



KALKA PUBLIC SCHOOL

BPTP (PARKLANDS), SECTOR-76, FARIDABAD, HARYANA

Contact : 0129-4096099, 9643443345 | www.kpsbtp.com



CLASS :XII (SCIENCE-

Medical / NON Medical)

EXTENSIVE CURRICULUM

(2025-2026)

				processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.					Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.		
--	--	--	--	--	--	--	--	--	--	--	--

	PHYSICS	<p>Unit1- Electrostatics Chapter 1</p> <p>Chapter 2</p>	<p>Electric charges and fields</p> <p>Electrostatic potential and capacitance</p> <p>SECTION-A EXPERIMENT-1 EXPERIMENT-2</p>	<p>Students will Explain processes, phenomena and laws with the understanding of the relationship between nature and matter on scientific basis; such as, force between charges, flux due to a charge, electric field and potential due to charges and distribution of charges, equipotential surface polarization of dielectric, charging of capacitor; Derive Formulae And Equations, such as, electrostatic forces and fields due to charge distributions; potential energy of system of charges; torque on a dipole in uniform electric field; combination of capacitors in series and in parallel; energy stored in capacitor.</p>	<p>SECTION-A ACTIVITY-1, 2</p> <p>A 1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.</p> <p>A 2. To assemble the components of a given electrical circuit.</p>	<p>Students will be able to apply concepts of physics in daily life with reasoning in solving problems; such as, if a certain capacitance is required in a circuit across a certain potential difference then suggesting a possible arrangement using minimum number of capacitors of given capacity which can withstand a given potential difference</p>	<ul style="list-style-type: none"> • Derivation of Electric field due to a dipole torque on dipole in uniform electric field. • Applications of Gauss law. • Potential and potential energy of the system of charges. • Capacity of parallel plate capacitor and energy stored in capacitor. <p>Numerical, conceptual questions, MCQs & Assessment Reasoning Questions on above concepts</p> <p>https://drive.google.com/file/d/1LW5g5GkGRbF6MdVvpx5oBcCflp-K1Q/view</p> <p>Class Test /Monthly test (Chapter wise / Topic wise)</p>			
--	----------------	--	---	---	---	---	---	--	--	--

					preparation.			eram ent and inqui sitive ness.		
	BIOLOGY	CH- 2	<p>Human Reproduction</p> <p>Male and female reproductive system, Gametogenesis Fertilization Parturition</p> <p>Reproductive Health</p> <p>Prevention of STD Birth control methods Medical termination of Pregnancy Amniocentesis Infertility and assisted reproductive technologies.</p>	<p>Students will be able to know about Male and female reproductive system, Gametogenesis - spermatogenesis & oogenesis.Fertilization Parturition.</p> <p>Students will be able to know about Prevention of STD Birth control methods Medical termination of Pregnancy Amniocentesis Infertility and assisted reproductive technologies.</p>	<p>To make them learn and understand about the of Male and Female reproductive System Learn and understand on the hormonal changes during puberty.</p> <p>Disorders of the reproductive system Create awareness regarding various sexually transmitted diseases Educate and make them</p>	<p>.PPT Screen Sharing Explanation Discussion Demonstrati on EXPERIENT IAL LEARNING</p> <p>PPT Screen Sharing Explanation Discussion Demonstrati on</p>	<p>Understood about the evolutionary advantages of the genetic variation that comes from sexual reproduction.</p> <p>Students will inculcate the applications of Assisted Reproduction Technologies which assist infertile couples to have children. Students will be educated regarding developments to overcome population explosion.</p>			<p>Students will develop decision making and logical thinking.</p>

					aware of Amniocentesis To make aware of different Assisted reproductive technologies	PROJECT-BASED LEARNING				
	MATHS	Ch 3 MATRICES CHAPTER 4 DETERMINANTS	* To enable the students to understand operation on matrices, application of matrices, solution of equation by matrix method. Its properties, Meaning of determinant, evaluation of determinant for a square matrix, Solution of determinants using properties	<ul style="list-style-type: none"> Through problems based on Matrix and Determinants, they will develop 1) Imagination 2) Systematic approach 3) To handle real life situation 	inductive and Deductive Reasoning Collaborative Learning Critical thinking logical reasoning	Students learnt about: operation on matrices, application of matrices, solution of equation by matrix method. Its properties, Meaning of determinant, evaluation of determinant for a square matrix, Solution of determinants using properties	Assessment will be done on the basis of decided Rubrics	Problem Solving and Critical Thinking Collaboration and		

								Communication		
	COMPUTER SCIENCE	Databases concepts	Relational model,Sql,Sql Commands	Students should be able to understand the core ideas behind DBMS, create and manipulate relational databases using SQL	Practical using SQL command, Discussion	students should be able to design, implement, and manage relational databases using SQL, understand database principles, and apply normalization techniques to improve database design	MySQL Practical	technical expertise in areas like SQL, database design, and data security		
	PHYSICAL EDUCATION	Unit 1	Management of sporting Events	Students will be able to describe the management of different events like organising and planning a sports event. Scoring and managing on going sports event activities and later on activities of the event.	Explanation with example Learning Explanation on board	Students will be able to organise the on going event activities and will be able to make fixtures for the events.	All the competencies will be assessed through subject enrichment activities like making fixtures for tournaments and planning or organizing events.	Planning, Staffing and Organising sports		

		Unit 2	Children and Women in sports	Students will be able to understand the importance of women participation in sports events. They will also know about Common Postural Deformities and Female Athlete Traid	Explaining with examples Learning Cross questioning	Students have learnt about the participation of women and children in sports. Common Postural Deformities in Children.	Assessment will be done by question answering. Explaining children about the chapter.	events.		
--	--	--------	------------------------------	--	---	--	---	---------	--	--

MONTH: MAY

<u>Month & No. of working days</u>	<u>Subject</u>	<u>Lesson No.</u>	<u>Lesson Name & topic</u>	<u>Learning objective</u>	<u>Pedagogy (Activities and resources)</u>	<u>Learning Outcome</u>		<u>Assessment</u>	<u>Life Skills</u>
	ENGLISH	Literature Vistas Writing	Vistas: 1. The Third Level 2. The Tiger King Writing: Advertisements - Classified	Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems. The student is able to: (i)	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	Students will be able to follow instructions and directions. Make inferences and judgment. Present various		All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical thinking , communication , collaboration	Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.

