

JAIN VIDYA MANDIR SR. SEC. SCHOOL, SONIPAT  
ANNUAL PLANNER (2023)  
CLASS- 11 SCIENCE

English

Month	Particulars	Activity	Teaching Aids	Methodology
April	<b>Literature:</b> R1:Portrait of a Lady R2: We're Not Afraid to Die S1: The Summer of a Beautiful White Horse P1: A Photograph <b>Grammar:</b> Tenses and Verbs <b>Writing Skills:</b> Notice	<b>Activity1:</b> Jolt down your relationship with your elders.	Hornbill reader, Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms, etc.	Group Discussion, Class Interaction, Explanation, Demonstration, Collaboration, Lecturing, Reading
May	<b>Literature:</b> R3:Discovering Tut S2: The Address S3: Ranga's Marriage P2: The Laburnum Top <b>Grammar:</b> Determiners <b>Writing Skills:</b> Advertisement, Poster	Activity2: share your experience about villege	Hornbill reader, Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms,etc.	Debreifing, Debate, Classroom discussion, enquiry based Lecture, Values Classification, Brainstorming, Demonstration, Problem solving, Reading
June	Summer Break			

July	<b>Literature:</b> R4: Lanscape of the Soul S4: Albert Einstien at School P3: The Voice of the Rain <b>Grammar:</b> Reordering, Error-editind, omission <b>Writing Skills:</b> Letters	<b>Activity3:</b> Role Play Activity	Hornbill reader, Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms,etc.	Debreifing, Debate, Classroom discussion, enquiry based Lecture, Values Classification, Brainstorming, Demonstration, Problem solving, Group Discussion, Reading
August	<b>Literature:</b> R5: The Ailing Planet R6: The Browning Version S5: Mother's Day <b>Grammar:</b> Active Voive and Passive Voice <b>Writing Skills:</b> Report Writing	<b>Activity4:</b> Role Play Activity	Hornbill reader, Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms,etc.	Enquiry based Lectures, Classroom discussion, Demonstration, Explanation, Reading, Debate, Problem solving, Reading
September	<b>Revision and Half-yearly Exams</b>			
October	<b>Literature:</b> <b>R7: The Adventure</b> <b>S6: Birth</b> <b>P4: Childhood</b> <b>Grammar: Modals</b> <b>Writing Skills: Article writing</b>	<b>Activity5:</b> Jot down the changing relationship between the parents and childern	Hornbill reader, Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms,etc.	Enquiry based Lectures, Classroom discussion, Demonstration, Explanation, Reading, Debate, Problem solving, Reading
November	<b>Literature:</b> R8: Silk Road S7: The Tail of Melon City P5: Father to Son <b>Grammar:</b> Clauses <b>Writing Skills:</b> Speech writing	<b>Activity6:</b> Frame few lines of poetry	Hornbill reader, Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms,etc.	Enquiry based Lectures, Classroom discussion, Demonstration, Explanation, Reading, Debate, Problem solving, Reading

December	<b>Literature:</b> S8: The Ghat of Only World	<b>Activity7:</b> Define the role of a doctor in today's generation	Snapshots, English practice, test materials, chalk-duster smartclass, greenboard, mindmap (self made), classrooms,etc.	Enquiry based Lectures, Classroom discussion, Demonstration, Explanation, Reading, Debate, Problem solving, Reading
January	<b>Revision</b>			
February	<b>Revision/Examination</b>			
March	<b>Examinations</b>			

JAIN VIDYA MANDIR SR. SEC. SCHOOL ,SONEPAT

ANNUAL PLANNER (2023-24)

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INFORMATICS PRACTICES

MONTH	WEEK	TOPIC	SUB TOPIC	ACTIVITIES	METHODOLOGY	INSTRUCTIONAL/ TEACHING AIDS
April	Week –I	Computer System	Introduction, Basic computer , Input unit, output unit  Organization	Group discussion on related topics	1. Lecture cum Discussion Method 2. Illustration Method	White board, marker, duster, pointer, flash o course book
	Week-II		Types of software, Transition from calculator to computer and smart devices, evolution of			

	Week-III	Database Concepts	<p>computers, troubleshooting computer operations</p> <p>Introduction, Purpose of DBMS , Relational Database Model Terminology, Brief History of MYSQL ,</p> <p>MYSQL database system , starting MYSQL, MYSQL and SQL</p>	Students will learn DBMS concepts. Practical demo will be given to them in lab using MYSQL to learning functioning of software	<ol style="list-style-type: none"> <li>1. Lecture Method</li> <li>2. Brain Storming</li> </ol>	White board, marker, duster, pointer, Computer, MYSQL software, course book
	Week-IV					
May	Week -I	Structured Query Language (SQL)	<p>Introduction , MYSQL Elements, SQL command Syntax, making simple queries</p> <p>(Insert, Update, Delete,</p>	Demonstration of different commands and function will be delivered. And Students will learn with practical practice in lab by creating their databases, tables and	<ol style="list-style-type: none"> <li>1. Lecture cum &amp; Demonstration Method</li> <li>2. Illustration method</li> </ol>	Black board , chalk , duster, pointer, computer system, database software(MY

	Week-II		Select)  Selectin specific rows	different DDL and DML statements.  Time Bound Team Based Exercise related to different topics and other practical		Black board , chalk , duster, pointer, computer system, Python software
	Week-III		Logical operators Order by			
	Week-IV		More on DDL			
June		SUMMER BREAK				
July	Week-I	Getting started with Python	Introduction, Python-Pluses and Minuses, Working in Python ,		1. lecture cum Discussion Method  2. Demonstration Method	White board, marker, duster, pointer, computer system, Python Anaconda distribution software
	Week-II		Understanding First Program Script	Practical demo will be given to them to work with Python and students will do their practice in software to be familiar with language		

	Week-III	Python Fundamentals	Introduction, Python character set, Tokens, Barebones of a Python Program ,	basic concepts will be practiced with the help of practical and students will try to use in short modules	<ol style="list-style-type: none"> <li>1. lecture cum Discussion Method</li> <li>2. Demonstration Method</li> <li>3. Illustration Method</li> </ol>	White board, marker, duster, pointer, computer system, Python Anaconda distribution software
	Week-IV		Variables and Assignments, Simple Input and Output			
August	Week-I	Data Handling	Introduction, Data types, Mutable and Immutable types ,	Students will create modules bases on math calculation like :addition, subtraction etc. using different operators and libraries	<ol style="list-style-type: none"> <li>1. lecture cum Discussion Method</li> <li>2. Demonstration Method</li> <li>3. Illustration Method</li> </ol>	White board, marker, duster, pointer, computer system, Python Enaco distribution software
	Week-II		Operators, Expressions			
	Week-III	Flow of Control	Introduction, Types of Statements in Python , Statement Flow Control, if Statements of Python , Repetition of Tasks -, range ( ), looping statements,	<ol style="list-style-type: none"> <li>1. lecture cum Demonstration Method</li> <li>2. Brain storming</li> </ol>	White board, marker, duster, pointer, computer system, Python Enaco distribution software	
	Week-IV					

