

**Syllabus for Academic Session: 2022-23**

**Class: X**

<b>Subject: English</b>						
<b>MONTH</b>	<b>FIRST FLIGHT</b>	<b>MOMENTS SUPPLEMENTARY READER</b>	<b>GRAMMAR</b>	<b>WRITING SKILLS</b>	<b>LEARNING OBJECTIVES</b>	<b>ACTIVITIES/PEDAGOGY</b>
<b>March</b>	Ch- 1 A Letter to God Dust of Snow (poem) Ch- 2 Nelson Mandela	A Triumph of Surgery	Gap Filling, Editing, Omission, rearrangement of sentences	Formal Letter (To Edit)	To educate the students about importance of having faith	<ul style="list-style-type: none"> <li>Group Discussion on Faith.</li> </ul>
<b>April</b>	Fire and Ice (poem)  Ch- 3 Two stories about flying:  I. His First Flight  II. Black Aeroplane  A Tiger in the Zoo (poem)	The Thief's Story	Modals	Formal Letter based on a given situation	To guess what will ultimately bring this world to an end, to tell the students that Trust is important and it can reform wayward people as well as hardened criminals to bring out the difference between a free life and a caged	<ul style="list-style-type: none"> <li>Exchange of Ideas on the origin and end of this world</li> <li>Narration of similar experiences by the students</li> <li>GD on moral values and societal attitudes</li> <li>Discussion on the difference between caged animals and ones in the forest Poster on a caged tiger versus a free tiger</li> </ul>
<b>May</b>	His First Flight  Ch- 4 From the Diary of Anne Frank  The Ball Poem (poem)	Footprints Without Feet	Voice Subject-Verb Concord		To tell the students about the difficult times faced by the Jews in Hitler's regime and the tribulations of a young teenager to emphasize on the need to listen to our parents and take their criticism positively	<ul style="list-style-type: none"> <li>Public speaking on Supernatural and Life After Death</li> <li>Discussion on the Nazi era and Germany in the times of Hitler</li> </ul>

						Research on 'The Invisible Man 'and eliciting more information
<b>June</b>	Ch- 5 The Hundred Dresses –I Ch- 6 The Hundred Dresses – II Amanda! (Poem)	The Making of a Scientist	Determiners	Writing an analytical paragraph (word limit 100-120 words) based on a given outline/ Data/ Chart/ Clue/s	To enable the students to: Understand the story/poem and grasp its meaning Read with correct pronunciation, stress, intonation, pause and articulation of voice Express the ideas orally and in writing Understand the literary devices Enhance vocabulary	<ul style="list-style-type: none"> <li>Classroom discussion on social inequality and behavior of classmates towards the underprivileged</li> </ul>
<b>July</b>	Ch- 7 Glimpses of India  I. A Baker from Goa  II. Coorg  III Tea from Assam	The Necklace	Reported speech	Analytical Paragraph Writing (more examples and exercises)	To enable the students to: Understand the story/poem and grasp its meaning Read with correct pronunciation, stress, intonation, pause and articulation of voice Express the ideas orally and in writing Understand the literary devices Enhance vocabulary	<ul style="list-style-type: none"> <li>Mind Mapping on India and its varied culture Collage Making</li> <li>Narration by students on their first independent journey or similar kind of achievement</li> </ul>
<b>August</b>	Ch-8 Mijbil the Otter Animals (Poem) Ch -9 The Trees (Poem) Ch-10 The Sermons At Banaras The Tale of Custard the Dragon	The Hack Driver	Integrated Grammar (Revision)	Story Writing, Article writing and Letter Writing	To educate the students about the importance of being honest	<ul style="list-style-type: none"> <li>Exchange of views on various kinds of pets and their peculiar behavior</li> <li>What is a Ballad? Examples of Ballad in English and Hindi Literature Poster making (The tale of Custard, the dragon) Public speaking on the decision of Buddha to leave home in search of enlightenment Collage of</li> </ul>