				<p>master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs,</p>		<p>interpretations of the poem and prose creatively and critically.</p>		<p>n Assignments, Worksheets, Tests</p>	<p>Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.</p>
--	--	--	--	---	--	---	--	---	---

				<p>letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.</p>					
	PHYSICS	<p>Unit I -Electrostatics Chapter 2</p> <p>Unit II - Current electricity Chapter 3</p>	<p>-Electrostatic potential and capacitance</p> <p>Current electricity</p>		<p>EXPERIMENTS SECTION A</p> <p>1. To determine resistivity of two/threewire by plotting a graph for potential difference versus current</p>			<p>Holiday Home works to be given. Investigatory project to be allotted to students.</p>	

	CHEMISTRY	UNIT–III Chapter–3	Chemical Kinetics	<p>Students will understand the following concepts- Rate of a reaction, factors affecting, first order & zero order reaction, numericals based, integrated rate equatins for zero order and first order reaction, Arrhenius equation and numericals.</p> <p><u>Experiment-</u> Detection of functional group in organic compound (alcoholic, amine, aldehyde, ketonic, phenolic, carboxylic acid)</p>	<p>Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities Active learning Collaborative learning</p> <p><u>NOTES- (CH-3)</u> https://drive.google.com/file/d/1vtCLNHWsfGgwfF0iriwDs3MZvpKJADH-/view</p>	<p>Students will be able to- Understand the various concepts. *Explain scientific terms ,law etc. *Draws graphs to understand various concepts. *Derives equations & calculates using the values given. *Applies scientific concepts in daily life & solving problems.</p>		<ol style="list-style-type: none"> Practice of MCQs through worksheets Practice of Assertion/Reason type questions. Practice of PBQs. Practice of rate of reaction, rate constant and half-life calculations. <p>Notes link- https://docs.google.com/presentation/d/1vtCLNHWsfGgwfF0iriwDs3MZvpKJADH-/edit?usp=sharing&oid=101800394715389172696&rtpof=true&sd=true</p> <p>–Holiday Home works to be given. —Investigatory project to be allotted to students.</p>	<p>Students will -develop scientific temperament and inquisitiveness. *Applies scientific concepts in daily life & solving problems.</p>
--	-----------	-----------------------	-------------------	---	---	--	--	---	--

	BIOLOGY	Chapter-2	Human Reproduction Male and female reproductive system, Gametogenesis Fertilization Parturition	To make them learn and understand about the of Male and Female reproductive System Learn and understand on the hormonal changes during puberty.	.PPT Screen Sharing Explanation Discussion Demonstration EXPERIENTIAL LEARNING	Understood about the evolutionary advantages of the genetic variation that comes from sexual reproduction.			
		Chapter-3:	Reproductive Health Prevention of STD Birth control methods Medical termination of Pregnancy Amniocentesis Infertility and assisted reproductive technologies.	Disorders of the reproductive system Create awareness regarding various sexually transmitted diseases Educate and make them aware of Amniocentesis To make aware of different Assisted reproductiv	PPT Screen Sharing Explanation Discussion Demonstration PROJECT-BASED LEARNING	Students will inculcate the applications of Assisted Reproduction Technologies which assist infertile couples to have children. Students will be educated regarding developments to overcome population explosion.			Students will develop decision making and logical thinking.

				e technologies					
	MATHS	chapter 1	Relations & Functions	To enable the students understand Equivalence relations, bijective functions. Different types of relations and functions, finding domain and range and inverse of functions and binary operation.	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities Active learning Collaborative learning	students will be able to understand Equivalence relations, bijective functions. Different types of relations and functions, finding domain and range and inverse of functions and binary operation.		Assessment will be done on the basis of decided Rubrics	Through problems based on Relations and functions they will Develop: 1)Logical thinking 2)Critical thinking 3)Imagination
	COMPUTER SCIENCE	Database concepts	Aggregate functions, joins, cartesian product	Students should be able to understand the core ideas behind DBMS, create and manipulate relational databases using SQL	Practical using SQL command, Discussion	students should be able to design, implement, and manage relational databases using SQL, understand database principles, and apply normalization techniques to improve database design	MySQL Practical	technical expertise in areas like SQL, database design, and data security	

	PHYSICAL EDUCATION	Unit 3	Yoga as preventive Measure for lifestyle Disease	Students will be able to understand different yoga asanas for different types of diseases that affect our body for example: Obesity, Diabetes, Asthma etc.	Explaining with examples Performing asanas Learning with practice	Students have understood the importance of yoga in life and how it keeps our body away from diseases.	Students will be able to add yoga asanas in their schedule to make their body fit.		
--	---------------------------	--------	--	--	---	---	--	--	--

MONTH: JULY

Month & No. of working days	Subject	Lesson No.	Lesson Name & topic	Learning objective	Pedagogy (Activities and resources)	Learning Outcome	Assessment	Life Skills
	ENGLISH	Literature Flamingo Vistas	Flamingo: 3. Deep Water Vistas: 3. Journey to the End of the Earth 4. The Enemy Writing; Poster	Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems. The student is able to: (i) master the Mechanics of writing; the use	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	Students will be able to follow instructions and directions. Make inferences and judgment. Present various interpretations of the poem and	All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical thinking , communication , collaboration	Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose. Students will be able to apply the grammar rules as per need in

			<p>of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and</p>		<p>prose creatively and critically.</p>	<p>Assignments, Worksheets, Tests</p>	<p>framing sentences and ideas while writing using the apt formats.</p>
--	--	--	---	--	---	---------------------------------------	---

				summarise; (xi) edit written material (xii) expand notes.				
	PHYSICS	UNIT- III MAGNETIC EFFECTS OF CURRENT AND MAGNETISM Chapter-4: Chapter-5:	Moving Charges and Magnetism Magnetism and Matter	Explains processes, phenomena and laws with the understanding of the relationship between nature and matter on scientific basis such as forces on moving charges in a magnetic field, torque on a rectangular current loop in an uniform magnetic field Derives formulae and equations, such as magnetic field on the axis of a circular current loop, force between parallel current carrying conductors, torque on current loop in magnetic field.,	EXPERIMENTS SECTION A 3. To verify the laws of combination (series) of resistances using a meter bridge. ACTIVITIES SECTION A 3. To study the variation in potential drop with length of a wire for a steady current. 4. To compare the EMF of two given primary cells using potentiometer. 5. To determine the internal resistance of a given primary cell using potentiometer.	Applies concepts of physics solving problems on trajectory of charged particle in magnetic field, finding magnetic field due to a circular coil & solenoid, converting galvanometer into ammeter and voltmeter Recognises the concepts of Physics related to various natural phenomena such as magnetic properties of materials	<ul style="list-style-type: none"> • Derivation of Magnetic field due to a circular loop carrying current. • Magnetic field due to a solenoid Force between two parallel current carrying conductors. • Torque on current loop in magnetic field Statement of Biot-Savart law and Ampere's law https://drive.google.com/file/d/1N8gVKBLectr6ozDl4JgjS0xVCvfLnL6K/view	

