

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Dr. V. Sangeetha

Year 2021 - 2022

Title of the Paper: Basic Chemistry - I Subject Code: 21 VCH 101

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Sl
					St
I From: 9/8/21 To: 13/10/21	UNIT - III chemistry of Alkanes classification of reagents types of organic reactions structure	9	9/8/21 to 11/10/21	-	4
II From: 20/10/21 To: 12/12/21	UNIT - II structure - chemical properties of alkanes - conformation study of ethane and n-butane.	9	12/10/21 to 12/12/21	-	10

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

ACADEMIC PLANNING

Department: CHEMISTRY

Core Paper - VII

Name of the Teacher: Dr. V. Sangeetha

Year 2021 - 2022

Title of the Paper: Organic Reaction Mechanism Subject Code: 19UC4507

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature	
					Staff	
I From: 21/06/21 To: 13/10/21	UNIT - I Stereo chemistry Optical isomerism ... optical activity of alkenes Biphenyls ... UNIT - II Carbohydrates Glucose, fructose, sucrose, maltose, starch, cellulose UNIT - III Molecules rearrangements 1 - 4	30 hrs	9/8/21 to 11/10/21	-		
II From: 22/10/21 To: 12/12/21	UNIT - III Molecules rearrangements 5 - 8 UNIT - IV Amines and diazo compounds UNIT - V Heterocyclic compounds	30 hrs	12/10/21 to 12/12/21	-		

ACADEMIC PLANNING

Department: CHEMISTRYName of the Teacher: Mr. S. Sivaram KumarYear 20 21 20 22

Elective - I

Title of the Paper: Leather Chemistry Subject Code: 19VCH5E2Semester: 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> Introduction - Chl processes used in Leather Chemistry... <u>Depic- -kling</u>	8	9.8.21 to 11.10.21	—	<u>Atx</u>	
	<u>Unit-II</u> types of tanning vegetable and mineral tanning... <u>fixation of vegetable tanning.</u>					
II	<u>Unit-II</u> - continued <u>Synthetic tanning</u> ... many- -facture and use.		12.10.21			
	<u>Unit-III</u> The preparation and Chemistry of Chrome tanning... Chemistry of Combination of tannages involving... other tanning agents	7	TO 12.12.21	—	<u>Atx</u>	

To: 12.12.21

From: 12.10.21

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ACADEMIC PLANNING

Department: CHEMISTRY Name of the Teacher: M.S. Sivarajam, M.Sc. Year 2021-2022
EDC-CHEMISTRY IN DAY TO DAY LIFE 19UCH45ED3. Semester: ODD / ~~EVEN~~

Title of the Paper:

Subject Code:

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-1 WATER TREATMENT</u> Introduction - sources and uses of water... Reverse osmosis method. <u>Unit-2 FERMENTATION.</u> Introduction - conditions for fermentation... Alcohol from molasses - uses.	15	9.8.21 to 11.10.21	-	<u>Asst</u>	
II	<u>Unit-III oils, fats, waxes and soaps - classification...</u> Cleansing action of soaps. <u>Unit-IV Food Adulteration and Hygiene.</u> Food Standards definition... <u>Unit-V paints</u> Classification... Manufacture	15	12.10.21 to 12.12.21	-	<u>Asst</u>	

ACADEMIC PLANNING

Department: CHEMISTRYName of the Teacher: M. J. SivarankumarYear 20 21 20 22Title of the Paper: HUMAN RIGHTS Subject Code: 20VHR3A1Semester: 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 : 9.8.21 To : 11.10.21	<u>Unit-1</u> Definition-meaning Concept - ... Rights under United Nations. <u>Unit-2</u> United Nations Charter and Human Rights. Cultural Rights. <u>Unit-III</u> Human Rights and Fundamental Rights-I etc.	15	9.8.21 to 11.10.21	—	<u>Yes</u>	
II From : 12.10.21 To : 12.12.21	<u>Unit-IV</u> Aged person and their Human Rights. ... Three Generation Human Rights. <u>Unit-V</u> , Rights of women ... Rights to Election.	15	12.10.21 to 12.12.21	—	<u>Yes</u>	

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

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Mrs. S. Narasim Kumar Year 20 21 20 22

Title of the Paper: General Awareness

Subject Code: 20UGA381

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	Unit-1 Tamil and other literature Unit-2 Economics and Commerce. Unit-3. Social Studies. Unit-4. Numerical aptitude.	15	9.8.21 to 11.10.21	—	<u>Not</u>	
From: 9.8.21 To: 11.10.21						
II	Unit-5. Verbal aptitude. Unit-6 Numerical aptitude Unit-7. Abstract Reasoning. Unit-8. National Service Scheme Unit-9. Youth Red Cross	15	12.10.21 to 12.12.21	—	<u>Not</u>	
From: 12.10.21 To: 12.12.21						

ACADEMIC PLANNING

Department: ChemistryName of the Teacher: Dr. P. Mani MalakarYear 2023 2024Title of the Paper: Core Paper - IIISubject Code: 23VCH303

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any
I From : 9/8/21 To :	Unit - IV Thermodynamics - II Limitations of first law, Second law Spontaneous and irreversible process, Entropy in detail. Work and free energy functions. Gibbs - Helmholtz equation, The Clapeyron Equation, equation, Applications, Van't Hoff isotherm and isochore	12 hrs.		
II From : 13/10/21 20/10/21 To :	Unit - V Thermodynamics - III Partial molar Properties - Chemical Potential in detail. Third law of thermodynamics, Residual entropy, Problems, Stirling's approximation.	12 hrs.		

