

CLASS

X

**ENGLISH
LANG. AND LIT.
(184)**

**ENGLISH
LANG. & LIT.
(184)**

SUBJECT	MONTH	CHAPTERS	GRAMMAR AND WRITING	ACTIVITY/ PROJECT
ENGLISH LANG. & LIT. (184)	APRIL	1.A Letter to God 2.Dust of Snow 3.Fire and Ice (Poem) 4.A Triumph of Surgery	Letter to the Editor Tenses	Mind Map
	MAY	1.Nelson Mandela: Long walk to Freedom 2.A Tiger in the Zoo 3.How to tell Wild animals(Poem) 4.The thief's Story 5. The Midnight Visitor	Modals Complaint/Enquiry/Placing Order /Situation based letter	BIOGRAPHY /AUTOBIOGRAPHY
	JULY	1.Two Stories about Flying 2.From The Diary of Anne Frank 3.The Ball Poem (Poem) 4. A Question of Trust 5. Footprint without Feet	Subject -Verb Concord Analytical Paragraph	Newspaper clippings as an activity
	AUGUST	1. A Glimpses of India 2. Mijbil The Otter 3. Amanda! (Poem) 4. The Making of A Scientist 5. Fog (Poem) 6. The Necklace	Reported Speech (Command & request) Statements Questions Determiners	Poster Making /Design Book Cover
	SEPTEMBER	TERM I BEGINS		
	OCTOBER	1.Madam Rides The Bus 2.The Sermon at Benaras 3.The Trees 4. The Tale of Custard The Dragon 5. Bholi 6. The Book that Saved The Earth	Gap Filling/ Editing Exercises	Comic strip (The Tale of Custard The Dragon)
	NOVEMBER	1. The Proposal 2. For Anne Gregory (Poem)	Integrated Grammar Exercises	Role Play
	DECEMBER	PRE-BOARD I BEGINS		
	JANUARY	PRE-BOARD II BEGINS		
		REVISION		

HINDI COURSE-A (002)

हिंदी कोर्स-A
(002)

विषय	माह	क्षितिज एवं कृतिका	व्याकरण एवं लेखन कार्य	रचनात्मक कार्य
हिंदी कोर्स-A (002)	अप्रैल	नेता जी का चश्मा (क्षितिज) पद (सूरदास)	रचना के आधार पर वाक्य के भेद लेखन कार्य पत्र-औपचारिक, अनौपचारिक अनुच्छेद	महाकवि सूरदास का सचित्र वर्णन करते हुए एक परियोजना तैयार कीजिए।
	मई	बाल गोंबिन भगत (क्षितिज) राम-लक्ष्मण परशुराम संवाद (तुलसीदास के पद)	अलंकार	रचना के आधार पर वाक्य के भेद की प्रवाह तालिका बनाइए।
	जुलाई	लखनवी अंदाज (क्षितिज) आत्मकथ्य (कविता) माता का अंचल (कृतिका)	वाच्य विज्ञापन लेखन संदेश लेखन	लखनवी अंदाज पाठ के आधार पर बताइए कि झूठी शान-ओ शौकत का दिखाना उचित है या अनुचित?(वाचन कौशल)
	अगस्त	एक कहानी यह भी (क्षितिज) उत्साह, अट नहीं रही (कविता) साना-साना हाथ जोड़िकर (कृतिका)	पद-परिचय स्ववृत्त लेखन ई-मेल लेखन	अट नहीं रहीं पाठ के आधार पर शिशिर ऋतु कर का चित्रांकन द्वारा प्रस्तुतिकरण। “उत्तराखण्ड की संस्कृति विशिष्ट है”। इसका सचित्र वर्णन कीजिए (लेखन कौशल)
	सितंबर	अर्द्धवार्षिक परीक्षा		
	अक्टूबर	नौबतखाने में इबादत (क्षितिज) यह दंतुरित-मुस्कान, फसल (कविता) मैं क्यों लिखता हूँ (कृतिका)		काशी हमेशा से संगीत, सहित्य एवं कला का प्रसिद्ध केन्द्र रहा है। इस विषय पर एक टिप्पणी तैयार कीजिए। (लेखन कौशल) “एक कहानी यह भी” के आधार पर बताइए क्या आप भी अपने जीवन में किसी से प्रेरित हुए हैं और इससे आपके जीवन में क्या परिवर्तन आए। (वाचन कौशल)
	नवंबर	संस्कृति (क्षितिज) संगतकार (कविता) प्री-बोर्ड 1		“आवश्यकता ही अविष्कार की जननी है”। लेकिन क्या आज तक के सभी अविष्कार मनुष्य के लिए लाभदायक सिद्ध हुए? (वाद-विवाद)
	दिसंबर	प्री-बोर्ड 2		