September	Revision + Half Year Examination					
October	Week-I	List Manipulation	Introduction, Creating and accessing lists, lists operations, Making true copy of a list, list	Program to calculate mean of a given list of numbers, program to search for an element for an element in a given list of a numbers , program to count frequency of a given elements of a given element in a list of numbers. etc.	1. lecture cum Discussion Method 2. Demonstration Method	White board, marker, duster, pointer, computer system, Python Enaconda distribution software
	Week-II		functions and methods, nested lists, list manipulation			
	Week-III	Dictionaries	Introduction, Key : Value Pairs, working with dictionaries, dictionary	Manipulation of dictionary with functions : Program to count the frequency of a list element using a dictionary.		
	Week-IV		functions and methods			
November	Week -I	Working with NumPy	Introduction, NumPy Arrays, NumPyDatatyps,creating	Practical related to array NumPy Arrays , Array slices etc.	1. lecture cum Discussion Method 2. Demonstration Method	White board, marker, duster, pointer, computer system, Python Enaconda

	Week-II		Numpy arrays  working with NumPyarrays,	(creating 1D and 2D arrays, operations performed on arrays)		distribution software
	Week-III		Airthmetic operations on numpy arrays			
	Week-IV		Functions with numpy arrays			
December	Week-I	Emerging Trends	Artificial intelligence, robotics,	Time Bound Team Based activity related to different topics.	1. lecture cum Discussion Method	White board, marker,duster, pointer,computer system
	Week-II	(Syllabus completion)	big data, internet of things , cloud computing,			internet explore software
	Week-III		grid computing , blockchain technology			course book



	Week-IV					
January		Revision				
February		Revision				

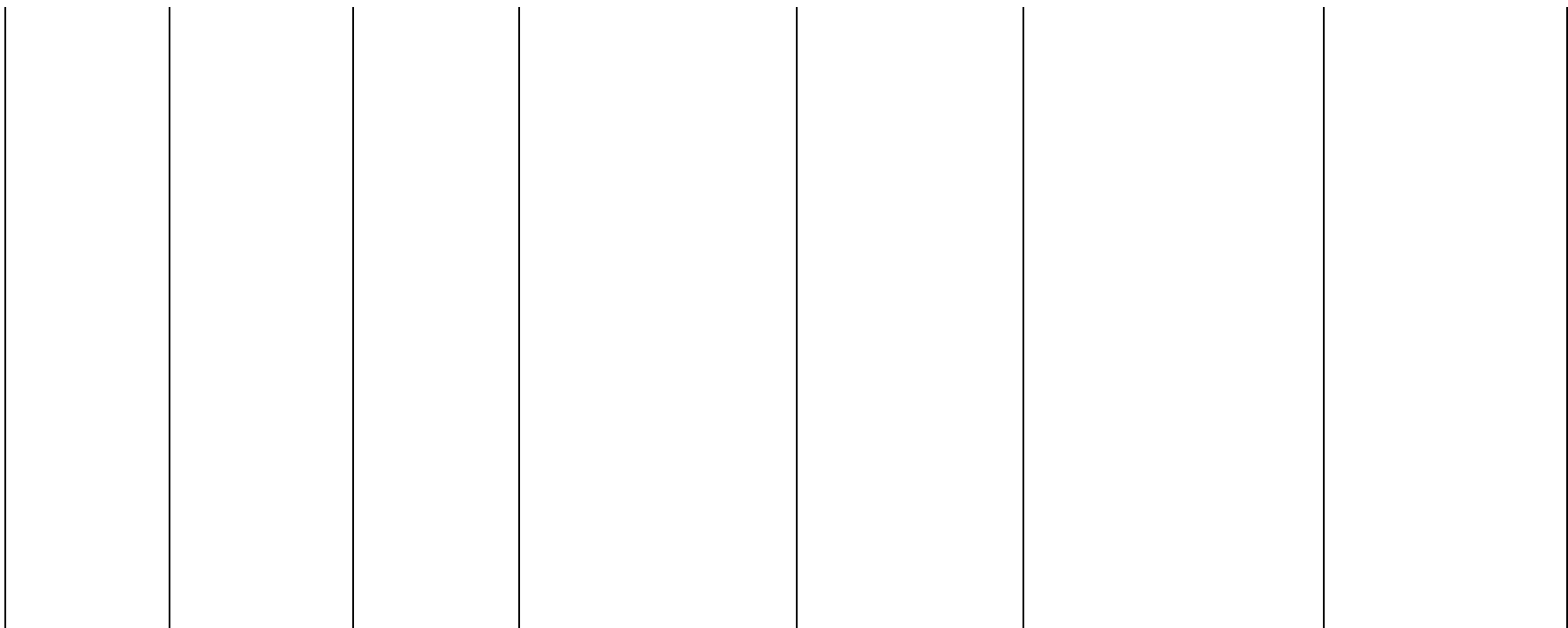
**Yoga  
XI**

Month	Week	Topic	Sub- topics	Art-Integrated	Methodology	Teaching - Aids
<b>APRIL</b>	<b>week-1,2</b>	Unit-1	Communication Skills	Practice of Halasana, Pawanmuktasana	Explanation	Chalk Board , duster and Smart - class
	<b>week-3,4</b>	Unit-2	Self Management Skills			
<b>May</b>	<b>Week-1,2</b>	Unit-3	ICT-Skills	Practice of Asanas	Yoga Activities Explanation	Chalk Board , duster and Smart - class
	<b>Week-3,4</b>	Unit-4	Entrepreneurial Skills			
<b>June</b>		<b>SUMMER BREAK</b>				

<b>July</b>	<b>Week-1,2</b>	Unit-5	Green Skills	Practice of Dhyana Mudra	Revise and Explanation	Chalk board , duster and Smart - class
	<b>Week-3,4</b>	Revision	Green Skills			

<b>August</b>	<b>Week-1</b>	(Part-B) Unit-1	Introduction to Yoga and Yogic Practices-1	1) Yoga Etymology, definition, Aim, objective and misconception text. 2)Yoga Origin, History and Development. 3)Rules and Regulation to be followed by yoga practitioners. 4)Introduction to major schools of yoga (Janan, Yoga Bhakti,Yoga Karma, Patanjali, Hatha. 5)Introduction to yogic practices (Sukshama Vyayama, Surya Namaskar and Asanas).		Chalk board , duster and Smart - class
	<b>Week-2</b>					
	<b>Week-3</b>					
	<b>Week-4</b>					
<b>September</b>				<b>REVISION</b>		

<b>October</b>	<b>Week-1</b>	Unit-2	Introduction to Yoga Texts-1	1)Introduction and study of patanjali Yoga sutra including memorization of selected Sutra. 2)Introduction and study of Gheranda Samhita. 3)Introduction of Hata Pradpika. 4) Introduction and study of Bhagavad Gita including memorization of selected Slokas.		Chalk board , duster and Smart – class
	<b>Week-2</b>					
	<b>Week-3</b>					
	<b>Week-4</b>					



<b>November</b>	<b>Week-1</b>	Unit-3	Introduction to Yoga and Yogic Practices-2	1) Brief introduction to human Body. 2) Role of Yoga for health promotion. 3)Yogic attitudes and practices. 4) Holistic approach of Yoga towards the health and diseases. 5) Introduction Yoga diet and its relevance and importance in Yoga Sadhana. 6) Dincharya and Ritucharya with respect of Yogic lifestyle.	Chalk board ,duster and Smart – class
	<b>Week-2</b>				
	<b>Week-3</b>				
	<b>Week-4</b>				

<b>December</b>		Unit-5	Yoga for Health Promotion-2			
<b>January</b>		Practicals and lab Activities	Demonstration of skill competency in lab activities and Surya Namaskar			
<b>February</b>		Revision	Revision			
<b>March</b>			Annual Exam			

