epidemiology of infectious diseases - microbial pathogens: Bacterial - Salmonella typhi, Mycobacterium tuberculosis, viral - Dengue, SARS virus - COVID 19; Fungal - Candida, Aspergillus.	7 HRS. 15 HRS.	12 th FEBRUARY 2024 To 12 th APRIL 2024 [22 HRS.]	-	G.Dh.D.P.	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : DR. G. DHANDAPANI

Year 2023 - 2024

Title of the Paper : SBS-III - CULTIVATION AND MARKETING Subject Code : 21UB06S3

Semester : ODD / EVEN

Test No. & Period	OF MEDICINAL PLANTS Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 11th DECEMBER, 2023 To : 9th FEBRUARY, 2024	UNIT-I: Scope, Importance and present scenario of Medicinal plants in India. conservation - In situ and ex situ. National Medicinal plants Board (NMPB). UNIT-IV: Marketing Scenario of Medicinal plants- Domestic market, Global market, Export.	6 HRS. 3 HRS	11th DECEMBER 2023 ↓ 9th FEBRUARY 2024 [9 HRS]	-	G.Dhandapani	
II From : 12th FEBRUARY, 2024 To : 12th APRIL, 2024	UNIT IV: Standard and quality control [constraints] Future strategy for medicinal plants. UNIT-V: Intellectual property Rights (IPR): Definition, origin, classification and forms, patents: Concepts and principles - Patent act in India, Procedure for obtaining patent - Rights of patent, Forms of IPR, Copyright - Trademark.	3 HRS. 4 HRS.	12th FEBRUARY, 2024 ↓ 12th APRIL, 2024	-	G.Dhandapani	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : BOTANY Name of the Teacher : DR. G. DHANDAPANI Year 2023 - 2024
 Title of the Paper : SBS II - PLANT TISSUE CULTURE Subject Code : 22UB04S2 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I	CONCEPTS AND APPLICATIONS. UNIT-III: Medium preparation - MS, BS and Nitsch medium. collection of explants. Surface sterilization, inoculation, incubation, callus culture and subculture. UNIT-IV: Embryo and ovule culture, Somatic embryoogenesis	6 HRS 3 HRS	2nd January, 2024 ↓ 9th February 2024	-	G.Dhandapani	
II	UNIT-IV: Artificial seed production, protoplast isolation, culture and fusion. UNIT-V: Cytological study, DNA content, disease and herbicide resistance. Application of somaclonal variation.	3 HRS 3 HRS	19th February 2024 ↓ 29th March 2024	-	G.Dhandapani	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY Name of the Teacher: DR. G. DHANDAPANI Year 2023-2024
 Title of the Paper: NME 4: INFORMATION SECURITY Subject Code: 22PGI4N2 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I <u>I-CIA</u> From : <u>4th DECEMBER</u> <u>2023</u> To : <u>To</u>	UNIT-I: Information Security [IS] basics: Definition of IS - History of IS - Characteristics of IS - Components of IS - Security Development Life Cycle (SDLC) - IS for technical administrators, Server Security - Network Security - Social media Security.	12 HRS	<u>4th DECEMBER</u> <u>2023</u> To <u>12th JANUARY</u> <u>2024</u> <u>[12 HRS]</u>		<u>G.Dh.D.P.</u>	<u>[Signature]</u>
II From : To : <u>10th FEBRUARY</u> <u>2024</u>	UNIT-II: CRYPTOGRAPHY: Basic concepts - plain text - Cipher text - Encryption principles - CRYPT Analysis - Cryptographic Algorithms - Cryptographic Tools - Authentication - Biometrics - Passwords - Access control Devices - Physical Security - Security and Personnel. Language-based Security: Analysis of code for security errors, Safe language and sandboxing techniques.	12 HRS	<u>22nd JANUARY</u> <u>2024</u> To <u>10th FEBRUARY</u> <u>2024</u> <u>[12 HRS]</u>		<u>G.Dh.D.P.</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: BOTANY Name of the Teacher: DR. G. DHANDAPANI Year 2023-2024
 Title of the Paper: NEE-4 INFORMATION SECURITY Subject Code: 22PSITAN2 Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
<u>II</u> <u>CIR</u> From : <u>12th FEBRUARY 2024</u> To :	<u>UNIT III : Firewalls, Viruses, Worms & Digital Rights Management. Firewalls - Application and Circuit proxies - Stateful Inspection - Design principles of firewalls. Logical Design : Access Control Devices - Physical Security - Security and Personnel - NIST Models - VISA International Security Model - Design of Security Architecture - Planning for continuity.</u>	<u>12th FEBRUARY, 2024 To 15th MARCH, 2024 [12 HRS]</u>	<u>12 HRS</u>	-	<u>G. Dhandapani</u>	<u>[Signature]</u>
<u>II</u> From : To : <u>19th APRIL 2024</u>	<u>UNIT-IV : Hacking - Introduction - Hacker Hierarchy - Password cracking - Phishing - Network Hacking - Wireless Hacking - Windows Hacking - Web Hacking - Ethical Hacking. Security Investigation : Need for Security - Business Needs - Threats - Attacks - IP Addressing and Routing - Social media.</u>	<u>18th MARCH, 2024 To 19th APRIL, 2024 [12 HRS]</u>	<u>12 HRS</u>	-	<u>G. Dhandapani</u>	<u>[Signature]</u>

