

SYLLABUS (2023-24)
CLASS X

SUBJECT- ENGLISH

- Books: 1. First Flight (NCERT)**
2. Footprints without Feet (NCERT)
3. Workbook (NCERT)
4. NCERT based worksheets on English (Optional) (PP Publication)

Month	Book Name	Syllabus	Activities	Learning Outcome
April (19 days)	First Flight	Prose: Ch-1 A Letter to God i) Ch-2 Nelson Mandela ii) His First Flight iii) Black Aeroplane Poem: Ch-1 Dust of Snow Ch-2 Fire and Ice	1) Writing a review and presenting a Speech on the film 'Twelve Years a Slave'	1) Belief in God and development of optimism 1) Acknowledgement of importance of freedom and democratic rights 1) Love for nature 2) All about jealousy and hatred
	Footprints without Feet	Ch-1 A triumph of Surgery		1) Love and care for animals
	First Flight	Prose: Ch-3 Two Stories about Flying Poem: Ch-3 A Tiger in the Zoo Ch-4 How to Tell Wild Animals	1) Narrating a story on the topic: A Mysterious Incident of the Life'	1) Development of courage 1) Interest in mysterious stories 2) Empathy and love for wild animals
	Footprints without Feet	Ch-2 The Thief's Story		1) Development of humanity and helpfulness 2) Value of friendship
June (08 days)	WRITING	Formal Letter –Complaint		1) Format and content
	GRAMMAR	Tenses (Continued)		1) Speaking and writing sentences in targeted tense

	COMPREHENSION	Discursive Passage		1) Comprehension skill needed to understand any article, discourse etc thoroughly.
July (23 days)	First Flight	Prose: Ch-4 From the Diary of Anne Frank Ch-5 i) The Hundred Dresses - I Poem: Ch-5 The Ball Poem	1) Watching the film 'The Boy in the Striped Pyjamas' and sharing its review in the class.	1) History and consequences of concentration camps 1) History of immigration in America 2) Respect for people of other communities 1) development of maturity
	Footprints without Feet	Ch-3 The Midnight Visitor		1) Introduction to the genre of crime fiction
	WRITING	Formal Letter – Enquiry, Placing Order		1) Format and content
	GRAMMAR	Modals Subject-verb Concord		1) Correct usage of modal auxiliaries while speaking and writing 2) Use of correct form of verb according to subject
	COMPREHENSION	Case-based Passage		1) Comprehending and analyzing any passage with statistical data, diagram etc.
August (23 days)	First Flight	Prose: Ch-5 ii) The Hundred Dresses - II Ch-6 Glimpses of India Poem: Ch-6 Amanda	1) Extempore speech delivery on 'The Best Places that I visited in India' 1) Extempore speech on 'The Challenges I face while I'm Growing up'	1) Development of empathy towards immigrants 1) Development of love for country and nature 2) Acknowledgement of cultural diversity in India 1) Acknowledgement of challenges faced by growing up children 2) Knowledge of metaphor, simile and allusion
	Footprints without Feet	Ch-4 A Question of Trust Ch-5 Footprints without Feet		1) Introduction to the genre of crime fiction 1) Learn about supernatural activities
	WRITING	Formal Letter – To the editor		1) Format and content

	GRAMMAR	Reported Speech		1) Narration of dialogues without any grammatical error
	COMPREHENSION	Discursive Passage		1) Comprehension skill needed to understand any article, discourse etc thoroughly.
September (22 days)	First Flight	Prose: Ch-7 Mijbil the Otter Poem: Ch-7 Animals		1) Love for wild animals 1) Learning values from nature and habits of animals
	Footprints without Feet	Ch-6 The Making of a Scientist	Quiz on 'The Indian Scientists and Their Achievements'	1) Development of curiosity about scientists and their contributions
		Ch-7 The Necklace		1) Introduction to storytelling with twisted end 2) Enhancement in story narration
	WRITING	Analytical Paragraph (Map, Chart)		1) To analyse any chart, table, diagram etc and describe the details in words instead of pictorial representation
	GRAMMAR	Reported Speech (continued), Command and Request, Statements		1) Narration of any dialogue without any grammatical error 1) Speaking and writing sentences of commands, requests, advise etc without any grammatical error
	COMPREHENSION	Case-based passage		1) Comprehending and analysing any passage with statistical data, diagram etc.
October (20 days)	First Flight	Prose: Ch-8 Madam Rides the Bus Poem: Ch-8 The Trees Ch-9 Fog Ch-10 The Tale of Custard the Dragon	1) Speaking on 'My interpretation of the poem, The Trees' 2) Watching the film 'Wadjda' and writing its review 1) Recitation of short poems from European and American literature	1) Development of curiosity, independence and self-responsibility 1) Love for nature 2) Development of interpretation skills needed in poems 1) Love for nature and winter season 1) Introduction to the 'ballad' genre of poetry