		CH-5	<p>Molecular basis of Inheritance</p> <p>The DNA The search of Genetic Material RNA World Replication Transcription Genetic code Regulation of gene expression Human Genome Project DNA Fingerprinting.</p>	<p>Describe Chromosomal theory of inheritance and will understand how it modified Mendel's.</p> <p>Understand the location and chemical composition of DNA. Explain the process of protein synthesis Understand the Human Genomic project which provide information for various genetic diseases and its treatments. Understand and express the different pattern of sequencing of DNA by the process of DNA fingerprinting.</p>	<p>.Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities</p>	<p>of various blood components. Apply quantitative problem solving skills to genetics problems and issues.</p> <p>The students will understand the importance of DNA in all activities The students learnt how DNA finger printing helps in Forensic sciences The learners learnt about the human genomic project which helped in identifying and preventing many hereditary disease.</p>	<p>1.Isolate DNA from Plant material. 2.Classifying the sequences into DNA, RNA and Protein. 3.To make complementary sequence of the given nucleotide.</p>	
		CH- 6	<p>Evolution</p> <p>Origin of life Evolution of Life Forms Evidences of evolution Adaptive radiation Biological Evolution Mechanism of Evolution Hardy Weinberg Principle Brief</p>	<p>Understand different theories on evolution.</p>	<p>Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities</p>	<p>They will be able to evaluate the importance Human genome project in preventing inherited disease. The learners could apply the knowledge of evolution of human beings</p>	<p>To make complementary sequence of the given nucleotide. Study of analogous and homologous organ in various plants and animals.</p>	

			Account of evolution Origin and evolution of man			by the molecular study of analogous and homologous organ in animals and their anatomical evidences.		
	MATHS	Chapter 2	Inverse Trigonometry	To enable the students to find solutions of problems of inverse trigonometric functions. Inverse trigonometric functions ,its domain and range ,properties of inverse trigonometric functions	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities	Students learned about : Solutions of problems of inverse trigonometric functions. Inverse trigonometric functions ,its domain and range ,properties of inverse trigonometric functions	Assessment will be done on the basis of decided Rubrics	Through problems based on integration , they will develop 1)Manipulation(assumption) 2) Logical thinking 3) Systematic approach
	COMPUTER SCIENCE	UNIT- 1 (Computational Thinking and Programming - II)	Introduction of python Programming	Key objectives include understanding Python's fundamentals, using data structures, writing functions, implementing object-oriented programming, and working with file	Discussion method, powerpoint slides, practical	write code, solve problems, and develop applications using Python's syntax, data structures, and libraries, including object-oriented programming concepts and file handling.	Python Programs based on Lists, Strings, Tuples and Dictionary	Python programming develops valuable life skills like problem-solving, logical thinking, and analytical abilities

	PHYSICAL EDUCATION	Unit 4	Physical Education and sports for CWSN (Children with special needs- Divyang)	Students will be able to understand the importance of special Olympics, paralympics and deaflympics. Also get clarity in the concept of Inclusion in sports.	Discussion Explanation of chapter with examples Reading	Students have understood the importance of physical activities for children with special needs. They will understand the concept of paralympics games for children with special needs.	Assessment will be done by cross questioning from students.	
		Unit 5	Sports and Nutrition	Students will be able to understand about the balanced diet and nutrition for sports person. Discussion on Macro and Micro food sources.	Discussion Explanation of chapter with examples Reading	Students have understood the importance of diet and nutrition for sports personalities and how they manage to get a fit body by including macro or micro nutrition in diet.	Students Assessment will be done by cross questioning and discussing chapters in the class.	

MONTH: AUGUST

<u>Month & No. of working days</u>	<u>Subject</u>	<u>Lesson No.</u>	<u>Lesson Name & topic</u>	<u>Learning objective</u>	<u>Pedagogy (Activities and resources)</u>	<u>Learning Outcome</u>	<u>Assessment</u>	<u>Life Skills</u>
	ENGLISH	Literature : Flamingo	Flamingo : 4. The Rat Trap 5. Indigo Poem 3: Keeping	Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	Students will be able to follow instructions and directions.	All the competencies will be assessed through subject enrichment activities	Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.

		Writing	<p>Quiet</p> <p>Writing: Invitations : Formal and Informal</p>	<p>appear in the literary prose and poems.</p> <p>The student is able to: (i) master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual</p>		<p>Make inferences and judgment.</p> <p>Present various interpretations of the poem and prose creatively and critically.</p>	<p>like creativity and innovation, critical thinking , communication , collaboration</p> <p>Assignments, Worksheets, Tests</p>	<p>Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.</p>
--	--	---------	--	--	--	--	--	---

				<p>questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.</p>				
	PHYSICS	<p>UNIT-IV ELECTRO MAGNETIC INDUCTION & ALTERNATING CURRENTS</p> <p>Chapter:6 Chapter 7</p>	<p>Electromagnetic Induction Alternating current</p>	<p>Analyses and draws conclusions such as direction of induced current in the figure Explains process on scientific basis such as production of eddy currents, self and mutual induction. Recognises different processes used in Physics Related industrial and technological applications; such as use of superconducting magnets for running magnetically levitated superfast trains, Generator. Derives formulae and equations such as current voltage phase relation in ac circuit, resonant frequency in series LCR circuit, energy stored in</p>	<p>6. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit.</p> <p>ACTIVITIES SECTION</p> <p>B 1. To study refraction of light through glass slabs.</p> <p>EXPERIMENTS SECTION</p> <p>1. To find the value of v for different values of u in case of a concave mirror and to find the focal length.</p> <p>MONTHLY TEST -3</p>	<p>Analyze and interpret graphs and draw conclusions such as phase relation between current and voltage in ac circuit, LC oscillations and conservation of energy. Realizes and appreciates the interface of Physics with other disciplines such as electromagnetic radiations in communication,</p>	<p>Statement of Faradays law and lenz's law Reasoning questions to find direction of induced current and emf, reactance and impedance of ac circuit Numerical and conceptual questions on induced emf, self and mutual induction, AC circuits, Resonance Derivation of expression for motional emf, self and mutual induction of a coil, displacement current. Derive phase relation between current and voltage in AC circuit Production</p>	

				inductor			properties and uses of e m waves	
	CHEMISTRY	UNIT– VI, Chapter-6	Haloalkanes & Haloarenes	Students will understand the following concepts- IUPAC nomenclature of haloalkanes and haloarenes, methods of preparation, physical and chemical properties, polyhalogen compounds and their uses	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities	*Writes IUPAC nomenclature and structures. *Writes chemical equations. (specially name reactions) *Explains test of distinction between two organic compounds. *Understands how to convert one organic compound into another. *Explains the reason of distinguishing characteristics of organic compounds.	1.Practice of MCQs through Google form. 2. Practice of Assertion/Reason type questions. 3. Practice of PBQs. 4. Practice of IUPAC nomenclature s. 5. Practice of name reactions and mechanisms involved. 6. Practice of chemical tests to distinguish between two organic compounds. 7. Practice of conversions in two steps.	Students will –analyze the usefulness and harmful effects of polyhalogen compounds in daily life. – develop scientific temperament and inquisitiveness.
		PRACTICAL		EXPERIMENT- Salt Analysis (any five)	Resources– https://youtu.be/ztt0teVJtly?si=r482U_2uD2wuucjE Notes link- https://docs.google.com/presentation/d/14fJY0WCMIVyFD6cZ9TpslR7fsDn4i85M/edit?usp=sharing&oid=101800394715389172696&rtpof=true&sd=true			
	BIOLOGY		Chapter- 7: Human Health and Diseases	Understand and classify the disease into congenital since birth (gene mutation,	To observe the permanent slides of disease causing organisms like Ascaris, Ent amoeba, Plasmodium, Round worm and write the	The students learnt about the life cycle of malarial parasite and the different stages of life cycle it	Draw the life cycle of malarial parasite showing the	To explore the critical thinking of the society that microbes are not

