

ANNUAL BIFURCATION

Grade X(2021-22)

Pedagogical Plan

English

MONTH	WEEK	CHAPTER	CONTENT	SUBJECT ENRICHMENT ACTIVITY
March	I	First Flight (A Letter to God)	Reading and understanding the text Understanding the characterization and other elements of story Reference to the context, Question/Answers	Public Speaking Poster Designing
		<u>Writing:</u> Letter of complaint (Official)	Usage and application Format Rubrics of assessment practice	
	II	Dust of Snow Fire and Ice	Reading and understanding the poem and its poetic devices RTC,Q/Ans	Poem Recitation
		Letter of complaint (Business)	Usage and application Format Rubrics of assessment practice	
	III	A Tiger in the Zoo	Reading and understanding the poem and its poetic devices RTC,Q/Ans	
		<u>Grammar:</u> Subject-Verb Agreement, Modals	Rules discussion Usage and relevance Exercise for practice	
	IV	Footprints Without Feet (A Triumph of Surgery)	Reading and understanding the text RTC,Q/Ans Solving back exercise Showing videos of the chapters done so far(A/V room)	

		Grammar: Determiners, Tenses	Rules discussion Usage and relevance Exercise for practice	
April	I	Footprints Without Feet(The Thief's Story, Footprints Without Feet)	Reading and understanding the text RTC,Q/Ans Solving back exercise	
	II	First Flight(Two stories about Flying)	Reading and understanding the text RTC,Q/Ans Solving back exercise	Group Discussion
	III	The Ball Poem	Reading and understanding the poem and its poetic devices RTC,Q/Ans	
IV	(From the Diary of Anne Frank)	Reading and understanding the text RTC,Q/Ans Solving back exercise		
May	I	Grammar: Reported Speech	Rules discussion Usage and relevance Exercise for practice	
	II	The Hundred Dresses-I	Reading and understanding the text RTC,Q/Ans Solving back exercise Enactment	
	III	Hundred Dresses-II	Reading and understanding the text RTC,Q/Ans	
	IV	First Flight(Nelson Mandela Long Walk to Freedom)	Reading and understanding the text RTC,Q/Ans Solving back exercise	
			Reading and understanding the text RTC,Q/Ans Solving back exercise	
III	Integrated Grammar			

	IV	Integrated Grammar		Practice	
AUGUST		Revision			
SEPTEMBER		REVISION AND EXAMINATION			
OCTOBER	i	Glimpses Of India Amanda	Reading and understanding the text RTC,Q/Ans Solving back exercise		
	ii	The Making of a Scientist	Reading and understanding the text RTC,Q/Ans Solving back exercise	Public Speaking	
	iii	The Necklace	Reading and understanding the text RTC,Q/Ans Solving back exercise		
	iv	Animals The Hack Driver	Reading and understanding the text RTC,Q/Ans Solving back exercise		
NOVEMBER	I	Madam Rides the Bus	Reading and understanding the text RTC,Q/Ans Solving back exercise	Public Speaking	
	II	The Sermon at Benaras	Reading and understanding the text RTC,Q/Ans Solving back exercise	Role Play	
	III	The Proposal	Reading and understanding the text RTC,Q/Ans Solving back exercise	Role play	
	iii	Bholi	Reading and understanding the text RTC,Q/Ans Solving back exercise		
	iv	The Tale of Custard the Dragon	Reading and understanding the text RTC,Q/Ans Solving back exercise		
December		Integrated Grammar	Rules discussion Usage and relevance Exercise for practice		
		REVISION			

JANUARY		REVISION	
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महीना	सप्ताह	पाठ	पठन सामग्री	शैक्षणिक कौशल
मार्च	एक	क्षितिज (काव्य खंड) पाठ -5 कविता-1 उत्साह	पाठ परिचय, पठन, सरलार्थ, भावार्थ, प्रश्न उत्तर	
	दो	कविता- 2 अट नहीं रही है	पाठ परिचय, पठन, सरलार्थ, भावार्थ, प्रश्न उत्तर	
	तीन	क्षितिज गद्य खंड पाठ-10 नेताजी का चश्मा	पाठ परिचय, पाठ का विस्तृत वर्णन, प्रश्न उत्तर	
	चार	व्याकरण (वाक्य)	वाक्य का अर्थ, वाक्य के प्रकार (रचना के आधार पर वाक्य के भेद) प्रधान वाक्य और आश्रित वाक्य में अंतर आश्रित वाक्य के भेद	
अप्रैल	एक	व्याकरण (वाक्य)	अभ्यास कार्य	
	दो	कृतिका	पाठ परिचय,	