	Footprints without Feet	Ch-8 The Hack Driver		1) Learning the art of characterisation necessary in a good story
		Ch-9 Bholi	Watching the documentary 'Most Dangerous Ways to School' on the channel 'Free Documentary' and writing a review	2) Familiarity with village life 1) Understanding the value of education 2) Development of empathy and helpfulness towards 'specially-abled children'
	WRITING	Analytical Paragraph (Report, line graph, pie chart)		1) To analyse any chart, table, diagram etc and describe the details in words instead of pictorial representation
	GRAMMAR	Determiners Prepositions		1) Correct usage of determiners while speaking and writing 1) Correct usage of preposition while speaking and writing
	COMPREHENSION	Discursive Passage		1) Comprehension skill needed to understand any article, discourse etc thoroughly.
November (18 days)	First Flight	Prose: Ch-9 The Sermon at Benares Ch-10 The Proposal Poem: Ch-11 For Anne Gregory	Watching any documentary on 'Life and teachings of the Buddha' and group discussion on the same	1) Learning the gist of 'Buddhism' 2) Knowledge of the Buddha's life 1) Identifying the 'farce' genre of play 2) Learning about marital traditions in Russia and comparing it those in India 1) Differentiation between true love and fake love 2) Impermanence of physical beauty
	Footprints without Feet	Ch-11 The Book that Saved the Earth		1) Knowledge about sci-fi genre
	WRITING	Analytical Paragraph (Cues)		1) To analyse any chart, table, diagram, cues etc and describe the details in words instead of pictorial representation

	GRAMMAR	Use of Passive Voice Clauses		1) Identification of passive voice while listening and reading 2) Using sentences of passive voice while writing and speaking without any error 1) Identification of clauses while listening and reading 2) Using sentences having clauses while speaking and writing
	COMPREHENSION	Case-based passage		1) Comprehending and analysing any passage with statistical data, diagram etc.
December (22 days)	Revision			

Syllabus PT I	Syllabus PT II/ HY		Syllabus (PT – III)/PB	Syllabus AE
First Flight Prose: Ch1-3 Poem: Ch1-3 Footprints without Feet Ch1, Ch2 WRITING Formal Letter –Complaint GRAMMAR Tenses	First Flight Prose: Ch1-6 Poem: Ch1-6 Footprints without Feet Ch1-5 WRITING Formal Letter –Complaint, Enquiry, Placing Order, To the Editor GRAMMAR Tenses, Modals, Subject-verb Concord, Reported Speech COMPREHENSION Discursive Passage, Case-based Factual Passage		Full syllabus	Whole syllabus as per C.B.S.E
AIL Topics	(1st Quarter) Prose, Ch2- Nelson Mandela Recitation of any poem (which is not given in the syllabus) that deals with the freedom.	(2nd Quarter) Prose, Ch5- The Hundred Dresses –I Painting (A painting which portrays Wandabeing teased by her classmates)	(3rd Quarter) Prose, Ch6-Glimpses of India Street Photography/Nature Photography in Locality	(4th Quarter) Poem 10 -The Tale of Custard the Dragon Music (Singing of any ballad in Hindi, English or any regional language)
PBL TOPICS	(1st Quarter) Nelson Mandela Preparation of a portfolio on any five most important personalities from black community. Paste relevant images, too.	(2nd Quarter) From the Diary of Anne Frank Creating a fictional character and preparing his/her diary and making at least 10 entries. The Character can be a war victim, an immigrant, a patriot etc.	(3rd Quarter) The Trees Planting a sapling in a flower pot. Sticking a note describing its scientific name, species, uses etc.	(4th Quarter) The Sermon at Benares Preparation of a portfolio on Life and Preaching of the Buddha. Paste relevant images, too.

BAL BHARATI PUBLIC SCHOOL, NTPC GADARWARA
SYLLABUS (2023-24)
CLASS -X

SUBJECT- HINDI				
पाठ्यपुस्तक - स्पर्श , संचयन, व्याकरण				
Month	Book Name	Syllabus	Activities	Learning Outcome
April (19 Days)	स्पर्श /संचयन	1. हरिहर काका 2. साखी 3. बड़े भाई साहब	1. आप मडियाकर्मी है एक संवाददाता के रूप में हरिहर काका के गौब की दशा का वर्णन कीजिए।	1. छात्र रिश्तों के मध्य आई स्वार्थपरता, धनलोलुपता, धर्म की आड़ में किये जाने वाले अनैतिक कार्यों के बारे में जान पाने में सक्षम हो सकेंगे। ऐसी धार्मिक संस्थाओं के प्रति सजग हो पाने में सक्षम हो सकेंगे। 2. छात्र अपने जीवन में नैतिकता को अपना सकेंगे, सत्संगति का महत्व समझ सकेंगे, ईश्वर के महत्व को समझ पाने में सक्षम हो सकेंगे। 3. छात्र पाठ के मर्म को समझ कर रिश्तों तथा प्रेम के महत्व को समझ पाने में सक्षम हो सकेंगे।
	व्याकरण	1 अपठित गद्यांश-पद्यांश 2 पदबंध		4 व्याकरणिक नियमों की जानकारी, शुद्ध व प्रभावशाली भाषा का प्रयोग , अर्थ ग्रहण कर लिखना।
June (8 Days)	स्पर्श /संचयन	5. पद 6. डायरी का एक पन्ना	1. भक्त कवि कवीर , गुरु नानक , नामदेव और मीराबाई की रचनाओं का संकलन कीजिए।	5. छात्र पद को समझ कर लोक व्यवहार तथा नैतिक व्यवहार को अपने जीवन में उतार पाने में सक्षम हो सकेंगे। 6. छात्र भारत के स्वतंत्रता संग्राम के लिए क्रांतिकारियों के प्रयास एवं बलिदान को समझ पाने में सक्षम हो सकेंगे।
	व्याकरण	3 पत्र लेखन (औपचारिक)		बुद्धि और ज्ञान की परिपक्वता, विचारों की विशालता , विषय का ज्ञान, अभिव्यक्ति की शक्ति और भाषा पर नियंत्रण।
July (23 Days)	स्पर्श /संचयन	7. मनुष्यता 8. तर्तौंग बामिरो कथा		7. छात्र मनुष्यता के सर्वोच्च गुणों को पहचान कर अपने जीवन में उन कुछ गुणों को उतार पाने में सक्षम हो सकेंगे। 8 छात्र भारत के स्वतंत्रता संग्राम

