

Shahid Matangini Hazra Govt. General Degree College for Women
Department of Chemistry
POs, PSOs and COs

Programme Outcomes (POs)

PO	Description
PO1	Students acquire basic ideas about fundamental laws, , basic rules and principles of chemistry that involve in different types of physico-chemical phenomena.
PO2	Students gain knowledge about physical and chemical properties, spectral and magnetic properties, optical and geometrical properties, structures and bonding of organic and inorganic compounds and also biomolecules.
PO3	Students learn about syntheses, separation techniques of compounds, chemical reaction mechanisms and kinetics.
PO4	Students acquire knowledge about the basic application, function, use and also adverse effects of different kinds of materials.
PO5	Students gain basic ideas about the analysis and characterization of different compounds as well as biological and environmental samples.
PO6	Students become aware about the impact of chemistry on the environment, society and also everyday life.

Programme Specific Outcomes (PSOs)

PSO	Description
PSO1	Be able to explain properties of matter, thermodynamics and kinetics of physico-chemical phenomena of macro and microscopic systems.
PSO2	Acquiring basic knowledge and understanding to carry out the synthesis, characterization, analysis and separation of compounds.
PSO3	Acquiring knowledge and idea about the different properties, structure and bonding, reaction mechanism application and use of compounds.

Courses Outcomes (COs)

4 year Honours (Single Major)

Course title & code	Course	Outcomes
SEM-I(MJ101) Organic Chemistry-I a) Bonding and Physical Properties b) General Treatment of Reaction Mechanism I c) Stereochemistry I	CO1	CO1.1: Basic idea about bonding and Properties of organic molecules CO1.2: Acquire knowledge about the reaction mechanism of organic reaction CO1.3: To understand symmetry and optical activity of chiral compounds.
SEM-I(SEC01) Chemistry of Cosmetics & Perfumes	CO2	CO2.1: Acquiring knowledge about preparation and uses. CO2.2: Get general idea about adverse effects of cosmetics & perfumes
SEM-I(MI01)	CO3	CO3.1: Know about the fundamentals behavior of subatomic particles and their interaction in atoms.

Atomic Structure, Acids and Bases, Redox Reactions, & States of Matter		CO3.2: Know about the acid-base nature of different substances. CO3.3: Know about the redox nature of different substances. CO3.4: Acquire knowledge about the properties of gaseous, solid & liquid state of matter.
SEM-II(MJ102) Inorganic Chemistry-I a) Extra nuclear Structure of atom b) Chemical periodicity c) Acid-Base reactions d) Redox Reactions and precipitation reactions	CO4	CO4.1: Know about the fundamentals behavior of subatomic particles and their interaction in atoms. CO4.2: Explain the nature of elements and their different periodic properties. CO4.3: Know about the acid-base nature of different substances. CO4.4: Know about the redox nature of different substances.
SEM-II(SEC02) Medicinal & Pharmaceutical Chemistry	CO5	CO5.1: Acquiring knowledge about natural resources of medical & pharmaceutical ingredients. CO5.2: Get general idea about the use of natural herbal plants
SEM-II(MI02) States of Matter & Chemical Kinetics	CO6	CO6.1: Acquire knowledge about the behaviour of ideal gases and real gases. CO6.2: Know about the properties of solid & liquid state of matter. CO6.3: Gain knowledge about the kinetics of chemical reactions.

3 year Multidisciplinary Studies

Course title & code	Course	Outcomes
SEM-I(MJA1) or SEM-II(MJB1) Atomic Structure, Redox Reactions and precipitation reactions, general organic chemistry & aliphatic hydrocarbons	CO1	CO1.1: Know about the fundamentals behavior of subatomic particles and their interaction in atoms. CO1.2: Know about the redox nature of different substances. CO1.3: Basic idea about bonding and Properties of organic molecules CO1.4: To understand symmetry and optical activity of chiral compounds.
SEM-I (MI-1/C1) Atomic Structure, Acids and Bases, Redox Reactions, & States of Matter	CO2	CO2.1: Know about the fundamental behavior of subatomic particles and their interaction in atoms. CO2.2: Know about the acid-base nature of different substances. CO2.3: Know about the redox nature of different substances. CO2.4: Acquire knowledge about the properties of gaseous, solid & liquid state of matter.
SEM-I(SEC01) Chemistry of Cosmetics & Perfumes	CO3	CO3.1: Acquiring knowledge about preparation and uses. CO3.2: Get general idea about adverse effects of cosmetics & perfumes
SEM-II(MI-2/C2) States of Matter & Chemical Kinetics	CO4	CO4.1: Acquire knowledge about the behaviour of ideal gases and real gases.

		CO4.2: Know about the properties of solid & liquid state of matter. CO4.3: Gain knowledge about the kinetics of chemical reactions.
SEM-II(SEC02) Medicinal & Pharmaceutical Chemistry	CO5	CO5.1: Acquiring knowledge about natural resources of medical & pharmaceutical ingredients. CO5.2: Get general idea about the use of natural herbal plants