MONTH	Week	TOPIC	SUBTOPIC	ACTIVITIES	METHODOLOGIES	TEACHING AIDS
April	1 <sup>st</sup> week	SOME BASIC CONCEPTS OF CHEMISTRY	General Introduction: Importance and scope of Chemistry. Nature of matter, laws of chemical combination, Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses, mole concept and molar mass, percentage composition, empirical and molecular formula, chemical reactions, stoichiometry and calculations based on stoichiometry	Make a poster showing the importance of chemistry in everyday life.	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model, smart board
	2 <sup>nd</sup> week			Make a chart showing the classification of matter .		
	3 <sup>rd</sup> week			On A4 size sheet write laws of chemical combination		
	3 <sup>rd</sup> week	STRUCTURE OF ATOM	Discovery of Electron, Proton and Neutron, atomic number, isotopes and isobars.	Draw spectral lines of atomic hydrogen on A4 size sheet	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model,



	4 <sup>th</sup> week		<p>Thomson's model and its limitations. Rutherford's model and its limitations, Bohr's model and its limitations, concept of shells and subshells,</p> <p>dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli's exclusion principle and Hund's rule, electronic configuration of atoms, stability of half-filled and completely filled orbitals.</p>	<p>Explain photoelectric effect with diagram on a chart.</p> <p>Draw boundary surface diagram of s, p and d orbitals.</p> <p>Show the spectrum of electromagnetic radiations on a chart paper.</p>		smart board
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May	1 <sup>st</sup> week	Classification of Elements and Periodicity in Properties	Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, inert gas radii, Ionization enthalpy, electron gain enthalpy, electronegativity, valency.  Nomenclature of elements with atomic number greater than 100	Draw modern periodic table on a piece of chart	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model, smart board
	2 <sup>nd</sup> week			On a piece of chart draw a figure show the periodic trends of elements in the periodic table  A4 size sheet show the nomenclature of elements with atomic number above 100  Write an assignment on the anomalous properties of second period elements		
August	2 <sup>nd</sup> week	Chemical Bonding and Molecular Structure	Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar	Write Lewis representation of some molecules on a piece of chart	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model,

	3 <sup>rd</sup> week		<p>character of covalent bond, covalent character of ionic bond, valence bond theory,</p> <p>resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization, involving s, p and d orbitals and shapes of some simple molecules,</p> <p>molecular orbital theory of homonuclear diatomic molecules(qualitative idea only), Hydrogen bond</p>	<p>Explain bond parameters on a chart paper.</p> <p>Write a table showing dipole moments of some molecules on an A4 size sheet.</p> <p>Draw shapes of molecules containing bond pair and lone pair on a chart</p>		smart board
July	1 <sup>st</sup> week	Thermodynamics	<p>Concepts of System and types of systems, surroundings, work, heat, energy, extensive and intensive properties,</p>	<p>With the help of diagram show types of system on a chart.</p> <p>Draw the diagram of bomb</p>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model, smart board

	2 <sup>nd</sup> week		<p>state functions. First law of thermodynamics - internal energy and enthalpy, heat capacity and specific heat, measurement of <math>\Delta U</math> and <math>\Delta H</math>,</p>	<p>calorimeter on an A4 size sheet</p>		
	3 <sup>rd</sup> week		<p>Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution.</p>	<p>Write enthalpies of different types of reactions on a chart</p> <p>draw enthalpy diagram for lattice enthalpy of sodium chloride (born Haber cycle) on chart</p>		
	4 <sup>th</sup> week		<p>Second law of Thermodynamics (brief introduction) Introduction of entropy as a state function, Gibb's energy change for</p> <p>spontaneous and non- spontaneous</p>			

			processes, criteria for equilibrium. Third law of thermodynamics (brief introduction).			
August	1 <sup>st</sup> week	Equilibrium	Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant,	With the help of diagram show how to predict the direction of the reaction.	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model, smart board
	2 <sup>nd</sup> week		factors affecting equilibrium - Le Chatelier's principle, ionic equilibrium-ionization of acids and bases, strong and weak electrolytes,	Write applications of equilibrium constant		
	3 <sup>rd</sup> week		degree of ionization, ionization of poly basic acids, acid strength, concept of pH, hydrolysis of salts (elementary idea),	Write an assignment on the significance of PH paper or universal indicator		
	4 <sup>th</sup> week			Diagrammatically show on factors affecting equilibrium		

			buffer solution, Henderson Equation, solubility product, common ion effect (with illustrative examples).			
October	1 <sup>st</sup> week	Redox Reactions	Concept of oxidation and reduction, redox reactions, oxidation number,	On a piece of chart write the differences between reduction and oxidation reactions.	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model, smart board
	2 <sup>nd</sup> week		balancing redox reactions, in terms of loss and gain of electrons and change in oxidation number,	On A4 size sheet show the different steps involved in balancing of reaction.		
	3 <sup>rd</sup> week		applications of redox reactions	Make a list of oxidation and reduction reactions on an A4 size sheet.		

				Write different types of reactions on a piece of chart.			
October	3 <sup>rd</sup> week	Organic Chemistry -Some Basic Principles and Techniques	General introduction, methods of purification, qualitative and quantitative analysis, classification	show Classification of organic compounds on a chart	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	Chalk, duster, green board, model, smart board	
	4 <sup>th</sup> week			IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond:			Make a model to show 3D representation of methane molecule
November	1 <sup>st</sup> week			inductive effect, electromeric effect, resonance and hyper conjugation.			Chart show some functional group and classes of organic compounds.
	2 <sup>nd</sup> week			Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions,			On an A4 size sheet show resonance effect

			<p>electrophiles and nucleophiles,</p> <p>types of organic reactions</p>			
November	3 <sup>rd</sup> week	Hydrocarbons	<p>Classification of Hydrocarbons</p> <p>Aliphatic Hydrocarbons:</p> <p>Alkanes - Nomenclature, isomerism, conformation (ethane only), physical properties,</p>	<p>Draw conformations of ethane A4 size sheet</p>	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Explanation</li> <li>• observation</li> </ul>	<p>Chalk, duster, green board, model, smart board</p>
	4 <sup>th</sup> week		<p>chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.</p>	<p>Write an assignment on carcinogenicity and toxicity</p>		
December	1 <sup>st</sup> week		<p>Alkenes - Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods</p>	<p>Write a report on hydrogenation</p>		
	2 <sup>nd</sup> week			<p>Show importance of hydrocarbons with the help of a collage</p>		



	<p>week</p> <p>3<sup>rd</sup> week</p> <p>4<sup>th</sup> week</p>		<p>of preparation, chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect),</p> <p>ozonolysis, oxidation, mechanism of electrophilic addition. Alkynes - Nomenclature, structure of triple bond (ethyne), physical properties,</p> <p>methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of - hydrogen, halogens, hydrogen halides and water.</p>			
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**SUBJECT- MATHS  
BOOK:NCERT**

			<p>Aromatic Hydrocarbons: Introduction, IUPAC nomenclature, benzene: resonance, aromaticity, 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</p>			
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MONTH	CHAPTER	TOPICS	Art Integrated activity	METHODOLOGY	TEACHING AIDS/INSTRUCTIONAL AIDS
<i>APRIL</i>					
WEEK 1 WEEK 2	<b>Sets</b>	Sets and their representations. Empty set. Finite and infinite sets. Equal sets.	Make attractive Venn diagram	Explanation by Venn diagram,	Chalk board,

		Subsets. Subsets of a set of real numbers especially intervals (with notations). Power set. Universal set. Venn diagrams. Union and intersection of sets. Difference of sets. Complement of a set. Properties of Complement.	to show: 1. $A \cup B$ 2. $A - B$ 3. Only A 4. Draw a sketch of John venn	Learning by doing.	Duster, Smart Class
APRIL WEEK 3 WEEK 4	<b>Relations and Functions</b>	Ordered pairs. Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the set of real of itself (up to $R \times R \times R$ ). Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special type of relation. Pictorial representation of a function, domain, co-domain and range of a function. Real valued functions, domain and range of these functions, constant, identity, polynomial, rational, modulus, signum, exponential,	1. <i>To distinguish between a relation and function using thread and bangle.</i> 2. <i>Draw an attractive graph of constant function,</i> 3. <i>modulus function</i> 4. <i>signum</i>	Demonstration , Graphic organizers, problem solving.	Chalk board, duster, arrow diagram on chart, smart class.

