	SUBJECT: C	HEMISTRY			S	D: XI
I	Month / No	Name of the Unit /	Learning Outcomes	Suggested Activities/	Assignment	Assessment
	of Working	Chapter/Topic		Projects under Internal		
ļ	Days			Assessment/PRACTICALS		
	APRIL	CHAPTER-1	Student will be able	TITRATION	NUMERICALS	Oral and
		Some Basic Concepts of	to-		BASED	written test
		Chemistry	1. Use the scientific		WORKSHEET	
		General Introduction:	method to create,			
		Importance and scope of	test, and evaluate a			
		Chemistry. Nature of	hypothesis.			
		matter, laws of chemical	2. determine the			
		combination, ballon's				
		of elements, atoms and	aloctrolyto and an			
		molecules. Atomic and				
		molecular masses mole	electrolyte			
		concept and molar mass	4 Students will gain			
		percentage composition.	an understanding of			
		empirical and molecular	the fundamental			
		formula	properties of atoms.			
			molecules, and the			
			various states of			
			matter			
		CHAPTER-2				
		Structure of atom	Students will be		WORKSHEET	
		concept of orbitals,	able to-			
		quantum numbers,	1. write the			
		shapes of s, p and d	electronic			
		orbitals, rules for filling	configuration of			
		electrons in orbitals -	elements and			
		Aurbau principle, Pauli s				
		Hund's rule electronic				
		configuration of atoms.				
		stability of half-filled and				
		completely filled orbitals.				
ŀ	IUNF	Some Basic Concents of	Students will be		NUMERICALS	Oral and
	JOINE	Chemistry(contd.)	able to do		RASED	written test
		Chemical reactions	stoichiometric		WORKSHEFT	whiten test
		Stoichiometry and	calculations of		WORKSHEET	
		calculations based on	chemical equations			
		stoichiometry	to determine the			
		,	quantities of			
			reactants and			
			products, limiting			
			reagent problems,			
			and enthalpies of			
			reactions.			
		CHAPTER-3	The students will be			
		Classification of			NCERI Based	
		in Properties Significance	1.Understand about		worksneet	
		of classification brief	classification of			
		history of the	elements 2.Cherish			
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# SUBJECT: CHEMISTRY

SORIECI: C	HEIVIISTRY			51	D: XI
	development of periodic	with the essentials			
	table, modern periodic	of Mendeleev and			
	law and the present form	Modern periodic			
	of periodic table,	table			
	periodic trends in	<ol><li>Classify the</li></ol>			
	properties of elements -	elements into			
	atomic radii, ionic radii,	different blocks viz.			
	inert gas radii, Ionization	s,p,d,f and get a			
	enthalpy, electron gain	detailed idea of			
	enthalpy,	their general			
	electronegativity,	characteristics			
	valency. Nomenclature of	4.Know about the			
	elements with atomic	periodic properties			
	number greater than	viz. Ionisation			
	100.	enthalpy, electron			
		gain enthalpy.			