						pictorial depiction of life of Buddha
<b>September</b>	Ch-9 Madam Rides the Bus  The Proposal (play)	Bholi	Writing: Revision(Story Writing, Article writing and Letter Writing		A play about wealthy families seeking matrimonial ties with other similar families for material gains	Enactment  Slogan writing on Women safety  <ul style="list-style-type: none"> <li>Public speaking on False Pretenses and need for social acceptability among the middle classes</li> </ul>
<b>October</b>	Ch-10 The Sermon at Benares  For Anne Gregory				The students will have learnt the taught topic and: Can understand and appreciate prose/poetry as literary form Understand author's/poet's style of writing Can understand the theme of the story/poem Understanding the importance of honesty and integrity in life Critically analyze the fact that death is inevitable Critically analyses the importance of inner beauty	Students will be assessed on their day to day activities Oral tests Written tests Classroom discussions based on textual topics Note book evaluation of practice questions.
<b>November</b>	<b>Ch-11</b> The Proposal (play)	The Book that saved the earth			The students will have learnt the taught topic and: Can understand and appreciate play as literary form Understand the play Wright's style of writing Can understand the theme of the play Understand the importance of values in life Critically examine the choices of freed by life	Role Play: assigning different roles to students and enact in the class
<b>December</b>			Writing: Revision(Story Writing ,Article writing and Letter Writing			

Subject: Hindi

मास	पाठ का नाम	व्याकरण	क्रियायात्मक कार्य	गतिविधियाँ
मार्च अप्रैल	बड़े भाई साहब मीरा के पद ततारावामीरों कथा	हिंदी के साहित्यकारों के बारे में जानकारी बड़े भाई साहब से मिली शिक्षा को अनुच्छेद द्वारा लिखना	पद बंध अनुच्छेद लेखन मुहावरे	मनुष्य के स्वभाव व व्यवहार की जानकारी , व्यंग्य लेखन की विशेषताएँ समझाना , दोहों को लिखने की योग्यता का विकास ततारावामीरों के आत्मबलिदान से की जानकारी भाषा का विकास
मई	हरीहर काका	समास		समाज व परिवार के बारे में जानकारी देना समाज में विसंगतियाँ की जानकारी देना
जून	अब कहाँ दूसरों के दुःख से दुखी होने वाले	अर्थ के आधार पर वाक्य के	व्याप्त किसी समस्या पर आधारित कोई कहानी लिखना	परिवेश व प्रकृति के बारे में जानकारी देना
जुलाई	पर्वत प्रदेश में पावस	लघुकु था लेखन।	पर्वतीय स्थल की सुन्दरता पर एक अनुच्छेद	शरीर के बारे में जानकारी देना , सुमृत्यु के बारे में बताना सभी के साथ मेलजोल से रहने की जानकारी
अगस्त	पतझड़ में टूटी पत्तियाँ	सुचना लेखन श्रवण कौशल		वर्षा ऋतू में पर्वतों पर होने वाले परिवर्तन की जानकारी देना जापान में होने वाली

				मानसिकरोगों की जानकारी देना भाषा में लोकोक्तियाँ का प्रयोग करना
सितम्बर	कर चले हम फ़िदा सपनों से के दिन	औपचारिक पत्र	देश पर शहीद होने वाले सैनिक की शौर्य गाथा प्रचीन व् आधुनिक पद्धति पर चर्चा	बच्चों की शरारतों व् प्रारम्भिक शिक्षा की जानकारी देना , योग्यता का विकास , भाषा का विकास
अक्टूबर		एकांकी कक्षा में मंचन		नींदं हराम करने वाले सिपाही के बारे में बताना
नवम्बर	टोपी शुक्ला	विज्ञापन लेखन।	बचपन में घटी किसी घटनाओं का संस्मरण श्रवण कौशल	परिवार में शिक्षा का महत्व की उपयोगिता बताना
दिसम्बर	प्रथम प्रीबोर्ड परीक्षा	औपचारिक ई-मेल लेखन		