<p>MAY WEEK 1 WEEK 2</p>	<p><b>Trigonometric Functions</b></p>	<p>logarithmic and greatest integer functions, with their graphs. Sum, difference, product and quotients of functions.</p> <p>Positive and Negative angles. Measuring angles in radians and degrees and conversion from one measure to another. Definition of trigonometric functions with the help of unit circle. Truth of the identity <math>\sin^2x + \cos^2x = 1</math>, for all <math>x</math>. Signs of trigonometric functions. Domain and range of trigonometric functions and their graphs. Expressing <math>\sin(x \pm y)</math> and <math>\cos(x \pm y)</math> etc. in the terms of <math>\sin x</math>, <math>\sin y</math>, <math>\cos x</math> and <math>\cos y</math> and their simple applications. Deducting all the identities like:</p> <p><math>\tan(x \pm y)</math>, <math>\cot(x \pm y)</math>, <math>\sin \alpha \pm \sin \beta</math>, <math>\sin 2x</math> etc.</p>	<p><i>function using graph and thread</i></p> <p>Draw curve of:</p> <ol style="list-style-type: none"> <li>1. sine</li> <li>2. cosine</li> <li>3. Tangent with the help of sketch or thread</li> </ol> <p>make a A4 Size sheet and write all formula of trigo</p>		
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<i>MAY</i> <i>WEEK 1</i> <i>WEEK 2</i>	<b>Complex Numbers and Quadratic Equations</b>	Need for complex numbers, especially $\sqrt{-1}$ , to be motivated by inability to solve some of the quadratic equations. Algebraic properties of complex numbers. Argand plane	1. make a curve of parabola using sketch		Chalk board, Duster, Smart Class
<i>WEEK 3</i> <i>WEEK 4</i>	<b>Linear Inequalities</b>	Linear inequalities. Algebraic solutions of linear inequalities in one variable and their representation on the number line.	To verify that the graph of a given inequality, say $5x + 4y - 40 < 0$ ,		Chalk board, Duster, Smart Class

			of the form $ax+by+c<0$ , $a,b>0, c<0$ represents only one of the two half planes.		
UNIT TEST					
<i>JULY</i> <i>WEEK 1</i> <i>WEEK 2.</i>	<b>Permutat- ions and Combinat- ions</b>	Fundamental principle of counting. Factorial n. (n!) Permutations and combinations, derivation of Formulae permutation and combination, simple applications.	1.To find the number of ways in which three cards can be selected from	Explanation, Brain storming	Chalk board, Duster, Smart Class

WEEK 3 WEEK 4	<b>Binomial Theorem</b>	History, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, simple applications.	given five cards. 2. Make a diagram to show all the ways of approaching school 3. make a game on Permutations  To construct a Pascal Triangle and to write binomial expansion		
SEPTEMBER	Revision and Half Yearly Exams				
AUGUST WEEK 1 WEEK 2	<b>Sequence and Series</b>	Sequence and series. Arithmetic Mean (A.M.) Geometric Progression (G.P.), general terms of G.P., sum of n terms of a G.P., infinite G.P. and its sum, geometric mean (G.M.), relation	1. To obtain formulae for the sum of squares of first n natural	Discovery Method, Problem Solving, Project	Chalk board, Duster, Smart Class,

<p>SEPT —BER</p>		<p>between A.M. and G.M. Formulae for the sums.</p>	<p>numbers. 2. Make pattern on AP 3. Make PATTERN ON G.P 3. Fibonacci spiral art</p>		<p>Models</p>
<p>OCTOBER R WEEK 1 WEEK 2</p>	<p><b>Introduction to Three-dimensional Geometry</b></p>	<p>Revision and Half Yearly Exams</p> <p>Coordinate axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points</p>	<p>1. To make model of octants 2. make any 3d sketch /pattern /graphics 3. show derivation of distance formula</p>		
	<p><b>Probability</b></p>	<p>Random experiments, outcomes,</p>			



<p>WEEK 3 WEEK 4</p>		<p>sample spaces (set representation). Events, occurrence of events, 'not', and 'or' events, exhaustive events, mutually exclusive events, axiomatic (set theoretic) probability, connections with other theories of earlier classes. Probability of an event, probability of 'not', 'and' and 'or' events.</p>	<p>1.To show the sample space through coin when it is tossed once, two times, three times, four times. 2.Make a card game using probability</p>		
<p>NOVEMBER WEEK 1 WEEK 2</p>	<p><b>Straight lines</b></p>	<p>Brief recall of two dimensional geometry from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a line: parallel to axis, point-slope form, simple-intercept form, two-point form, intercept form ,Distance of a point from a line.</p>	<p>1. Make a stained glass window 2. Prepare any art work using</p>	<p>Heuristic Method, Project, Discussion, Problem Solving,</p>	<p>Chalk board, Duster, Smart Class</p>

<p>WEEK 3 WEEK 4</p>	<p><b>Conic Sections</b></p>	<p>Sections of a cone: ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.</p>	<p>straight line and curve 3. Make any optical illusion through line To construct different types of conic 1. Circle 2. Ellipse 3. Parabola 4. Make fun images using conics</p>		
<p>DECEMBER WEEK 1 AND 2</p>	<p><b>Limits and Deratives</b></p>	<p>Derivative introduced as rate of change both as that of distance function and geometrically. Intuitive idea of limit. Limits of polynomials and rational functions trigonometric exponential</p>	<p>Verification of geometrical significance of derivatives.</p>	<p>Problem Solving, Explanation</p>	<p>Chalk board, Duster, Smart Class</p>

<p>WEEK 3 WEEK 4</p>	<p><b>Statistics</b></p>	<p>and logarithmic functions. Definition of derivative relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivates of polynomial and trigonometric functions.</p> <p>Measures of Dispersion: Range, Mean Deviation, variance and standard deviation of ungrouped/grouped data.</p>			
<p>JANUAR Y</p>	<p>UNIT TEST-2</p>				
<p>FEBRU- ARY</p>	<p>REVISION AND ANNUAL EXAMS</p>				

**MARCH****ANNUAL EXAMS****BOOKS PRESCRIBED – NCERT TEXT BOOK, NCERT EXAMPLERS, LAB MANUAL**

ANNUAL PLANNER (2023-24).

