

ENGLISH SYLLABUS

Month & Periods	Contents	Grammar	Writing	Activities
March (22)	First Flight:- A Letter to God, Dust of Snow, Fire and Ice Foot Prints:- A Triumph of Surgery	Gap Filling (Tenses + Determiners)		
April (23)	First Flight:- Nelson Mandela- Long Walk to Freedom, A Tiger in the zoo, Two stories about flying Foot Prints:- The Thief's Story	Sentence Reordering	Article Writing, Letter to Editor	Assignment I (Character Analysis)
May (28)	First Flight:- How to tell Wild animals, The Ball Poem, From the Diary Anne Frank Foot Prints:- The Midnight Visitor, A Question of Trust		Letter of Complaint	Assignment II (Poetry Analysis) Assignment III (Article Writing + Holiday Homework)
July (24)	First Flight:- Amanda, The Hundred Dresses I, The Hundred Dresses II Foot Prints:- Footprint without Feet	Reported speech		Listening activity I (ASL) Assignment IV (Character Analysis)
PRE MID TERM EXAMINATION				
August (30)	First Flight:- Animals, Glimpses of India, The Trees Foot Prints:- Footprints without feet	Editing (sub-verb agreement+ Modals)	Story Writing	Assignment V (Integrated Grammar Worksheet)
September (14)	First Flight:- Fog Foot Prints:- The Necklace	Omission (connectors & Prepositions)	Letter of Enquiry	
MID TERM EXAMINATION				
October (30)	First Flight:- Mijbil the Otter, Madam Rides the bus, The Sermon at Benaras, For Anne Gregory Foot Prints:- The Hack Driver		Letter for placing Order	Assignment VI [Story Writing + Narration (ASL)]
November (30)	First Flight:- The tale of custard the Dragon, The Proposal Foot Prints:- Bholi, The Book That Saved the Earth			Assignment VII [Prose + Poetry Questionnaire] Assignment VIII [Testing Reading Skills]
December (15)	REVISION POST MID TERM EXAMINATION			Listening Activity II (ASL)
January (12)	REVISION			
February	REVISION			

LEARNING OBJECTIVES

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| <ul style="list-style-type: none"> ➤ To develop the ability to extract relevant information and identify the central themes and sub themes ➤ To build competence to apply literacy conventions, illustrate and justify. ➤ To develop curiosity and creativity through extensive reading of literature chapters. | <ul style="list-style-type: none"> ➤ To make them apply conventions using integrated grammar structure with accuracy. ➤ To develop the ability to work on integrated grammar exercises. | <ul style="list-style-type: none"> ➤ To equip learners with essential skills to write in appropriate style and format. ➤ To enable the students to link ideas and express them effectively in writing. ➤ To develop competence to present the final product in an appropriate style, free of grammatical and syntactical errors. | <ul style="list-style-type: none"> ➤ <u>Listening:-</u> To Develop the ability to listen to a wide range of oral texts, summarize and respond to them. To make students able to distinguish between facts and opinions. ➤ <u>Speaking:-</u> To develop competence to communicate confidently and effectively in spoken language in various situations. To make students able to identify and use appropriate vocabulary, tone, pause and gestures. ➤ <u>Reading:-</u> To develop the ability to articulate their own interpretations with an awareness & curiosity for other perspectives. To summarize main and supporting ideas in the form of notes/points and make connections between them. |
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All assignments are to be evaluated for the portfolio.

SYLLABUS CLASS X (2020-2021)

MARCH TO FEBRUARY

2020-21
हिंदी पाठ्यक्रम
कक्षा १०

माह /कालांश	इकाई	गद्य	पद्य	कृतिका	व्याकरण	शिक्षण उद्देश्य	क्रियाकलाप /रचनात्मक
						गद्य	
मार्च 29		नेताजीका चश्मा	सूरदास	माताका आँचल	*वाक्यविचार *पत्र - ओपचारिक , अनोपचारिक	गद्यविधा के माध्यम से विद्यार्थियों को जीवन के परिवेश, समकालीन यथार्थ एवं दिन -प्रतिदिन के बदलते जीवन की चुनौतियों से सजग करवाया जाता है	नेताजीसुभाष चन्द्र बोस के व्यक्तित्व और कृतित्व पर परियोजना कार्य करे
अप्रैल 28		*बालगोबिनभगत *लखनवी अंदाज़	तुलसीदास		पदपरिचय - संज्ञा, सर्वनाम, विशेषण, क्रिया	गद्यके माध्यम से विद्यार्थी भाषा के तत्वों की जानकारी प्राप्त कर सकते है	मन्नूभंडारीऔर जयशंकर प्रसाद की रचनाओ को पढ़कर पुस्तक की समीक्षा कीजिए
मई 30		*मानवीयकरुणा की दिव्य चमक		जार्जपंचम की नाक	*रसपरिचय व भेद * वाच्य परिवर्तन	छात्रोंमें अर्थ ग्रहण की योग्यता विकसित कराना एवं भाषा के अभिव्यक्ति कौशल से परिचितकराया जाता है	फाठेरकामिल बुल्के की तरह अनेक बिभुतियाँ हुई है, जिनकी जन्म भूमि अन्यत्र थी लेकिनकर्म भूमि के रूप में भारत को चुना इस विषय पर जानकारी एकत्र कीजिए
जुलाई 24	*त्रैसिकमासिक परीक्षा	*एककहानी यह भी	*उत्साह, अट नहीं रही *दन्तुरित मुस्कान *फसल		पदपरिचय - क्रिया विशेषण	विद्यार्थियोंका चहूँमुखी विकास हो एवं रटंत प्रणाली से मुक्ति मिल सके	
						पद्य	
अगस्त 30		नौबतखाने में इबादत	*कन्यादान *छाया मत छूना	साना - साना हाथ जोड़ी	*रसके भेद *विज्ञापन	*काव्य के माध्यम से विद्यार्थियों में भाव जगत काविस्तार करवाना है *विद्यार्थियों की कल्पना शक्ति को जगाकर सौंदर्य बोध का विकास करवाया जाता है।	वाद - विवाद प्रतियोगिता
सितम्बर 14	अर्द्धवार्षिकपरीक्षा		संगतकार		*अपठितगद्यांश *निबन्ध	*काव्य के द्वारा छात्रों में छंद विधान, अलंकार, रस, लय आदि का बोध करवायाजाता है * विद्यार्थियों में कविता के मर्म को समझने की क्षमता को	