			<p>Disease, Types of disease: Congenital and acquired, common diseases(pneumonia, common cold, malaria, ascariasis), Immunity, Development of immunity, types of immunity, vaccination, kinds of defense mechanism, external defense, internal defense – cellular and cytokine barrier, Addiction (tobacco, alcohol, drugs)</p> <p>Chapter-9: Microbes in Human Welfare</p> <p>Microbes in human welfare in house hold, industrial, antibiotics, sewage treatment.</p>	<p>chromosomal aberrations, environmental factors first two are transmitted to children where as environmentally are not) or acquired (after birth communicable or non communicable) . communicable –infectious spread through pathogens and non-communicable non infectious (organ ic disease, deficiency disease, hypo or hyper secretion of hormones.</p> <p>Understand and express the benefits of bacteria in probiotics, antibiotics, industrial and sewage treatment.</p>	<p>symptoms of the disease.</p>	<p>completes in different host Students learnt to prevent themselves from different diseases by observing signs and symptoms.</p>	<p>stages at in different host.</p>	<p>always bane but act as boon in our daily life.</p>
	MATHS	chapter 5	<p>Continuity & Differentiability</p>	<p>To enable the students to understand 1) Continuity and differentiability. 2) Change in one variable when the other</p>		<p>Students learned about : 1) Continuity and differentiability of a function. 2) To differentiate trigonometric</p>	<p>Assessment will be done on the basis of decided Rubric</p>	<p>Through problems based on AOD, they will develop 1)Imagination 2)Systematic approach 3)To handle real life situation</p>

	Chapter -6	Application of derivatives	Mean value theorem and Rolle's theorem	<p>variable changes (i.e. meaning of differentiation)</p> <p>3)Differentiation of trigonometric function, logarithmic function, exponential function, inverse of trigonometric function, implicit functions, parametric form and higher order derivatives.</p> <p>To enable the students to understand</p> <p>1)Through problems based Rolles Theorem and Mean value Theorem imagination skills are imbibed.</p> <p>2)Derivatives are used in Real life</p>	<p>Problem solving</p> <p>Explanation</p> <p>Demonstration</p> <p>Experiential Learning</p> <p>Subject enrichment activities</p> <p>PPT, PDF</p> <p>Questionnaire</p>	<p>function, logarithmic function, exponential& parametric function, inverse of trigonometric function</p> <p>3)Higher order derivatives. 4) Mean value theorem and Rolle 's Theorem. Through explanation of graph creative thinking will be imbibed.</p>		
	COMPUTER SCIENCE	UNIT- 1 (Computational Thinking and Programming - II)	CSV Files Data structure	<p>Key objectives include understanding Python's fundamentals, using data structures,</p>	<p>Discussion method, powerpoint slides, practical</p>	<p>write code, solve problems, and develop applications using Python's syntax, data structures, and</p>	<p>File Handling Programs in :</p> <p>Text File</p>	<p>Python programming develops valuable life skills like problem-solving, logical thinking, and analytical</p>

				writing functions, implementing object-oriented programming, and working with file		libraries, including object-oriented programming concepts and file handling.	Binary File CSV File	abilities
PHYSICAL EDUCATION	Unit 6	Test and Measurement in Sports	Students will be able to understand the Sai Khelo Fitness test. This is for different age groups. Each age group has its own testing exercises.	Explaining with examples and discussing it with children.	Students will be able to explain the concept of testing one's fitness at any age without any difficulty.	Assessment will be done by asking questions about the different tests that take part for different ages.	Will be able to judge the fitness level of a person.	
	Unit 7	Physiology and Injuries in sports	Students will be able to understand the physiological factors determining Components of Physical Education. Effects of exercises on muscular system,	Explaining with examples and discussing it with children.	Students have understood the concept of physiological factors determining Components of Physical Education. Effects of exercises on muscular	Assessment will be done by asking questions about the different tests that take part for different ages.		

				reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and				
--	--	--	--	--	--	--	--	--

				summarise; (xi) edit written material (xii) expand notes.				
	PHYSICS	UNIT- VI: OPTICS Chapter-9 Chapter-10	Ray Optics and Optical Instruments Wave Optics	Recognises the concepts of Physics related to various natural phenomena such as reflection, refraction, interference, diffraction and polarization of light; formation of rainbow. Derives formulae and equations such as mirror formula, lens formula, refraction at spherical surface and prism, magnifying power of microscope and telescope, fringe width in Young's double slit experiment and diffraction	EXPERIMENTS SECTION 2. To find the focal length of a convex lens by plotting graphs between u and v or between 1/u and 1/v. 3. To find focal length of a convex mirror by using a convex lens. 4. To find the focal length of a concave lens, using a convex lens. of a concave lens, using a convex lens. COMPLETION OF PROJECT WORK MONTHLY TEST-4	Analyses and interprets figures, and draws conclusion such as position of image in ray diagrams; fringe pattern due to diffraction at single slit. Handles tools and laboratory apparatus properly; measures physical quantities using appropriate apparatus, instruments, and devices: such as Traveling Microscope; concave and convex lens, prism, glass slab. Plans and conducts investigations and experiments to arrive at and verify the facts, principles, phenomena, relationship between physical quantities such as Study the image formed by lens and mirror, determine refractive index of a liquid using a convex lens and a plane mirror Applies concepts of physics in daily life with reasoning	Derivation of Mirror formula Refraction at spherical surface Lens formula Prism formula Magnifying power of Microscope and telescope Condition for maxima and minima in Interference and diffraction Conceptual, graphical questions, Ray diagrams and numerical on above topics Practice Assertion Reasoning and content based Questions	

						while decision-making and solving problems such as use of polarized glass in spectacles, applications of optical fibers for transmission of optical signals.		
	CHEMISTRY	UNIT-VII Chapter--:7	Alcohols, phenols & ethers	Students will understand the following concepts- IUPAC nomenclature, methods of preparation,, physical and chemical properties, polyhalogen compounds and their uses, Chemical tests to distinguish between compounds, organic conversions	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire	Students will be able to - *Write IUPAC nomenclature and structures. *Write chemical equations. (specially name reactions) *Explain test of distinction between two organic compounds. *Understand how to convert one organic compound into another. *Explain the reason of distinguishing characteristics of organic compounds *perform the experiments *learn how to handle the apparatus.	1.Practice of MCQs. 2.Practice of Assertion/Reason type questions. 3.Practice of PBQs. 4.Practice of IUPAC nomenclature s. 5.Practice of name reactions and mechanisms involved. 6.Practice of chemical tests to distinguish between two organic compounds. 7.Practice of conversions in two steps.	Students will be able to understand the -importance of organic compounds in our daily life. - develop scientific temperament and inquisitiveness.
		PRACTICAL	Experiment	Chromatography, Preparation of inorganic compound and organic compound.				