SUBJECT : PHYSICS

CLASS : XI

Month	WEEK	Topic	Sub-Topic	Activities	Methodology	Teaching-Aids
APRIL	WEEK 1	PHYSICAL WORLD AND ENVIRONMENT	Basic mathematics including graphs and basic calculus	To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.	EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 2		Need for measurement: Units of measurement; systems of units;SI units, fundamental and derived units. Significant figures.			
	WEEK 3		Dimensions of physical quantities, dimensional analysis and its applications.			
	WEEK 4	MOTION IN A STRAIGHT LINE	Frame of reference, Motion in a straight line, Elementary concepts of differentiation and integration for			
MAY						

	WEEK1		describing motion,			
	WEEK 2		Uniform and non-uniform motion, and instantaneous velocity, uniformly accelerated motion,  velocity - time and position-time graphs. Relations for uniformly accelerated motion (graphical treatment).	To measure diameter of a given wire and thickness of a given sheet using screw gauge.	EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD

JUNE	WEEK 3	MOTION IN A PLANE	Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number;	To determine volume of an irregular lamina using screw gauge.	EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 4		<b>PRE VACATION EXAMS</b>  <b>SUMMER VACATION</b>			
JULY	WEEK 1		Addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components,	To determine radius of curvature of a given spherical surface by a spherometer.	EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 2		Scalar and Vector product of vectors. Motion in a plane, cases of uniform velocity and uniform acceleration- projectile motion, uniform circular motion.			

AUGUST	WEEK 3	LAWS OF MOTION	Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse;			
	WEEK 4		Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces,			
	WEEK 1		Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force,			
	WEEK 2		Examples of circular motion (vehicle on a level circular road, vehicle on a banked road).			
	WEEK 3	WORK, ENERGY	Work done by a constant force and a variable force; kinetic energy, work- energy			

CHALK, DUSTER,  
GREEN  
BOARD, MODEL,  
SMART BOARD

EXPLANATION  
DISCUSSION  
OBSERVATION

SEPTMBER	WEEK 4	AND POWER	<p>theorem, power.</p> <p>Notion of potential energy, potential energy of a spring, conservative forces: non- conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.</p> <p><b>EXAMINATIONS</b></p>		EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
OCTOBER	WEEK 1	System of particles and Rotational motion	<p>Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod.</p> <p>Moment of a force, torque, angular momentum, law of conservation of angular momentum and its applications.</p>		EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 2		<p>Equilibrium of rigid bodies, rigid body</p>		EXPLANATION DISCUSSION	



NOVEMBER	WEEK 3	Gravitation	rotation and equations of rotational motion, comparison of linear and rotational motions Moment of inertia, radius of gyration, values of moments of inertia for simple geometrical objects (no derivation).		OBSERVATION		
	WEEK 4				EXPLANATION DISCUSSION OBSERVATION		CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 1		Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth.		EXPLANATION DISCUSSION OBSERVATION		CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 2		Gravitational potential energy and gravitational potential, escape velocity, orbital velocity and weightlessness		EXPLANATION DISCUSSION OBSERVATION		CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
			Elasticity, Stress-strain relationship, Hooke's law, Young's				

	WEEK 3	Mechanical properties of solids	<p>modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy.</p> <p>Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure.</p> <p>Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications. Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise.</p>	<p>To determine Young's modulus of elasticity of the material of a given wire.</p> <p>To find the force constant of a helical spring by plotting a graph between load and extension.</p>	EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 4	Mechanical properties of fluids			EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD

DECEMBER	WEEK 1	THERMAL PROPERTIES OF MATTER	Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; $C_p$ , $C_v$ - calorimetry; change of state - latent heat capacity.		EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 2		Heat transfer- conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law .		EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 3	THERMODYNAMICS	Thermal equilibrium and definition of temperature zeroth law of thermodynamic heat, work and internal energy. I law of thermodynamic Second law of thermodynamics: gaseous state of matter, change of condition of gaseous state -isothermal,		EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL,

JANUARY	WEEK 4		adiabatic, reversible, irreversible, and cyclic processes. Eqn of state of a perfect gas, work done in compressing a gas.			SMART BOARD
	WEEK 1	KINETIC THEORY OF GASES	Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.	To study the relation between frequency and length of a given wire under constant tension using sonometer.	EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD
	WEEK 2	OSCILLATIONS	periodic motion displacement as a function of time, periodic functions and their application.  Simple harmonic motion phase; oscillations of a loaded spring-		EXPLANATION DISCUSSION OBSERVATION	CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD

			<p>restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period.</p> <p>Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats.</p> <p><b>REVISION</b></p>		<p>EXPLANATION DISCUSSION OBSERVATION</p>	<p>CHALK,DUSTER, GREEN BOARD,MODEL, SMART BOARD</p>
	WEEK 3					
	WEEK 4					

TYPOGRAPHY & COMPUTER APPLICATION

MONTH	WEEK	TOPIC	SUB TOPIC	ACTIVITIES	METHODOLOGIES	INSTRUCTIONAL/TEACHING AIDS
April	Week-I	INTRODUCTION TO TYPOGRAPHY	INTRODUCTION , Learning Objectives The Typewriter , Origin. of Typewriter, Importance of Typewriter /Computer ,Categories of Typewriters ,	➤ History of typography	1. Lecture	White board, marker, dust er, pointer, computer system, flash cards course book
	Week-II		Standard			

	Week-III	Keyboard Operations	<p>Typewriter ,Noiseless Typewriter ,Portable Typewriter , Electric Typewriter ,Electronic Typewriter , Computers , Laptops</p> <p>Introduction ,Objectives ,Keyboard ,QWERTY Keyboard , Key Types , Character Keys ,Modifier key, Sitting Posture ,Chair &amp; Table Height</p>	<p>w i l l b e g i v e n G r o u p d i s c u s s i o n w i l</p>	<p>M e t h o d 2. I l l u s t r a t i o n M e t h o d</p>	<p>White board, marker, duster , pointer, Computer, typing software ,cours</p>
	Week-4					

			Guideline ,Placement of Machine ,Methods of Keyboard Operation ,Sight Method Merits of Sight Method Demerits of Sight Method ,Touch Method of Typing Merits of Touch Method Demerits of Touch Method	l b e  g i v e n  o n  d i f f e r e n t y p e s  o f  t	e book    1. Lecture Method cum demonst ration method
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				y p e w r i t e r		
				Training will be given to		

				<p>students for touch method of typing</p> <p>Students will do practice of different rows using touch method in typing master</p> <p>After learning all rows of keyboard paragraph will be given for</p>		
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				practice		
May	Week-1	Computer Hardware	Input devices,	Hardware parts will be shown to students in lab	1. Lecture cum & Demonstration Method	Black board , chalk , duster , pointer, computer system
	Week-2		Output devices,		2. Brain Storming	
	Week-3	Windows Operating System	Serial ports, Parallel Ports	Serial ports and parallel port of computer will be shown to students	1. Lecture Method cum demonstration method	Black board , chalk , duster , pointer, computer
			Introduction, Objectives , Logging On ,Switching between Accounts ,Features of the Windows System , Desktop , Icon ,	Practical knowledge will be given to students based		

	Week-4	<p>Window ,Dialogue Box , Start Menu ,Task Bar , Tab Menu ,Opening &amp; Closing Application , Manipulating Windows, Maximize , Minimize , Resize , Using Computer Folder , Using window Explorer ,Navigation Pane ,Details Pane , Preview Pane Control Panel ,</p>	<p>on this chapter</p> <p>Students will save their files in different memory locations by using their own created folders</p>		<p>system, MS Office</p>
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			Locating Files and Folders , Search for file or Folder, creating a folder , Deleting a file or folder , Renaming a file or folder			
June		Summer - Break				
July	UT +  Week-1	Introduction to Office	,Introduction to Word, Introduction to Excel, Introduction to Power Point, Introduction to Outlook ,Working with the Office Assistant ,	Creating documents ,editing documents with different features of words ,excel and	1. lecture cum Discussion Method  2. Demonstration Method	White board, marker, dust er, pointer, computer system, MS office

