

**Department of Chemistry**  
**Course Specific Outcome**

Semester	Paper /Course	Name of the Paper/Corse	Course Outcome
Semester-1	CC-1	Inorganic chemistry-1	This is a fundamental paper in which composition of mater and regarding various models or theories are given. Different natural and artificial elements and periodicity properties along with compound formation etc also co-relates to understand vast field of chemistry
	CC-2	Physical chemistry-1	In this paper composition of gases, structures of crystals and properties of liquids and equilibria etc. are given, which help us to understand different physical properties of ,matter which build a foundation to develop understanding of different substances used in applied field .
	GE-1	Inorganic chemistry-1, and organic chemistry-1	This is a basic conceptual paper includes inorganic as well as organic chemistry .this paper helps to understand composition and bonding of matter as well as different organic reactions and their stereo - chemical changes
Semester-2	CC-3	Organic chemistry -1	This is a introductory paper in organic chemistry.it explains different procedure of naming of organic compounds i.e. IUPAC ,common name and study of stereo chemistry which develop a better function on organic chemistry
	CC-4	Physical chemistry-2	This paper includes principle of thermodynamics, various laws which are help full in daily life, industrial field ,medicine manufacturing field mechanical field etc.
	GE-2	Physical chemistry-1, organic chemistry-2	This includes thermodynamics, equilibria and different aliphatic and aromatic organic reactions and their mechanism which help various importance to understand different chemical as well as biochemical process.
Semester-3	CC-5	Inorganic chemistry-2	This paper includes study about metal extractions from respective ores and analytical explanations of S,P blocks elements and their compounds which help to understand the industrial applications of various elements and their compounds .
	CC-6	Organic chemistry-2	This is a most important paper in organic chemistry where synthesis of organic halaides ,alcohols ,phenols , ethers, carbonyl compounds ,acids etc. are given .these synthesis have most of applications in daily life as well as in the field of industry of also
	CC-7	Physical chemistry -3	This paper includes equilibria of different phases kinetics of chemical reaction as well as catalytic process equilibria helps us to study about different phases of different thermodynamics parameter .kinetics and catalysis helps us to understand the rate of reactions which have large applications in

			biochemical and industrial field.
	SEC-1	Renewable energy and energy harvesting	After completion of this paper student can able to understand about renewable and non-renewable resources with its implementation in daily life through different harvesting process .
Semester-4	CC-8	Inorganic chemistry -3	This includes study about co-ordination compounds ,which have large applications in the field of medicines like chemotherapy and bio-inorganic chemistry helps us to understand biological process properly
	CC-9	Organic chemistry-3	This is a organic synthesis paper where aromatic , aromatic heterocyclic and alkaloids synthesis and properties are explained .these have much applications in chemical and medical industries
	CC-10	Physical chemistry-4	This includes details study about electro chemistry .Electro chemistry has importance in the extraction of metals electrocoating ,electro printing, dialysis etc.
	SEC-2	Fuel chemistry	After completion of this paper student can able to understand about different fuel resources available in the earth crust and process of extraction
	CC-11	Organic chemistry-4	This paper includes the study about different organic spectroscopic data .
Semester-5	CC-12	Physical chemistry-5	This paper includes the study about quantum chemistry and molecular Spectroscopy. after completion of this paper student able to understand behaviour of microscopic particles, electronic, rotational ,vibration motion of particles which have importance in the field of food ,medicines , and technologies .
	DSE-1	Polymer chemistry	This includes the study about macro molecules which are synthesised from monomer. After completion of this paper student able to understand synthesis, applications of polymers like nylon, rayon, decagon , polythene etc
	DSE-2	Green chemistry	This includes different chemical changes involved in ecosystem. After completing this paper student able to understand different chemical changes and precautions to preserve our green environment by using 12 principles.
Semester-6	CC-13	Inorganic chemistry-4	After completion of this paper student able to understand nature of metal -carbon bond involved in organometallic compounds . organometallics have most of applications in the field of food industries, medicinal industries etc.
	CC-14	Organic chemistry-5	This includes study about amino acids , enzymes, nucleic acids , pharmaceutical compounds etc. after completion of this paper student able to understand different biochemical process involved in living being and applications of pharmaceutical compounds against various diseases.
	DSE-3	Industrial chemistry	By studying industrial chemistry, it make the students well grounded in the principles and

		knowledge of scientific techniques of chemical industry and train students for professional participation in the chemical , petrochemical, biochemical fields.
	DSE-4	This includes project paper where student can develop own field of interest ,innovative ideas , research interests etc. by taking guidance of teacher.