



V.V.SANGHA'S

**SHREE KHASGATESH COLLEGE OF ARTS, COMMERCE AND SCIENCE
TALIKOTI**

Affiliated to Rani Channamma University, Belagavi
NAAC Accredited – 'B' Grade

DEPARTMENT OF CHEMISTRY




Programme Outcome (Pos)

Programme Specific Outcomes (PSOs)

Course Outcome (Cos)


HEAD

Department of Chemistry
S.K. Arts, Commerce & Science
College, Talikoti-586214, Dist-Vijayapur


PRINCIPAL
S. K. College of Arts, Comm. & Science,
TALIKOTI-586214, Dist-Vijayapur
S. K. College of Arts, Comm. & Science, Talikoti, Dist:Vijayapur

PROGRAMME OUTCOME (POs)

PO1: Students will gain elementary basic knowledge in Chemistry and become familiar with different branches of chemistry.

PO2: Student will appreciate the role of Chemistry in daily life, nature.

PO3: Students will get opportunities to enter into higher education or job .

PROGRAMME SPECIFIC OUTCOMES(PSOs)

PSO1:- To develop strong and competent knowledge in theoretical and practical chemistry.

PSO2:- Students will become able to explain structure, reactions and mechanism of various reactions belonging to different classes of organic and inorganic compounds.

PSO3:- Students will understand various processes, laws and theorems physical chemistry and will become able to solve the numerical problems.

PSO4:- Students will develop various technical and analytical skills through laboratory training.

PSO5:- Students will become aware about the importance and impact of chemistry on environment and daily life.

COURSE OUTCOMES

Class: B. Sc I sem

CO1: Understanding of atomic structure through various atomic models, quantum numbers and rules in filling atomic orbitals.

CO2: Imparting essential knowledge in chemical bonding factors affecting bonding and Born-Haber's Cycle applications to NaCl.

CO3: Various methods in analysis to solve numerical and analytical problems.

CO4: To develop skills of quantitative analysis using different types of titrations.

CO5: Students will gain theoretical knowledge in analytical techniques in purification of organic compounds such as crystallisation, Sublimation, MP & BP.

CO6: To know stereochemistry & various conformations of organic molecules

CO7: To know basic principle of UV spectroscopy electronic transition & its applications.

PCO1: Inorganic volumetric experiments.

COURSE OUTCOME FOR II SEM

CO1: Understanding the concept of hybridisation geometry of inorganic molecules based on various theories.

☛ CO2: To study the advantages of organic reagents in inorganic analysis.

CO3: Study the preparation and reactions mechanism of alkenes, Diene and alkynes.

CO4: Students will get the knowledge of different process energies in thermo dynamics.

CO5: Students will learn about reaction mechanism of aromatic hydrocarbon.

CO6: They will learn to determine the structure of solid and liquids using various methods.

PCO1: Identification & preparation of organic compounds & their derivatives.

B. Sc III Sem. COURSE OUTCOME

CO1: Students study various metallurgical process & extractions of metals.

CO2: Students study the preparation of & reaction of nonaqueous solvents.

CO3: Classification & different concept of acids & bases.

CO4: Students learn about the orientation of substituents in aromatic compounds with different fundamental group

CO5: Students study the classification, nomenclature & reaction mechanism of alcohol & phenol.

CO6: Students able to determine molecular weight of the colligative properties.

CO7: Understand the basic concepts & structure determination using IR spectroscopy.

CO8: Students know the concept of thermodynamics & able to derive the equation of thermodynamics.

PCO1: Students know how to determine rate constant of I & II order.

PCO 2: Students learn determination of properties of liquids by experimentally.

COURSE OUTCOME FOR IV SEM

CO1: General characteristics of d-block and f-block elements.

CO2: Students will get the knowledge of elements in biological process

☛ CO3: To study the concept of role of chemistry in environment.

CO4: Nomenclature, structure, classification and mechanism of aldehyde, ketones, carboxylic acid, aromatic amines ethers and peroxides.

CO5: Students will understand the theoretical knowledge of electrolytes and application of conductance measurements.

CO6: Determination of rate constant for second order reaction by different methods & theories.

PCO1: Qualitative analysis of simple inorganic salts.

Course outcome for V sem.

CO1: Nomenclature, isomerisation & theories of co-ordination chemistry.

CO2: Students understand principles of gravimetric analysis.