	Week-2		Office Short Cut Bar, Customizing the Office Shortcut Bar ,Exit the office shortcut bar	power point		
	Week-3	MS Word(part-1)	Beginning with word a) Edit document b) Format document c) Tables & Graphics Documents prepared using MS word, Application window of MS Word,	Creating documents ,editing documents with different features	. Demonstration Method	White board, marker, dust er, pointer, computer system, MS

				of words will be taught to students		office
July	Week-4	MS Word(part-1)	Creating a new blank document , Entering text in a document file , Inserting a text , Deleting a text, Selecting a text, Copy & paste text , Drag and drop text	Creating documents ,editing documents with different features of words will be taught to students  Student	1. lecture cum Discussion Method  2. Demonstration Method	White board, marker, dust er, pointer, computer system, MS office software

August	Week-1		<p>,Finding a text ,</p> <p>Replacing text Using find and replace text , Auto correction , Correction of mistakes , Save As Command , Using Save As command , Using spell check features , Using Grammar check feature</p> <p>FORMATTI NG WITH WORD</p> <p>Formatting</p>	<p>s will practice practical concepts in MS word</p>		
	Week-2					



	Week-3	MS WORD- PART-2	the text , Changing the text case , Applying bullets & Numbers ,Inserting a new list , Selecting an alternate bullet or number or style , Using a symbol as a bullet ,Changing the bullet colour, Changing the text alignment, Using indents and tabs , Modifying the default settings , Setting a			
	Week-4		Apart from using differen t features of WORD students will be learn and practice : Mail	1. lecture cum Discussi on Method	Black board , chalk , duster , pointe r, comp uter syste m, MS Office	

			<p>tab stop ,Hanging indent , Setting left, center, right and decimal tab stops</p> <p>Working with text boxes , Using styles and themes , Moving the shapes , Changing of colour scheme , Managing Documents and customizin g word , Document Properties , Using Thesaurus , Advanced</p>	<p>merge, work with tables, shapes , images, lists etc.</p>		
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			Word Features , Creating & Using auto text entries , Working with Tables, Adding footer and header , Adding Footnotes & Endnotes, adding border , Mail Merge			
September		Revision + Half year Examination				
October	Week-1	Communication Skills	Session 1: Introduction to Communication Session 2: Verbal Communication	Different types of communication will be learned with the	1. lecture cum Discussion Method	White board, marker, dust er, pointer, computer

	Week-2		ation Session 3: Non-verbal Communic ation	help of differen t activitie s	2. Brain storming method	syste m
	Week-3		Session 4: Pronunciati on Basics Session 5: Communic ation Styles — Assertivene ss Session 6: Saying No — Refusal Skills			
			Session 7: Writing Skills — Parts of Speech			
			Session 8: Writing Skills —			

	Week-4	Self-management Skills	<p>Sentences</p> <p>Session 9: Greetings and Introduction Session</p> <p>Session 10: Talking about Self</p> <p>Session 11: Asking Questions</p> <p>Session 12: Talking about Family</p> <p>Session 13: Describing Habits and Routines</p> <p>Session 14: Asking for Directions</p> <p>Session 1: Strength and Weakness</p>	Time bound activities will be given to students to learn	1. lecture cum Discussi	White board, marker, dust er, pointer
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			<p>Analysis</p> <p>Session 2: Grooming</p> <p>Session 3: Personal Hygiene</p> <p>Session 4: Team Work</p> <p>Session 5: Networking Skills</p> <p>Session 6: Self- motivation</p>	<p>Group discussi on will be given to underst and the topics</p>	<p>on Method</p> <p>2. Brain storming method</p>	
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			<p>Session 7: Goal Setting</p> <p>Session 8: Time Management</p>			
December	Week-1	Information and Communication Technology Skills	<p>Session 1: Introduction to ICT</p> <p>Session 2: Basic Interface of LibreOffice Writer 1</p> <p>Session 3: Saving, Closing, Opening and Printing Document</p> <p>Session 4: Formatting Text in a Word Document</p> <p>Session 5:</p>	<p>Creating documents ,editing documents with different features of words will be taught to students</p> <p>Students will practice practical concept</p>	<p>1. lecture cum Discussion Method</p> <p>2. Demonstration Method</p>	<p>White board, marker, dust er, pointer, computer system, Libre Office</p>

	Week-2		<p>Checking Spelling and Grammar</p> <p>Session 6: Inserting Lists, Tables, Pictures, and Shapes</p> <p>Session 7: Header, Footer and Page Number</p> <p>Session 8: Tracking Changes in LibreOffice WriterUnit 4:</p>	<p>s in libre Office</p> <p>Apart from using different features of Libre Office students will be learn and practice :</p> <p>Mail merge, work with tables, shapes , images, lists etc.</p>		
December	Week-3	Entrepreneurship	Session 1: Introductio	Time Bound	1. lecture	White board,



	Week-4	Skills	<p>n to Entrepreneurship</p> <p>Session 2: Values of an Entrepreneur</p> <p>Session 3: Attitude of an Entrepreneur</p> <p>Session 4: Thinking Like an Entrepreneur</p> <p>Session 5: Coming Up with a Business Idea</p> <p>Session 6: Understanding the Market</p> <p>Session 7: Business</p>	Team Based activity related to different topics.	cum Discussion Method	<p>market, dust er, pointer, computer ,</p> <p>internet explore software, Internet, course book</p>
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January	Week-1		Planning			
	Week-2	Green Skills		1. Prepare posters on green Economy	1. lecture cum Discussion Method	
		(Syllabus completion)	Session 1: Sectors of Green Economy	2. Motivate students to plant a tree.	2. Brain storming method	
		+ Revision	Session 2: Policies for a Green Economy	3. Motivate students to buy energy efficient products		
February		Revision	Session 3: Stakeholders in Green Economy	4. Motivate students to do		
			Session 4: Government and Private Agencies			White board, marker, dust er, pointer, computer system, Google, Internet, course book

				environ ment friendly jobs in their routine life.  etc.		
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**ANNUAL PLANNER 2023-24**

**PHYSICAL EDUCATION**

**CLASS-XI**

<b>Chapter</b>	<b>Sub Topics</b>	<b>Activities</b>	<b>Methodology</b>	<b>Teaching Aids</b>	
1. changing trends & physical education	i) Meaning & definition of physical education <ul style="list-style-type: none"> <li>Aims and objectives of physical education</li> </ul>	Make a chart tabulation on the aims and objectives of physical education.  Make a project on carrier options of physical education.	Lecture method	<ul style="list-style-type: none"> <li>Green board</li> <li>Educomp smart board.</li> </ul>	