## Subject: Maths

MONTH	UNITS/ LESSON	LEARNING OBJECTIVES OR SUBTOPICS	PRACTICAL/ACTIVITY	LEARNING OUTCOMES
<b>Feb &amp; March</b>	Real Numbers	Euclid Division Lemma, Fundamental theorem of Arithmetic, Revisiting Irrational number	Quiz on HCF and LCM of numbers.	Students would be able to Recall different number System and to apply HCF and LCM in different situations
	Polynomials	Geometric representation of polynomials , Relation between zeroes and coefficients of a polynomial Forming quadratic polynomial when the zeros are given.	Mind Mapping Activity: Summarise the topic by Mind mapping which includes the General form of a Quadratic Polynomial, Zeroes and relationship between zeroes and coefficients	Students would be able to  i) Recall the concept of polynomials . ii) Compare the relation between zeroes and coefficients of a polynomial iii) Comprehend the method to form a polynomial.
<b>April</b>	Pair of linear Equations in two Variables	Solving a pair of linear equations algebraically by substitution and elimination method. Solution by graphical method. Word problems on linear equations, Conditions for consistency of a system of linear equations	Worksheets to solve the pair of equations by Elimination method, substitution method.	Students would be able to – i) Recall the concept Linear equation and its solution.  ii) Compare the consistency for different equations.  iii) To develop the skill of drawing graphs.
<b>May</b>	Quadratic Equation	Standard form of a Quadratic equation ,Solution by Factorization method and by quadratic formula , Nature of roots.	Mind Mapping Activity: Summarise the topic by Mind mapping which includes the General form of a Quadratic equation, solution by factorization and by Quadratic formula.	Students would be able to – i) Recall the concept of Quadratic Polynomial and correlate with linear equation and Quadratic equation. ii) Explore different methods to solve Quadratic equation and apply it in different situations.
<b>June</b>	Introduction to Trigonometry	Introduction to trigo - ratios Trigonometric ratios of $30^\circ, 45^\circ, 60^\circ$ . Trigonometric identities- Proof and applications of the identity $\sin 2A + \cos 2A = 1$ .	i) Grid activity Making different Grids and to write the values of trigonometric ratios of specific angles.	Students would be able to –  i)To prove Trigonometric identities.  ii) Compare, explore and estimate trigonometric ratios & values of specific angles
	Application of Trigonometry	Heights and Distances , Angles of elevation / depression should be only $30^\circ, 45^\circ, 60^\circ$ . Word problems on Heights and Distances.	Problem solving: ii) Solving daily life situation related problem using Trigonometric ratios. Solving Picture worksheets from smart class modules	
<b>July</b>	Arithmetic Progression	Definition of A.P. General term of an A.P. Sum to n terms of A.P Application in	To verify that the given sequences are in A.P. or not by paper cutting and pasting method.	Students would be able to – i) Identify the series A.P and to select appropriate formula to find out an and $S_n$

		solving daily life problems based on sum to n terms are to be avoided		of the A.P. ii) To identify the formula to find out an and Sn of the A.P. ii) to correlate the subject with Art
<b>August</b>	Co – ordinate Geometry	Distance Formula , Section Formula	Graph Activity:  Points are to be plotted in Cartesian Plane on a graph paper and find out the distance between them.	Students will be able to - i) To select appropriate formula to find out length of a line segment.  ii) To apply section formula in different situation
<b>September</b>	Statistics	Mean, Median, Mode of grouped data. Mean by Direct method and by Assumed mean method.	Class activity: Students will have to note down the heights of all students of their class to find out the mean , median and mode of this data. Identify the student whose height is approximately equal to the mean, median and mode.	Students would be able to – i) Recall the concept Mean,Mode and Median of raw data. ii) Explore different methods to find out Mean, Median and mode.
	Areas related to circle.	Area of sector and segment of a circle Problems on central angle of $120^\circ$ are to be avoided.	Solving picture Work sheet to find out the area of shaded region of the given figure.	Students will able to -(i) To identify appropriate formula to find Length of an arc,area of sector and segment of a circle ii) To develop computational skill.
<b>October</b>	Probability	Probability –The Theoretical Approach. To find the probability of different events.	Learning by doing: Coin tossing activity (two/ three coins together)	Students would be able i) To recall the concept experimental probability and to correlate with theoretical probability.
	Triangles	Introduction of Concept of similar figures, Basic Proportionality theorem. Criteria for similarity Pythagoras theorem	To verify that the tangents from an external point to a circle are equal by paper cutting method.	Students would be able to i) Recall different types of triangle and their properties. ii) Explore different methods to prove the theorems. iii) To apply the concept in different situation.
<b>November</b>	Circles & Construction	Secant and Tangents of a circle. Theorems on tangents to a circle	Geo Board activity: i) Verification of properties of circle using Geo board. ii) Learning by doing hands on activity	Students would be able to – Develop the skill of drawing figures using geometrical instruments.
	Surface area and Volume	Surface area and volume of cube, cuboid, cylinder, Cone, sphere, and hemisphere. Volume and surface area of combination of figures.	Verification of curved surface area of a cone by paper cutting activity	Students would be able to – i) To recall different solid shapes and their properties. ii) To identify appropriate formula and to apply them to find out surface area and volume of combination of solids.
<b>Jan. &amp; Feb</b>	<b>REVISION AND PRE BOARD</b>			