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 2

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Dr. R. Manimekalai

Year 2024-2025

Title of the Paper: Spectroscopy

Subject Code: 19UCH505

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any
I From : To : 12/12/21	<u>Unit - IV</u> Mass Spectrometry Basic Principles, theory, general fragmentation modes of hydrocarbon Petro - Diels Alder reaction, hydrogen transfer rearrangement and McLafferty rearrangement, Problems.	9 hrs.		<u>L.D. S</u>
II From : To :				

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTonomous), COIMBATORE - 2

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Dr. P. Mani. Melkalai

Year 2022-2023

Title of the Paper: Core Chemistry - III Subject Code: 20UC14303

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any
I From : <u>12/12/21</u> To : <u>12/12/21</u>	Unit - III Aldehydes and ketones General Mechanism of nucleophilic addition reactions	6hrs		<u>2 hrs</u>
II From : To :				

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS), COIMBATORE - 2

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Dr. R. Manimekalai

Year 2020-2021

Title of the Paper: Allied Chemistry Paper I

Subject Code: 20UCH3A3

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any
I From : <u>9/8/21</u> To : <u>12/12/21</u>	<u>UNIT - III</u> <u>Hybridisation and Isomerism in compounds</u> hybridization, Classification of reactions and reagent, Isomerism - optical Isomerism and Geometrical Isomerism	12 hrs.		<u>L.V.</u>
II From : To :				

ACADEMIC PLANNING

Department: ChemistryName of the Teacher: Dr. R. ManimekalaiYear 2020 20 21Title of the Paper: Spectroscopy Subject Code: 19UCH505Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	S
					S
I From : 13/10/21 To : 13/10/21	<u>Unit - III Raman Spectroscopy</u> <u>Introduction, Quantum theory</u> <u>Instrumentation, Conditions, characteristic</u> <u>Parameters of Raman lines, Raman</u> <u>Spectra of diatomic molecules, Rotational</u> <u>Vibrational Raman Spectra, Vibrational</u> <u>Raman Spectra,</u>	9 hrs.			
II From : 20/10/21 To : 20/10/21	<u>Unit - IV NMR Spectroscopy</u> <u>Principles and theory, conditions of</u> <u>resonance, relaxation process,</u> <u>Instrumentation, solvent used in</u> <u>NMR, chemical shift, peak area</u> <u>and proton coupling, spin-spin</u> <u>splitting,</u>	9 hrs			

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ACADEMIC PLANNING

Department: Chemistry

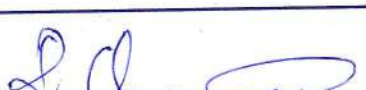
Name of the Teacher: Dr. R. Manikavelu

Year 2020-2021

Title of the Paper: Spectroscopy

Subject Code: LGUCH505

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature	
					Staff	HH
I From : 9/8/21 To :	<u>Unit-I</u> Ultraviolet and visible spectroscopy Principles, absorption laws, selection rules, Instrumentation, theory, types of electronic transitions, absorption and intensity shifts, Types of absorption bands, Woodward Fischer rule.	9 hrs				
II From : To :	<u>Unit-II</u> Infrared spectroscopy Principles, molecular vibrations, vibrational frequency, Number of fundamental vibrations, overtones and combination bands, selection rules and combination bands, selection rules factors influencing vibrational frequency Instrumentation, finger print region.	9 hrs				

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

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Dr. E. Jayanthi

Year 2021-2022

Title of the Paper: Pharmaceutical Chemistry

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	
					Staff	
I From 21.0.22 To: 9.4.22	Unit II Designation of drugs based on physiological action. Definition & two ex of Anesthetics General, IV & Local, Antibiotics - Penicillin & Streptomycin, Chloramphenicol, Tetracycline Antihistals - Atale - symptoms, Prevention treatment - Cancer & neoplastic agents	8	21/02/22 16 9/4/22	Nil		
II From: 11.4.22 To: 25.5.22	Unit III Analgesics - Narcotic & Synthetic Anti Pyretics + Anti-inflammatory agents Unit I Common diseases, Infective diseases insect - borne, air borne - malarial disease - haemolytic diseases, ... factors affecting absorption & drugs	7	11/4/22 16 25/5/22	Nil		

ACADEMIC PLANNING

Department: Chemistry

Name of the Teacher: Dr. E. S. Sengupta

Year 2021 - 2022

Title of the Paper: Organic Chemistry Paper Subject Code: R.O.C.H.A.D.4

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	S
I From: 21/2/22 To: 9/4/22	Unit III Monohydric phenol, Prep & prop, acidity of phenols, Nov, Esterification, Nitration Sulfonation, Halogenation, ... Federala Nomenclature, phenol formaldehyde, Phosphoric acid Unit II Alcohols, Classification, Nomenclature, Monohydric Alcohols method of formation.	15	21/2/22 15 9/4/22	Nil	2
II From: 11/4/22 To: 25/5/22	Unit II - Reactions of Alcohols, Hydrogen bonding, Acidity. Unit IV Phenol & Phenol equilibria Phenol rule, definition, conditions for equilibrium phenol. Formation of sp ² with conjugated & Inconjugated melting point Free H ₂ O & Sodium sulfate-sulfate system	15	11/4/22 15 25/5/22	Nil	2