

**Dr. B.B HEGDE FIRST GRADE COLLEGE KUNDAPURA**

**Department of Chemistry**

**Course Outcome as per National Educational Policy**

<b>Code</b>	<b>Course Name: Chemistry</b>	<b>Course Outcome</b>
DSC-1	Analytical and Organic Chemistry-I	<ul style="list-style-type: none"><li>• The concepts of chemical analysis, precision and statistical data treatment</li><li>• Prepare the solutions after calculating the required quantity of salts in preparing the reagents/solutions the conversion factor for determination.</li><li>• Handling of toxic chemicals, concentrated acids and organic solvents and practice safety procedure.</li><li>• The concepts of organic reactions and techniques of writing the movements of electrons, bond breaking, bond forming.</li></ul>
DSC-2	Inorganic and Physical Chemistry-I	<ul style="list-style-type: none"><li>• The Bohr's theory of atomic structure and how it was developed.</li><li>• Quantum numbers and their necessity in explaining the atomic structure.</li><li>• The concept of unit cell, Symmetry elements, Nernst</li></ul>

		distribution law.
BSCCHCN301	Analytical and Organic Chemistry-II	<ul style="list-style-type: none"> <li>• The concept of chromatography and its application.</li> <li>• The study of nomenclature of organic compounds and its various projection.</li> <li>• Study of reaction mechanism.</li> </ul>
BSCCHCN401	Inorganic and Physical Chemistry-II	<ul style="list-style-type: none"> <li>• The concept of thermodynamics and derivations</li> <li>• Study of structure of unit cell of various ionic crystals.</li> <li>• Electrochemistry and its application</li> </ul>
BSCCHCN501	Inorganic and Physical Chemistry	<ul style="list-style-type: none"> <li>• Understand the types of bonding in compounds and the theories to explain them</li> <li>• Understand nuclear reactions, the importance of nuclear phenomenon, radiation chemistry &amp; its applications.</li> <li>• Know the application of Quantum mechanics to particle in a box and hydrogen atom.</li> <li>• Know chemistry of main group elements and acid base concepts. Know chemical dynamics and kinetics of chemical reactions.</li> </ul>

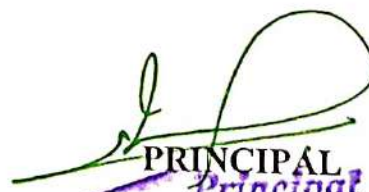
BSCCHCN502	Organic Chemistry and Spectroscopy	<ul style="list-style-type: none"> <li>• Differentiate aliphatic and aromatic compounds, understand the concept of resonance and write simple reaction mechanisms.</li> <li>• Identify some of the heterocyclic compounds, their structure and physiological properties.</li> <li>• Have the basic knowledge of molecular spectroscopic methods like rotational, vibrational, Raman, NMR and UV Spectroscopy.</li> </ul>
BSCCHCN601	Inorganic and Physical Chemistry	<ul style="list-style-type: none"> <li>• Know the Kinetics of complex formation and also the electronic spectra of complexes which will help them in selecting the methods of synthesis and identification of complex compounds.</li> <li>• Understand the theories of bonding in complex compounds.</li> <li>• Understand the principle of steam distillation and separation of components of binary mixtures.</li> <li>• Get introduced to</li> </ul>

		<p>thermal methods of analysis.</p> <ul style="list-style-type: none"> <li>Understand the concept of galvanic cells and potentiometric methods of quantitative analysis.</li> </ul>
BSCCHCN602	Organic Chemistry and Spectroscopy	<ul style="list-style-type: none"> <li>Know the mechanism of selected electrophilic and nucleophilic substitution reactions</li> <li>Understand the mechanism of addition reactions in organic compounds.</li> <li>Get exposure to symmetry and group theory.</li> <li>Get introduction to photo electron spectroscopy and flame photometry.</li> </ul>



HOD

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