	BIOLOGY		<p>Chapter-10: Biotechnology Principles and Processes</p> <p>Tools for recombinant DNA Technology Process of Recombinant DNA technology</p> <p>Biotechnology and its Application Principles and process of Biotechnology Genetic engineering Biotechnological application in Agriculture Biotechnological Application in Medicines Transgenic Animals & Ethical Issues</p> <p>Chapter-11: Biotechnology and its Application</p>	<p>Understand Basic concept of genetic engineering Learn basic tools of rDNA technology Describe restriction enzymes, cloning vector Understand procedures, to transfer rDNA into host cell, Apply procedures to identify recombinants, Acquire knowledge of DNA sequencing, Enumerate the applications of PCR. Understand techniques of isolating, purifying and manipulating the DNA. Learn methods of gene sequencing and DNA fingerprinting.</p>	<p>To Prepare vinegar from fruit peels by the process of fermentation . To determine the action of salivary amylase in carbohydrates/starch at different pH and temperature.</p>	<p>The students learnt the process of r-DNA technology The learners understood how the technology is used in the large scale production of antibiotics, enzymes etc in industries The students learnt about the different techniques which could be applied to transfer the genes. The students learnt about the gene therapy which enabled the medical scientist to replace the defective gene responsible for hereditary disease.</p>	Project Work	<p>Students will develop scientific temperament and inquisitiveness. Students will analyze various methods of genetic engineering for improving standard of living Students will gain awareness regarding developments in recombinant DNA technology that yielded numerous new useful products in the fields of healthcare and agriculture.</p>
--	----------------	--	---	--	--	---	--------------	---

	COMPUTER SCIENCE	Revision For half Yearly Exam	Revision For half Yearly Exam	Revision For half Yearly Exam	Revision For half Yearly Exam	Revision For half Yearly Exam	Revision For half Yearly Exam	Revision For half Yearly Exam
	PHYSICAL EDUCATION	Unit 8	Biomechanics and Sports	Students will be able to understand the Law of Motion and types of Levers and their application in sports activity. They also study Equilibrium and Friction in sports.	Explanation with examples Reading Chapter Cross Questioning	Students will understand the Law of Motion and can easily apply things that they have learned in playing games.	Assessment will be done in class by Cross questioning and checking the understanding level of students.	Students will be able to analyse and improve the game by applying things they have learned in class.

MONTH: OCTOBER

Month & No. of working days	Subject	Lesson No.	Lesson Name & topic	Learning objective	Pedagogy (Activities and resources)	Learning Outcome	Assessment	Life Skills
	ENGLISH	Flamingo	Flamingo: 7. The Interview Poem 5: The Roadside Stand Vistas: On the	Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems. The student is able	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	Students will be able to follow instructions and directions. Make inferences and judgment.	All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical	Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.

			<p>Face of It Writing: Debate</p> <p>to: (i) master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.</p>		<p>Present various interpretations of the poem and prose creatively and critically.</p>	<p>thinking , communication , collaboration</p> <p>Assignments, Worksheets, Tests</p>	<p>Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.</p>
	PHYSICS	UNIT-VII: DUAL NATURE OF RADIATION	Recognises the concepts of Physics related to various phenomena such as	ACTIVITIES SECTION	Realizes and appreciates the interface of Physics with other	Numerical and derivations on Einstein's	

		<p>AND MATTER</p> <p>Chapter–11</p> <p>UNIT-VIII: ATOMS AND NUCLEI</p> <p>Chapter–12</p> <p>Chapter–13:</p>	<p>Dual Nature of Radiation and Matter.</p> <p>Atoms</p> <p>Nuclei</p>	<p>radioactivity; nuclear fusion and nuclear fission. Differentiates between; wave and particle nature of light; half-life and average life; Nuclear fusion and nuclear fission;. Derives formulae and equations such as de Broglie wavelength; equations for nuclear fission and fusion, beta decay, mass defect.</p>	<p>B 2. To observe polarization of light using twoPolaroids.</p> <p>3. To observe diffraction of light due to a thin slit.</p> <p>HALF YEARLY EXAMINATION</p>	<p>disciplines such as, with Chemistry as various materials give rise to interesting properties in the presence or absence of electric field, making light sensitive cells using the applications of photoelectric effect; use of atomic and nuclear physics in medicine,</p>	<p>equation DE Broglie's equation Distance of closest approach Radius and velocity of electron in H-atom Energy of electron in nth orbit Spectral line of H- atom Size of nucleus Binding energy Radioactivity Practice MCQ, Assertion Reasoning graphical and content based questions on above topics.</p>	
--	--	--	---	--	---	---	---	--

	CHEMISTRY	UNIT-VIII Chapter-8	Aldehyde, Ketone and Carboxylic acid	Students will understand the following concepts- IUPAC nomenclature, methods of preparation,, physical and chemical properties, Chemical tests to distinguish between compounds, organic conversions, uses of organic compounds.	Problem solving Explanation Demonstration Experiential Learning Subject enrichment PPT, PDF Questionnaire Resources- Notes link- https://drive.google.com/file/d/1JGtHlyyBR4TAI9VEVGJig63JAa5G-HDe/view?usp=sharing	Students will be able to - *Writes IUPAC nomenclature and structures. *Writes chemical equations. (specially name reactions) *Explains test of distinction between two organic compounds. *Understands how to convert one organic compound into another. *Explains the reason of distinguishing characteristics of organic compounds	1.Practice of MCQs through Google form. 2. Practice of Assertion/Reason type questions. 3. Practice of PBQs. 4. Practice of IUPAC nomenclature 5. Practice of name reactions and mechanisms involved. 6. Practice of chemical tests to distinguish between two organic compounds. 7.Practice of conversions in two steps.	Students will be able to understand the importance of organic compounds in our daily life. -develop scientific temperament and inquisitiveness.
	BIOLOGY	Chapter-13: Organisms and Populations	Organisms and environment: Habitat and niche, population	Students will be familiarized with various hierarchial levels of organization like Organism,	Problem solving Explanation Demonstration Experiential Learning Subject enrichment	The students learnt how adaptation allows organism to survive and reproduce in natural	To determine population density and frequency by quadrate method.	To emphasized on development of skills like observational, experimental, critical thinking and problem solving skill