		पाठ- 1 (माता का आंचल)	पाठ का विस्तृत वर्णन, प्रश्न उत्तर	
	तीन	लेखन-विज्ञापन क्षितिज (काव्य खंड) पाठ 6 कविता -1 यह दंतुरित मुस्कान	विज्ञापन का प्रारूप विज्ञापन का उदाहरण	विज्ञापन लेखन प्रतियोगिता
	चार	क्षितिज (काव्य खंड) पाठ 6 कविता-2 फसल	पाठ परिचय सरलार्थ व भावार्थ, प्रश्न उत्तर, पाठ का विस्तृत वर्णन	
मई	एक	अपठित गद्यांश अपठित काव्यांश अनुच्छेद लेखन	वर्कशीट पर अभ्यास करवाया जाएगा संकेत बिंदु की सहायता से अनुच्छेद लेखन	
	दो	लेखन(पत्र) औपचारिक पत्र अनौपचारिक पत्र	औपचारिक पत्र का प्रारूप औपचारिक पत्र का उदाहरण अनौपचारिक पत्र का प्रारूप व उदाहरण अभ्यास	
	तीन	वाक्य की दोहराई विज्ञापन की दोहराई अपठित गद्यांश अपठित काव्यांश	वर्कशीट पर अभ्यास करवाया जाएगा	

	चार	क्षितिज (गद्य खंड) पाठ- 11 बालगोबिन भगत	पाठ का सार पाठ का विस्तृत पठन व वर्णन प्रश्न उत्तर	संदेश लेखन प्रतियोगिता
जुलाई	एक	लेखन- संदेश लेखन	संदेश लेखन का प्रारूप व उदाहरण	
	दो	क्षितिज काव्य खंड पाठ- 7 कविता छाया मत छूना	पाठ परिचय सरलार्थ भावार्थ प्रश्न उत्तर वर्कशीट पर अभ्यास	
	तीन	व्याकरण वाच्य	वाच्य का अर्थ वाच्य के भेद अभ्यास कार्य	वाद विवाद प्रतियोगिता
	चार	क्षितिज (काव्य खंड) पाठ 1 सूरदास के पद पठित गद्यांश पठित काव्यांश	पाठ परिचय सरलार्थ भावार्थ प्रश्न उत्तर वर्कशीट पर अभ्यास	
अगस्त	एक	वाच्य की दोहराई अपठित गद्यांश अपठित काव्यांश	वर्कशीट पर अभ्यास	
	दो	क्षितिज (पद्य खंड) पाठ- 2 (राम लक्ष्मण परशुराम संवाद)	कविता परिचय सरलार्थ भावार्थ व प्रश्न उत्तर वर्कशीट पर अभ्यास	
	तीन	पद परिचय (विकारी शब्द)	विकारी शब्द का भेद सहित वर्णन अभ्यास कार्य	

	चार	व्याकरण पद परिचय (अविकारी शब्द)	अविकारी शब्द का भेद सहित वर्णन अभ्यास कार्य	
सितंबर	एक	रस	रस का अर्थ रस के अंग स्थायी भाव विभाव अनुभव व संचारी भाव	कविता वाचन प्रतियोगिता
	दो	रस के प्रकार	रस के भेदों का विस्तृत वर्णन अभ्यास कार्य	
	तीन	दोहराई अपठित गद्यांश अपठित काव्यांश		
	चार	प्री बोर्ड		
अक्तूबर	दोहराई			
नवंबर	प्रथम टर्म बोर्ड परीक्षा			
दिसंबर	एक	क्षितिज (पद्य खंड) पाठ- 8 कन्यादान क्षितिज (गद्य खंड) पाठ- 12 लखनवी अंदाज	पाठ का सार पाठ का विस्तृत पठन व वर्णन प्रश्न उत्तर	
	दो	क्षितिज (गद्य खंड) पाठ 13 मानवीय करुणा की दिव्य चमक अनुच्छेद लेखन संदेश लेखन	पाठ का सार पाठ का विस्तृत पठन व वर्णन प्रश्न उत्तर संकेत बिंदु की सहायता से अनुच्छेद लेखन	
	तीन	कृतिका पाठ-2 जॉर्ज पंचम की नाक कृतिका पाठ- 3(साना साना हाथ जोड़ी)	पाठ का सार पाठ का विस्तृत पठन व वर्णन प्रश्न उत्तर	
	चार	अनुच्छेद लेखन	दोहराई	