		9. पर्वत प्रदेश में पावस	पौराणिक कथा के किसी एक दृश्य का चित्र बनाना।	के लिए क्रांतिकारियों के प्रयास एवं बलिदान को समझ पाने में सक्षम हो सकेंगे। 9 छात्र प्रकृति के सौंदर्य एवं उसके मानवीकरण को जानकर अपनी कल्पना शक्ति का प्रयोग कर पाने में सक्षम हो सकेंगे।
	व्याकरण	5. विज्ञापन		आकर्षक विज्ञापन बनाना, उत्पादों के संबंध में अपने मत की पुष्टि के लिए उचित वातावरण तैयार करना। व्याकरणिक नियमों की जानकारी, शुद्ध व प्रभावशाली भाषा का प्रयोग, अर्थ ग्रहण कर लिखना
August (23 Days)	स्पर्श/संचयन	10. तीसरी कसम के शिल्पकार शैलेन्द्र 11. तोप	“तीसरी कसम” फिल्म देखेंगे व उसके निर्माण पर विवेचना करेंगे।	10. छात्र एक सार्थक एवं उद्देश्यपरक फिल्म बनायेंगी, यह समझ पाने में सक्षम हो सकेंगे। 11 छात्र स्वतंत्रता संग्राम के इतिहास की जानकारी पा सकेंगे। यह समझ सकेंगे कि प्रत्येक शक्ति का एक न एक दिन अंत अवश्य होता है।
	व्याकरण	7. सूचना लेखन 8 मुहावरे		मुहावरे का प्रयोग कर छोटे, रोचक व स्वभाविक लेखन द्वारा घटनाक्रम को आगे बढ़ाना
September (22 Days)	पुनरावृत्ति - अर्द्धवार्षिक परीक्षा			
October (20 Days)	स्पर्श/संचयन	13. अब कहाँ दूसरों के दुख में दुखी होने वाले		13. छात्र पशु-पक्षियों के एवं प्रकृति के प्रति प्रेम उत्पन्न कर पाने में सक्षम हो सकेंगे, जीवों के प्रति दया का भाव उत्पन्न कर पाने में सक्षम हो सकेंगे।
		14 सपनों के से दिन	मनुष्य द्वारा प्रताड़ित किसी एक जीव की भवनाओं को नृत्य द्वारा प्रस्तुत	14 छात्र ग्रामीण परिवेश तथा ग्रामीण बच्चों के बचपन की जानकारी पा सकने में सक्षम हो सकेंगे। पूर्व शिक्षा पद्धति के दोषों को जानकर नवीन शिक्षा पद्धति से उसकी तुलना कर पाने में सक्षम हो सकेंगे

गद्यांश-पद्यांश 2 पदबंध 3 पत्र लेखन (औपचारिक) 4 पाठ्य-पुस्तक के मुहाबरे।	8. ततौरा ग्रामिरो कथा 9पर्व त प्रदेश में पावस 10. तीसरी कसम के शिल्पकार शैलेन्द्र व्याकरण - 1 अपठित गद्यांश-पद्यांश 2 पत्र लेखन (औपचारिक) 5. विज्ञापन 7. सूचना लेखन 8 मुहाबरे	व्याकरण - 1 अपठित गद्यांश-पद्यांश 2 पत्र लेखन (अनौपचारिक) 9. वाक्य 10 समास 11. अलंकार		
AIL Topics	(1 st Quarter)	(2 nd Quarter)	(3 rd Quarter)	(4 th Quarter)
	पाठ -1 हरिहर काका आप मडियाकर्मी है एक संवाददाता के रूप में हरिहर काका के गाँव की दशा का वर्णन कीजिए।	पाठ - 7. मनुष्यता पौराणिक कथा के किसी एक दृश्य का चित्र बनाना।	पाठ - 18. अब कहाँ दूसरों के दुख में दुखी होने वाले मनुष्य द्वारा प्रताडित किसी एक जीव की भवनाओं को नृत्य द्वारा प्रस्तुत करें।	पाठ - 16. आत्मत्राण किसी एक प्रार्थनागीत का गायन करें।
PBL Topics	(1 st Quarter)	(2 nd Quarter)	(3 rd Quarter)	(4 th Quarter)
	पाठ -1 कारतूस किसी एक स्वतंत्रता सेनानी का भूमिका निर्वाहन कीजिए।	पाठ - पर्वत प्रदेश में पावस पर्वतीय क्षेत्र की किसी एक दृश्य का निर्माण करना।	श्रवण- लेखन मूल्यांकन	पोर्ट फोलियों बनाना