			and ecological adaptations; interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution.	Population, Community, Biosphere Ecosystem. Students will learn about plant adaptation to different medium like light, salinity etc. To enhance their ability to learn and understand biotic community. To explore their critical thinking by studying population growth and growth models To make them share their opinion in population interactions Appreciate the importance of interspecific interactions in biotic community .	activities PPT, PDF Questionnaire	environment The students have learnt to explain how single species population grow and regulate. The learners can distinguish between density dependent and density independent birth and death rates. They will be well versed with the analysis of population data using statistics, graphs, life tables, survivor curves. They learnt how community change in both space(biome and gradient)and time(succession) Students will be able to assess survival needs and interaction between organism and environment. Understand how interaction among species such as competition predation, parasitism and mutualism organize a community.	Adaptation of xerophytic and aquatic plants and animals.	determining and inculcating values like Awareness, Responsibility. They will describe and practice scientific methods of observation, experimentation by finding population frequency and density. They will be able to evaluate that increase or decrease in population attribute is due to birth and death rates.
		Chapter-14 : Ecosystem	Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of	Understand Basic concept of Ecosystem Describe various biotic components in ecosystem like producers, consumers decomposers and certain abiotic	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire	Students will appreciate the roles of organisms in different food chains and food web. Students will be able to assess survival needs and	Analysis of Soil Texture, pH, Water holding capacity, Moisture content	Analyse the roles of organism as a part of interconnected webs, population, communities and ecosystem. Interpret

			number, biomass, energy; nutrient cycles (carbon and phosphorous); ecological succession; ecological services - carbon fixation, pollination, seed dispersal, oxygen release (in	components Understand different types of food chains, grazing and detritus food chain Acquire knowledge of different types of ecological pyramids Understand ten percent law in energy flow models Evaluate the mechanism of decomposition in ecosystem Explore different biogeochemical cycles.		interactions between organisms and the environment. Students will analyze various types of ecological pyramids like number and biomass and relate to real life situations Students will develop scientific temperament and inquisitiveness by studying ten percent law in energy flow in ecosystem Students will get awareness regarding different biogeochemical cycles and would explore how to maintain it in sustainable form.	Illustrations of ecological pyramids of number, biomass and energy by citing different examples .	energy flow among population through food web and ecological pyramids .
	MATHS	Chapter -9	Differential equations	To enable the students to find 1) the function when differential equations is given. 2)Degree and order of differential equations 3) solution of various forms of differential equations 4)general and particular solution.	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire	Students learned about : 1) the function when differential equations is given. 2)Degree and order of differential equations 3) solution of various forms of differential equations 4)general and particular solution. 5)	worksheets ,pyqs	To enable the students to understand 1)Different types solution 2)Different approaches for solution to problems

		Chapter 10	Vectors	<p>To enable the students to understand the concept of</p> <ol style="list-style-type: none"> 1)vectors and its usage 2)Types of vectors their properties 3) Representation of vectors 4) dot and cross product of vectors 5)area of triangle and quadrilateral. 6)Scalar triple product 	<p>Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire</p>	<p>Different types solution 6)Different approaches for solution to problems</p> <p>Students learned about :</p> <ol style="list-style-type: none"> 1)vectors and its usage 2)Types of vectors their properties 3) Representation of vectors 4) dot and cross product of vectors 5)area of triangle and quadrilateral. 6)Scalar triple product 7) to visualize vectors 8)understanding different types of quantities and its importance 		
	COMPUTER SCIENCE	Unit II: Computer Networks Evolution of networking	Intrernet, APRA NET, LAN, WAN, WMAN	understanding the historical milestones, key innovations, and the underlying principles that have shaped network technologies	<p>Discussion method</p> <p>Powerpoint slides</p>	allows individuals to understand how networks have grown from basic interconnected systems to the complex,	Practical of Computer Network and Network	digital literacy, critical thinking, problem-solving, and adaptability.

						interconnected global network we know today	Architecture	
	PHYSICAL EDUCATION	Unit 9	Psychology and Sports	Students will be able to understand the concept of personality and motivation in sports and in human life.	Explaining with examples Reading	Students have understood about the personality of human beings. Aggression in sports and Psychological attributes in sports.	Assessment is done with class discussion.	Students will be able to differentiate in different personalities and importance of motivation in sports.

MONTH: NOVEMBER

Month & No. of working days	Subject	Lesson No.	Lesson Name & topic	Learning objective	Pedagogy (Activities and resources)	Learning Outcome	Assessment	Life Skills
	ENGLISH	Flamingo	Flamingo: 8. Going Places Poem 6: Aunt Jennifer's Tigers	Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems.	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	Students will be able to follow instructions and directions. Make inferences and judgment.	All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical thinking , communication , collaboration	Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.
		Vistas	Tigers Vistas: 8. Memories of Childhood	The student is able to: (i) master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate		Present various interpretations of the poem and prose creatively and critically.	Assignments, Worksheets , Tests	Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using
		Writing	Writing: Speech					

				<p>vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.</p>				the apt formats.
	PHYSICS	UNIT- IX: ELECTRONIC DEVICES Chapter 14	Semiconductor or Electronics:	<p>Differentiates between conductors, insulators and semiconductors</p>	<p>EXPERIMENTS SECTION B</p> <p>5. To draw the I-V characteristic curve for a p- n junction in forward bias and reverse bias.</p> <p>6. To draw the characteristic curve of a Zener diode and to determine its reverse breaks down voltage.</p>	<p>. Plans and conducts investigations and experiments to arrive at and verify the facts, principles, phenomena, relationship between physical quantities such as designing a voltage regulator circuit using zener diode, draw I-V characteristics curves of a p-n</p>	<p>Practice Assertion reasoning, and MCQ questions. Questions on energy band diag., junction diode & its use as rectifier, Special purpose diode –LED Zener diode, photo diode, solar cell</p>	

						junction diode		
	CHEMISTRY	UNIT-IX CHAPTER-9	Amines	Students will understand the following concepts- IUPAC nomenclature , methods of preparation,, physical and chemical properties of compounds and their uses, Chemical tests to distinguish between compounds, organic conversions	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire	Students will be able to - *Writes IUPAC nomenclature and structures. *Writes chemical equations. (specially name reactions) *Explains test of distinction between two organic compounds. *Understands how to convert one organic compound into another.	1.Practice of MCQs through Google form. 2. Practice of Assertion/Reas on type questions. 3. Practice of PBQs. 4. Practice of IUPAC nomenclatures 5. Practice of name reactions and mechanisms involved. 6. Practice of chemical tests to distinguish between two organic compounds. 7.Practice of conversions in two steps.	Students will be able to understand the importance of organic compounds in our daily life. -develop scientific temperament and inquisitiveness. *Appreciate & realize the interface of chemistry with biology. *Exhibit creativity in designing eco friendly models.
		UNIT-X CHAPTER-10	Biomolecules	Carbohydrates- Types, structures, properties, uses Proteins- Composition, structure, types, importance Vitamins- types and deficiency diseases Nucleic acids- structure,types ,composition	Resources– Notes Link– Amines- https://drive.google.com/file/d/1ynCyZZ316tPdC5Vbr4GLPckV3hjWsk1R/view?usp=sharing Biomolecules- https://docs.google.com/presentation/d/1SXyvDfmKVNDljC8X_OwgGOeorFAxw0tZ/edit?usp=sharing&oid=101800394715389172696&rtpof=true&sd=true	8. Practice of classification, comparisons, structures and biological functions of biomolecules. *Explains the reason of distinguishing characteristics of organic compounds *Draws structure of various biomolecules. *Prepares flow charts to classify biomolecules like carbohydrates, amino acids etc.		
		PRACTICAL	Investigator y project					