**Subject: Science**

<b>MONTH</b>	<b>UNITS/ LESSON</b>	<b>LEARNING OBJECTIVES or SUBTOPICS</b>	<b>PRACTICAL/ACTIVITY</b>	<b>LEARNING OUTCOMES</b>
<b>February</b>	<b>Topic/Chapter: Chemical Reactions and Equations</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Recognize chemical changes</li> <li>Understand and differentiate between a physical change and chemical change</li> <li>-Develop scientific skills of observation, drawing conclusions and handling chemicals</li> <li>-Learn to write word equations and chemical equations and understand the need to balance a chemical equation</li> <li>- Categorise the given reactions as combination, decomposition, displacement, double displacement, or redox reaction</li> <li>- Understand the products formed during reactions and compare the reactivity of two elements based on the products formed</li> </ul>	<p><b>Inter disciplinary Linkages:</b></p> <p>Art Integration: Diagrams Diagram: Electrolysis of water Flow charts: Basic Concept Practical: Activity 1.7 of NCERT Experiment number 2 A, B, C, D from the curriculum</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Understand and differentiate between a physical change and chemical change</li> <li>- Develop scientific skills of observation, drawing conclusions and handling chemicals</li> <li>- Learn to write word equations and chemical equations and understand the need to balance a chemical equation</li> <li>- Categorise the given reactions as combination, decomposition, displacement, double displacement or redox reaction</li> <li>- Understand the products formed during reactions and compare the reactivity of two elements on the basis of the products formed</li> </ul>
<b>March</b>	<b>Topic/Chapter: Electricity</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>-To understand meaning of electric current, potential difference and resistance and relation between them</li> <li>-Make students familiarized with the symbols of different circuit elements and be able to draw simple circuit diagrams</li> <li>- To learn the way of connecting circuits in series and parallel combination</li> <li>-To enable students to identify different components/devices used in domestic electric circuits and understand the practical use of these components</li> <li>- Learn and understand the advantages of safety measures used in electric circuits</li> </ul>	<p><b>Inter disciplinary Linkages:</b> With Mathematics (Calculation of numerical using different formulae) Diagram: Labelled diagram for verifying Ohm's law, circuit diagrams for series and parallel combination, domestic electric circuit Practical: Experiment number 4 and 5 from the curriculum</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Define electric current, potential difference and resistance and express relation between them</li> <li>- Identify symbols of different circuit elements and be able to draw simple circuit diagrams</li> <li>- Connect circuits in series and parallel combination</li> <li>-To identify different components/devices used in domestic electric circuits and understand the practical use of these components</li> <li>- Understand the advantages of safety measures used in electric circuits</li> </ul>