SUBJECT - MATHEMATICS

BOOK: A textbook for class X; by N.C.E.R.T

REFERENCE BOOK: Mathematics Exemplar problems For Class X; by N.C.E.R.T.

Month	Syllabus	Enrichment activities	Learning Outcomes
April (19 days)	Ch 1 Real Numbers	Quiz on HCF and LCM of numbers.	<ul style="list-style-type: none"> Recall different number System and to apply HCF and LCM in different situations. Learn about EDL. Learn Fundamental theorem of Arithmetic Know about Proofs of irrationality of $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$
	Ch 2 Polynomials	To obtain the condition for consistency for the system of equation in two variables by graphical method.	<ul style="list-style-type: none"> Recall the concept of polynomials. Compare the relation between zeroes and coefficients of a polynomial Comprehend the method to form a Polynomial.
	Ch 3 Pair of linear Equations in two Variables	To obtain the condition for consistency for the system of equation in two variables by graphical method.	<ul style="list-style-type: none"> Recall the concept Linear equation and its solution. Compare the consistency for different equations. To develop the skill of drawing graphs.
June (8 days)	Ch 4 Quadratic Equation	Summarize the topic by Mind mapping which includes the General form of a Quadratic equation, solution by factorization and by Quadratic formula.	<ul style="list-style-type: none"> Recall the concept of Quadratic Polynomial and correlate with linear equation and Quadratic equation. Explore different methods to solve Quadratic equation and apply it in different situations
	Ch 5 Arithmetic Progressions	Research on Geometrical Progression and to compare it with A.P.	<ul style="list-style-type: none"> Identify the series A.P and to select appropriate formula to find out a_n and S_n of the A.P. To identify the formula to find out a_n and S_n of the A.P.
July(23 days)	Ch 6 Triangles	Proving Pythagoras theorem and BPT by Inductive – deductive method.	<ul style="list-style-type: none"> Explore different methods to prove the theorems. Recall different types of triangles and their properties.

			<ul style="list-style-type: none"> To apply the concept in different situation. To verify the concept by learning by doing.
	Ch 7 Coordinate Geometry	Points are to be plotted in Cartesian Plane on a graph paper and find out the distance between them.	<ul style="list-style-type: none"> To select appropriate formula to find out length of a line segment. To apply section formula in different situation
August (23 days)	Ch 8 Introduction to Trigonometry	Making different Grids and to write the values of trigonometric ratios of specific angles.	<ul style="list-style-type: none"> Compare, explore and estimate trigonometric ratios & values of specific angles To prove Trigonometric identities
	Ch 9 Application of Trigonometry	Solving daily life situation related problem using Trigonometric ratios.	<ul style="list-style-type: none"> Apply Trigonometric ratios in solving day to day life situation. develop problem solving skills.
September (22 days)	Ch 10 Circles	<ul style="list-style-type: none"> Verification of properties of circle using Geo board. Learning by doing hands on activity. 	<ul style="list-style-type: none"> Secant and Tangents of a circle. Theorems on tangents to a circle.
October (20 days)	Ch 11 Construction	Demonstration method using basic geometrical instruments.	<ul style="list-style-type: none"> Construction of tangents to a given circle. Division of line segment in a given ratio
	Ch 12 Areas related to circle	Solving picture Work sheet to find out the area of shaded region of the given figure.	<ul style="list-style-type: none"> Recall area and circumference of a circle. Learn about area of sector, length of arc, area of segment and area of quadrant.
	Ch 13 Surface Areas & volumes	To find out surface area of combination of figures with the help of transparent solid models of cube, cylinder, cone etc.	<ul style="list-style-type: none"> To recall different solid shapes and their properties. To identify appropriate formula and to apply them to find out surface area and volume of combination of solids. To develop computational skill. Develop logical reasoning skill by proving theorem
November	Ch 14 Statistics	Students will have to note down	<ul style="list-style-type: none"> Recall the concept Mean, Mode and Median of