	BIOLOGY	CH- 15 Biodiversity and its Conservation	Concept of biodiversity; patterns of biodiversity; importance of biodiversity; loss of biodiversity; biodiversity conservation ;hotspots, endangered organisms, extinction, Red Data Book, biosphere reserves, national parks, sanctuaries and Ramsar sites.	To evaluate and characterize different levels of Biodiversity To analyse critically the factors contributing threat to extinction of biodiversity To enumerate different methods of conservation of biodiversity, in situ and ex situ conservation. Students will develop scientific temperament and inquisitiveness. Students will analyze various methods of conservation of biodiversity Students will get awareness regarding ICUN red list categories Value the ethical concerns regarding conservation of biodiversity.	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire	Justify the importance of conserving populations that have been subdivided due to habitat fragmentation. Recognize that the restoration of habitats is often involved in landscape preservation.	.To study the suspended particulate matter in air at two different sites. To study pH, clarity and presence of living organism in water.	Develop Creativity, Decision Making and Logical thinking how and where to implement is only use for betterment of society and environment
		CH- 16 Environmental Issues	Air pollution and its control; water pollution and its control; agrochemicals and their effects; solid waste management ; radioactive waste management ; greenhouse effect and	Illustrating the techniques of in situ and ex situ conservation The learns will learn to describe how biodiversity is measured and predict the consequences of continued species loss. . Understand Basic cause of pollution Learn basic types of pollution, like air, water, soil, radioactive and noise pollution .	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire	The students will be able to Define and explain important concepts in the field of different pollution Understand the current evidence for global warming Understand the current warming in relation to climate changes throughout the Earth's history Explain factors forcing climate change, and the extent of anthropogenic influence Use scientific methods, quantitative and	Expand awareness of self in a global society and effectively engage diverse perspectives, values, and cultures, ranging from local to global, in dealing with environmental and social issues.	Develop Creativity, Decision Making and Logical thinking how and where to implement is only use for betterment of society and environment

			climate change; ozone layer			symbolic reasoning, and explore complex environmental issues and analyze the problems .		
	MATHS	CHAPTER 11	Three dimensional geometry	<p>To enable the students to understand the concept of</p> <ol style="list-style-type: none"> 1) Straight line in space 2) Equation of line in Cartesian and vector form 3) Angle between two lines 4) shortest distance between two lines, plane and shortest distance in 3 Dimensional geometry 5) Foot of perpendicular from a point to the line 6) Equation of planes in Cartesian and vector form 7) Angle between two planes 8) shortest distance between a point and a plane . 9) intersection point of a line and plane 	<p>Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire</p>	<p>Students will be able to learn Direction cosines/ratios of a line joining two points. Cartesian and vector equation of a line, coplanar and skew lines, shortest distance between two lines. Cartesian and vector equation of a plane. Angle between (i) two lines, (ii) two planes, (iii) a line and a plane. Distance of a point from a plane</p>	worksheets pyqs	<ol style="list-style-type: none"> 1. Physics use of vectors 2. Critical thinking, problem solving, and spatial awareness.
		Chapter 12	Linear programming	<ul style="list-style-type: none"> • formulate a given 		<ul style="list-style-type: none"> • formulate a 		<ol style="list-style-type: none"> 1. mathematization (ability to think logically, formulate and

				<p>simplified description of a suitable real-world problem as a linear programming model in general, standard and canonical forms</p> <ul style="list-style-type: none"> • sketch a graphical representation of a two-dimensional linear programming model given in general, standard or canonical form • classify a two-dim 		<p>given simplified description of a suitable real-world problem as a linear programming model in general, standard and canonical forms</p> <ul style="list-style-type: none"> • sketch a graphical representation 	<p>handle abstractions) rather than knowledge of procedures (formal and mechanical). 2. mathematical vocabulary. 3. exploring concepts / series of concepts in several ways to develop and elaborate her understanding of them and the interrelationship between them. 4. developing the processes involved in mathematical reasoning 5. developing the processes of dealing with greater abstractions, moving from particular to general to particular. 6. movement with facility from one representation to another of a concept or process. 7. solving and posing problems.</p>
--	--	--	--	--	--	---	--

				<p>dimensional linear programming model by the type of its solution</p> <ul style="list-style-type: none"> • solve a two-dimensional linear programming problem graphically • use the simplex method to solve small linear programming models by hand, given a basic feasible point. 		<p>of a two-dimensional linear programming model given in general, standard or canonical form</p> <ul style="list-style-type: none"> • classify a two-dimensional linear programming model by the type of its solution 	<p>8. realising as to how and why mathematics is all around us by establishing linkages with one's life and experiences and across the curriculum.</p>
--	--	--	--	--	--	---	--

- on solve a two-dimensional linear programming problem graphically
- use the simplex method to solve small linear programming models by hand, given a basic feasi

						ble point		
	COMPUTER SCIENCE	Unit II: Computer Networks Evolution of networking	Networking devices, protocols	understanding the historical milestones, key innovations, and the underlying principles that have shaped network technologies	Discussion method Powerpoint slides	allows individuals to understand how networks have grown from basic interconnected systems to the complex, interconnected global network we know today	Practical of Computer Network and Network Architecture	digital literacy, critical thinking, problem-solving, and adaptability.
	PHYSICAL EDUCATION	Unit 10	Training in Sports	Students will be able to understand the concept of training in sports for different games. Different types of training for example - circuit training, Interval training, continuous training and weight training etc.	Explanation with examples Reading chapter Detailed description of topics.	Students have learnt about the training methods to improve performances	Assessment have to be done while playing games.	Students will be able to play games according to skills.