2. Olympic value education	<ul style="list-style-type: none"> <li>• Career option in physical education</li> <li>• Competition in various sports at national and international level</li> <li>• Khelo - India program</li> </ul>	<p>Make a flash card on competitions in various sports at national and international level.</p> <p>Make a chart on Olympic symbols.</p> <p>Make a project on Olympic, Para Olympic and special Olympics.</p>	Explanation method	<ul style="list-style-type: none"> <li>• Green board</li> <li>• Educop smart board.</li> </ul>	
3. Yoga	<ul style="list-style-type: none"> <li>• Olympics, Paralympics and special Olympics</li> <li>• Olympic, symbols, ideals, objectives &amp; value of Olympics</li> <li>• International Olympic committee.</li> <li>• Indian Olympic association.</li> </ul>	<p>Make an explanation on international Olympic committee and Indian Olympic Association.</p> <p>Make a flashcard on the importance of Yoga.</p> <p>Make a chart on the asanas, pranayamas, meditation and yogic kriyas. Make a project on elements of yoga.</p>	Interactive method	<ul style="list-style-type: none"> <li>• Green board</li> </ul>	
4. Physical education & sports for CWSN children with specific need	<p>Meaning &amp; importance of yoga</p> <p>Elements of yoga.</p>				

<div data-bbox="69 193 277 414">divang.</div> <div data-bbox="69 430 277 582">5. Physical fitness, wellness &amp; lifestyle</div> <div data-bbox="69 1292 277 1383">6. test, measurement</div>	<div data-bbox="389 193 584 411">Introduction – Asanas, pranayam, meditation &amp; yogic kriyas. Summer break</div> <ul data-bbox="344 1018 600 1383" style="list-style-type: none"> <li>•</li> <li>• Meaning &amp; importance of physical fitness, wellness &amp; lifestyle</li> <li>• Components of physical fitness and wellness</li> <li>• Components of</li> </ul>	<div data-bbox="647 568 931 663">Make a chart on the components of physical fitness and wellness.</div> <div data-bbox="647 703 925 836">Make a project on the importance of physical fitness, wellness and lifestyle.</div> <div data-bbox="647 876 902 935">Make a flash card on health related fitness.</div> <div data-bbox="647 1147 954 1279">Make a flashcard on the role of various professionals for children with special needs.</div> <div data-bbox="647 1319 954 1378">Make a chart on aims and objectives adaptive</div>	<div data-bbox="983 193 1128 256">Explanation method</div> <div data-bbox="983 839 1113 903">Interactive method</div> <div data-bbox="983 1182 1128 1246">Explanation method</div>	<ul data-bbox="1211 403 1341 467" style="list-style-type: none"> <li>• Green board</li> </ul>	
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<p>7.fundamentals of anatomy physiology &amp; kinesiology in sports.</p>	<p>physical education teacher, speech, therapist &amp; special education.</p> <ul style="list-style-type: none"> <li>• Leadership qualities &amp; role of a leader</li> <li>• Creating leaders through physical education</li> <li>• Meaning, objectives &amp; types of adventure sports ( rock climbing, tracking, river, rafting, mountaineering, surfing and paragliding.</li> <li>• Safety measures to prevent sports injuries.</li> </ul>	<p>Make a chart on the types of adventure sports( rock climbing, trekking, river rafting, mountaineering, surfing and paragliding).</p> <p>Make a project on safety measures to prevent sports injuries.</p> <p>Make a chart measurement of health related fitness.</p> <p>Make a chart showing importance measurement and evaluation in sports.</p> <p>Make a flashcard on the classification of bones and types of bones.</p> <p>Make a project on the functions and structures</p>	<p>Explanation method</p> <p>Demonstration method</p> <p>Explanation method</p>		
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<p>8. Fundamentals of kinesiology and biomechanical in sports</p>	<p>Revision</p> <ul style="list-style-type: none"> <li>Defining and importance of anatomy, physiology &amp; kinesiology.</li> </ul>	<p>of respiratory and circulatory systems.</p> <p>Make a chart on equilibrium- dynamic and static and centre of gravity</p>		<ul style="list-style-type: none"> <li>Green board</li> </ul>	
<p>9. psychology &amp; sports .</p>	<ul style="list-style-type: none"> <li>Function of speleton system and circulatory system.</li> <li>Properties and function of muscles.</li> </ul>	<p>Make a project on the development characteristics at different stages of development.</p> <p>Make a flashcard on adolescent problems and their management.</p>		<ul style="list-style-type: none"> <li>Green board</li> </ul>	
<p>10. Training and doping in sports.</p>	<ul style="list-style-type: none"> <li>Equilibrium – dynamic &amp; static and centre of gravity and its application in sports</li> </ul>	<p>Make a chart on difference between Growth and development.</p> <p>Make a flashcard of the principles of sports training.</p>	<p>Explanation method</p>		
<p>November</p>		<p>Make a chart on the Warming up and Limbering down.</p>			
<p>December</p>	<ul style="list-style-type: none"> <li>Definition &amp; importance of psyohology in physical</li> </ul>			<ul style="list-style-type: none"> <li>Green</li> </ul>	



	<p>education &amp; sports.</p> <ul style="list-style-type: none"> <li>• Adolescent problems &amp; their management.</li> <li>• Meaning and concept of sports training.</li> <li>• Principle of sports training.</li> <li>• Warming up &amp; limbering down.</li> <li>• Skill, technique &amp; style</li> <li>• Concept &amp; classification of doping</li> </ul> <p><b>Revision</b></p> <p><b>Annual Examination</b></p>			<p><b>board</b></p> <ul style="list-style-type: none"> <li>• <b>Green board</b></li> <li>• <b>Educomp smart board</b></li> </ul>	
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January					
February					

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**XI (2023-24)**  
**Biology (044)**

<b>Months</b>	<b>Week</b>	<b>Lesson No &amp; Name</b>	<b>Activity</b>
<b>July</b>	<b>Week -1</b>	1.The Living World	Study of compound microscope
	<b>Week-2,3</b>	2.Biological Classification	Study and description of the flowers.
	<b>Week-4</b>	3.Plant Kingdom	Study of specimens & identification with reasons.

<b>August</b>	<b>Week-1</b>	4. Animal Kingdom	Study of characters of animal specimens and identification with reasons
	<b>Week-2</b>	5. Morphology of Flowering Plants.	
	<b>Week-3,4</b>	6. Anatomy of flowering plants	Study of distribution of stomata
<b>September</b>	<b>Week-1,2</b>	7. Structural Organization in Animals	Preparation and study of T.S. dicot and monocot root and stem
	<b>Week-3</b>	8. Cell theory and cell as the basic unit of life	Study of osmosis
	<b>Week-4</b>	9. Biomolecules	Study of plasmolysis in epidermal peels of leaves
<b>October</b>	<b>Week-1,2</b>		

	<b>Week-3,4</b>	10.Cell division and Cell Theory	Study of mitosis ( onion and grasshopper) through permanent slides
		13.Photosynthesis	Test of presence of sugar, starch, proteins and fats in plant and animal material
<b>November</b>	<b>Week-1</b>	14.Respiration in Plants	Comparative study of rate of transpiration
	<b>Week-2,3</b>	15.Plant growth and development	Study of Photosynthesis- Separation of plant pigments through paper chromatography
	<b>Week4</b>	17.Breathing and Respiration	Rate of respiration
<b>December</b>	<b>Week-1,2</b>	17.Breathing and Respiration	Different types of inflorescence
	<b>Week-3</b>	18.Body fluids and circulation	Human skeleton and different types of joints
	<b>Week-4</b>	19. Excretory products and their elimination	Investigatory Project

<b>January</b>	<b>Week-1</b>	20.Locomotion and movement	Test for presence of urea and sugar in urine
	<b>Week-2</b>	21.Neural control and coordination	Test for presence of albumin in urine
		22.Chemical control & coordination	Test for presence of bile salts in urine
<b>February</b>		Revision	Investigatory Project
<b>March</b>		Annual Exam	