						विकसित करना ।	
मार्च से सितम्बर तक करवाया गया सम्पूर्ण पाठ्यक्रम अर्द्धवार्षिकपरीक्षा में दिया जाएगा ।							
						व्याकरण	
अक्टूबर 25		सम्पूर्णपाठ्यक्रम (ओसवाल सैंपल पेपर)				*व्याकरण का मुख्य उद्देश्य भाषा के शुद्ध रूपकीपहचान करवाना है । *व्याकरण हिंदी के स्वरूपों का अध्ययन किया जाता है । *पढ़ी या सुनि हुई बातों को शुद्ध वर्तनी तथा विराम चिन्हों का सही प्रयोग करतेहुए लेखन कौशल के विकास करने में सहायक होता है । *छात्रों में मौलिक वाक्य संरचना की योग्यता का विकास किया जाता है ।	श्रवणकौशल करवाया जाएगा ।
नवम्बर 23		सम्पूर्णपाठ्यक्रम (यू लाइक सैंपल पेपर)					
दिसम्बर 23		सम्पूर्णपाठ्यक्रम (प्रथम प्री सैंपल पेपर)					
जनवरी 25		सम्पूर्णपाठ्यक्रम (द्वितीय प्री सैंपल पेपर)					
फरवरी 10		वार्षिकपरीक्षा हेतु पुनरावृत्ति					

MATHEMATICS SYLLABUS				
Month & Periods	Unit	Contents	Learning Objectives	Suggested Activities
March (22)	Unit II Algebra	Chapter-3: Pair of Linear Equations in Two Variables. Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic Conditions for number of solutions. Solutions of a pair of linear	The students will able to (i) Define the general form of a pair of linear equations in two variables. (ii) Solve the given pair of linear equations by graphical method. (iii) Determine the given pair of linear equation are consistent or inconsistent by comparing the ratios of the	<u>Assignment</u> <u>Lab Activity:-</u> To verify the conditions of consistency or inconsistency for a pair of linear equations in two variables by graphical method.

			<p>(iv) coefficients of the equations. Solve the given pair of linear equation by substitution method, elimination method and cross multiplication method.</p> <p>(v) Solve the given pair of equation by reducing it to a pair of linear equation.</p>	<u>Cross world puzzle</u>
April (30)	Unit II Algebra	<p>Chapter-2: Polynomials Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials. Statement and simple problems on division algorithm for polynomials with real coefficients.</p>	<p>The students will be able to</p> <p>(i) Understand polynomials & their categories and the method to calculate their zeros.</p> <p>(ii) Find the zero or zeros of a polynomial by studying its graph.</p> <p>(iii) Verify the relationship between the zeros and the coefficients of linear, quadratic and cubic polynomials.</p> <p>(iv) Verify the division algorithm for polynomials.</p>	<p><u>Lab activity:</u> The given sequence is an A.P. or not.</p>
	Unit I Number Systems	<p>Chapter-1: Real Numbers Euclid's division lemma, Fundamental Theorem of Arithmetic statements after reviewing work done earlier And illustrating and motivation</p>	<p>The Students will be able to</p> <p>(i) Describe Euclid's Division Lemma.</p> <p>(ii) Calculate the HCF of positive integers by</p>	

		Through examples, Proofs of irrationality of $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, Decimal representation of rational numbers in terms of terminating / non -terminating recurring decimals.	<p>Euclid's Division Lemma.</p> <p>(iii) Describe the fundamental theorem of Arithmetic and apply to calculate the H.C.F and L.C.M of nos.</p> <p>(iv) Prove that $\sqrt{2}$ is an irrational no.</p> <p>(v) Recall the properties of rational no and their decimal expansions.</p> <p>(vi) Prove the theorems related to the terminating and non- terminating decimal expansions of rational nos.</p>	
	Unit II Algebra	Chapter-4: Quadratic Equations Standard form of a quadratic Equation $ax^2+bx+c=0$. ($a \neq 0$). Solutions of quadratic equations (only real roots) by Factorization by using quadratic formula. Relationship between discriminate and nature of roots. Situational problems based on quadratic equations related to day to day activities to be incorporate.	The students will be able to <p>(i) Check the given equation is a quadratic equation.</p> <p>(ii) Represent a given situation in the form of quadratic equation.</p> <p>(iii) Find the roots of quadratic equation by factorization & using the quadratic formula.</p> <p>(iv) Find the nature of roots of quadratic equation.</p>	Lab Activity :- Quadratic Equations