(18 days)		the heights of all students of their class to find out the mean, median and mode of this data.	raw data. • Explore different methods to find out Mean, Median and mode.
	Ch 15 Probability	Learning by doing: Coin tossing activity (two/ three coins together)	<ul style="list-style-type: none"> To recall the concept experimental probability and to correlate with theoretical probability. To understand the concept by doing hands on activity
December (22 days)	Revision of AE 2023 – 24 PB – I		
January (22 days)	Revision of AE 2023 – 24 PB – II		
February (23 days)	Revision of AE 2023 – 24 Annual Examination 2023 – 24		
March (21 days)	Annual Examination 2023 – 24		
Syllabus (PT – I)	Syllabus (HY/PT – II)	Syllabus (PT – III)/PB	Syllabus (AE)
Ch 1 to 4.	Ch 1 to 8.	Full syllabus	Ch 1 to 15.
AIL TOPICS	(1st Quarter) Ch 6 Triangles	(2nd Quarter) Ch 15 Probability	(3rd Quarter) Ch 14 Statistics.
PBL TOPICS	BPT	Sample Space for Coin, Dice and cards.	Project based on the traditional craft of the state Meghalaya

SUBJECT- SCIENCE

BOOKS:- Physics :NCERT

Chemistry: NCERT, Reference: Lakhmir Singh & Manjeet Kaur(S .Chand Pub.)

Biology:NCERT

Month	Syllabus	Enrichment activities	Learning Outcomes
April(19 days)	Physics- Light -Reflection and Refraction	Dispersion of light is observed through a glass prism and related questions are asked. Which kind of corrective mirror do you have in your home? What is its nature and its uses.	Students will be able to trace ray diagrams to locate the image of an object placed in front of spherical mirrors and lenses. Students will be able to trace ray diagrams to locate the image of an object placed in front of spherical mirrors and lenses.
	Chemistry: Chapter 1 Chemical reactions & Equations	Performing and observing the reactions and classifying them into: A. Combination reaction B. Decomposition reaction C. Displacement reaction D. Double displacement reaction	The students will be able to: • Demonstrate & verify chemical changes • Relate chemical changes to a daily life situations • Convert chemical change into word equation • Substitute it by symbols and formula
	Biology: Chapter 6 life processes	Make a working model of human lungs	Structure and function of different system digestive circulatory respiratory and excretory system
June(8 days)	Physics- Light -Reflection and Refraction: Dispersion of light is observed through a glass slab and related questions are asked.	Dispersion of light is observed through a glass slab and related questions are asked.	Students will be able to trace ray diagrams to locate the image of an object placed in front of spherical mirrors and lenses.
	Chemistry: Chapter 1 Chemical reactions & Equations	To Observe the action of Zn, Fe, Cu and 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	Compare the different types of reactions • Classify the reactions as oxidation or reduction • Apply oxidation in daily life

	Biology: Chapter 6 life processes	Make a working model of human lungs	Structure and function of different system respiratory and excretory system
July(23 days)	Physics: The human eye and the colorful world.	Which kind of corrective lens do you have in your spectacles? What is its Power and its corresponding focal length	Students will be able to differentiate between the eye defects- Myopia and Hypermetropia.
	Chemistry: Chapter 2 Acids, Bases & Salts	Activity to Check whether a substance is acid or base with the help of 1.litmus paper 2.phenolphthalein indicator. 3.methyl orange indicator	Identify the substances as acids or bases. • Properties of acids and bases Identify the parent acid and base from which the salt is formed • Tabulate the salts into their families • Predict and check the pH of few common salts • Study of some salts of daily use like : Baking soda, Washing soda, Plaster of paris Bleaching powder
	Biology Chapter 7 control and coordination	Dancing movements to show balancing	Nervous tissue reflex action animal and plant hormones
August(23 days)	Physics : Electricity	Wires of different lengths and thickness rolled out from 'atta' dough and LEDs are used to make circuits to check the factors that determine the resistance of a conductor	Students will understand that resistivity is independent of the length and cross section of the conductor.
	Chemistry: Chapter -3 Metals and non metals	To prepare a chart of periodic table highlighting metals, non metals and metalloids with different colour.	The students will be able to: • Demonstrate properties of metals and non-metals • Compare properties of both metals and non-metals

			<ul style="list-style-type: none"> • Identify metals and nonmetals from the given samples • Tabulate the reactivity series of metals • Arrange metals into ascending and descending order of reactivity • Draw schematic diagrams for ionic compounds • Demonstrate properties of ionic compounds • Draw schematic diagrams for ionic compounds • Demonstrate properties of ionic compounds
	Biology: Chapter 7 control and coordination Chapter 15 environment	Make a project on e-waste	Environmental pollution ecosystem food chain and food web
September(22 days)	Physics: Electricity	Wires of different lengths and thickness rolled out from 'atta' dough and LEDs are used to make circuits to check the factors that determine the resistance of a conductor	Students will be able to apply the various relations between E,P,I,R and V to solve numerical problems.
	Chemistry: Chapter 3:Metals and Non metals (contd) Chapter 4:Carbon and its compounds :	Activity :To prepare a chart reactivity series of elements Study of the comparative cleaning capacity of a sample of soap in soft and hard water.	<ul style="list-style-type: none"> • Know about basic concepts of Metallurgy. • Come to know about the Extraction of metals from their ores based on their reactivity. • Refining of metals. • Organic compounds • Hydrocarbons and their derivatives • Homologous series • Apply the general formula of homologous series
	Biology: chapter 8 how do Organism reproduce	Dissect a flower and display male and female reproductive system	different method of sexual and asexual reproduction in plants and animals.