		5.Electronegativity,			
		ionic and atomic			
		radii and their			
		variations in the			
		given form of the			
		periodic table			
		6.Correlate various			
		elements and their			
		physical properties			
		in the periodic table			
					DT_1
JULY					PT-1
JULY	CHAPTER-2	Students will gain	SAIT ΑΝΑΙΥSIS	NCERT BASED	PT-1 Oral and
JULY	CHAPTER-2 Structure of Atom	Students will gain	SALT ANALYSIS	NCERT BASED	PT-1 Oral and written test
JULY	<u>CHAPTER-2</u> Structure of Atom (contd.)	Students will gain an understanding of: a. the	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.)	Students will gain an understanding of: a. the fundamental	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron.	Students will gain an understanding of: a. the fundamental properties of atoms.	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	<u>CHAPTER-2</u> Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations.	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	<u>CHAPTER-2</u> Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations. Bohr's	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations,	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b.	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship,	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
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JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle CHAPTER-8 Redox reactions	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table The students will be	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle CHAPTER-8 Redox reactions Concept of oxidation and	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table The students will be able to 1.Electronic	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle CHAPTER-8 Redox reactions Concept of oxidation and reduction, redox	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table The students will be able to 1.Electronic concept of	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle CHAPTER-8 Redox reactions Concept of oxidation and reduction, redox reactions, oxidation	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table The students will be able to 1.Electronic concept of oxidation and	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle CHAPTER-8 Redox reactions Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table The students will be able to 1.Electronic concept of oxidation and reduction 2.Basic	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test
JULY	CHAPTER-2 Structure of Atom (contd.) Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars. Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle CHAPTER-8 Redox reactions Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions, in terms of loss	Students will gain an understanding of: a. the fundamental properties of atoms, molecules, and the various states of matter with an emphasis on the particulate nature of matter b. fundamental atomic structure and the periodicity of elements in the periodic table The students will be able to 1.Electronic concept of oxidation and reduction 2.Basic principles involved	SALT ANALYSIS	NCERT BASED QUESTIONS	PT-1 Oral and written test

#### SUBJECT: CHEMISTRY

change in oxidation number, applications of redox reactions. - Claculation of oxidation numbers in terms of electron transfer 5/various kinds of reactions in terms of redox reaction 6.Balancing of redox reactions using i) oxidation number method iii haf reaction method - Chemical Bonding and Molecular Structure Valence electrons, joinc bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent bond, covalent balloon theory, resonance, molecules and the formal charge of formal charge of parameters viz., Bond enthalty and Bond enthalty and Bond enthalty and Bond enthalty and Bond electronic concept of structures of the molecules	JUDILCI. C			5	D. AI
number, applications of redox reactions.       electron transfer involved in redox reactions 4. Calculation of oxidation numbers in terms of electron transfer 5.Various kinds of reactions in terms of redox reactions for edox reactions for edox reactions in terms of redox reactions in terms of redox reactions using () xxidation number method ii) half reaction method         CHAPTER-4       Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, different able to 1.Understand the dion parameters, Lewis structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory       Ball and stick model of 3.Calculate the molecules and the uika structures of simple molecules and the the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz, Bond angle, Bond length, Bond enthaly and Bond order which would give a complete knowledge of electronic concept of structures of the molecules		change in oxidation	3.Mechanism of		
redox reactions. reactions 4. Calculation of oxidation numbers in terms of redox reaction 6. Balancing of redox reactions using i) oxidation number method ii) half reaction method Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, bond parameters, Lewis approaches to types structure, polar character of covalent bond, covalent character of covalent bond, covalent bond, covalent character of covalent bond, covalent bon		number, applications of	electron transfer		
CHAPTER-4		redox reactions.	involved in redox		