SCIENCE

(086)

Subject	Month	Chapters	Activity/Project
SCIENCE (086)	April	<u>BIOLOGY</u> Chapter 5: Life Processes Topic; Basic concept of nutrition in plants & animals	ACTIVITY Prepare a temporary mount of a leaf peel to show stomata
		<u>PHYSICS</u> Chapter 9: Light – Reflection and Refraction Topic : Reflection of light, plane mirror, spherical mirrors, mirror formula, Refraction of light and Refractive index.	ACTIVITY To draw Ray Diagram for various position of objects for concave and convex mirror.
		<u>CHEMISTRY</u> Chapter-1: Chemical Reactions Topic : Balanced chemical equation, implications of a balanced chemical equation,	Activity- To study endothermic and exothermic reactions.
	May	<u>BIOLOGY</u> Chapter 5: Life Processes (Continued.) Topic: Basic concept of respiration in plants & animals	ACTIVITY Sketch the human digestive system emphasizing the different digestive glands, and tabulate the different enzymes associated with breakdown of different food components. Experimentally show that carbon dioxide is given out during respiration.
		<u>PHYSICS</u> Chapter 9: Light – Reflection and Refraction (continued) Topic: Refraction of light through Spherical Lens, lens formula and its application.	ACTIVITY 1. To draw Ray Diagram for various position of objects for Concave and Convex Lens. 2. To Trace the path of light through Glass slab showing refraction phenomena.
		<u>CHEMISTRY</u> Chapter 1 Conti..... Topics: types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, endothermic exothermic reactions, 5.oxidation and reduction.	Activity- To study types of chemical reactions.
	July	<u>BIOLOGY</u> Chapter 5: Life Processes (Continued.) Topic; Basic concept of Transportation & Excretion in plants & animals	

	<p style="text-align: center;"><u>PHYSICS</u></p> <p>Chapter 10: The Human Eye and the Colourful World. Topics: Human Eye, power of Accommodation, defects of vision and their correction, Refraction of Light through a prism.</p>	To Trace the path of ray of light through a glass prism and obtain spectrum.
	<p style="text-align: center;"><u>CHEMISTRY</u></p> <p>Chapter-2: Acid, bases and salts Topics: General properties, examples and uses, neutralization, concept of pH scale (Definition relating to 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.</p>	<p>Activity-To study natural and synthetic indicators.</p> <p>ART(Art integrated activity)- Natural Dye Extraction : Study the <u>CHEMISTRY</u> of natural dyes used in traditional Arunachal Pradesh textiles. Collect plant specimens from the region and extract dyes using scientific methods. Create artworks using these natural dyes, experimenting with different mordants and dyeing techniques.</p>
August	<p style="text-align: center;"><u>BIOLOGY</u></p> <p>Chapter 6: Control and co-ordination</p>	<p style="text-align: center;">ACTIVITY</p> <p>Asks students to check if the nose has any effect on the taste of food. For this it asks us to eat sugar once with nose open, and once with nose closed; in another instance, it asks us to repeat the same with some other food.</p>
	<p style="text-align: center;"><u>PHYSICS</u></p> <p>Chapter 10: The Human Eye and the Colourful World Topic: Atmospheric Refraction and Scattering of Light.</p>	To demonstrate Tyndall effect by showing Scattering of Light.
	<p style="text-align: center;"><u>CHEMISTRY</u></p> <p>Chapter-3: Metals and non metals Topics: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds; Basic metallurgical processes; Corrosion and its prevention.</p>	Activity-To show exchange of electrons in ionic bond through a model.
September	HALF YEARLY EXAMINATION BEGINS	
October	<p style="text-align: center;"><u>BIOLOGY</u></p> <p>Chapter 7: How do organisms reproduce Chapter 8: Heredity Topic- Heredity; Mendel's contribution- Laws for inheritance of traits</p>	<p>Study of binary fission in Amoeba and budding in Yeast & Hydra with the help of prepared slides.</p> <p>Identification of the different parts of an embryo of a dicot seed (Pea, Gram or red kidney bean)</p>
	<p style="text-align: center;"><u>PHYSICS</u></p> <p>Chapter 11: Electricity Topic: Electric Current and Circuit, Electric Potential, Circuit</p>	<p style="text-align: center;">ACTIVITY</p> <p>To plot the graph between Electric Potential and Current using Ohm's Law</p>