		संदेश लेखन विज्ञापन लेखन लेखन(पत्र) औपचारिक पत्र अनौपचारिक पत्र		
जनवरी फ़रवरी	बोर्ड परीक्षा के पाठ्यक्रम की दोहराई			

Mathematics

Month	Topic	Pedagogical skills
March	Chapter 1: Real Numbers Chapter 2: Polynomials Chapter 3: Pair of linear equation of two variable	
Week 1	Euclid Division Algorithm Fundamental Theorem of Arithmetic Irrational numbers and their decimal presentation Geometrical meaning of zeroes of a polynomial. Relationship between zeroes and coefficients of a polynomial.	
Week 2	Division algorithm for polynomials. Introduction to linear equation in two variables. Graphical method for solving linear equation in two variables.	
Week 3	Substitution method for solving linear equation in two variables. Elimination and cross multiplication method for the solution of linear equation in two variables.	
Week 4	Consistency and inconsistency of linear equations in two variable. Reducible equations . Word problems	To solve the system of linear equation graphically and investigate conditions for unique solution. To investigate the conditions for consistency and inconsistency for system of linear equation in two variable.
April	Chapter 4: Quadratic Equation Chapter 5: Arithmetic Progression	
Week 1	Introduction to quadratic equations. Finding roots of quadratic equations using factorisation along with word problems.	
Week 2	Finding roots of quadratic equation using completing the square method . Discriminant method. Nature of roots of quadratic equation.	
Week 3	Introduction to AP nth term of AP Sum of an AP	To check whether given sequence is an AP or not.

Week 4	Last term of an AP Problems based on sum of an AP	
May	Chapter 14: Statistics Chapter 15: Probability	
Week 1	Mean of grouped data Median of grouped data	
Week 2	Mode of grouped data Empirical relationship between mean, median and mode.	
Week 3	Graphical representation of cumulative frequency distribution. Finding probability of various events	To verify experimentally that the probability of occurrence of a random number from 0 to 10 is 1/11.
July	Chapter 7: Co-ordinate Geometry Chapter 8: Introduction to Trigonometry Chapter 9: Some applications of Trigonometry	.
Week 1	Introduction and distance formula. Section formula. Area of triangle.	Apply and derive distance formula in order to determine the distance between two coordinates on graph.
Week 2	Trigonometric ratios T- ratios of some specific angles.	To verify experimentally that $\sin^2 \theta + \cos^2 \theta = 1$
Week 3	T- ratios of complementary angles. Trigonometric identities.	
Week 4	Heights and distances	Me and my shadow: When sun is high, shadow is short and vice versa.
August	Chapter 10 : Circles Chapter 12 : Area related to circles	
Week 1	Tangent to a circle Number of tangents from a point on a circle	

Week 2	Number of tangents from a point on a circle Perimeter and area of a circle.	
Week 3	Areas of sector and segment of a circle.	
Week 4	Areas of combinations of plane figures.	
September	Chapter 11: Construction	-----
Week 1	Division of line segment. Construction of a similar triangle. Construction of tangents to a circle.	
	Half Yearly Exam	
October	Chapter 06 : Triangles Chapter 13: Surface Area and Volume	
Week 1	Similar figures Similarity of triangles Criteria for similarity of triangles	To verify median of a triangle intersects at a common point called centroid which always lies in interior of triangle
Week 2	Area of similar triangles Area of similar triangles (cntd) Pythagoras Theorem	
Week 3	Surface area of combination of solids. Volume of a combination of solids.	
Week 4	Conversion of solid from one shape to another. Frustum of cone Applications of surface areas and volumes.	To compare volume and surface area of right circular cylinder using rectangular sheets. To find the area of the circle of given radius by paper folding, cutting and pasting.
November	Pre-board I	
December	Pre-board II	
January	Revision	
February	Final Examination	