4.Calculation of oxidation numbers in terms of electron transfer 5.Various kinds of reactions in terms of redox reaction 6.Balancing of redox reactions using i) oxidation number method ii) half reaction method       Image: Construction reaction 6.Balancing of redox reactions using i) oxidation number method ii) half reaction method         CHAPTER-4 Chemical Bonding and Molecular Structure bond, covalent bond, toond, covalent bond, of chemical bonding       The students will be able to able to able to able to different approaches to types structure, polar character of covalent bond, covalent character of to covalent bond, covalent character of to covalent bond, covalent character of theory, resonance, geometry of covalent molecules, VSEPR theory       Ball and stick different approaches to types structures of simple molecules and the theory resonance, geometry of covalent molecules, VSEPR theory       Ball and stick approaches to types to write the Lewis structures of simple molecules and the the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			reactions		
cxidation numbers in terms of redectron transfer 5.Various kinds of reactions in terms of redox reaction 6.Balancing of redox reactions using i) oxidation number method ii) half reaction method       Image: science intervention intervention is reaction 6.Balancing of redox reactions using i) oxidation number method ii) half reaction method         CHAPTER-4       The students will be able to       Image: science intervention is science intervention is science intervention is science intervention is science intervention is structure, polar character of covalent bond, bond parameters, Lewis structure, polar character of covalent bond, bond, valence bond, covalent chond, covalent chond, covalent chond, ionic bond, valence bond ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory i Catulat the the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz, Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules       Ball and stick			4.Calculation of		
CHAPTER-4       In terms of electron         Chapters-4       Trasfer 5.Various         Kinds of reactions in       terms of redox         reaction 6.Balancing       of redox reactions         using i) oxidation       number method ii)         half reaction       method         Molecular Structure       able to         Valence electrons, joint       Junderstand the         bond, covalent bond,       different         bond parameters, Lewis       approaches to types         structure, polar character       of chemical bonding         of covalent bond,       2.Explain the rules         covalent character of       to write the Lewis         noicelord, valence bond       structures of simple         theory, resonance,       molecules and the         geometry of covalent       imitations involved         molecules, VSEPR theory       Scalculate the         formal charge of       atoms present in         the Lewis structures       which will give an         idea of actual       shapes of molecules         shapes of molecules       4.Explain the Bond         parameters viz.,       Bond angle, Bond         length, Bond       enthaly and Bond         order which would       give a complete </td <td></td> <td></td> <td>oxidation numbers</td> <td></td> <td></td>			oxidation numbers		
cHAPTER-4       transfer 5.Various         CHAPTER-4       terms of redox         CHAPTER-4       the students will be         Able to       susing i) oxidation         Nolecular Structure       able to         Valence electrons, ionic       1.Understand the         bond, covalent bond,       different         approaches to types       Ball and stick         of covalent bond, covalent bond,       of chemical bonding         covalent character       of covalent bond,         of covalent bond, valence bond       the tuewis         geometry of covalent       molecules of the         molecules, VSEPR theory       3.Calculate the         formal charge of       atoms present in         the Lewis structures       which will give an         idea of actual       shapes of molecules         a shapes of molecules       4.Explain the Bond         parameters, viz.,       Bond angle, Bond         geometry of wolken       actual         shapes of molecules       shapes of molecules         a covalent chard, wolken			in terms of electron		
kinds of reactions in terms of redox in reaction 6.Balancing of redox reactions using 1) oxidation number method iii) half reaction method CHAPTER-4 Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, theory, resonance, geometry of covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, theory, resonance, geometry of covalent molecules, VSEPR theory Hendy, VSEPR theory atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4. Explain the Bond parameters viz, Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			transfer 5.Various		