May (25)	Unit II Algebra	Chapter-5: Arithmetic Progressions Motivation for studying Arithmetic Progression, Derivation of the nth term and sum of the first n terms of A.P. and their application in solving daily life problems.	The Students will be able to (i) Identify if a given series of numbers Form an arithmetic progression (A.P.) (ii) Identify the first term and common difference of the given AP (iii) Find the nth term of an AP and the sum of the first n terms of an AP.	Oral Test
July (22)	Unit VII Statistics and Probability	Chapter-14: Statistics Mean, median and mode of grouped data (bimodal situation to be avoided). Cumulative frequency graph.	The students will be able to (i) Calculate the mean of grouped data using the direct method, the assumed mean method & the step deviation method. (ii) Calculate the mode of the grouped data. (iii) Find the median of grouped data. (iv) Represent cumulative frequency distribution as an origin.	
	UNIT VII	Chapter-15: Probability Classical definition of probability. Simple problems on single events (not using set notation)	The students will be able to (i) Calculate the probability of an event comes. (ii) Describe the various terms such as equally likely outcomes, elementary	Model / Project Work Assignment Oral Test

			event, complement of an event, sure event and impossible event.	
August (32)	UNIT V Geometry	<p>Chapter-6: Triangles</p> <p>Definitions, examples, counter examples of similar triangles. (Prove) if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divide in the same ration. (Motivate) if a line divides two sides of a triangle in the same ration, the line is parallel to the third side. (Motivate) If the corresponding sides of two triangles are proportional their corresponding angles are equal are the two triangles are similar. (Motivate) If one angle of the triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar. (Motivate) If a perpendicular is drawn for the vertex of the right angle of a right triangle of the hypotenuse, the triangles of each side of the perpendicular are similar to the whole triangle and to each other. (Prove) The ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides. (Prove) In a triangle, if the square on one side is equal to sum of the square on the other</p>	<p>The students will be able to</p> <p>(i) Define the term similar figures. (ii) Explain the condition of similarity for triangles. (iii) Prove the basic proportionality theorem, Pythagoras theorem and converse of Pythagoras theorem. (iv) Prove the AA Similarity criterion, AAA similarity criterion, SSS similarity criterion and SAS similarity criterion. (v) Prove the AA similarity criterion, AAA similarity criterion, SSS similarity criterion & SAS similarity criterion.</p>	<p>Lab Activity:</p> <p>Pythagoras Theorem</p> <p>Lab Activity: To verify the ratio of the area of two similar triangles is equal to the ratio of the squares on their corresponding sides.</p>

		two sides, the angles opposite to the first side is a right angle.		
	UNIT V Trigonometry	Chapter 8: Introduction to Trigonometry Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (will be defined), motivate the ratios whichever are defined at 0° and 90° values (with proofs) of the trigonometric ratios of 30° , 45° and 60° . Relationships between the ratios. Proofs and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple Identities to be given. Trigonometric ratios of complementary angles.	The students will be able to 1) Define trigonometry & trigonometric ratios of an acute angle of a Right triangle. 2) Calculate the trigonometric ratios of an angle if one of the ratios is known. 3) Find the values of the trigonometric ratios 0° , 30° , 45° , 60° and 90° .	Assignment Lab Activity: To verify identify $\sin^2 \theta + \cos^2 \theta = 1$
September (12)	Unit V Trigonometry	Chapter-9 Some applications of Trigonometry Heights and Distances: Angle of Depression. Simple Problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation/depression should be only 30° , 45° , 60°	The students will be able to 1) Explain the terms line of sight, angle of elevation and angle of depression. 2) Calculate heights and distances using trigonometric ratios.	Lab Activity: To make a clinometer & use it to measure the height of an object.
Revision of all Chapters from March to Sept. Half-yearly Examination 2020-2021				
Oct. (30)	Unit III Coordinate Geometry	Chapter-7: Coordinate Geometry Lines (in two -dimensions) Review: Concepts of a coordinate geometry, graphs of linear equations. Distance formula, Section Formula (internal division), Area of triangle.	The students will be able to (1) Derive the distance formula to find the distance between any two points whose coordinates are given. (2) Calculate the distance between the two points whose coordinates are given. (3) Derive the section formula. (4) Find the coordinates	

			<p>of the point that divides a line segment joining two points of known coordinates internally in given ratio.</p> <p>(5) Find the area of a triangle whose the coordinates of its three vertices are given.</p>	
Oct.	UNIT VI Mensuration	<p>Chapter-12: Area Related to Circles</p> <p>Motivate the area of a circle, area of sectors and segments of a circle. Problems based on areas and perimeter/ circumference of the above said plane figures. (in calculating area of segment of a circle, problems, should be restricted to central angle of 60°, 90° and 120° only. Plane Figures involving triangles, simple quadrilaterals and circle should be taken.)</p>	<p>The Students will be able to</p> <ol style="list-style-type: none"> 1) Recall the terms sector, angle of a sector and segment in relation of a circle. 2) Calculate the area of a sector of a circle. 3) Recall the terms major arc and minor arc of a circle. 4) Calculate the length of an arc of a sector of a circle, area of a segment and the area of combinations of a plane figures. 	
November (32)	UNIT VI Mensuration	<p>Chapter-13: Surface area and Volumes</p> <p>Surfaces areas and volumes of combination of any two of the following cubes, cuboids, spheres, hemispheres and right circular cylinders/ cones. Frustum of a cube.</p>	<p>The students will be able to</p> <ol style="list-style-type: none"> 1) Calculate the surface areas & volumes of the combination of solids. 2) Explain that when a solid is converted to another solid or multiple solids either of the same or different shapes, the surface area changes but the volume remains constant. 3) Define the concept of the frustum of a cone. 4) Calculate the surface area and volume of 	Oral Test

			the frustum of a cone.	
November	UNIT IV Geometry	Chapter-10:Circle Tangent to a circle at point of contact. (prove) the tangent at any point of a circle is perpendicular to the radius through the point of contact. (prove) the lengths of tangents drawn from an external point to a circle are equal.	The students will be able to 1) Define the terms tangent & secant in relation to a circle. 2) Prove that the tangent at any point of a circle is perpendicular to the radius through the point of contact. 3) Prove that the lengths of a tangent drawn from an external point to a circle are equal. 4) Calculate the length of a tangent drawn from a point outside a circle.	Cross World Puzzle
December (18)	UNIT IV Geometry	Chapter-11: Constructions Division of a line segment in a given ratio (internally). Tangents to a circle from a point outside it. Construction of a triangle similar to a given triangle.	The students will be able to 1) Divide a line segment in a given ratio using a compass. 2) Construct a triangle similar to a given triangle as per the specified scale factor. 3) Const. the pair of tangents from an external point a given circle.	Lab Activity: To const. tangents to a circle. ORAL TEST
Revision of all chapters from March to December Pre-Board 2020-2021				
January (10)	Revision of all chapters from March to December			
February (10)	Revision of all chapters from March to December			
March	Final Examination			