SOCIAL SCIENCE

Month	Topic	Pedagogical Skills
April	Chapter 1: Power Sharing (Pol.Sc) Chapter 1: Development (Economics) Chapter 1: Resources and Development(Geo)	
Week 1	Development promises: Different people and different goals Income and other goals (i) National development Comparison of countries or states. (i) Comparison through national income. (ii) Comparison through per capita income. Income and other criteria Public distribution system. Body mass index (BMI) Sustainability of development (i) Environmental degradation and sustainable development.	
Week 2	Resources Types of resources Development of resources Land resources and utilisation (i) Land use pattern in India. (ii) Land degradation and conservation measures Soil as a resource: (i) Classification of soil. (ii) Soil erosion and soil conservation.	Map work (soil)
Week 3 & 4	Belgium and Sri Lanka Majoritarianism in Sri Lanka Accommodation in Belgium Why power sharing is desirable? Forms of power sharing	
May	Chapter 1: Nationalism in Europe (History) Chapter 2: Water Resources(Geo) Chapter 2: Sectors of the Indian Economy(Eco)	
Week 1 & 2	The French Revolution and the Idea of the Nation The Making of Nationalism in Europe The Age of Revolutions: 1830-1848 The Making of Germany and Italy Visualizing the Nation Nationalism and Imperialism	
Week 3	Water: some facts and Figures Water scarcity: (i) Causes of water scarcity. (ii) Managing the water resources. (iii) Multi-purpose river project. Rain water harvesting	Map work (dams)
Week 4	Sectors of Economic Activities: Primary, Secondary and Tertiary sector Economic Interdependence Comparing the three sectors. (i) Gross Domestic Product (GDP)	

	<p>(ii) Historical change in sector Primary, Secondary and Tertiary sector in India</p> <p>(i) Where are the most of the people employed? (ii) How to create more employment? (a) Technical and institutional measures (b) Improvement in rural infrastructure</p> <p>Division of sectors as Organised and Unorganised Sectors in terms of Ownership: Public and Private Sectors</p>	
JULY	<p>Chapter 3 : Federalism(Political Science)</p> <p>Chapter 2: Nationalism in India(History)</p> <p>Chapter 4: Agriculture (Geo)</p>	-----
Week 1	<p>Types of Farming:</p> <p>(i) Primitive subsistence farming. (ii) Intensive subsistence farming. (iii) Commercial farming</p> <p>Types of Farming: Primitive subsistence farming. Intensive subsistence farming Commercial farming</p> <p>Cropping Pattern: Cropping seasons in India</p> <p>Major Crop</p> <p>Agricultural Reforms: i) Institutional Reforms (ii) Technological Reforms. Contribution of Agriculture to the National Economy: (i) Food Security (ii) Impact of globalisation on agriculture. (iii) Gene Revolution</p>	Map work
Week 2	<p>What is Federalism? What makes India a federal country</p> <p>How is federalism practiced?</p> <p>Decentralization in India</p>	
Week 3 & 4	<p>The First World War, Khilafat and Non Cooperation</p> <p>Differing Strands within the Movement</p> <p>Towards Civil Disobedience</p> <p>The Sense of Collective Belonging</p>	Map work
August	REVISION	
SEPTEMBER	HALF YEARLY EXAMINATION	
OCTOBER	Revision for Board term 1	
NOVEMBER	BOARD TERM 1	

DECEMBER	Chapter: 6 Manufacturing industries (Geo) Chapter: 7 Lifelines of National Economy(Geo) Chapter: 6 Political Parties (Pol sc) Chapter : 7 &8 outcomes and challenges of democracy	
Week 1	Importance of Manufacturing: (i) Contribution of Industry to National Economy Classification of Industries: (i) Agro-based Industries. (ii) Mineral-based Industries. (iii) Miscellaneous Industries Industrial Pollution and Environmental Degradation	Map work
Week 2	Transport Transport in India: (i) Roadways Railways. (iii) Pipelines Waterways (v) Airways Communication : (i) International Trade	Map work
Week 3	Why do we need political parties? How many parties should we have? National and political parties And challenges to political parties	
Week 4	How do we assess democracy's outcomes? And Accountable, responsive legitimate government Economic growth and development. Reduction of inequality and poverty Dignity and freedom of the citizens Thinking about challenges Thinking about political reforms	
December	CH 3 . The age of Industrialisation CH 3 .(ECO) Money and credit CH. 4.(ECO) Globalisation	
JANUARY	REVISION	