		- To learn to calculate electricity bill for electric energy consumed by a house hold for a given month		- To calculate electricity bill for electric energy consumed by a house hold for a given month
<b>April</b>	<b>Topic/Chapter: Magnetic effects of current</b>	<b>This topic will enable the students to:</b> Understand the meaning and properties of magnetic field lines -Learn to draw magnetic field lines using compass needle - Observe a physical phenomenon and to make careful observation/deduction and to draw inferences -Familiarize with right hand thumb rule, Fleming's left hand and right-hand rule -Learn to apply different rules in different situations -Understand the working principle of electric motor and electric generator -Understand the basic details of the AC supply used in domestic circuits in India - Differentiate between AC and DC current and understand basic design of domestic electric circuit - To enable students to identify different components/devices used in domestic electric circuits and understand the practical use of these components	<b>Diagram:</b> Labelled diagram for magnetic field around current carrying conductor, solenoid, electric motor, electric generator and domestic electric circuit <b>Practical:</b> Activities 13.2, 13.3, 13.4, 13.7, and 13.8 (NCERT)	<b>At the end of the chapter, students will be able:</b> -Explain the process of human fertilization discuss the changes in a women's body during and after fertilization -describe the characteristics of each trimester - Explain different ways by which organisms can reproduce asexually - Define and state advantages of vegetative propagation - Understand reproduction in flowering plants - Explain the parts of male and female reproductive system in humans - Realize the importance of reproductive health
<b>May</b>	<b>Topic/Chapter: Acids, Bases and Salts</b>	<b>The students will be able to:</b> Differentiate between acids and bases and understanding the Arrhenius concept of defining acids and bases -Understand use of indicators to identify acidic, basic or neutral nature of chemicals -Conceptualise various reactions shown by acids and bases. -Write balanced chemical equations for reactions of acids and bases with metals, carbonates, and hydrogen-carbonates, metallic oxides etc.	<b>Inter disciplinary Linkages:</b> <b>Diagram:</b> For activities 2.3, 2.5, 2.8 and 2.9 <b>Practical:</b> Experiment number 1 A and 1 B from the curriculum Lab manual <b>Assignment:</b> Extra Questions on the topic	<b>After completion of the topic, students will be able to:</b> Differentiate between acids and bases and define acids and bases according to Arrhenius concept Identify acidic, basic or neutral nature of chemicals using indicators -Write various reactions shown by acids and bases. -Write balanced chemical equations for reactions of acids and bases with metals, carbonates and hydrogen-carbonates, metallic oxides etc. - Explain the role of water in showing acidic behaviour

		<ul style="list-style-type: none"> <li>- Understand the importance of water for acids to show acidic behaviour</li> <li>-Understand the meaning of pH and studying its application in real life</li> <li>Correlate the acidic, basic or neutral nature of the salt to the strength of the acid and base used to obtain the salt</li> <li>-Correlate common names, preparation, uses and chemical properties of various salts in the syllabus.</li> </ul>	<ul style="list-style-type: none"> <li>-Define pH and correlate its application in real life</li> <li>-Correlate the acidic, basic or neutral nature of the salt to the strength of the acid and base used to obtain the salt</li> <li>-Correlate common names, preparation, uses and chemical properties of various salts in the syllabus</li> </ul>	
<b>June</b>	<b>Topic/Chapter: METALS AND NON METALS</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Understand the concept of physical and chemical properties of metals and non-metals</li> <li>- Differentiate between metals and non-metals on the basis of physical and chemical properties</li> <li>- Understand and comprehend the concept of reactivity series</li> <li>- Draw inference about more or less reactive metal</li> <li>- Understand the properties and formation of ionic compounds chemicals</li> <li>- Conceptualise various reactions shown by acids and bases.</li> <li>- Write balanced chemical equations for reactions of acids and bases with metals, carbonates and hydrogen-carbonates, metallic oxides etc.</li> <li>- Understand the importance of water for acids to show acidic behaviour</li> <li>- Understand the meaning of pH and studying its application in real life</li> <li>- Correlate the acidic, basic or neutral nature of the salt to the strength of the acid and base used to obtain the salt</li> <li>- Correlate common names, preparation, uses and</li> </ul>	<p><b>Inter disciplinary Linkages:</b> With Social Science (Occurrence of minerals in different states of India) <b>Diagram:</b> Labelled diagram for electrolytic reduction of NaCl and electrolytic refining of copper <b>Practical:</b> Activities 3.1, 3.2, 3.3, 3.4,3.6, 3.10, 3.12 (NCERT) Lab manual Assignment: Extra Questions on the topic</p>	<p><b>After completion of the topic, students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Explain physical and chemical properties of metals and nonmetals</li> <li>-Differentiate between metals and non-metals on the basis of physical and chemical properties</li> <li>- Explain and make use of reactivity series to complete reactions</li> <li>-Draw inference about more or less indicators</li> <li>-Write various reactions shown by acids anabases.</li> <li>-Write balanced chemical equations for reactions of acids anabases with metals, carbonates and hydrogen-carbonates, metallic oxides etc.</li> <li>-Explain the role of water in showing acidic behaviour</li> <li>- Define pH and correlate its application in real life</li> <li>-Correlate the acidic, basic or neutral nature of the salt to the strength of the acid and base used to obtain the salt</li> <li>- Correlate common names, preparation, uses and chemical properties of various salts in the syllabus</li> </ul>