terms of redox reaction 6.Balancing of redox reactions using i) oxidation number method ii) half reaction methodHere reactions using i) oxidation number method ii) half reaction methodCHAPTER-4 Chemical Bonding and Molecular Structure bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent chond, covalent chond, to covalent chond, structures of simple molecules, VSEPR theoryBall and stick model or structures of chemical bonding structures of simple there is a chemical covalent chord, which will give an idea of actual shapes of molecules different structures of simple there is structures dimitations involved distructures dia character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryBall and stick model of structures of simple there is structures of simple direa chemical compoundsmolecules, VSEPR theory3.Calculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			kinds of reactions in		
CHAPTER-4 Chemical Bonding and Molecular Structure of covalent bond, bond parameters, lewis structure, polar character of covalent bond, tonic bond, valence of covalent bond, tonic bond, valence bond, theory, resonance, geometry of covalent molecules, VSEPR theoryBall and stick model of toric tond valence bond, toric tond valence bond, toric tond valence bond, theory, resonance, geometry of covalent molecules, VSEPR theoryBall and stick molecules the tue to the the term is toric tond valence bond, toric tond valence bond, toric tond valence bond, the tue to the term is toric tond valence bond, the tue to the term is toric tond valence bond, the tue to the tue to the term is toric tond valence bond, the tue to the tue tue tue tue tue tue tue tue tue tu			terms of redox		
of redox reactions using i) oxidation number method ii) half reaction methodCHAPTER-4Chemical Bonding and Molecular Structure bond, covalent bond, bond, covalent bond, of covalent bond, of covalent bond, covalent bergen situatures of simple formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4 Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesI length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesI length, Bond <td></td> <td></td> <td>reaction 6.Balancing</td> <td></td> <td></td>			reaction 6.Balancing		
CHAPTER-4Chemical Bonding and Molecular Structure bond, covalent bond, bond parameters, Lewis structure, polar character of ionic bond, valence bond differentbond parameters, Lewis geometry of covalent molecules, VSEPR theoryThe students will be able to 1.Understand the different of chemical bonding of chemical bonding the Lewis structures, polar character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryBall and stick model of to write the Lewis structures of simple the Lewis tructures of chemical bonding structures of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond eenthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			of redox reactions		
CHAPTER-4Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, different of covalent bond, of covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent bond, of covalent bond, structure, polar characterBall and stick model or of chemical bonding of covalent bond, 2.Explain the rules to write the Lewis structures of simple molecules, VSEPR theoryBall and stick model of to write the Lewis structures of simple molecules, VSEPR theoryaclaculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesFormal charge shall and stick model or theory, resonance, molecules, VSEPR theoryaclaculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesactual shapes of molecules query and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			using i) oxidation		
CHAPTER-4       Image: method         Chemical Bonding and Molecular Structure       The students will be able to different approaches to types of covalent bond, covalent bond, covalent bond, covalent character of forwal character of covalent character of theory, resonance, geometry of covalent molecules, VSEPR theory       Ball and stick model of structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the work would be able to able the ball on the lewis structures which would give a complete knowledge of electronic concept of structures of the work of the ball be able to able the ball be able to actual shapes of molecules and the band parameters viz.       Imitations involved         Scale able the interverse which will give an idea of actual shapes of molecules and the band parameters viz.       Imitations involved         Scale able the interverse which will give an idea of actual shapes of molecules       Imitations involved         Scale able the interverse which will give an idea of actual shapes of molecules       Imitations involved         Source able the interverse which would give a complete knowledge of electronic concept of structures of the band parameters viz.       Imitation involved interverse which would give a complete knowledge of electronic concept of structures of the band parameters of the band pa			number method ii)		
CHAPTER-4methodChemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, bond parameters, Lewis of covalent bond, covalent bond, of covalent bond, bond parameters, Lewis approaches to typesBall and stick model or balloonof covalent bond, bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryTo write the Lewis structures of simple molecules, VSEPR theoryBall and stick model of to write the Lewis structures of simple molecules and the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of throw would give a complete knowledge of electronic concept of structures of the noleculesHerek the structures throw would parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesHerek the structures throw would be added to a structure of the throw would be added to a structure of the 			half reaction		