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : DR. V. ARAVINDHAN Year 2023-2024
 Major Elective : Seed Biology Subject Code : 21UBD6E3 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit - II</u> - seed treatment - methods of seed treatment seed treating formulations and equipments. - seed disinfection, identification of treated seed - pelleting and their significance. - seed packaging, bagging and labelling, storage and marketing	15 hours	04/12/2023 to 05/02/2024	nil	A	Dr. V. Aravindhan
II From : 14/02/2024 To : 03/04/2024	<u>Unit - III</u> - seed drying - process and Equipments - methods of moisture determination of seed. - seed cleaning and upgrading - seed testing and quality control <u>Unit - IV</u> - significance of seed dormancy, factors involved methods used to break dormancy.	15 hours	14/02/2024 to 03/04/2024	nil	A	Dr. V. Aravindhan

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. V. ARAVINDHAN Year 2023-2024
 Title of the Paper : Core Paper - 6 Ecology, Bioenergetics and Natural Resource Management Subject Code : 23PBO206 Semester : ODD / EVEN ✓

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	Unit - II - Bio-energetics - Energy dispersion, law of thermodynamics, concept and Energy flow model. - productivity concept, turn over	11 hours	04/12/2023 to 05/02/2024	nil	R	
II From : 14/02/2024 To : 03/04/2024	- primary production processes in C ₄ and CAM plants, adaptations in C ₄ plants for efficient primary production - productivity in different ecosystems. measurement of primary production	11 hours	14/02/2024 to 03/04/2024	nil	R	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : DR. V. ARAVINDHAN Year 2023-2024
Core paper 4 -
 Title of the Paper : Bioinformatics Subject Code : 23PBO204 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit V</u> - Recent trends in Bioinformatics - Biomolecular visualization - phylogenetic analysis.	11 hours	04/12/2023 to 05/02/2023	nil	A	
II From : 14/02/2024 To : 03/04/2024	<u>Unit - V</u> - Computer aided drug designing - Concepts of molecular modelling - Applications of Bioinformatics in various fields.	11 hours	14/02/2024 to 03/04/2024	nil	A	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department : Botany Name of the Teacher : Dr. V. ARAVINDHAN Year 2023- 2024
Core Paper 9
 Title of the Paper : Biochemistry and Bioinstrumentation Subject Code : 21UB0609 Semester : ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit - I:-</u> - Basic concepts of atoms and molecules. - types of bonding - isomerism, isotopes, - Acids, bases, colloids and pH.	10 hours	04/12/2023 to 05/02/2024	NIL	R	R
II From : 14/02/2024 To : 03/04/2024	<u>Unit - I:-</u> - Buffer systems - Introduction to phytoconstituents. - proteins - classification, structures - Enzymes - Definition, structure, properties, mode of action and factors affecting enzyme activity.	14 hours	14/02/2024 to 03/04/2024	NIL	R	R

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany Name of the Teacher: Dr. V. ARAVINDHAN
Core paper 4 - cytology, genetics and plant breeding
 Title of the Paper: cytology, genetics and plant breeding Subject Code: 22-VB0404

Year 2023 2024

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit - I</u> - Ultrastructure of cell - - structure, chemical composition and functions of cell wall, plasma membrane, mitochondria and Endoplasmic reticulum.	8 hours	04/12/2023 to 05/02/2024	nil	A	
II From : 14/02/2024 To : 03/04/2024	- structure, chemical composition and functions of Golgi apparatus, chloroplast, ribosomes, nucleus and chloroplast chromosomes.	8 hours		nil	A	

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 29.

ACADEMIC PLANNING

Department: Botany

Name of the Teacher: DR. V. ARAVINDHAN

Year 2023-2024

Title of the Paper: Botany - 2

Subject Code: 23UB02A2

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 04/12/2023 To : 05/02/2024	<u>Unit-II</u> physiology - water relationships of plants - osmosis, absorption of water and ions - phytohormones - Auxins and cytokinins	7.5 hours	04/12/2023 to 05/02/2024	nil	A	
II From : 14/02/2024 To : 03/04/2024	- photosynthesis - photosynthetic apparatus - Primary photochemical reaction - Calvin cycle. - Respiration - Glycolysis and Krebs cycle	7.5 hours	14/02/2024 to 03/04/2024	nil	A	