		chemical properties of various salts in the syllabus.		
<b>July</b>	<b>Topic/Chapter: Heredity and evolution</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Understand the contribution of Mendel in the field of Genetics</li> <li>- Conceptualize monohybrid and dihybrid cross</li> <li>- Understand how traits are expressed</li> <li>- Understand the method of sex determination in humans</li> <li>- Differentiate between acquired and inherited traits</li> <li>- State the evidences of evolution</li> <li>- Understand the concept of artificial hybridization</li> <li>- Human Evolution</li> </ul>	<p><b>Test:</b> Test of Diagrams, Written and Oral tests, Written Work: NCERT Exercise Questions,</p> <p><b>Definitions Assignment:</b> Extra Questions on the topic</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Throw light on the contribution of Mendel in the field of Genetics</li> <li>- Conceptualize monohybrid and dihybrid cross</li> <li>- State how traits are expressed</li> <li>- Explain the method of redetermination in humans</li> <li>- Differentiate between acquired and inherited traits</li> <li>- State the evidences of evolution</li> <li>- Explain the concept artificial hybridization</li> <li>-Understand human evolution</li> </ul>
<b>August</b>	<b>Topic/Chapter: Control and Coordination</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Explain nervous system in a human beings</li> <li>- Learn the parts of a neuron and transmission of impulses from one neuron to another</li> <li>- Discuss action caused by the nervous tissue</li> <li>- Understand how reflex action occurs</li> <li>- Understand the coordination in plants</li> <li>- Structure and functions of different parts of brain</li> <li>- Role of hormones incoordination in plants</li> </ul>	<p><b>Test:</b> Test of Diagrams, Written and Oral tests, Written Work: NCERT Exercise Questions,</p> <p><b>Definitions Assignment:</b> Extra Questions on the topic</p> <p>Label the diagrams</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Discuss action caused by the nervous tissue</li> <li>- Explain the parts of a neuron and the method of transmission of impulses from one neuron to another</li> <li>- Understand how reflex action occurs</li> <li>- Draw the structure and highlight the functions of different parts of brain</li> <li>- List the role of hormones incoordination in plants</li> <li>- Locate various Endocrine glands on the outline o human body and state the role of hormones secreted by them</li> </ul>

