

**Kongunadu Arts and Science College (Autonomous)**  
**Coimbatore 641029**

**Department of CHEMISTRY (UG)**

**Minutes of the Board of Studies:**

The Board of Studies meeting was held on 03.05.2021. The Chairman welcomed and outlined the changes to be made in the following for the board approval.

Item 1. To consider revision in the Curriculum, Scheme of Examination and Syllabi of UG/PG/Certificate / Diploma courses and approval.

Item 2. To suggest the panel of names for appointment of examiners.

Item 3. Other academic activities in the department.

As per the suggestions and recommendations given by the various Stakeholders on the above items discussed, the existing/revised the Scheme of Curriculum / Scheme of Examination / Syllabi and Panel of Examiners are to be followed is annexed herewith for the implementation from the commencement of the Academic year 2020 – 2021.

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

Sem.	Course code	Name of the Course	Changes made
Sem I	21UCH101	CORE CHEMISTRY PAPER – I:  INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY – I	UNIT-IV : Limitations of Aufbau principle, multi electron system of Pauling's exclusion principle - included
Sem II	21UCH202	CORE CHEMISTRY PAPER – II  INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY	UNIT-I: Cement processing and mining operations. - included
Sem II	21UCH2CL	CORE CHEMISTRY PRACTICAL – I  INORGANIC QUALITATIVE ANALYSIS AND	Melting point and FT-IR spectrum of Inorganic complexes. - included

		PREPARATIONS	
Sem IV	21UCH404	CORE CHEMISTRY PAPER – IV  INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY - IV	Unit –V Intellectual Property Rights-The art of writing and publishing-Effective dissertation writing
Sem IV	21UCH4S2	SKILL BASED SUBJECT-II  WATER POLLUTION AND MANAGEMENT	Unit –III : Sample-preservation and pre concentration method- carbon absorption method, freeze concentration method, solvent extraction method. Determination of iron using spectrophotometric method, atomic absorption method. -included
Sem IV	21UCH4CM	CORE CHEMISTRY PRACTICAL – II  INORGANIC VOLUMETRIC AND ORGANIC QUALITATIVE ANALYSIS	Melting point and FT-IR spectrum of organic compounds. - included
Sem V	21UCH505	CORE CHEMISTRY PAPER – V SPECTROSCOPY AND CHROMATOGRAPHIC TECHNIQUE	Instead of Raman spectra, Chromatographic techniques included
Sem V	21UCH506	CORE CHEMISTRY PAPER – VI  INORGANIC CHEMISTRY	UNIT – I :ligand, Types, Industrial applications of Chelation, EAN rule, square planar and octahedral  UNIT – II: Basic difference between nuclear reaction and conventional chemical reaction  UNIT – V: advantages of inorganic solvents over organic solvents
Sem V	21UCH507	CORE CHEMISTRY PAPER – VII  ORGANIC REACTION MECHANISM	Specifying absolute configuration – D, L nomenclature

Sem V	21UCH508	CORE CHEMISTRY PAPER - VIII  PHYSICAL CHEMISTRY - I	UNIT – IV  Sorption – Absorption, Adsorption-Types of adsorption, adsorption of gases by solids. Adsorption isotherms – Freundlich, Langmuir. Adsorption of solutes from solutions. Application of adsorption.
Sem VI	21UCH609	CORE CHEMISTRY PAPER – IX  SOLID STATE AND COORDINATION CHEMISTRY	UNIT III : Alloys in automobile industry and construction sectors
Sem VI	21UCH610	CORE CHEMISTRY PAPER – X  CHEMISTRY OF NATURAL PRODUCTS	UNIT –I  classification isolation and commercial value of essential oils  UNIT-II  phytochemical isolation of naturally occurring products
Sem VI	21UCH6S3	SKILL BASED SUBJECT – III FOOD CHEMISTRY	UNIT –V  Diary product related topic included instead of calorific value of food
Sem VI	21UCH6CN	CORE CHEMISTRY PRACTICAL – III  GRAVIMETRIC ANALYSIS	Gravimetric Analysis: Metal analysis in cosmetic products using AAS.
Sem VI	21UCH6CO	CORECHEMISTRY PRACTICAL – IV  PHYSICAL CHEMISTRY EXPERIMENTS	Conductometric Titration (Strong acid Vs Strong base)  Potentiometric Titration (Acid-Base Titration HCl Vs NaOH CH <sub>3</sub> COOH Vs Na <sub>2</sub> CO <sub>3</sub> )  Potentiometric Titration (Redox Titration FAS Vs KMnO <sub>4</sub> )  Estimation of Manganese by colorimetric method- included
Sem VI	21UCH6CP	CORECHEMISTRY PRACTICAL – V  APPLICATION ORIENTED PRACTICAL	V. Day to day activity related experiments. 1. Natural Product extraction using Rotary vapour evaporator. 2. Water quality analysis using hydrometer. 3. Milk analysis using lactometer. 4. Green synthesis reactions in microwave oven- Were Included

<b>SEM III</b>	<b>20UCH1A1/ 20UCH2A1</b>	<b>ALLIED CHEMISTRY PAPER – I</b>  <b>21UCH1A1/ 21UCH2A1</b>	<p><b>Unit –I</b> Compounds of Borane: Preparation, property, Uses and structure of diborane.</p> <p><b>Unit-II</b> Hybridization and VSEPR theory-Hybridization of BeCl<sub>2</sub>, H<sub>2</sub>O, CH<sub>4</sub>and NH<sub>3</sub>.</p> <p><b>Unit-V</b> Petroleum-Classification of Petroleum-Refining of crude oil-Cottrell’s Process-Removal of Sulphur Compounds-Fractional distillation- Fraction by distillation of crude-Important liquid fuels derived from Petroleum-Gasoline Oil-Kerosene Oil-Diesel Oil.</p> <p>The above topics were newly included.</p>
<b>SEM IV</b>	<b>20UCH1A2/ 20UCH2A2</b>	<b>ALLIED CHEMISTRY PAPER – II</b>  <b>21UCH1A2/ 21UCH2A2</b>	<p><b>Unit-I</b> Pauling theory and its application to Potassium Hexa cyanoferrate (II), Tetracyano nickelate (II) ion</p> <p><b>Unit-III</b> Vitamins-Definition-Classification-Sources-Deficiency-Disease.</p> <p><b>Unit-IV</b> Adsorption-Adsorption versus absorption- types of adsorption-physical adsorption-chemical adsorption-factors affecting adsorption-difference between physical and chemical adsorption-applications of adsorption.</p> <p>The above topics were newly included.</p>

Other Academic Activities:

Signature of the Board Members

<b>S.No.</b>	<b>Name</b>	<b>Designation</b>	<b>Signature</b>

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Signature of the Chairman of the Board