October (20 days)	Physics : Magnetic effect of electric current	To demonstrate the phenomenon of electromagnetic Induction.	Students will learn that the force acting on a current carrying conductor placed in the magnetic field depends upon (i) length (ii) magnetic field (iii) current.
	Chemistry :Ch 4: Carbon & its Compounds	To draw the structure of different functional group Study of the comparative cleaning capacity of a sample of soap in soft and hard water.	<ul style="list-style-type: none"> • Identification of functional group. • Able to write IUPAC Nomenclature • Get idea of Soaps and Detergents • Cleansing actions of soaps. • Difference between soaps & detergents • Basic idea of Ethanol & Ethanoic acid , Their properties. • Denatured alcohol
	Biology : Chapter 8 how do Organism reproduce Chapter 14 sources of energy		Sexual reproduction in huma
November (18 days)	Chemistry : Revision of Preboard Exam I	Revision of questions based on Practicals	The students will be able to: <ul style="list-style-type: none"> •Recapitulate their learning. • Reflect upon their interpretation skills. • Reflect upon their writing and learning skills. •Produce their learning in the form of written and oral assessment.
December (22 days)	Biology : Chapter 9 heredity and evolution	Find about latest technological advancement in cloning	law of heredity 6 determination evolution
	Physics :Revision of Preboard Exam	Verification of the Laws of reflection of sound.	Visualize sound as waves and explain that sound cannot produce without a vibrating object. Explain the different characteristics of sound waves. Draws labeled diagrams of human ear. explains processes and phenomena how bats use ultrasonic waves to catch prey
	Chemistry : Revision of Preboard II and Annual Exam	Revision- Practical based questions	The students will be able to: <ul style="list-style-type: none"> •Recapitulate their learning. • Reflect upon their interpretation skills.

	PB I-Full syllabus		<ul style="list-style-type: none"> • Reflect upon their writing and learning skills. • Think logically • Solve application based questions 	
January (22 days)	Biology Chapter 16 sustainable management of natural resources	Make a report on international norms to regulate the emission of carbon dioxide	Need of managing resources 4Rs	
	Chemistry: Revision Board Exam Physics :Revision of Board Exam PB li-Full syllabus			
	Revision – Board exam			
February (23 days)	Revision – Board exam			
March (21 days)	Board Exam			
Syllabus (PT – I)	Physics: Motion, Gravitation. Chemistry: Ch 1 Chemical reactions & Equations, Ch 2: Acids, Bases & Salts, , Biology: Chapter 6,7 &15			
Syllabus (HY/PT – II)	Physics : Floatation, Work & Energy., Chemistry : Ch-3 Metals & Non Metals , Ch 4: Carbon & its Compounds Biology : Chapter 8 & 14			
Syllabus (PT – III)/PB	Physics : Full syllabus Chemistry: Full syllabus Biology: Full syllabus			
Syllabus (AE)	Full Syllabus			
AIL TOPICS	(1st Quarter) Make a working model of human lungs.	(2nd Quarter) To observe, analyse and plot the graph for different values of position, velocity and acceleration. Link for	(3rd Quarter) Art integrated project on mineral ores of Manipur	(4th Quarter) To prepare ball and stick model showing different hydrocarbons and functional

		the simulation:		groups.
PBL TOPICS	To study the third law of motion using two spring balances.	Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with: a) Litmus solution (Blue/Red) b) Zinc metal c) Solid sodium carbonate	The Newtonian Toy Design a toy using waste materials which describe any one or more laws of Motion given by Newton. Present your toy and explain the concept in form of a video.	Make a report on e waste

Practical's: LIST OF EXPERIMENTS

1. (A). Finding the pH of the following samples by using pH paper/universal indicator:

- (i) Dilute Hydrochloric Acid
- (ii) Dilute NaOH solution
- (iii) Dilute Ethanoic Acid solution
- (iv) Lemon juice
- (v) Water
- (vi) Dilute Hydrogen Carbonate solution

(B). Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:

- a) Litmus solution (Blue/Red)
- b) Zinc metal
- c) Solid sodium carbonate

2. Performing and observing the following reactions and classifying them into:

- A. Combination reaction
- B. Decomposition reaction
- C. Displacement reaction
- D. Double displacement reaction
- (i) Action of water on quicklime
- (ii) Action of heat on ferrous sulphate crystals

(iii) Iron nails kept in copper sulphate solution

(iv) Reaction between sodium sulphate and barium chloride solutions

3. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

i) $\text{ZnSO}_4(\text{aq})$

ii) $\text{FeSO}_4(\text{aq})$

iii) $\text{CuSO}_4(\text{aq})$

iv) $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

4. 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.