SCIENCE SYLLABUS					
PHYSICS					
Month	Period	Unit	Contents	Learning	Suggested Activities

				Objectives	
March	09	Light Reflection and Refraction	Reflection of light by curved surfaces, images formed by spherical mirrors, center of curvature, principal axis, principal focus, focal length, mirror refraction, Law of refraction, refractive index	To make the learners to understand the phenomenon of reflection and refraction and apply the concept in daily life.	<ul style="list-style-type: none"> Multiple Choice Questions(worksheet)
April	07	Refraction of light	Refraction of light by spherical lens, image formed by spherical lens, lens formula (Derivation not required) , Magnification, Power of a lens	To make them understand the application of different Lenses and mirror.	<ul style="list-style-type: none"> Compare and contrast (Reflection and Refraction) Peer Quiz
May	10	Human Eye and the Colorful world	Functioning of a lines in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses. Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.	To make them understand dispersion and scattering. To make the learners understand the function of human eye along with type of defects.	<ul style="list-style-type: none"> Cool Collapses (make a collage for demonstrating their understanding of a concept)
July	09	Sources of Energy	Sources of Energy: Different Forms of Energy, Conventional and Non-Conventional sources of energy, Fossil Fuels, solar energy, blogs, wind and tidal energy, Nuclear Energy, Renewable versus non-Renewable sources of Energy.	To make them understand different sources of energy, their uses, limitations etc.	<ul style="list-style-type: none"> CBSE Sample Questions (Worksheet) Exploration Table Project/research Report Lab report
August	06	Effects of Current	Electric Current, potential difference	To make the learners to	<ul style="list-style-type: none"> Concept Map Multiple Choice

			and electric current Ohm's Law, Resistance, Resistivity, Factors on which the resistance of a conductor depends.	understand the concept of electricity, resistance, resistivity and the parameters affecting etc.	Questions (Worksheet) <ul style="list-style-type: none"> • CBSE Sample Questions
August	05		Numerical Questions on <ul style="list-style-type: none"> • Reflection of light and refraction of light • Power of a lens 		<ul style="list-style-type: none"> • Concept Map • Multiple Choice Questions • CBSE Sample Questions
September	06		<ul style="list-style-type: none"> • Myopia and Hypermetropia • NCERT Text Questions 		
September	Mid Term Examination				
October	7	Effects of Current	Series Combinations of resistors and its applications in the daily life. Heating effect to electric current and its application in daily life. Electric Power. Interrelation between P, V, I and R.	To make them understand the numerical calculations based on electricity.	<ul style="list-style-type: none"> • Talk it out (Ohm's Law) • Multiple Choice Questions
October	5	Magnetic effects of current	Magnetic Field, Field lines, field due to a current carrying coil or solenoid. Force on current carrying conductor, Fleming's Left-Hand Rule, Electric Motor.	To make the learners aware of the difference between electricity and magnetism.	<ul style="list-style-type: none"> • Research Report (Factors on which resistance depends) • Formulae Chart (Physical quantities, unit with formula)
November	5	Magnetic effects of current	Electromagnetic Induction. Induced potential difference, induced current Fleming's Right-Hand Rule, Electric Generator, Direct Current, Alternating current: frequency of AC, Advantages of AC	To make the learners understand different rules and apply the rules in different numerical problems.	<ul style="list-style-type: none"> • Creative/ scientific understanding • Poster making/ slogan writing • Numerical worksheet

			over DC. Domestic electric Circuits.		
November	6		Numerical Questions <ul style="list-style-type: none"> • Ohm's Law • Series and parallel combination of Resistors • Electrical energy and Electrical Power • Heating effect of electric current 		<ul style="list-style-type: none"> • CBSE Sample Questions • Compare and Contrast (Electricity and Magnetism) • Lab Report
December	4				
December	Pre-Board Examination 2020-2021				
January	Practice Test & Revision				
February					

BIOLOGY					
Month	Period	Unit	Contents	Learning Objectives	Suggested Activities
March	12	Life Processes	Basic Concepts of Nutrition and Respiration	Students will be able to learn <ul style="list-style-type: none"> • Photosynthesis-raw materials, site, conditions and mechanism. • Human Digestion • Human Respiration 	<ul style="list-style-type: none"> • Multiple Choice Questions(worksheet)
April	10 6	Life Processes Control and Coordination	Basic Concept of Transport and Excretion Control and Coordination in animals and plants: Topic movements in plants, introduction of plant hormones	<ul style="list-style-type: none"> • Transport in Plants-Xylem and phloem • Human Excretion Students will be able to understand <ul style="list-style-type: none"> • Nastic and Tropic movements • Phytohormones-Auxin, Gibberelin, cytokinin, ABA 	<ul style="list-style-type: none"> • Compare and Contrast (Nervous System and Endocrine System) • Peer Quiz
May	12	Control and Coordination	Control and coordination in animals, Nervous System, Voluntary, Involuntary and	<ul style="list-style-type: none"> • Structure of Neuron • Type of Neuron • Types of Action- 	<ul style="list-style-type: none"> • Cool Collages (Make a Collage for demonstrating