Computer Applications

Term 1

Month	Topic	Pedagogical Skills
April	Chapter 3: HTML - 1 : Basic HTML Elements	
Week 1	HTML and its Capabilities History of HTML Writing HTML Documents Basic Terminology	LAB Work – creating programs using HTML
Week 2	Container and Empty Elements HTML Tag Structure Basic HTML Tags	LAB Work – inserting Special Characters in HTML
Week 3	Logical and Physical Text Styles Special Characters Combining Tags	LAB Work – inserting Physical and Logical Text Styles in HTML
Week 4	Lists in HTML	LAB Work – inserting Special Characters,

	Ordered List Unordered List Nested List Definition List	creating Lists in HTML
May	Chapter 4: HTML - II : Images, Links and Tables	
Week 1	Inserting Images Using all the attributes of tag in HTML programs ... Src, height, width, alt etc.	LAB Work- Inserting Images in web pages
Week 2	Subscripts Superscripts	LAB Work- Programs will be made by using <sub> and <sup> Tags
Week 3	Linking Internal and External linking Href attribute will be discussed and used in programs	LAB Work- <a> tag will be used in programs to create link between web pages.
Week 4	Revision will be done of List Topic Unordered List Nested List Definition List	LAB Work – inserting Special Characters, creating Lists in HTML
July	Chapter 6: Cyberethics	
Week 1	Introduction to Cyberethics Cyberethics for E-commerce Privacy Fraud	Giving Examples why privacy is required and what type of Fraud can be while using Internet
Week 2	Secure Data Transmission Other Ethical Issues Intellectual Property Right	Telling Students about IPR
Week 3	Plagiarism Digital Property Rights	Understanding Plagiarism with examples
Week 4	Open Source Philosophy and Software Licences Freedom of Information and Digital Divide	Discussing about OSS
August	Chapter 4: HTML - II : Images, Links and Tables	
Week 1	HTML Forms Creating HTML Forms How HTML Forms Works?	LAB Work – creating Forms in HTML
Week 2	Creating Textbox Creating Radio buttons	LAB Work – creating Textbox & Radio buttons in HTML
Week 3	Creating checkbox Creating Password	LAB Work – creating checkbox & password buttons in HTML
Week 4	Creating list Creating combobox	LAB Work – creating combobox & list buttons in HTML
September	-----	

Term 2

Month	Topic	Pedagogical Skills
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October	Chapter 1: Internet Basics	
Week 1	Introduction Internet and its Components World Wide Web(WWW) Internet Terminology Web Server	Understanding Internet and its Components by Discussion
Week 2	Services Provided by a Server Services Provided by web Servers Web Site Components of a Website Website vs. Portal	Telling Students about websites and how these can be created
Week 3	Web Pages What makes a Webpage Work? Difference between a Webpage and Website Web Browsers Blogs	Understanding working of Webpage by Diagram and discussion
Week 4	Types and Advantages of Blogs Web Address (URL) News Groups HTML Protocols	Asking students about the protocols they know
November	Chapter 2: Internet Services and mobile Technologies	
Week 1	Introduction Information Retrieval E-mail (Electronic Mail) E-mail Account and Address Creating a Web based E-mail Account Structure of an Email Message	LAB Work – Creating Email account in LAB Asked students to create their account
Week 2	Using Search Engines How Search Engine Works FTP Protocol Remote Login and File Transfer Protocols – TELNET, SSH,SCP and SFTP	Telling students about security Protocols Discussing about web services
Week 3	Web Services Chat Video Conferencing e-Learning e-Banking	Asking students about the Internet services they are using
Week 4	e-Shopping e-Reservation etc. Social Networking Mobile Technologies	Asking them about different e-shopping apps they are using.
December	Chapter 4: HTML - II : Images, Links and Tables	
Week 1	Embed audio & video in a HTML page	LAB Work- Inserting audio & video in web pages
Week 2	Create a table using the tags: table,tr, th, td	LAB Work- Creating Tables using Table tag and attributes
Week 3	Create a table using the attributes: colspan, rowspan	LAB Work- Creating Tables using colspan & rowspan attributes
Week 4	Links: significance of linking, anchor element (attributes: href, mailto), targets	LAB Work- Creating links between web pages