5. Determination of the equivalent resistance of two resistors when connected in series and parallel.

6. Preparing a temporary mount of a leaf peel to show stomata.

7. Experimentally show that carbon dioxide is given out during respiration.

8. Study of the following properties of acetic acid (ethanoic acid):

i) Odour

ii) solubility in water

iii) effect on litmus

iv) reaction with Sodium Hydrogen Carbonate

9. Study of the comparative cleaning capacity of a sample of soap in soft and hard water.

10. Determination of the focal length of: i) Concave mirror ii) Convex lens by obtaining the image of a distant object.

11. 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.

12. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.

13. Tracing the path of the rays of light through a glass prism.

14. Identification of the different parts of an embryo of a dicot seed (Pea, gram or red kidney bean)

SUBJECT- SOCIAL SCIENCE

BOOKS: History: India and the contemporary World-II
Geography: Contemporary India-II
Civics: Democratic Politics-II
Economics: Understanding Economic development
PUBLISHED BY: N.C.E.R. T

Month (Days)	Syllabus	Learning Outcomes	Enrichment Activities
April (19)	<p>Civics: Chapter1-Power Sharing Chapter 2-Federalism</p> <p>Geography: Chapter 1-Resources and Development Chapter 2- Forest and Wildlife</p> <p>Economics: Chapter1-Development</p> <p>Economics: Chapter-2 Sectors of the Economy</p>	<ul style="list-style-type: none"> • Understand the working of spatial and social power sharing mechanisms. • Analyze federal provisions and institutions. • Explain the decentralization in rural and urban areas. • Understand the value of resources and the need for their judicious utilization and conservation. • Understand the importance of forest and wildlife in one environment as well as develop concept towards depletion of resources. • Understand the importance of quality of life and sustainable development. • Identify the major employment generating sectors. • Reason out the government investment in different sections of economy 	<ul style="list-style-type: none"> • Draw a flow chart of the classification of resources with two examples of each of them. • Read any newspaper for one week and make clippings of news related to ongoing conflicts or wars. Make a group of five students and pool their clipping together and answer the questions. • Complete the Survey table given on page 36 about the organized and unorganized sector in the city.
June (8)	<p>History: Chapter 1: The Rise of Nationalism in Europe</p>	<ul style="list-style-type: none"> • Understand the way the idea of nationalism emerged and led to the formation of nation states in Europe and Elsewhere. 	<ul style="list-style-type: none"> • Prepare a presentation on unification of nation states in the 19th century Europe.

<p>July (23)</p>	<p>History: Chapter-2 Nationalism in India Geography: Chapter-3 Water Resources Chapter 4- Agriculture</p>	<ul style="list-style-type: none"> • Recognize the characteristics of Indian nationalism through a case study of Non-Cooperation and Civil Disobedience Movement. • Comprehend the importance of water as a resource. • Explain the importance of agriculture in the national economy and policies for institutional as well as technological reforms and independence. 	<ul style="list-style-type: none"> • Prepare a Skit on the freedom Struggle of India. • Prepare a presentation on the various types of crops grown in India.
<p>August (23)</p>	<p>Economics: Chapter 3-Money and Credit Chapter 4- Globalization and the Indian Economy Civics: Chapter-4 Gender, Caste and Religion Chapter 6- Political Parties</p>	<ul style="list-style-type: none"> • Understand money as an economic concept and the role of financial institutions from the point of view of day-to-day life. • Explain the working of the Global Economic phenomenon. • Identify and analyze the challenges posed by communalism to Indian democracy. • Analyze the party system in India. 	<ul style="list-style-type: none"> • Prepare a skit on political and social impact of globalization on the Indian economy. • Look carefully at the picture given on page 41 and discuss all the perceptions of ideal women that prevail in our society.
<p>September (22)</p>	<p>History: Chapter 3- The Making of Global World</p>	<ul style="list-style-type: none"> • The making of global world through the industrialization and globalization 	<ul style="list-style-type: none"> • Make a list of changes taking place during the period of industrialization.
<p>October (20)</p>	<p>Geography: Chapter-5 Minerals and Energy Resources Chapter 6 Manufacturing Industries Civics: Chapter 7- Outcomes of Democracy History: Chapter-4 The Age of Industrialization</p>	<ul style="list-style-type: none"> • Identify different types of minerals and energy resources and places of their availability. • Bring out the importance of industries in the national economy as well as understand the regional disparities. • Understand the causes for continuation of democracy in India. • Familiarize with the Pro-to-Industrial phase and early factory system. 	<ul style="list-style-type: none"> • Collect Information about various minerals found in India and speak a few lines about it in the class. • Prepare a talk on the importance of democratic government.