			reflex action, chemical coordination, animal hormones.	<p>Reflex Action</p> <ul style="list-style-type: none"> Human endocrine System-Glands and Hormones. 	<p>their understanding of the concept)</p> <ul style="list-style-type: none"> CBSE Sample Questions (Worksheet) Exploration Table Project/ Research Report Lab Report
June			Summer Vacation		
July	12	Our environment	Our Environment: Eco System, Environment Problems, Ozone depletion, Waste Production and their Solutions. Biodegradable and non-biodegradable Substances.	<p>Students will be able to learn</p> <ul style="list-style-type: none"> Types of ecosystem Food Chain and Food Web Environmental problems- disposal and solid waste, depletion of ozone waste. 	<ul style="list-style-type: none"> Concept Map Multiple choice Questions (Worksheet) CBSE Sample Questions(Worksheet)
August	16	Management of Natural resources	Management of Natural Resources: Conservation and judicious use of Natural Resources. Forest and wild Life, Coal and Petroleum conservation. Examples of People's participation for conservation of Natural resources. Big Dams: advantages and limitations, alternatives, if any. Water Harvesting. Sustainability of natural Resources.	<ul style="list-style-type: none"> Management of forest of wild life. Chipko Movement Khadin system Alternative source of energy 	<ul style="list-style-type: none"> Concept Map Multiple Choice Questions CBSE Sample Questions (Worksheet)
September	Mid Term Examination 2020-2021				
October	14	How do Organisms reproduce	Reproduction: Reproduction in animals and plants (sexual and asexual) reproductive health -need and methods of family planning. Safe sex as HIV / AIDS. Child bearing and women's health.	<p>Students will be able to learn</p> <ul style="list-style-type: none"> Types of asexual reproduction Fission, Budding etc. Human male and female reproductive system. Contraceptive Methods 	<ul style="list-style-type: none"> Talk it out (population control, Prevention of SIDs) Multiple Choice Questions (Worksheet) Poster Making/ Slogan Writing
November	16	Heredity and Evolution	Heredity and Evolution: Heredity, Mendel's	Students will be able to learn about	<ul style="list-style-type: none"> Creative/ Scientific Writing.

			Contribution- Laws for inheritance of traits: Sex Determination: Brief introduction, Basic concepts and Evolution.	<ul style="list-style-type: none"> • Introduction of Heredity • Law of dominance, Segregation & Independence assortment • Sex- determination in humans • Progress v/s Evolution • Human evolution 	<ul style="list-style-type: none"> • Compare and Contrast • CBSE Sample Questions (Worksheet) • Pictorial Chart on Medel's law of inheritance. • Lab Report
December	4		Revision Pre-Board Examination		
January			Revision and Practice Test		
February			Revision and Practice Test		

CHEMISTRY

MONTH	PERIOD	UNIT	CONTENTS	LEARNING OBJECTIVES	SUGGESTED PRACTICALS
March	09	Chemical reactions and equations	Chemical Reactions: Chemical equation, Balanced Chemical equation, implication of a balanced chemical equation, types of chemical equations, combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.	After studying this unit students will be able to <ul style="list-style-type: none"> • Explain different type of chemical reactions. • Differentiate between corrosion and rancidity • Balanced Chemical Equations • Demonstrate different types of reactions 	Multiple Choice Questions (Worksheet)
April	08	Chemical reactions and equations in continuation			
April	06	Acids, bases and Salts	Acids, Bases and Salts: Their definitions in terms of furnishing of H ⁺ and OH ⁻ ions. General properties, examples and uses, Concept of pH scale(Definition related to	After studying this unit students will be able to <ul style="list-style-type: none"> • Define acid, base and salt. • Explain different types of acid and bases. 	<ul style="list-style-type: none"> • Compare and Contrast (acids and Bases) • Pear Quiz • Cool Collage (make a collage for

			logarithm not required), importance of pH in everyday life, preparation and uses of sodium hydroxide, Bleaching Powder, Baking Soda, Washing Soda and Plaster of Paris.	<ul style="list-style-type: none"> • Explain pH and pH scale. • Explain preparation of different type of salts and their properties. 	<p>demonstrating their understanding of a concept)</p> <ul style="list-style-type: none"> • CBSE Sample Questions (Worksheet) • Exploration Table • Project/ Research Report • Lab Report
May	06	Acids, bases and Salts in continuation			
May	04	Metals and Nonmetals	Metals and Nonmetals: Properties of metals and non-metals, Reactivity series, formation and properties of ionic components, basic metallurgical processes, Corrosion and its prevention.		
June			Summer Vacation		
July	05	Metals and Nonmetals in continuation		<p>After Studying this unit students will be able to</p> <ul style="list-style-type: none"> • Define metals and nonmetals. • Explain properties of metals and non metals. • Explain extraction of metals. 	<ul style="list-style-type: none"> • Concept Map • Multiple choice Questions
		Revision			
August	10	Carbon and its Compounds	Carbon Compounds: Covalent bonding in carbon compounds. Versatile nature of carbon, homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and	<p>After studying this unit students will be able to</p> <ul style="list-style-type: none"> • Explain bonding in carbon. • Draw electron dot structure of different organic compounds. • Compare the properties of 	<ul style="list-style-type: none"> • Talk it out(Allotropes of Carbon) • Multiple Choice Questions(Worksheet) • Poster Making/

			alkynes), difference between saturated hydrocarbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction). Ethanol and Ethanoic acid (only properties and uses)	ethanol and Ethanoic acid <ul style="list-style-type: none"> Explain different reactions of ethanol and Ethanoic acid. 	Slogan Writing
September		REVISION AND MID TERM EXAM			
October	06	Carbon and its Compounds (Continuous)			
October	06	Periodic Classification of elements	Periodic classification of elements: Need for classification, Early attempts at classifications of elements (Dobereiner's Triads, Newland's Law of Octaves, Mendeleev's Periodic Table), Modern Periodic Table, Gradation in properties, valency, atomic number, metallic and non-metallic properties.	After studying this unit students will be able to <ul style="list-style-type: none"> Understand the basis of classification of elements. Compare different types of elements Explain advantages and disadvantages of Mendeleev's classification. Explain trends of different properties of elements. 	<ul style="list-style-type: none"> Creative/ Scientific writing Compare and Contrast(Mendeleev's and Modern Periodic Table)
November	06	Periodic Classification of elements (Continuous)			
November	06	REVISION			
December	04	REVISION PRE BOARD EXAMINATION			
January			Revision and Practice Test		
February			Revision and Practice Test		