CHAPTER-4The students will be able toNolecular Structureable toValence electrons, ionic1.Understand the differentbond, covalent bond,approaches to typesof covalent bond,2.Explain the rulesof covalent bond,2.Explain the rulescovalent character ofto write the Lewisionic bond, valence bondstructures of simplechemical Songlechemicalmolecules, VSEPR theory3.Calculate the formal charge of atoms present in the Lewis structureswhich will give an idea of actualshapes of moleculesshapes of molecules4.Explain the Bond geometry of covalentmolecules, VSEPR theory3.Calculate the formal charge of atoms present in the Lewis structureswhich will give an idea of actual shapes of molecules4.Explain the Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the wold give a complete knowledge of electronic concept			method		
Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, covalent bond, covalent bond, of covalent bond, of covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent bond, covalent character of tionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryBall and stick model of structures of simple tructures of simple chemical compoundsmolecules, VSEPR theory bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesThe students will be able to parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesThe students will be able to molecules delectronic concept of structures of the molecules		CHAPTER-4			
Molecular Structureable toValence electrons, ionic1.Understand thebond, covalent bond,differentbond parameters, Lewisapproaches to typesstructure, polar characterof chemical bondingof covalent bond,2.Explain the rulescovalent character ofto write the Lewisionic bond, valence bondtructures of simpletheory, resonance,molecules and thegeometry of covalentlimitations involvedmolecules, VSEPR theory3.Calculate theformal charge ofatomalatoma present inthe Lewis structureswhich will give anidea of actualshapes of molecules4.Explain the Bondparameters viz.,Bond angle, Bondlength, Bondenthalpy and Bondorder which would give a completeknowledge ofelectronic conceptof structures of themoleculesof structures of themoleculesdifferentadding bordcorrest of the structureswhich wuld give a completeknowledge ofelectronic conceptof structures of themoleculesdifferentorder which wouldgive a completeknowledge ofelectronic conceptof structures of themoleculesbordparameters viz.bordparameters viz.bordparameters viz.bordparameters viz.		Chemical Bonding and	The students will be		
Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, covalent bond, covalent bond, 2.Explain the rules to write the Lewis structures of simple molecules and the molecules and the ionic bond, valence bond theory, resonance, geometry of covalent molecules and the imitations involved molecules and the the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules1.Understand the different molecules different balloonValence electrons, joint of covalent character of ionic bond, valence bond theory, resonance, molecules and the molecules and the ionic haracter of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesImage: Electronic concept of structures of the molecules		Molecular Structure	able to		
bond, covalent bond, bond parameters, Lewis structure, polar character of covalent hond, covalent character of tionic bond, valence bond theory, resonance, geometry of covalentdifferent approaches to types of structures of simple molecules and the the Lewis structures of simple molecules, VSEPR theoryBall and stick model or balloonMail Could Structures which will give an idea of actual shapes of moleculesmodel or theory, resonance, geometry of covalent molecules, VSEPR theoryScalculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesScalculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesScalculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesScalculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesScalculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesSold angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesScalculate the formal charge of atoms present in the Lewis structures shapes of molecules		Valence electrons, ionic	1.Understand the		
bond parameters, Lewis structure, polar character of covalent bond, covalent character of tionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryBall and stick model or balloon tructures of simple structures of simple dimitations involved 3.Calculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of moleculesBall and stick model or balloonAll and stick model or to write the Lewis geometry of covalent molecules, VSEPR theory3.Calculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesBall and stick model or balloon		bond, covalent bond,	different		
structure, polar character of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryof chemical bonding structures of simple molecules and the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesmodel or balloonstructure, polar character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryof chemical compoundsmolecules, VSEPR theory which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesmodel or balloon		bond parameters, Lewis	approaches to types	Ball and stick	