CO3: Students able to determine types, structure & application of inorganic chemistry.

CO4: Understanding the concept of Green Chemistry.

CO5: Classification & aromaticity of heterocyclic compounds.

CO6: Students understand synthetic application & reaction mechanism.

CO7: Study of general aspects of chemical equilibrium & kinetics of chain reaction.

PCO1: Volumetric analysis of iron copper & calcium.

PCO2: Experimental study of conductometric titration.

Course Outcome For V sem. Paper-II

CO1: Students give brief account of synthesis significance, types & application of alloys, abrasives & glass.

CO2: Students understand manufacture composition & characteristics.

CO3: Students know preparation, mechanism & application of oxidising & reducing agents.

CO4: Students understand principle & instrumentation of mass spectroscopy.

CO5: Know the colour & constitution, synthesis of different dyes.

CO6: Study of theories of absorption & industrial application of catalyst.

CO7: Study of general aspects of chemical equilibrium & kinetics of chain reaction.

PCO1: Volumetric analysis of iron, copper, zinc & calcium.

PCO2: Experimental study of conductometric titration.

COURSE OUTCOME FOR VI SEM PAPER-1

CO1: They will understand the concept of CFT with respect to octahedral and square planar complexes calculation of CFSE and properties of complexes.

CO2: Students will learn formation and stability constant of metal-ligand Equilibrium, factors affecting the stability of the metal complex and chelate.

CO3: Students will get the knowledge of classification of organo transition metal complexes, 18 electron rule with respect to OMC complexes structure bonding in metal olefins and ferrocene.

CO4: Understanding the concept of Haworth and Conformational formulae of glucose & fructose their synthesis and intercombination.

CO5: Classification and importance of vit-A, B, B, C, D and E & synthesis of amino acids, peptide, protein and terpenoids.

CO6: To study the concept of P, E curve for BMOs & ABMO electronic transition dipole moment and its application.

CO7: Students will get the knowledge of determination and classification of molar masses of polymers by using different methods.

CO8: To study the different photoelectric methods.

PCO1: Organic estimation & determination of saponification & iodine values of oils.

COURSE OUTCOME FOR VI SEM PAPER-2

CO1: Students acquire knowledge of paper & column chromatography.

CO2: Students understand the principle, instrumentation & application of different analytical methods.

CO3: Students acquire knowledge of nutrients and determination of various parameters of soil nutrients.

CO4: To study the concepts of electronic spectrum of metal complexes.

CO5: Students acquire knowledge of manufacturing and cleaning action of soaps and detergents.

CO6: Students understand the basics of NMR spectroscopy in the study of some simple organic compounds.

CO7: They will learn the concept of photochemical laws quantum efficiency and photochemical process.

CO8: To study the reaction mechanism of various named reactions.

PCO1: Students acquire practical knowledge of gravimetric analysis of ores.

PCO2: Experimental study of potentiometric titrations and colorimetric methods by using Beers Lamberts law

COURSE OUTCOME OF I SEM (CBCS)

CO1: Students understand atomic structure through various atomic models, significance of quantum numbers and rules for filling atomic orbitals.

CO2: Students impart essential knowledge in chemical bonding factors affecting bonding study about different methods.

CO3: Students understand the fundamentals of organic chemistry.

CO4: Study the structure, shape and reactivity of organic molecule.

CO5: Study the preparation and reaction mechanism of alkenes, Dienes and alkynes.

CO6: Students will gain theoretical knowledge in analytical techniques in purification of organic compounds such as crystallisation, sublimation, MP & BP.

CO7: To know stereochemistry & various conformations of organic molecules.

PCO1:

COURSE OUTCOME OF II SEM (CBCS)

CO1: Students will learn the concept of thermodynamics importance & principles of thermo chemistry.

CO2: Students understand the concept of electrolytes, degree of ionisation & factors affecting the degree of ionization.

CO3: To study the concept of ionic equilibria & chemical equilibrium.

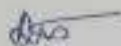
CO4: Students understand the concept of spectroscopy, UV spectroscopy & preparation of alkyl halides & Aryl halides.

CO5: They get knowledge of nomenclature, structure, bonding, Reaction mechanism of aldehydes, ketones, Carboxylic acid, Ethers & epoxides.

PCO1: Identification of organic compounds and preparation of their derivative.


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IQAC Co-ordinator,
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