January	Chapter 5: Cascading Style Sheets (CSS)	
Week 1	Introduction to CSS Static vs. Dynamic Webpages What is DHTML?	CSS will be discussed & web pages will be created by using CSS
Week 2	DHTML Components What is CSS? Three ways of Adding Stylesheets to a Web page	LAB Work – Using Style sheets in Programs
Week 3	Using Multiple Types of Style-sheets Together Identification and Grouping of Elements	LAB Work- making HTML programmes with different styles
Week 4	CSS Elements and Properties Some Limitations of CSS	Understanding the limitations of CSS by doing examples
February	Revision	
March	-----	

SCIENCE

MONTH	WEEK	CHAPTER	SUBJECT ENRICHMENT ACTIVITY
March	I & II	Life Processes	Lab work: Temporary mount of leaf peel to show stomata
		Nutrition and Respiration	-Experimentally show carbon dioxide is given out during respiration
	Transport and excretion	To show carbon dioxide is given out during respiration	
	III & IV	Electricity	Lab work: To determine the potential difference across a resistor and plot graph between V and I
April	I & II	Control and Coordination	(Deleted)
	III & IV	Sources of energy (Deleted)	Presentations by students
May	I & II	Magnetic effects of electric current	

	III & IV	Our environment	Case study -To study the different kinds of pollution in your area and list the major reasons and sources.
July	I & II	How do organisms reproduce?	1. Binary fission of Amoeba (slide) 2. Budding in yeast (slide)
	III & IV	Heridity & Evolution	Study different parts of embryo.
August	I & II	Reflection of light	
	III & IV	Refraction of light	To trace the path of light through a rectangular glass slab
SEPTEMBER	REVISION AND EXAMINATION		
OCTOBER	I	Human eye and the colorful world	Practical: Tracing the path of light rays through a glass prism.
	II	Contd...	
	III	Revision	
	IV	Revision	
NOVEMBER	TERM-1		
DECEMBER	I&II	Electricity	
	III&IV	Heridity & Evolution	
January	II & III	How do organisms reproduce?	Study binary fission in Amoeba & budding in yeast & hydra with the help of prepared slides.
	IV	Our Environment	
February	I	Magnetic effect of electric current	
	II, III,IV	REVISION	

Chemistry

<u>Month</u>	<u>Topic</u>	<u>Pedagogical Skills</u>
April	Chapter 1: Chemical Reactions and Equations	
	<ul style="list-style-type: none"> • Introduction, Physical and Chemical change, Reactants, Products ,Chemical Reaction • Characteristics of chemical reaction: <ul style="list-style-type: none"> Evolution of gas Formation of precipitate Change in colour Change in temperature: <ul style="list-style-type: none"> Exothermic Reactions Endothermic Reactions Change in state 	<ul style="list-style-type: none"> • Lab work: • Burning of Magnesium ribbon in air • Reaction of Zinc metal with sulphuric acid • Reaction of barium chloride with sodium sulphate • Rusting of iron • Burning of candle wax
	<ul style="list-style-type: none"> • Chemical Equations: <ul style="list-style-type: none"> Word equation, Writing symbols equations Balanced and unbalanced equations • How to balance chemical equations • How to make chemical equations more informative • Limitations of chemical equations 	<ul style="list-style-type: none"> • To learn the principle for balancing of equations: <ul style="list-style-type: none"> Law of conservation of mass • Practice assignment for balancing equations
	<ul style="list-style-type: none"> • Types of chemical Reactions: <ul style="list-style-type: none"> Combination reactions- <ul style="list-style-type: none"> Between Element and element Between Element and compound Between compound and compound Decomposition reactions- <ul style="list-style-type: none"> Thermal decomposition Electrical decomposition Photolytic decomposition Decomposition reaction in daily life 	<ul style="list-style-type: none"> • Lab work: <ul style="list-style-type: none"> Action of water on quick lime Action of heat on ferrous sulphate • Discussion about digestion of food
May	<ul style="list-style-type: none"> • Displacement reactions: <ul style="list-style-type: none"> Reactivity series of metals • Double displacement reactions <ul style="list-style-type: none"> Precipitation reactions Neutralisation reactions • Oxidation and Reduction reactions <ul style="list-style-type: none"> Oxidation, Oxidising agent Reduction, Reducing agent 	<ul style="list-style-type: none"> • Lab work: <ul style="list-style-type: none"> Iron nails kept in copper sulphate solution Reaction between sodium hydroxide and hydrochloric acid Reaction between Barium chloride and sodium sulphate