November (18)	History: Chapter 5- Print Culture and the Modern World Geography: Chapter 7 Lifelines of the National Economy Revision	<ul style="list-style-type: none"> Identify the link between print culture and the circulation of ideas. Understand the role of trade and tourism in the economic development of a country. 	<ul style="list-style-type: none"> Write an article on any of the social evils prevalent during the 18th century.
December (22)	Revision & Pre Board Examination		

Syllabus (PT-I)	Syllabus (HY/PT-II)		Syllabus (Pre-Board/PT-III)	
Civics: Chapter1 Geography: Chapter 1 Economics: Chapter1 History: Chapter 1	Civics: Chapter 1, 2 & 4 Geography: Chapter 1, 2 & 3 Economics: Chapter 1 & 2 History: Chapter 1 & 2		Full Syllabus	
AIL TOPICS	(1st Quarter) Ch – 2 Federalism Create a visual representation of federalism, such as a map of India or USA that shows the distribution of power between the federal government and the states.	(2nd Quarter) Ch – 2 Sustainable Development Goals Poster on Sustainable development goals	(3rd Quarter) Incredible India Comparative study of states Manipur and Sikkim.(Group Activity).	(4th Quarter) Ch – 6 Mind Maps Create the mind map of the chapter outcomes of democracy.
PBL TOPICS	Every student has to compulsorily undertake any one project on the following topics: Consumer Awareness OR Social Issues OR Sustainable Development			

**SUBJECT-ART
CLASS-10**

Month	Syllabus	Learning Outcome
April (Day-19)	Wall Painting	Learn draw and colour using colours
June (Day-08)	Wall Painting	Learn draw and colour using colours
July(Day-23)	Modern art painting	Learn draw and colour with different types of painting.
August(Day-23)	White Cement Pot	Making pot using white cement.
September(Day-22)	Mirror painting	Learn draw and colour using colours.
October(Day-20)	Mirror painting	Learn draw and colour using colours.
November(Day-18)	3 Shape painting	Learn draw and colour using colour and strokes.
December(Day-22)	Design Art Painting	Learn different techniques step-by-step colouring.
January(Day-22)	3 Shape painting	Learn draw and colour using colour and strokes.
February(Day-23)	3 Shape painting	Learn draw and colour using colour and strokes.
March	ANNUAL EXAMINATION	

**SUBJECT-CRAFT
CLASS-10**

Month	Syllabus	Learning Outcome		
April (Day-19)	Key Holder	Making key holders using cardboard.		
June (Day-08)	Bowl	Use old type new-paper collage making		
July(Day-23)	Bowl	Use old type new-paper collage making		
August(Day-23)	Cardboard	Making frame using waste material		
September(Day-22)	Cardboard	Making frame using waste material		
October(Day-20)	Batter design	Making design using botter.		
November(Day-18)	T-Shirts design	Making t-shirts design using colour		
December(Day-22)	Lamp	Making rope using waste material		
January(Day-22)	White Cement Pot	Making pot using white cement		
February(Day-23)	White Cement Pot	Making pot using white cement		
March	ANNUAL EXAMINATION			
ALL TOPICS	(1st Quarter)	(2nd Quarter)	(3rd Quarter)	(4th Quarter)

MUSIC:

Month	Syllabus	Learning Outcomes
April (19 days)	Kawayat sargam along with Instruments Swar gyan (Vocal and instrumental)	Kawayat sargam along with Instruments Swar gyan (Vocal and instrumental)

June (08 days)	Revision	Students will revise everything from Starting.
July (23 days)	Rupak Taal – Taali Khali And Theka Drum – 8/8 (Patterns with Rolls) Guitar - D,Dm Keyboard – Major Chords	They will learn Taali, Khali, Rolls etc. & major Chords in keyboard.
August (23 days)	Patriotic Song	Considering music as a way celebrating Independence Day.
September (22 days)	Annual Day Practice	Annual Day Practice
October (20 days)	Annual day practice	Annual Day Practice
November (18 days)	Instrumental Guitar – A,Am,E,Em Keyboard – Song on Major Chords Chords Tabla,-Chuataal & Rupak	Students will Learn A,Am,E,Em Chords in Guitar & Minor Chords In Keyboard.
December (22 days)	Instrumental Guitar – A,Am,E,Em Keyboard – Songs on Major Chords Chords Tabla,-Chuataal & Rupak X-Max Song	Students will Learn A,Am,E,Em Chords in Guitar & Minor Chords In Keyboard. & Students will Learn Coral singing
January (23 days)	Patriotic song	They will learn Group Song for 26th January
February (24 days)	Project/ ppt	Students will Learn About Music and They will Learn Importance of Music In our Life.
SUBJECT- DANCE		
Month	Syllabus	Learning Outcomes
April (19 days)	Contemporary Dance Steps	To Develop Basic Understanding of foot work, improved balance coordination

June (08 days)	Theme Dance on Forest (AIL)	To Developed their performing skill
July (23 days)	Fusion-Patriotic Dance item	To Improvement Physical Clarity & posture
August (23 days)	Preparation for 15 th August	To Learning contemporary dance style
September (22 days)	Glimpse of India (AIL)	To Learning Hand Gustier
October (20 days)	Preparation for Annual function & Dusshera dance	To New Cultural Experience
November (18 days)	Preparation for Annual function & Dusshera dance	To New Cultural Experience
December (22 days)	Role play of freedom fighter (AIL)	To Increase ability in self-reflection with patriotism
January (23 days)	Fusion -Patriotic Dance	To Increase ability in self-reflection with patriotism
February (24 days)	AIL	Learning Thematic Dance