LIST OF PRACTICALS (SCIENCE)

1. Determination of the focal length of a concave mirror by obtaining image of a distant Object.
2. Determination of the focal length of a convex mirror by obtaining image of a distant Object.
3. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure

the angle of incidence, angle of refraction, angle of emergence and interpret the result.
4. Tracing the path of the rays of light through a glass prism.
5. Finding the image distance varying object distance in case of a convex lens and drawing corresponding ray diagrams to show the nature of image formed.
6. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also Plotting a graph between V and I.
7. Determination of the equivalent resistance of two resistors when connected in series.
8. Determination of the equivalent resistance of two resistors when connected in parallel.
9. To find pH of the following samples using pH Paper/Universal indicator. (a) Dilute HCL (b) dilute NaOH (c) dilute CH ₃ COOH (d) Lemon Juice (e) Water (f) dilute NaHCO ₃ Solution
10. To study the properties of dilute HCL by its reaction with: (a) Litmus Solutions(red and blue) (b) Zinc Metal (c) HCL (dilute)
11. To study the properties of base (NaOH) by its reaction with (a) Litmus paper (b) Zn Metal (c) HCL (dilute)
12. Performing and observing the following reactions and classifying them into: (a) Combination Reaction (b) Decomposition Reaction (c) Displacement Reaction (i) Action of water on quick lime (ii) Action of heat on ferrous sulphate crystals. (iii) Iron nails kept in copper sulphate. (iv) Reaction between sodium sulphate and barium chloride solutions.
13. (a) Observing the action of Zinc(Zn), Iron(Fe), Copper(Cu) and Aluminum(Al) metals on the following salt solutions: (i) ZnSO ₄ (aq) (ii) FeSO ₄ (aq) (iii) CuSO ₄ (aq) (iv) Al ₂ (SO ₄) ₃ (aq) (b) Arranging Zn, Fe, Cu and Al in decreasing order of reactivity based on the above result.
14. Study of the following properties of acetic acid: (a) Odour (b) Solubility in water (c) effect of litmus (d) reaction with sodium hydrogen carbonate.
15. Study of the comparative cleaning capacity of a sample of soap in soft and hard water.
16. To prepare temporary mount of a leaf peel to show stomata.
17. To show that carbon-dioxide is produced during respiration.
18. To Study (a) Binary fission in amoeba (b) Budding in yeast (c) Budding in hydra, with the help of prepared slides.
19. To study parts of dicot seed.

SOCIAL SCIENCE				
Month& Periods	Unit	Content	Learning Objectives	Suggested Activities
March (16)	Pol. Science	Chapter 1:Power Sharing <ul style="list-style-type: none"> Case Study of Belgium & Sri Lanka Why Power Sharing is desirable? Forms of Power Sharing 	1. Familiarize with the centrality of power sharing in aDemocracy.	Comparative study of Belgium and Srilanka along with map.
	Economics	Chapter 1:Development <ul style="list-style-type: none"> What Development Promises 	1. Familiarize with the concept of	

		<ul style="list-style-type: none"> • Different people different goals • Income and other goals • National Development • Income and other criteria • Public facilities • Sustainability of development 	<p>macroeconomics.</p> <ol style="list-style-type: none"> 2. Understanding the importance of quality of life and sustainable development. 	
	History	<p><u>Chapter 3: Nationalism in India</u></p> <ul style="list-style-type: none"> • The First World War, Khilafat and non-cooperation. • Different strands within the movement. • Towards Civil Disobedience • The Sense of Collective Belonging. 	<ol style="list-style-type: none"> 1. Recognize the Characteristics of Indian nationalism through a case study of Non-Cooperation and civil Disobedience Movement. 2. Diverse Social Movements 	<p>Map Work:</p> <p>Ch-3 (History) India Visit to Gandhi Smariti</p>
April (23)	History	<u>Chapter 3: Last Part</u>		
	Pol. Sc.	<p><u>Chapter 2: Federalism</u></p> <ul style="list-style-type: none"> • What is Federalism? • What make India a Federal Country? 	<ol style="list-style-type: none"> 1. Analyze Federal Provisions and institutions. 2. Explain decentralization in rural and urban areas 	<p>Debate:</p> <p>Decentralization of Powers in India</p>
May (20)	Economy	<p><u>Chapter 2: Sectors of Indian Economy</u></p> <ul style="list-style-type: none"> • Sectors of Economic Activities • Comparing the three Sectors • Division of Sectors as organized & unorganized sector • Sectors in terms of ownership: Public & Private sectors. 	<ol style="list-style-type: none"> 1. Identify major employment generating sectors. 2. Reason out the government investment in different sectors of economy. 	<p>Debate:-</p> <p>On three Different Sectors</p>
	Pol. Sc.	<u>Chapter 3: Democracy & Diversity [Periodic Test]</u>		
July (20)	History	<p><u>Chapter 1: The rise of Nationalism in Europe [1st Half]</u></p> <ul style="list-style-type: none"> • The French Revolution and idea of the Nation. • The Making of Nationalism in Europe. • The Age of Revolution: 1830-1848 • The making of Germany and 	<ol style="list-style-type: none"> 1. Understand the way the idea of nationalism emerged and led on the formation of nation states in Europe and elsewhere. 	<p>Map Work from Ch-1 (History)</p>

