CHEMISTRY MDC

COURSE OUTCOME OF NEP CHEMISTRY (GEN) SYLLABUS (CO,PO,PSO)

LEVEL OF TEACHING (UG)	COURSE CODE [CEM-G]	PAPER NO.	PAPER TITLE	COURSE OUTCOME(CO)
SEM-1	CC1 CC1 PRAC SEC-TH	CHEM-MD-CC1 CHEM-MD-CC1-1-P CHEM-MD-SEC-TH	MODULE -I MODULE-II MODULE-III PRACTICAL CHEMISTRY IN DAILY LIFE TUTORIAL	To learn the basic concept of atomic structure & chemical periodicity. To understand chemical bonding &molecular structure and fundamentals of organic stereochemistry To learn kinetic of some reactions and concept of thermodynamics. Concept of acid base titrations and various types of redox titrations. To learn about dairy products, food additives, food colours, vitamins, oil fat, soaps & detergents, renewable energy .polymers. To know estimation of vitamin-c, iodine number, saponification number.
SEM-2	CC2 CC2 PRAC	CHEM-MD-CC2 CHEM-MD-CC2-2-P	MODULE-I MODULE-II MODULE-III PRACTICAL	To learn about the kinetic theory of gases &real gases. To understand the nature of chemical bonding. To learn the stereochemical features, reactivity-selectivity principle in the light of Hammond' postulate and concept of reactive intermediates, reaction kinetics& reaction kinetics &substitution reaction. Concept of Iodometric titration and estimation of metal content.
SEM-3	CC3 CC3 PRAC	CHEM-MD-CC3 CHEM-MD-CC3-3-P	MODULE-I MODULE-II MODULE-III PRACTICAL	To learn about different types of substitution in aromatic system, concept of organic acids &bases, tautomerism. To learn eliminations &substitution reactions. To understand the chemistry of alkenes &alkynes Identifications of pure organic solid & liquid compounds.
SEM-4	CC4	CHEM-MD-CC4	MODULE-I MODULE-II MODULE-III	To learn about orbital designations, concept of HOMO<LUMO, MO diagrams, metallic bond, weak chemical forces. To learn acid-base concept, pH, buffer, indicators. To understand the principles of inorganic

CHEMISTRY MDC

COURSE OUTCOME OF NEP CHEMISTRY (GEN) SYLLABUS (CO,PO,PSO)

	CC4 PRAC	CHEM-MD-CC4-4-P	PRACTICAL	qualitative analysis. To understand the semimicro analysis of inorganic mixtures.
	CC5 CC5 PRAC	CHEM-MD-CC5 CHEM-MD-CC5-5-PRAC	MODULE-I MODULE-I MODULE-III PRACTICAL	To learn the 2nd law of thermodynamics,carnot cycle; . Concept of entropy. To learn chemical equilibrium, conductance and ionic equilibrium. To study the kinetics of the inversion of cane sugar, and determination of the rate constant of different chemical reactions.
SEM-5	CC6 & CC7 CC6 & CC 7 PRAC	CHEM-MD-CC6 & CC7 CHEM-MD-CC6 & CC7 PRAC	MODULE-I MODULE-II MODULE-III PRACTICAL	To learn about conformational stereochemical features., chemistry of carbonyl compounds and acidity of ulfa hydrogen of carbonyl group, and mechanism of substitution at sp2 carbon. To detection of single solid organic compound by qualitative analysis. To learn viscosity, surface tension, laws of crystallography, colligative properties, phase equilibrium and electrochemistry To know the practical knowledge of physical chemistry.
SEM-6	CC8	CHEM-MD-CC8 & CC8 PRAC	MODULE-I MODULE-II MODULE-III & PRACTICAL	To learn the basics coordination chemistry, crystal field theory and d-d transitions; orbital and spin magnetic moments. To learn radioactivity, nuclear reactions and redox reactions. To learn the estimation of mixtures of metal ions.

CHEMISTRY MDC

COURSE OUTCOME OF NEP CHEMISTRY (GEN) SYLLABUS (CO,PO,PSO)

SERIAL NO	PROGRAM OUTCOME	PROGRAM OUTCOME ATTRIBUTE (PO)
1	PO1	Critical thinking
2	PO2	Creativity
3	PO3	Analytical reasoning\ thinking
4	PO4	Research-related skills
5	PO5	Coordinating\collaborating with others
6	PO6	Digital and technological skills
7	PO7	Communication skills
8	PO8	Environmental awareness and action

PROGRAM SPECIFIC OUTCOMES NOS	PROGRAM SPECIFIC OUTCOMES (PSO)
PSO1	Apply knowledge in emerging and varied areas of chemistry for higher studies, research and industry ,analytical,environmental ,polymer and biochemistry.
PSO2	To develop leadership and managerial skills promoting the need for lifelong learning as required for a competent professional with the different branches of chemistry like analytical, organic, inorganic, physical chemistry and environmental chemistry.
PSO3	To develop knowledge about the fundamentals applications of chemical and scientific theories. And also to gain a neat experimental hand in conformity with good laboratory practices including safety measures