	<ul style="list-style-type: none"> Application of oxidation in daily life Rancidity : Meaning and methods Of prevention of rancidity Corrosion: Rusting of iron, Tarnishing of silver, Corrosion of copper <p>Chapter 2: Acids, Bases and Salts</p>	Activity for Rusting of iron
July	<ul style="list-style-type: none"> Indicators: <ul style="list-style-type: none"> Natural indicators: litmus, red Cabbage extract ,turmeric Powder Synthetic Indicators: phenolphthalein, Methyl orange Olfactory Indicators: onion extract and Vanilla essence. Acids: Classification of acids based on Origin ,amount of water, extent of Dissociation Physical Properties of acids 	<ul style="list-style-type: none"> Lab Work : <ul style="list-style-type: none"> Use of indicators to identifying acid and base
	<ul style="list-style-type: none"> Chemical properties of acids : <ul style="list-style-type: none"> Reaction with metals Reaction with metal oxide Reaction with metal carbonates and metal hydrogen carbonates Bases: Strong and weak base Physical Properties of bases Chemical properties of bases <ul style="list-style-type: none"> Reaction with metals Reaction with non metal oxides Dilution of acids and bases Acid Base reaction: Neutralisation Common factor of acids and bases 	<ul style="list-style-type: none"> Lab work: <ul style="list-style-type: none"> To study the properties of acids and bases (HCl and NaOH) on the bases of their reaction with : <ul style="list-style-type: none"> Litmus solution(Blue/Red) Zinc metal Solid Sodium carbonate
August	<ul style="list-style-type: none"> Strength of acids and bases Universal indicator pH scale, Importance in everyday life Salts, Family of salts, pH of salts Commercially important compounds: sodium chloride Chlor alkali process 	<ul style="list-style-type: none"> Lab work: <ul style="list-style-type: none"> To find the pH of given samples using pH paper/ universal indicator: <ol style="list-style-type: none"> Dilute HCl and NaOH Lemon juice Acetic acid and Dilute NaHCO_3, Water
	<ul style="list-style-type: none"> * Bleaching powder * Baking soda * Washing soda * Plaster of paris * Water of crystallisation 	<ul style="list-style-type: none"> Lab Work: <ul style="list-style-type: none"> To study the effect of heat On copper sulphate crystals
	Chapter 3 : Metals and Non metals	
	<ul style="list-style-type: none"> General introduction to metals and non - 	<ul style="list-style-type: none"> Lab work :

August	metals <ul style="list-style-type: none"> Physical properties of metals Physical properties of Non metals Chemical properties of metals: Reaction of metals with -oxygen , water, acids (reactivity series of metals) salt solutions, chlorine, hydrogen Chemical properties of Non –metals: Reaction with oxygen, water, dilute acids, chlorine, hydrogen and salt solutions 	<ul style="list-style-type: none"> To observe the corrosion of various metals
September	<ul style="list-style-type: none"> How do metals and non metals react chemically Formation of ionic and covalent compounds Properties of ionic and covalent compounds Term-2	<ul style="list-style-type: none"> Practice worksheet of covalent bond formation
	Chapter-4 (Carbon and its compounds)	
October	<ul style="list-style-type: none"> Occurrence of carbon Covalent bonding in carbon compounds Versatile nature of carbon Allotropes of carbon Organic compounds Hydrocarbon: saturated and unsaturated Cyclic hydrocarbons Nomenclature of organic compounds: Isomers Homologous series 	<ul style="list-style-type: none"> Explanation of structure of allotropes of carbon in AV room Practice assignment
November	Term-1 Examination	
December	Ch: 5 (Periodic Classification of Elements)	

	<ul style="list-style-type: none"> • Early attempts at classification of elements • Dobereiner's triads • Newlands law of octaves • Mandeleev's periodic table • Modern periodic table-Long form of periodic table • Position of hydrogen in the periodic table • Periodicity in the periodic table • Trends in properties: <ul style="list-style-type: none"> Atomic size Metallic/Non- Metallic character Chemical reactivity • Merits of long form of periodic table 	<p>Discussion of periodic table (AV Room)</p>
January	Revision	
February	Pre-boards	