of covalent bond, covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules and the molecules and the ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory2.Explain the rules truitations involved imitations involved formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesballoon model of chemical compounds		structure, polar character	of chemical bonding	model or	
covalent character of ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theoryto write the Lewis structures of simple molecules and the imitations involved 3.Calculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesmodel of chemical compounds		of covalent bond,	2.Explain the rules	balloon	
ionic bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory 		covalent character of	to write the Lewis	model of	
theory, resonance,       molecules and the       compounds         geometry of covalent       limitations involved       3.Calculate the         molecules, VSEPR theory       3.Calculate the       formal charge of         atoms present in       the Lewis structures       which will give an         idea of actual       shapes of molecules       4.Explain the Bond         parameters viz.,       Bond angle, Bond       length, Bond         enthalpy and Bond       order which would       give a complete         knowledge of       electronic concept       of structures of the		ionic bond, valence bond	structures of simple	chemical	
geometry of covalent molecules, VSEPR theorylimitations involved 3.Calculate the formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond 		theory, resonance,	molecules and the	compounds	
molecules, VSEPR theory       3.Calculate the         formal charge of       atoms present in         the Lewis structures       which will give an         idea of actual       shapes of molecules         shapes of molecules       4.Explain the Bond         parameters viz.,       Bond angle, Bond         length, Bond       enthalpy and Bond         order which would       give a complete         knowledge of       electronic concept         of structures of the       molecules		geometry of covalent	limitations involved		
formal charge of atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules		molecules, VSEPR theory	3.Calculate the		
atoms present in the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			formal charge of		
the Lewis structures which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			atoms present in		
which will give an idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the moleculesImage: Concept of structures of the molecules			the Lewis structures		
idea of actual shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			which will give an		
shapes of molecules 4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			idea of actual		
4.Explain the Bond parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			shapes of molecules		
parameters viz., Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			4.Explain the Bond		
Bond angle, Bond length, Bond enthalpy and Bond order which would give a complete knowledge of electronic concept of structures of the molecules			parameters viz.,		
length, Bond         enthalpy and Bond         order which would         give a complete         knowledge of         electronic concept         of structures of the         molecules			Bond angle, Bond		
enthalpy and Bond         order which would         give a complete         knowledge of         electronic concept         of structures of the         molecules			length, Bond		
order which would give a complete knowledge of electronic concept of structures of the molecules			enthalpy and Bond		
give a complete knowledge of electronic concept of structures of the molecules			order which would		
knowledge of electronic concept of structures of the molecules			give a complete		
electronic concept of structures of the molecules			knowledge of		
of structures of the molecules			electronic concept		
molecules			of structures of the		
			molecules		
5.Describe the			5.Describe the		
VSEPR theory and			VSEPR theory and		
its significance in			its significance in		
predicting the			predicting the		
anomalous change			anomalous change		
in geometry of			in geometry of		
molecules due to			molecules due to		
different kinds of			different kinds of		
electronic			electronic		

#### SUBJECT: CHEMISTRY

		interactions			
AUGUST	Chemical Bonding and	6.Give an account of	PRACTICALS	ART	Oral and
	Molecular	VB theory that		INTEGRATED	written test
	Structure(contd.)	predicts the		ACTIVITY	
	Concept of hybridization,	geometry of		(Rangoli or	
	involving s, p and d	molecules in terms		mehndi	
	orbitals and shapes of	of the concept of		designs for	
	some simple molecules,	hybridization		hybridisation)	
	molecular orbital theory	7.Explain the			
	of homonuclear diatomic	concept of			
	molecules(qualitative	resonance			
	idea only), Hydrogen	8.Describe the			
	bond.	concept of			
		hydrogen bonding			
	CHADTER 12	The students will be			
	CHAPTER-12 Organic Chemistry	able to 1 Interpret			
	Some Basic Principles	the structure of			
	and Techniques	molecules in			
	Classification and ILIPAC	different ways		WORKSHEFT	
	nomenclature of organic	2.Classify and give		WORKSHEET	
	compounds. Electronic	the nomenclature			
	displacements in a	of organic			
	covalent bond: inductive	compounds in trivial			
	effect, electromeric	and IUPAC system.			