	Diagram, Ohms Law, Resistance and resistivity, Heating Effect of current, Electric Power.	
	<p style="text-align: center;"><u>CHEMISTRY</u></p> <p>Chapter-4: Carbon and its compounds Topics: Covalent bonding in carbon compounds, Versatile nature of carbon, Homologous series, Nomenclature of carbon compounds containing functional groups.</p>	Activity- Model of structure of graphite.
November	<p style="text-align: center;"><u>BIOLOGY</u></p> <p>Chapter 8: Heredity Topic- Sex Détermination Chapter 13: Our Environment</p> <p style="text-align: center;">Pre-Board - 1 Begins (Mid November)</p>	
	<p style="text-align: center;"><u>PHYSICS</u></p> <p>Chapter 12: Magnetic Effects of Current Topic : Magnetic Field and Field lines, Magnetic field due to current carrying conductor, force on current carrying conductor, domestic electric circuit.</p> <p style="text-align: center;">Pre-Board- 1 Begins (Mid November)</p>	To Draw and Study the field line patterns of Magnetic Field through the various Current Carrying Conductors.
	<p style="text-align: center;"><u>CHEMISTRY</u></p> <p>Chapter-4: Carbon and its compounds Conti..... Topics: Chemical properties of carbon compounds Ethanol and Ethanoic acid soaps and detergents.</p> <p style="text-align: center;">PREBOARD-1 BEGINS (MID NOVEMBER)</p>	
December	PRE-BOARD- 2 BEGINS	
January	REVISION	

ARTIFICIAL INTELLIGENCE (417)

SUBJECT	MONTH	CHAPTERS	ACTIVITY/PROJECT/ART INTEGRATED PROJECT
ARTIFICIAL INTELLIGENCE (417)	APRIL	Part A Unit 1- Communication Skills Part B Unit 1 Introduction to AI	A look at Real life AI Implementations
	MAY	Part A Unit-2 Self-Management Skills Part B Unit 2 Basics of AI	Go Goals Board Game
	JULY	Part A Unit-3 ICT Skills Unit-5 Green Skills Part B Unit-3 AI Project Cycle Unit-5 Data Science	Presentation on AI Project Cycle Data Science Programs
	AUGUST	Part A Unit-4 Entrepreneurial Skills Part B Unit-6 Computer Vision	Create your own pixels on pixel app and make a gif image Programs based on Computer vision
	SEPTEMBER	HALF YEARLY EXAMINATION BEGINS	
	OCTOBER	Part B Unit-7 Natural Language Processing Unit-4 Advanced Python	Python Programs Confusion Matrix
	NOVEMBER	Part B Unit-8 Evaluation PREBOARD-1 BEGINS (MID NOVEMBER)	
	DECEMBER	PREBOARD-2 BEGINS	
	JANUARY	REVISION	

