



DPG DEGREE COLLEGE

(Affiliated to MDU Rohtak)

Sector-34, Near Marble Market, Gurugram 122001

B.Sc.: Chemistry

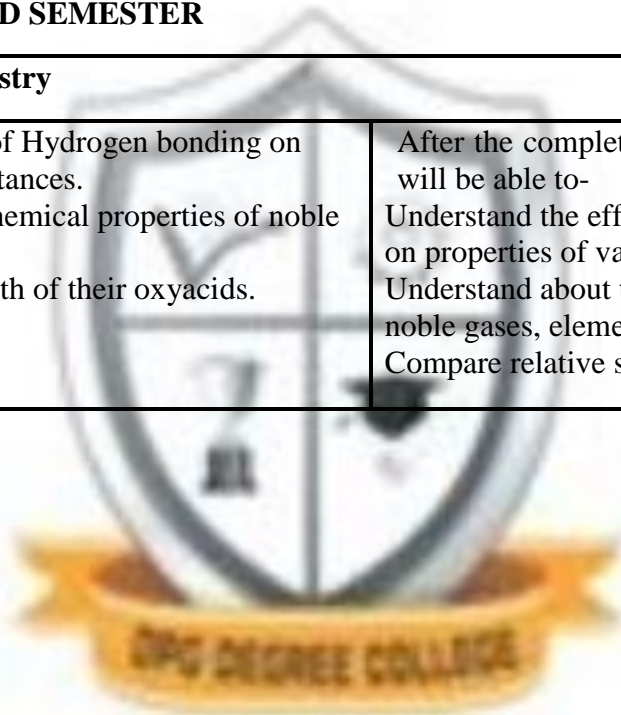
B.Sc. Program outcomes listed as follows:

1. Understanding of basic concepts, fundamental principles related to various scientific phenomena and their relevance in day to day life.
2. Development of Research Aptitude.
3. Development of Scientific Temper.
4. Critical thinking and creative ability.

COURSE OBJECTIVES & COURSE OUTCOMES-

S.N.	COURSE OBJECTIVES	COURSE OUTCOMES
1	CHEMISTRY: B.SC. IST SEMESTER	
	Paper: Inorganic Chemistry	
	<p>To define various principles related to atomic orbitals.</p> <p>To identify and define effective nuclear charge, ionisation energy and other terms related to periodic table.</p> <p>To explain the valence bond theory and VSEPR theory and determines shapes of various inorganic molecules.</p> <p>To expose students to the facts and terms of ionic structures and polarization.</p>	<p>After the completion of the course, students will be able to-</p> <p>Define various principles related to atomic orbitals.</p> <p>Identify and define effective nuclear charge, ionisation energy and other terms related to periodic table.</p> <p>Explain the valence bond theory and VSEPR theory and determines shapes of various inorganic molecules.</p> <p>Explain facts and terms of ionic structures and polarization.</p>
	Paper: Physical Chemistry	
	<ol style="list-style-type: none">1. To explore various velocities of gases and equations related to them.2. To identify and define critical phenomenon and gas liquefaction.3. To explain the structure and properties of liquids.4. To define structure of solids and various laws and equation.	<p>After the completion of the course, Students will be able to-</p> <p>Explore various velocities of gases and equations related to them.</p> <p>Identify and define critical phenomenon and gas liquefaction.</p> <p>Explain the structure and properties of liquids.</p> <p>Define structure of solids and various laws and equation.</p>

	Paper : Organic Chemistry	
	<p>To define various resonance and hyper conjugation. To identify and define different isomerisms and configurations. To explain the mechanisms of different reactions. To understand nomenclature and properties of alkanes.</p>	<p>After the completion of the course, students will be able to-</p> <p>Define various resonances and hyper conjugation. Identify and define different isomerisms and configurations. Explaining the mechanisms of different reactions. Understand nomenclature and properties of alkanes.</p>
2.	CHEMISTRY B.SC IIND SEMESTER	
	Paper: Inorganic Chemistry	
	<p>To understand the effect of Hydrogen bonding on properties of various substances. To understand about the chemical properties of noble elements of periodic table. To compare relative strength of their oxyacids.</p>	<p>After the completion of the course, students will be able to-</p> <p>Understand the effect of Hydrogen bonding on properties of various substances. Understand about the chemical properties of noble gases, elements of periodic table. Compare relative strength of their oxyacids.</p>



Paper: Physical Chemistry	
<ul style="list-style-type: none"> · To understand the various types of rate of reaction and also the factors responsible for affecting the rate of reactions. · To study about the effect of temperature on reaction kinetics. · To explain electrolytic conductance, molar conductance and various laws associated to them in determining various properties. 	<p>After the completion of the course, students will be able to-</p> <p>Understand the various types of rate of reaction and also the factors responsible for affecting the rate of reactions.</p> <p>Study about the effect of temperature on reaction kinetics.</p> <p>Explain electrolytic conductance, molar conductance and various laws associated to them in determining various properties.</p>
Paper: Organic Chemistry	
<p>To understand various mechanisms and properties of alkenes.</p> <p>To understand various mechanisms related to aromatic compounds.</p> <p>To expose students to mechanisms and reactions involved in dienes and alkynes.</p> <p>To understand in nomenclature and mechanisms of alkyl and aryl halides.</p>	<p>After the completion of the course, students will be able to-</p> <p>Understand various mechanisms and properties of alkenes.</p> <p>Understand various mechanisms related to aromatic compounds.</p> <p>Explain mechanisms and reactions involved in dienes and alkynes.</p> <p>Understand in nomenclature and mechanisms of alkyl and aryl halides.</p>
CHEMISTRY : B.SC III SEMESTER	
Paper: Inorganic Chemistry	
<p>To introduce the facts, terms and basic concepts inorganic chemistry</p> <p>To understand the bonding in compounds</p> <p>To know about basic theory of coordination</p> <p>To know properties of d block elements</p>	<p>After The Completion Of The Course, students will be able to-</p> <p>Able to predict the geometries and shapes of molecule.</p> <p>Able to know the concepts of acids and base.</p> <p>Able to know the coordination compounds.</p>
Paper: Physical Chemistry	
<p>To introduce the facts, terms and basic concepts Physical chemistry</p> <p>To understand the laws of thermodynamics.</p> <p>To know about basic concepts of entropy, internal energy.</p> <p>To know about different thermodynamics process.</p>	<p>After The Completion Of The Course, Students will be able to-</p> <p>Able to define the concept of thermodynamics</p> <p>Able to understand the concept of thermodynamic laws</p> <p>Able to elaborate the thermodynamic process</p>