	effect, resonance and	3.Explain about			
	hyper conjugation.	different types of			
	Homolytic and	isomerism exhibited			
	heterolytic fission of a	by organic			
	covalent bond: free	compounds 4.Bring			
	radicals, carbocations,	out the effect of			
	carbanions, electrophiles	electronic			
	and nucleophiles, types	displacements on			
	of organic reactions.	structure and			
		reactivity of organic			
		compounds			
SERIEIVIBER					
OCTOBER	CHAPTER-6	The students will be	ΔΙΤ ΔΝΔΙΥΣΙΣ		Oral and
	Thermodynamics	able to understand		WORKSHFFT	written test
	Concepts of System and	1. The concept of			
	types of systems.	System and			
	surroundings, work, heat,	surroundings in			
	energy, extensive and	thermodynamics			
	intensive properties,	and their types			
	state functions. First law	2.First law of			
	of thermodynamics -	thermodynamics in			
	internal energy and	terms of internal			
	enthalpy, heat capacity	energy, work and			
	and specific heat,	heat. 3. Relationship			
	measurement of U and	between internal			

SUBJECT: CHEMISTRY

JODJECI. C					D. AI
	H, Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution. Second law of Thermodynamics (brief introduction)	energy and enthalpy changes and the formulation of Hess's law 4.Intensive and Extensive properties of a system 5.Different types of enthalpy changes involved in terms of Hess's law			
	Organic Chemistry - Some Basic Principles and Techniques(contd.) General introduction, methods of purification, qualitative and quantitative analysis	Students will be able to 5.Understand the methods of purification of organic compounds 6.Explain in detail the qualitative and quantitative aspects of organic compounds.		WORKSHEET	
NOVEMBER	Thermodynamics(contd.) Introduction of entropy as a state function, Gibb's energy change for spontaneous and non- spontaneous processes, criteria for equilibrium. Third law of thermodynamics (brief introduction).	Students will be able to – understand Gibbs free energy, entropy and the concept of spontaneity	ELEMENT DETECTION	NCERT BASED WORKSHEET	Oral and written test
	CHAPTER-13 Hydrocarbons Classification of Hydrocarbons Aliphatic Hydrocarbons: Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis. Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation, chemical reactions: addition of hydrogen,	The students will be able to 1.Name the different kinds of hydrocarbons according to common and IUPAC nomenclature 2.Identify and write the structures of isomers of aliphatic and aromatic hydrocarbons 3.Know different forms arise due to free rotation of C-C bond in alkanes(conformers) 4.Discuss on Preparations and Properties of		WORKSHEET	

SUBJECT: (	CHEMISTRY			ST	TD: XI
	halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.	alkanes, alkenes, alkynes and arenes 5.Define Geometrical isomers(cis-trans) arising due to the restricted rotation about C=C			
DECEMBER					PT-2
	CHAPTER-7 Equilibrium Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium - Le Chatelier's principle ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of poly basic acids, acid strength, concept of pH	The students will be able to 1.Understand the equilibria existing between different states of matter 2.Explain the characteristics of chemical equilibrium and equilibrium constant 3.Bringout the relationship between equilibrium constants at different conditions 4.Classify substances as acids and bases on the basis of different theories	SALT ANALYSIS	FIND PH OF DIFFERENT LIQUIDS	Oral and written test
	Hydrocarbons(contd.) Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water. Aromatic Hydrocarbons: Introduction, IUPAC nomenclature, benzene: resonance, aromaticity	Students will be able to- *Discuss on Preparations and Properties of alkynes and arenes *Reason out the acidic nature of alikynes. 6.Explain resonance and extra stability of benzene		CONVERSION WORKSHEET	
JANUARY	Equilibrium(contd.) Hydrolysis of salts (elementary idea), buffer solution, Henderson Equation, solubility	Students will be able to 5.Explain different important concepts of equilibrium viz.,	SALT ANALYSIS	NCERT BASED WORKSHEET	Oral and written test

SUBJECT: C	CHEMISTRY		ST	D: XI
	product, common ion effect (with illustrative examples).	pH scale, ionic product of water, common ion effect, buffer solution 6.Understand and calculate solubility product 7.Solve problems pertaining to this chapter		
	Hydrocarbons(contd.) Chemical properties: mechanism of electrophilic substitution. Nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation, directive influence of functional group in monosubstituted benzene. Carcinogenicity and toxicity	Students will be able to- 7. Describe directive influence of functional groups on the aromatic ring system. 8.Explain Carcinogenicity and Toxicity in aromatic hydrocarbons	NAME REACTION WORKSHEET	
FEBRUARY				FINAL EXAM
MARCH				

NAME OF THE SUBJECT TEACHER: Dr. Pragati Vijay

SIGNATURE OF THE SUBJECT COORDINATOR :