SOCIAL SCIENCE (087)

SUBJECT	MONTH	CHAPTERS	ACTIVITY/PROJECT
SOCIAL SCIENCE (087)	APRIL	* The Rise of nationalism in Europe *Resources and development	*Any activity according to existing scheme
	MAY	*Development *Power Sharing	* make a projet on any one of the following topics a) consumer rights b) social issues c)sustainable development (compulsory according to existing scheme)
	JULY	* Nationalism in India *Forest and wildlife resources *Gender religion and caste *Sectors of the Indian economy *Water resources *Federalism	Any activity according to the existing scheme
	AUGUST	*The Making of a Global World (subtopics as given according to the scheme) *Agriculture *Money and credit *Mineral and energy resources *Political parties	Project on any ONE of the following *the 19 th century to the end of bretton woods *the beginning of globalization
	SETEMBER	TERM 1 EXAMINATION	
	OCTOBER	*Globalisation and the Indian economy *Outcomes of democracy *The age of Industrialisation (to be assessed as part of periodic assessment) *Manufacturing industries	*Assignment on any one of the following a) products across the countries b) Chinese toys in India c)world trade organization d)the struggle for fair globalization
	NOVEMBER	*Lifelines of the Indian economy (only map pointing) *Print culture And the modern world PRE BOARD-I	Project related to the chapter *Lifelines of the Indian economy
	DECEMBER	PRE BOARD–II	
	JANUARY	REVISION	

INFORMATION TECHNOLOGY (402)

Subject	Month	Unit/Chapter	Learning outcome
INFORMATION TECHNOLOGY (402)	April	Employability Skill Communication Skill: Verbal, Non verbal, Visual communication Feed back and 7Cs of effective communication.	Learning various methods of communication and importance and significance of communication in day to day life.
		Self-Management Skill: Stress Management : Meaning and importance of stress management. Stress management techniques. Eue-stress and Di-stress.	Apply stress management techniques to deal with day to day problems and overcome them with some positive result. Understanding the significance of stress to accomplish the set objective and goals. Learn how to manage stress to make it fruitful and result oriented
		Ability to work Independently: Self Awareness: Self Motivation: Self Regulation:	Significance of doing work by self Know ones strength and weakness Importance of keep oneself motivated to accomplish the goals. Need of discipline in life .
	May	Employability Skill ICT Skill: Operating system, basif work of OS , learning basic job in computer like creating files and folders. How to do maintenance of computer and protect computer from virus and other threats to data.	Understanding of basics of computer system and performing basic operation in computer. Maintenance of computer to make it work smoothly.
	May-July	Subject Specific Skill Digital Documentation: Styles ,Working with images , use of template, Table of contents , mail merge.	Creating document using pre-defined styles and template. Using images in a document. Creating index using table of contents . Creating multiple copies of same text using mail merge.
	July-August	Electronic Spread Sheets: Goal seek and Scenario Linking of data and spreadsheets Sharing of spreadsheets Creating and using macros .	Analyzing data using goal seek and scenario. Connecting data in two spreadsheets Creating Macros and use of it on same format data.
	August	Database Management System: Concept of DBMS, creating table and performing various operation using queries. Create forms and reports.	Understanding of DBMS, creating of table and executing operation on table like retrieving, updating and deleting data. Creation of forms to input data and generating a report from data in a table.
September	TERM-I Examination		

	October-November	<p style="text-align: center;">Employability Skill</p> <p>Entrepreneurial Skill</p> <p>Green Skill</p> <p style="text-align: center;">Subject Specific Skill</p> <p>Web Application</p> <p>Accessibility option, Networking Fundamental, Chat, Blogs , Transaction , internet security, workplace safety and prevention.</p> <p style="text-align: center;">PRE BOARD-1</p>	<p>Who is an entrepreneur , how to be an entrepreneur and role of an entrepreneur in development of the society.</p> <p>Duties of every one towards the preservation of nature and its resources. Need of sustainable development.</p> <p>Ease of doing in computers for differently abled people, Understanding the use and facility with the Internet.</p> <p>Networking concepts and significance of Security while using internet.</p>
	December	PRE BOARD-2	
	January	REVISION	