**Subject: - Psychology**

Month	Week	Topic	Sub -Topic	Teaching Aids
April	Week -1	<b>What is Psychology?</b>	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. What is psychology <ul style="list-style-type: none"> <li>• Psychology as discipline</li> </ul> </li> </ol>	Blackboard, Chalk , Duster, Course Book

			<ul style="list-style-type: none"> <li>• Psychology as a natural science</li> <li>• Psychology as a social science</li> </ul>	
	Week - 2		<p><b>3.</b> Understanding mind and behaviour</p> <p><b>4.</b> Popular Nations about the Discipline of psychology</p> <p><b>5.</b> Evolution of psychology</p>	
	Week -3		<p><b>6.</b> Development of psychology in India</p> <p><b>7.</b> Branches of psychology</p>	
	Week -4		<p><b>8.</b> Psychology and other disciplines</p> <p><b>9.</b> Psychology in everyday life</p>	
May	Week - 1	<b>Methods of Enquiry in Psychology</b>	<p><b>1.</b> Introduction</p> <p><b>2.</b> Goals of psychological enquiry</p> <ul style="list-style-type: none"> <li>• Steps in conducting scientific research</li> <li>• Alternatives</li> <li>• Paradigms of Research</li> </ul>	Blackboard, Chalk , Duster, Course Book

	Week -2		<b>3.</b> Nature of psychological data <b>4.</b> Some important methods in Psychology <ul style="list-style-type: none"> <li>• Observation method</li> <li>• Experimental method</li> <li>• Correlation Research</li> </ul>	
	Week -3		<ul style="list-style-type: none"> <li>• Survey Research</li> <li>• Psychological Testing</li> <li>• Case Study</li> </ul> <b>5.</b> Analysis of Data <ul style="list-style-type: none"> <li>• Quantitative Method</li> <li>• Qualitative Method</li> </ul>	
	Week -4		<b>6.</b> Limitations of Psychological Enquiry <b>7.</b> Ethical Issues	
June			<b>Summer Break</b>	
July	Week-1	<b>Human Development</b>	<b>1.</b> Introduction <b>2.</b> Meaning of Development Life-Span Perspective on Development Factors Influencing Development	Blackboard, Chalk , Duster, Course Book

	Week-2		<b>3. Context of Development</b> <b>4. Overview of Developmental Stages</b> <ul style="list-style-type: none"> <li>• Prenatal Stage</li> </ul>	
	Week -3		<ul style="list-style-type: none"> <li>• Infancy</li> <li>• Childhood</li> </ul>	
	Week -4		<ul style="list-style-type: none"> <li>• Challenges of Adolescence</li> <li>• Adulthood and Old Age</li> </ul>	
August	Week-1	<b>Sensory, Attentional and Perceptual Processes</b>	<b>1. Introduction</b> <b>2. Knowing the world</b> <b>3. Nature and varieties of Stimulus</b>	Blackboard, Chalk , Duster, Course Book
	Week-2		<b>4. Sense Modalities</b> <ul style="list-style-type: none"> <li>• Functional limitation of sense organs</li> </ul> <b>5. Attentional Processes</b> <ul style="list-style-type: none"> <li>• Selective Attention</li> <li>• Sustained Attention</li> </ul>	



	Week-3		<b>6.</b> Perceptual Processes <ul style="list-style-type: none"> <li>Processing Approaches in Perception</li> </ul> <b>7.</b> The Perceiver <b>8.</b> Principles of Perceptual Organisation	
	Week-4		<b>9.</b> Perception of Space, Depth and Distance Monocular Cues and Binocular Cues <b>10.</b> Perceptual Constancies <b>11.</b> Illusions <b>12.</b> Socio-Cultural Influences on Perception	
September	Revision		Half Yearly	
October	Week- 1	<b>Learning</b>	<b>1.</b> Introduction <b>2.</b> Nature of Learning <b>3.</b> Paradigms of Learning	Blackboard, Chalk , Duster, Course Book
	Week-2		<b>4.</b> Classical Conditioning <ul style="list-style-type: none"> <li>Determinants of Classical Conditioning</li> </ul> <b>5.</b> Operant/Instrumental <ul style="list-style-type: none"> <li>Conditioning</li> <li>Determinants of Operand</li> </ul>	

			Conditioning <ul style="list-style-type: none"> <li>• Key Learning Processes</li> </ul>	
	Week -3		<b>6.</b> Observational Learning <b>7.</b> Cognitive Learning <b>8.</b> Verbal Learning	
	Week-4		<b>9.</b> Skill Learning <b>10</b> Factors Facilitating Learning <b>11.</b> Learning Disabilities	
November	Week -1	<b>Human Memory</b>	<b>1.</b> Introduction <b>2.</b> Nature of memory	Blackboard, Chalk , Duster, Course Book
	Week-2		<b>3.</b> Information Processing Approach : The Stage Model <b>4.</b> Memory Systems : Sensory, Short-term and Long-term Memories	
	Week-3		<b>5.</b> Levels of Processing <b>6.</b> Types of Long-term Memory <ul style="list-style-type: none"> <li>• Declarative and Procedural;</li> <li>• Episodic and Semantic</li> </ul>	

	Week-4		<p><b>7. Nature and Causes of Forgetting</b></p> <ul style="list-style-type: none"> <li>Forgetting due to Trace Decay, Interference and Retrieval Failure</li> </ul> <p><b>8. Enhancing Memory Mnemonics using Images and Organisation</b></p>	
December	Week-1	<b>Thinking</b>	<p><b>1. Introduction</b></p> <p><b>2. Nature of Thinking</b></p> <ul style="list-style-type: none"> <li>Building Blocks of Thought</li> </ul>	Blackboard, Chalk , Duster, Course Book
	Week-2		<p><b>3. The Processes of Thinking</b></p> <p><b>4. Problem Solving</b></p> <p><b>5. Reasoning</b></p>	
	Week-3		<p><b>6. Decision-making</b></p> <p><b>7. Nature and Process of Creative Thinking</b></p> <ul style="list-style-type: none"> <li>Nature of Creative Thinking</li> <li>Process of Creative Thinking</li> </ul>	

	Week-4		<b>8. Thought and Language</b> <b>9. Development of Language and Language Use</b>	
January	Week-1	<b>Motivation and Emotion</b>	<b>1. Introduction</b> <b>2. Nature of Motivation</b>	Blackboard, Chalk, Duster, Course Book
	Week-2		<b>3. Types of Motives</b> <ul style="list-style-type: none"> <li>• Biological Motives</li> <li>• Psychosocial Motives</li> </ul> <b>4. Maslow's Hierarchy of Needs</b>	
	Week-3		<b>5. Nature of Emotions</b> <b>6. Expression of Emotions</b> <ul style="list-style-type: none"> <li>• Culture and Emotional Expression</li> <li>• Culture and Emotional Labelling</li> </ul>	
	Week-4		<b>7. Managing Negative Emotions</b> <b>8. Enhancing Positive Emotions</b>	
February	Revision	<b>Practical (Projects, experiments, small studies)</b>	The students shall be required to undertake one project and conduct two experiments. The project would involve the use of	

			different methods of enquiry like observation, survey, interview, questionnaire, small studies related to the topics covered in the course (e.g. Human development, Learning, Memory, Motivation, Perception, Attention and Thinking). Experiments could focus on cause-and-effect relationship.	
March	Annual Exam			