MONTH: DECEMBER

Month & No. of working	Subject	Lesson No.	Lesson Name & topic	Learning objective	Pedagogy (Activities and resources)	Learning Outcome	Assessment	Life Skills
------------------------	---------	------------	---------------------	--------------------	-------------------------------------	------------------	------------	-------------

days								
	ENGLISH	Full Syllabus Revision	Literature Writing Reading (Full Syllabus Revision)	<p>Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems.</p> <p>The student is able to: (i) master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like</p>	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	<p>Students will be able to follow instructions and directions.</p> <p>Make inferences and judgment.</p> <p>Present various interpretations of the poem and prose creatively and critically.</p>	<p>All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical thinking , communication , collaboration</p> <p>Assignments, Worksheets, Tests</p>	<p>Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.</p> <p>Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.</p>

				<p>stories, events, processes etc;</p> <p>(viii) write description of people, places and things and respond imaginatively to textual questions;</p> <p>(ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc;</p> <p>(x) make notes and summarise;</p> <p>(xi) edit written material</p> <p>(xii) expand notes.</p>				
	PHYSICS	<p>I Pre Board Examination Practice Content based questions Assessment reasoning questions Derivations, Statement of laws and Diagrams Time bound practice of solving Question papers</p>						
	CHEMISTRY	Revision of full syllabus as per CBSE and Pre board examination						
	BIOLOGY							

	PHYSICAL EDUCATION		Full Syllabus Revision	Students will be able to identify , analyze , interpret and Solve questions.	Explanation Experiential Learning Critical Communication	After going through this chapters, the students will be able to do questions.	Test will assess the performance of students.	They will be able to answer the questions related to the syllabus.
--	---------------------------	--	------------------------	--	--	---	---	--

MONTH: JANUARY

Month & No. of working days	Subject	Lesson No.	Lesson Name & topic	Learning objective	Pedagogy (Activities and resources)	Learning Outcome	Assessment	Life Skills
	ENGLISH	Full Syllabus Revision	Literature Writing Reading (Full Syllabus Revision)	<p>Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems.</p> <p>The student is able to: (i) master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate</p>	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	<p>Students will be able to follow instructions and directions.</p> <p>Make inferences and judgment.</p> <p>Present various interpretations of the poem and prose creatively and critically.</p>	<p>All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical thinking , communication , collaboration</p> <p>Assignments, Worksheets, Tests</p>	<p>Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.</p> <p>Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.</p>

				<p>vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events, processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.</p>				
	PHYSICS	II Pre Board Examination Preparation for Practical Examination						
	CHEMISTRY	2nd preboard examinatio						

		n and preparation for Practical examination						
	BIOLOGY							
	MATHS	II Pre Board Examination Preparation			Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire			
	COMPUTER SCIENCE	Full Syllabus Revision	Full Syllabus Revision	Full Syllabus Revision	Full Syllabus Revision	Full Syllabus Revision	Full Syllabus Revision	Full Syllabus Revision
	PHYSICAL EDUCATION		Full Syllabus Revision	Students will be able to identify , analyze , interpret and Solve questions.	Explanation Experiential Learning Critical Communication	After going through this chapters, the students will be able to do questions.	Test will assess the performance of students.	They will be able to answer the questions related to the syllabus.

MONTH: FEBRUARY

Month & No. of working days	Subject	Lesson No.	Lesson Name & topic	Learning objective	Pedagogy (Activities and resources)	Learning Outcome	Assessment	Life Skills
--	----------------	-------------------	--------------------------------	---------------------------	---	-------------------------	-------------------	--------------------

	ENGLISH	Full Syllabus Revision	Literature Writing Reading (Full Syllabus Revision)	<p>Students will be able to identify , analyze , interpret and describe the critical ideas , values and themes that appear in the literary prose and poems.</p> <p>The student is able to: (i) master the Mechanics of writing; the use of correct punctuation marks and capital letters; (ii) spell words correctly; (iii) write neatly and legibly with reasonable speed; (iv) use appropriate vocabulary; (v) use correct grammatical items; (vi) write coherently in more than one paragraph; (vii) complete accurately and fluently semi controlled compositions like stories, events,</p>	PPT Screen Sharing Explanation Experiential Learning Critical Communication and Collaboration	<p>Students will be able to follow instructions and directions.</p> <p>Make inferences and judgment.</p> <p>Present various interpretations of the poem and prose creatively and critically.</p>	<p>All the competencies will be assessed through subject enrichment activities like creativity and innovation, critical thinking , communication , collaboration</p> <p>Assignments, Worksheets, Tests</p>	<p>Students will be able to Critically analyze the prose and poetry. Appreciate the beauty , rhyme, style, genre of the poem and prose.</p> <p>Students will be able to apply the grammar rules as per need in framing sentences and ideas while writing using the apt formats.</p>
--	---------	------------------------	---	---	---	--	--	---

				<p>processes etc; (viii) write description of people, places and things and respond imaginatively to textual questions; (ix) write paragraphs, letters. (personal and official) simple, narrative pieces, reports, notices, messages, diary entries etc; (x) make notes and summarise; (xi) edit written material (xii) expand notes.</p>				
	PHYSICS	AISSCE Practical Examination III Pre Board Examination						
	CHEMISTRY	Practical examination and III pre board examination						
	BIOLOGY							

	MATHS	full syllabus revision	Understanding Core Concepts: <ul style="list-style-type: none">• Relations and Functions: Students will learn about different types of relations, functions, and their properties, including domain,	Problem solving Explanation Demonstration Experiential Learning Subject enrichment activities PPT, PDF Questionnaire			
--	-------	------------------------	--	--	--	--	--

codom
ain,
and
range.

-
- **Calcul**

us:
This
includ
es
unders
tandin
g
limits,
contin
uity,
differe
ntiabili
ty, and
applic
ations
of
derivat
ives
and
integra
ls.

-
- **Differ**

**ential
Equati**

ons:
Stude
nts will
learn
to
solve
differe
nt
types
of
differe
ntial
equati
ons
and
unders
tand
their
applic
ations.

-
- **Proba
bility:**
This
includ
es
unders

standing concepts like conditional probability, Bayes' theorem, and different probability distributions.

-
- **Vector Algebra and 3D Geometry:** Students will learn about

			vectors , their operations, and applications in 3D geometry.					
	COMPUTER SCIENCE							
	PHYSICAL EDUCATION		Full Syllabus Revision	Students will be able to identify , analyze , interpret and Solve questions.	Explanation Experiential Learning Critical Communication	After going through this chapters, the students will be able to do questions.	Test will assess the performance of students.	They will be able to answer the questions related to the syllabus.

MONTH: MARCH

<u>Month & No. of working days</u>	<u>Subject</u>	<u>Lesson No.</u>	<u>Lesson Name& topic</u>	<u>Learning objective</u>	<u>Pedagogy (Activities and resources)</u>	<u>Learning Outcome</u>	<u>Assessment</u>	<u>Life Skills</u>
	ENGLISH	Board Examination						

	PHYSICS	Board Examination						
	CHEMISTRY	Board examination						
	BIOLOGY							
	MATHS		Board examination					
	COMPUTER SCIENCE							
	PHYSICAL EDUCATION		Board Exam					