**MATHEMATICS
STANDARD &
BASIC
(041/241)**

Subject	Month	Unit/Chapter			Learning outcome
MATHEMATICS STANDARD & BASIC (041/241)	APRIL & MAY	<ul style="list-style-type: none"> • REAL NUMBERS • POLYNOMIALS • QUADRATIC EQUATIONS • LINEAR EQUATIONS IN TWO VARIABLES • TRIANGLES 	<ul style="list-style-type: none"> • To draw the graph of quadratic polynomial and observe: <ol style="list-style-type: none"> 1-The shape of the curve when the coefficient of x^2 is positive. 2- The shape of the curve when the coefficient of x^2 is negative. 3- Its number of zeroes and value of zeroes <p>To verify the conditions of consistency/ inconsistency for given pairs of linear equations in two variables by graphical method.</p>	Application of Algebra in day to day life.	<ul style="list-style-type: none"> • To recognize & differentiate between rational and irrational numbers. Proof of irrational numbers. To apply the fundamental theorem of Arithmetic. Questions on LCM X HCF = a X b • To tell the number of zeros and value of zeros from the graph of a polynomial. To recognize the quadratic polynomial and find the zeros of it by quadratic formula. • To solve the word problem based on quadratic equations. Applications of all these in daily life. • To check the consistency of given pair of linear equations in two variables and solve it algebraically and graphically. Word problems based on it. • Statement and proof of Thale's Theorem. Differentiate between congruent and similar figures, establishing properties for similarity of two triangles logically.
	JULY	<ul style="list-style-type: none"> • ARITHMETIC PROGRESSION • INTRODUCTION TO TRIGONOMETRY • APPLICATION OF TRIGONOMETRY 	To find the height of the school building using clinometer.		<ul style="list-style-type: none"> • To recognize Arithmetic Progression. To solve the questions based on nth term and sum of the n terms. Its application in daily life. • To solve questions based on formulae of all the T- ratios, Trigonometric identities, value of T- ratios proof and application of angle 0° to 90°. • Able to apply the knowledge in solving daily life problems like finding heights of different structures and distance between them. Cases involving maximum two triangles.
	AUGUST	<ul style="list-style-type: none"> • CIRCLES • STATISTICS • CO-ORDINATE GEOMETRY 	<ul style="list-style-type: none"> • To verify experimentally that the tangent at any given point to a circle is perpendicular to the radius through that point. • To find the Mean, Median and Mode of the data collected for a given situation and interpret the result. 		<ul style="list-style-type: none"> • To solve questions based on the circle and tangent. • To find the Mean, Median and Mode of given data and interpret the result. • Able to use the distance formula and section formula in the context of coordinate plane.

SEPTEMBER		REVISION AND HALF YEARLY EXAMS			
OCTOBER	<ul style="list-style-type: none"> • AREAS RELATED TO CIRCLES • SURFACE AREA AND VOLUMES • PROBABILITY 	To compare the theoretical probability of an event of getting head of its empirical probability by tossing a coin 200 times.	Chronology of Bhartiya Mathematician (s) with their contributions. Aryabhata/ Bhaskaracharya / Brahmgupta	<ul style="list-style-type: none"> • Able to find length of arc , area of segment and area of sector of angles, 60°, 90°, 120° and also able to apply it in different geometrical figures. • Able to find the surface area and volumes of objects in the surrounding by visualizing them as a combination of different solids like cylinder, cone, hemisphere, sphere. Able to solve the questions based on the concept and able to apply in day to day life. Able to determine the probability of an event and apply the concept in solving daily life problems. 	
NOVEMBER	PRE-BOARD I EXAMS				
DECEMBER	PRE-BOARD II EXAMS AND REVISION				