		Italy.		
	Economics	<u>Chapter 3: Money and Credit</u> <ul style="list-style-type: none"> • Money as a medium of exchange • Modern forms of energy • Loan activities of Bank • Terms of Credit-> Formal Sectors • Self Help Groups 	<ol style="list-style-type: none"> 1. Understand Money as a economic concept. 2. Understand the role of financial institution. 	Visit to Bank
August (20)	Pol. Sc.	<u>Chapter 4: Gender, Religion and Caste</u> <ul style="list-style-type: none"> • Gender and Politics • Religion, Communication and Politics. • Caste and Politics 	<ol style="list-style-type: none"> 1. Develop as gender prospective on politics. 	Poster: Religion and communalism
	History	<u>Chapter 1: The rise of Nationalism in Europe [Last Part]</u> <ul style="list-style-type: none"> • Visualizing the Nation • Nationalism and Imperialism 	<ol style="list-style-type: none"> 2. Difference between Europe Nationalism and anti-Colonial nationalism. 	
September (15)	Pol. Sc.	<u>Chapter 4: Gender, Religion and Caste [Last Part]</u> [MID TERM EXAMINATION]		
October (20)	History	<u>Chapter 5: The age of Industrialization</u> <ul style="list-style-type: none"> • Before the Industrial Revolution • Hand Labour and steam power • Factories come up • The Peculiarities of Industrial growth • Market for goods. 	<ol style="list-style-type: none"> 1. Familiarize with the pro-to-industrial phase and early factory system. 2. Enable them to understand industrialization in the colonies with reference to Textile industries. 	Make a list of Industries establishes in the 18 th and the beginning of the 19 th century.
	Economics	<u>Chapter 4: Globalization and the Indian Economy</u> <ul style="list-style-type: none"> • Product across countries • Interlinking production across countries • Foreign Trade • Globalization • World Trade Organization • Impact of Globalization on India • The Struggle for a fair Globalization 		

	Pol. Sc.	<u>Chapter 5: Popular Struggle and Movement</u> [Periodic Test]	1. Understand the vital role of people's struggle in the expansion of democracy.	1. Write a short note on a movement which was recently held in very big scale in India.
November (22)	Pol. Sc.	<u>Chapter 6: Political Parties</u> <ul style="list-style-type: none"> • Why do we need Political Parties? • How many Parties should we have? • National/State Political Parties. • Challenges to Political Parties. • How can Parties be reformed? 	1. Analyse party systems in democracies. 2. Introduction to major Political parties.	<u>Debate:</u> Political parties
	History	<u>Chapter 7: Print and Culture</u> <ul style="list-style-type: none"> • The first printed books • The print revolution and its impact • The reading Mania • India and the world of print • New forms of publication • Print and Censorship 	1. Identify the link between print culture and the Circulation of ideas. 2. Familiarize with pictures, cartoon, extracts from propaganda literature and newspaper.	
	Economy	<u>Chapter 5: Consumer Rights</u> [Activity based Chapter]	1. Rights and duties of consumer "Jago Grahak Jago"	"Jago Grahak Jago"
December (22)	Pol. Sc.	<u>Chapter 7: Outcomes of Democracy</u> <u>Chapter 8: Challenges to Democracy</u> [Periodic Test]		

PRE BOARD EXAMINATION

January	REVISION AND PRACTICE TEST
February	REVISION AND PRACTICE TEST
March	FINAL EXAM (BOARD)

GEOGRAPHY

Month	Period	Topic	Objectives	Activity
March	07	Resource and development: Types of resources, sustainable development, Agenda 21, Conservation of resources, Resource Planning	To understand the value of resources and the need for their judicious utilization and conservation.	Discussion on 'Need of Resources'
April	10	Resource and Development: Land and Soil		Map Activity:

		Resource		Soil types of India
May	12	Forest and Wildlife Resource: Bio-Diversity, Types of forest Water Resources: Facts and figures with reference of water availability, Multi- purpose Projects + Forest & Wildlife Resources.	To Comprehend the importance of water as a resource as well as develop awareness towards its judicious use and Conservation.	Map Activity: Dams of India + Tiger Reserves
June	-	Summer Vacation		
July	09	Agriculture: Types of farming, Major Crops of India.	To explain the importance of agriculture in national economy.	Map Activity: Major Crops of India
August	12	Agriculture: Reforms and Globalization		Map Activity: Major Crops of India
September	06	Revision		
Half Yearly Examination				
October	09	Mineral and Energy Resources: Types and distribution of minerals energy resources	To identify different types of minerals and their availability.	Map Activity: Different minerals found in India.
November	10	Manufacturing Industries: Locational factors, types of industries, pollution Lifelines of National Economy: Different modes of transport and communication.	To bring out the importance of industries in the development of national economy. To explain the importance of transport & communication in ever Shrinking world.	Map Activity: Industries
December	06	Lifelines of National Economy: Trade and Tourism Revision	To understand the role of trade and tourism in economic development.	Map Activity: Seaports, airports, roadways & railways
PRE BOARD EXAMINATION				
January	09	Revision and practice Test	To recall the earlier topics for the preparation of board exams	
February	03	Revision and practice Test		

COMPUTER SCIENCE				
Months and Periods	Unit	Contents	Learning Objectives	Suggested Activities

