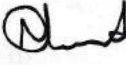


B.Sc. Sem. 1&2

DEPARTMENT OF CHEMISTRY CO,PO &PSO

Programme Outcome	Students will gain basic knowledge for fundamental aspects of chemistry like Thermodynamics Energy, chemical properties, chemical structure, Electro analytical techniques and literature of analytical chemistry
Programme Specific Outcome	Student Understand the basic concept of chemistry and they will be able to work in the next year the various branch of chemistry in B.Sc. programme.
Course	Course Out Comes
CC CH : 101	To enable the students to learn a basic concept of chemistry They know different structural and geometry, Knowledge about thermodynamics and its terms, f- block elements, various chemical properties, Separation methods and its importance Students acquire knowledge for classical and electro- analytical techniques reaction mechanism, principal and application of different type of titration.
CC CH: 201	Students aware about various complex compounds and its IUPAC nomenclature, magnetic properties, splitting of CFT in Oh and Td. Students gain knowledge in stereo chemistry-Z nomenclature and conformation for organic chemistry. They also knowledge in chemical kinetics, nuclear chemistry, Students also gain knowledge from literature of analytical chemistry
Laboratory course-I & II	Students can analyses unknown inorganic substance by qualitative method and they can prepare different concentration standard solutions. Students can analysis organic compound by qualitative method and volumetric analysis.


 Convener
IQAC Committee
 H.N.S.B. Ltd. Science College
 Himatnagar


 Head
 Chemistry Department,
 The H.N.S.B. Ltd., Science College
 Himatnagar-383001, Dist. S.K.


 Principal
 The H.N.S.B. Ltd. Science College
 Himatnagar-383001, Dist. S.K.



DEPARTMENT OF CHEMISTRY B.Sc. Sem. 3&4 CO,PO &PSO

Programme Outcome	Students will gain basic knowledge for fundamental aspects of chemistry like Wave Mechanics, Electrophonic reactions, Acid Base Principles Physical properties, Amino Acid and peptides and environmental pollutions.
Programme Specific Outcome	Student Understand the basic concept of chemistry and they will be able to work in the second year the various branch of chemistry in B.Sc. programme.
Course	Course Out Comes
CC CH : 301	Students enable the knowledge of basic postulate of quantum mechanics, free radicals, various operators Lewis acid base, hybridization, partial properties and claperion closes equation concepts of chemical potential and degrahaum- Margules equation.
CC CH: 302	To enable the students of noble gases and periodic tables, amino acids depth knowledge of synthesis of amino acids, peptides and analysis, Fundamentals of electrophonic aromatic substitutions, and the physical and molecular properties of viscosity, surface tension refractive index and its application of specific refraction , molecular refraction and its optical activity.
SE-CH-302A	To enable the students to the knowledge of environmental pollution of air, land water and their impacts to the global era.
Laboratory course-III	To enable the students for separation and identification of water insoluble solids mixtures with its derivatives, and gain the knowledge of Colorimeter, conductivity meter, potentiometer and Refractometer and their operations.

Programme Outcome	Students will gain basic knowledge for fundamental aspects of chemistry like Crystal field, Coordination compounds, heterocyclic compounds, carbohydrates, basic spectroscopy techniques and the use of electrodes in electrochemistry.
Programme Specific Outcome	Student Understand the basic concept of chemistry and they will be able to work in the second year the various branch of chemistry in B.Sc. programme.
Course	Course Out Comes
CC CH : 401	To enable the students to learn about Crystal field theory, magnetic properties of coordination compounds. Heterocyclic compounds for five and six member carbohydrates as well as different titrations of acids.
CC CH: 402	To enable the students to learn about Boron hydrides basic spectroscopes techniques and its applications. Knowledge of Electrochemistry and different electrode used in the various instrumentation techniques.
SE-CH-402A	To enable the students the basic knowledge of name reactions than the students obtained the wide area of knowledge of intermediates pertain to industries.
Laboratory course-IV	To equip all the students for the basic knowledge of chemical analysis of inorganic chemistry of various cations and anions, volumetric techniques, as well as chromatographic Techniques.

DEPARTMENT OF CHEMISTRY B.Sc. Sem. 5&6 CO,PO &PSO

Programme Outcome	Students will gains basic knowledge for fundamental aspects of chemistry like organomettalic compounds, stereochemistry, terpenoids, macromolecules, NMR Spectroscopy and the acid base titrations and the fundamental knowledge of dyes and its applications.
Programme Specific Outcome	Student Understand the basic concept of chemistry and they will be able to work in the third year the various branch of chemistry in B.Sc. programme.
Course	Course Out Comes
CC CH : 501	To enable the students of learn about reaction mechanism of coordination compounds and organometalic compounds and corrosion with understand the importance.
CC CH: 502	To enable the students to learn about the fundamental knowledge of stereochemistry, carbohydrates, isoprenoids and nucleophilic substitution at saturated carbon atom with understand the importance.
CC-CH-503	To enable the students to learn about electromotive force, Statistical Thermodynamics and macromolecules with understand the importance.
CC-CH-504	To enable the students to learn about symmetry of molecules and NMR Spectroscopy and Acid base Titration with understand the importance.
SE-CH-505 A	To enable the students to learn about introduction and classification of dyes and its methods of synthesis and its wide applications.
Laboratory course-IV	To predict the outcome and mechanism of some organic separations, determination, identifications with preparation of derivatives. Various metals analysis by gravimetric and volumetric by conventional method.

Programme Outcome	Students will gains basic knowledge for fundamental aspects of chemistry like Crystal field, Coordination compounds, heterocyclic compounds, carbohydrates, basic spectroscopy techniques and the use of electrodes in electrochemistry.
Programme Specific Outcome	Student Understand the basic concept of chemistry and they will be able to work in the third year the various branch of chemistry in B.Sc. programme.
Course	Course Out Comes
CC CH : 601	To equip the knowledge of molecular orbital theory, hybridization, physical and chemical properties of metal carbonyl and essential elements as well as the study of invitro and in vitro in bioorganic chemistry.
CC CH: 602	To enable the students the basic knowledge of Markonicof and antimarkonicof and keto enol tautomerism and the mechanism of Bimolecular displacement of SN ₁ and SN ₂ reactions.
CC-CH-603	To enable the students to learn about the First, Second, Third Law of Thermodynamics, Photochemical Reactions and its theoretical aspects.
CC-CH-604	To develop the students based on the term sybols and spectrs related to the d1-d9 octahydral complex. And learn about the symmetry and Spectroscopy related to the IR,UV,and NMR Spectra and the TLC,HPLC Chromatography techniques and its applications.
SE-CH-605A	To enable the students to learn about the ploymerization,mechanism of ploymerisation, kinetics of ploymerisation experimental methods for the determination molar mass of polymer sample by viscosity, light scattering, osmometer, its explanations by Mn, Mw
Laboratory course-VI	To enable the knowledge amongst students of anions and cations ,estimations and preparations and intermediates application and used in the industries than the students can utilized their way of knowledge in the industries to develop the small scale.



[Signature]
Convener
FOAS

[Signature]
Head

[Signature]
Principal

Committee Chemist