March (08)	Part A Unit-1 Communication Skills II	Verbal and Non Verbal Communication, Effective Communication, Barriers, Writing Skills, Sentence, Speech, Paragraph	Students will get familiarized with the various means of modern day's communication, their barriers, and Descriptive Feedback as well as grammar rules.	<ol style="list-style-type: none"> 1. Classroom learning on mediums of communication, barriers to communication etc. 2. Group discussion on effective ways of 'Communication'. Discuss the advantages and disadvantages.
April (06)	Unit-2 Self-Management Skills II	Importance of Stress Management Techniques- Yoga, Meditation and Physical Exercise, Self-Motivation and Self-Regulation	Students will learn how to manage time for hobbies, Interests and relaxation. It also develop necessary skills to work independently.	<ol style="list-style-type: none"> 1. Classroom activities based on reducing stress in everyday life. 2. Classroom learning on how to work independently, provide self-Awareness and self- regulation among students.
May (08)	Unit-3 Basic ICT Skills II	Word 2010,Commands,copy text, find and replaces, basic spreadsheet, presentation, slide layout	Students will learn how to work on word file, excel file and PowerPoint file. They also learn the use of software in our day-to-day life.	<ol style="list-style-type: none"> 1. Write an article on the rainfall in India for 10 states. 2. Prepare a excel file and find out the areas where you have the maximum, minimum rainfall in last five years. 3. Create a presentation to showcase the statistics of rainfall in the last year.
July (08)	Unit-3 Basic ICT Skills II	Word 2010,Commands,copy text, find and replaces, basic spreadsheet, presentation, slide layout	Students will learn how to work on word file, excel file and PowerPoint file. They also learn the use of software in our day-to-day life.	<ol style="list-style-type: none"> 1. Write an article on the rainfall in India for 10 states. 2. Prepare a excel file and find out the areas where you have the maximum, minimum rainfall in last five years. 3. Create a presentation to showcase the statistics of rainfall in the last year.
First Unit Test	Unit -1,2			
August (16)	Unit -4 Entrepreneurial Skills	Qualities and functions of a successful Entrepreneur, Role and myths of Entrepreneurship	Students will learn How to become an Entrepreneur, their Importance and functions.	<ol style="list-style-type: none"> 1. Group discussion among students about entrepreneurship play an important role in the economy. 2. Discussion on why

				innovative ideas initially difficult to accept by team members.
September (6)	Unit -5 Green Skills II Part B Unit -1 Web Applications	Importance of Sustainable development, Problems and their Solutions Working with Accessibility Options, Networking Fundamentals, Topologies, Google Hangouts, Blogs, Online Transactions and Internet Security	Students will learn the problem related to Sustainable development like population, lack of Food resources and adverse effect on ecosystem. Students will learn how to work on hangouts app, use Blogger and word press. They can easily learn how to do online banking transactions.	1. Classroom activities based on problems related to Sustainable development. 2. Group discussion topic "Is Sustainable development actually possible?" Assignments 1. Download the Hangout app, sign in and send messages as well as emojis. 2. Download window live editor on your computer. Find More offline blog editors, write a blog, add a picture and publish it.
Mid Term Exam	Unit -3,4,5			
October (14)	Unit -2 Word processing Unit -3 Spreadsheet	Layout of paragraph, Page Margins, Headers, Document Template, Insert graphic Object and Illustrations, Hyperlinks, Shapes and Equation Excel functions, Conditional Formatting, Set Page Breaks, Page Layout, Range Name, Format Charts, Sorting and Filter Data, Sharing Data.	Students will easily learn how to set page layout, Header, footer and section breaks on a word file. They can understand shapes and images too. Students will learn how to calculate data across worksheets. They can easily linked cells and multiple workbooks.	1. Write an article and make a poster on 'Save Water' or Fit India Movement'. 2. Create a unit test report for 10 students of your class using tab stops. 1. Prepare a Weather Forecasting Report using a spreadsheet and also a chart for analysis the data. 2. Prepare a workbook to maintain the records of the Students who participated, Won medals on a sports day.

November (20)	Unit -4 Digital Presentation Unit-5 Email Messaging	Insert a movie clip, audio clip, Tables, Charts, Transitions, Animations, Speaker Notes, Prepare and print a presentation. Calendar Views, Categorize an appointment, Meeting Request, Create task, Journal Entry, Outlook Records Manually	Students will learn how to add and record sound clips as dialogues to give appropriate effect of the presentation. They can also create and view journal Entry, note, task and meeting.	1. Create a presentation on “Era of Artificial Intelligence”. Include topics of virtual Reality and Robotic Engineering too. 2. Create a note and journal with a contact with whom you coordinate a lot. 3. Plan your daily activities of sports day using Calendar.
December (10)	Unit-6 Database Development Revision and Pre Board Exam	DBMS, Advantages, Data storage, Manipulation of Data, Database Templates, Access Tables, Forms, Queries, Sql statements, Reports	Students will learn how to make tables in access with queries, forms, reports and relationship among data.	1. Create a database to maintain the records of students going for picnic. 2. Make a database of Kid’s Apparel showroom about clothes they sells in each day.
January February	Revision			

ART			
Month	Period	Topic	Learning Objectives
March	4	Shapes	Students will be able to learn basic Shapes.
April	4	Design	Students will apply basic shapes in Rangoli Design.
May	3	Book Cover Design	Students will enhance their creativity.
July	4	Composition	Students will learn to apply colours in their drawings.
August	-	Poster	Students will learn how to design Poster.
September	-	Collection of File	-
October	-	Paper Bag Making	Students will learn craft.
November	-	Paper Collage	The Technique of paper collage will be taught.
December	-	Collection of file	-

SITAR

April & May	1 Patriotic Song 1 Devotional Song
July & August	1 Patriotic Song 1 Bhajan
September & October	1 Devotional Song 1 Folk Dhoon
November & December	1 Prayer Song Revision Work

MUSIC

April & May	1 Patriotic Song 1 Prayer Song
July & August	1 Semi Classical(Bhajan for House Competition) 1 Folk Song 1 Quwali Song
September & October	1 Prayer Song (Learn with Harmonium) Vandemataram (Learn with Harmonium)
November & December	Continue of Vandemataram Prayer Songs Patriotic Songs