		- Endocrine glands and role of hormones secreted by them		
<b>October</b>	<b>Metopic/Chapter: Light – Reflection and Refraction</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Understand the concept of plane, concave and convex mirrors</li> <li>- Understand the laws of reflection and rules for image formation in spherical mirrors</li> <li>- Learn to draw correct ray diagrams showing image formation by spherical mirrors for different position of objects</li> <li>- Learn to use Cartesian sign conventions correctly</li> <li>- Interpret and draw correct information from given statement and solve numerical using mirror formula</li> <li>- Learn the definition of refraction and laws of refraction</li> <li>- Understanding the refraction of light through a glass slab</li> <li>- Studying and practicing ray diagrams for image formation in spherical lenses</li> <li>- Learn to use New Cartesian sign conventions and lens formula to solve numerical</li> <li>- Understand the application of different mirrors and lenses in everyday life</li> </ul>	<p><b>Test:</b> Test of Diagrams, Written and Oral tests, Written Work: NCERT Exercise Questions Definitions Lab manual Assignment: Extra Questions on the topic</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Differentiate between plane, concave and convex mirrors</li> <li>- Explain the laws of reflection and rules for image formation in spherical mirrors</li> <li>- Draw correct ray diagrams showing image formation by spherical mirrors for different position of objects</li> <li>- Use Cartesian sign conventions correctly</li> <li>- Interpret and draw correct information from given statement and solve numerical using mirror formula</li> <li>- State define refraction and state the laws of refraction</li> <li>- Explain the refraction of light through a glass slab</li> <li>- Draw ray diagrams for image formation in spherical lenses Apply New Cartesian sign conventions and lens formula to solve numerical</li> <li>- Reason out the application of different mirrors and lenses in everyday life</li> </ul>
<b>November</b>	<b>Topic/Chapter: Sources of Energy</b>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>- Recognize various available sources of energy and categorize them into renewable, non-renewable, conventional and nonconventional sources of energy Understand the</li> </ul>	<p><b>Inter disciplinary Linkages:</b> Diagram: For hydro power plant, thermal power plant, biogas plant Art Integration:</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Recognize various available sources energy and categorize them into renewable, non-renewable,</li> </ul>

		<p>criteria to select a source of energy</p> <ul style="list-style-type: none"> <li>- Realize the need to adopt non-conventional sources of energy</li> <li>- Learn the advantages and disadvantages of various sources of energy</li> </ul>	<p>Practical: Activities 14.5, 14.6 (NCERT)</p>	<p>conventional and non-conventional sources of energy</p> <ul style="list-style-type: none"> <li>- Explain the criteria to select a source of energy</li> <li>- Realize and explain the need to adopt non-conventional sources of energy</li> <li>- Differentiate and compare between different sources of energy</li> </ul>
	<p><b>Topic/Chapter: Management of Natural Resources</b></p>	<p><b>The students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Suggest methods for more sustainable utilization of natural resources.</li> <li>- Define natural resources</li> <li>- Understand the importance of 3 R's</li> <li>- Understand the reasons to manage our resources</li> <li>- Understand the role of forests and wild life as natural resources</li> <li>- Know the importance of Water harvesting</li> <li>- Know the ways they can contribute towards natural conservation</li> </ul>	<p><b>Diagram:</b> Traditional water harvesting system-khadi system</p>	<p><b>After learning this chapter students will be able to:</b></p> <ul style="list-style-type: none"> <li>-Compare the methods of utilization of natural resources in the with how they should be used in future.-</li> <li>Realize the importance of 3 R's</li> <li>-Understand the reasons to manage our resources</li> <li>-Role of forests and wild life as natural resources and realize as to why we need to conserve them.</li> <li>-Conceptualize the role of Water Harvesting System</li> <li>-List the ways by which an individual contribute to conserve coal and petroleum</li> </ul>

**Subject: Social Science**

<b>MONTH</b>	<b>UNITS/ LESSON</b>	<b>LEARNING OBJECTIVES OR SUBTOPICS</b>	<b>PRACTICAL/ACTIVITY</b>	<b>LEARNING OUTCOMES</b>
<b>Feb</b>	Power Sharing	<ul style="list-style-type: none"> <li>• Case Studies of Belgium and Sri Lanka</li> <li>• Why power sharing is desirable?</li> <li>• Forms of Power Sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Comparative case studies of Belgium and Srilanka</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarize with the centrality of power sharing in a democracy.</li> <li>• Understand the working of spatial and social power sharing mechanisms</li> </ul>
	Federalism	<ul style="list-style-type: none"> <li>• What is Federalism?</li> <li>• What make India a Federal country?</li> <li>• How is federalism practiced?</li> <li>• Decentralization in India</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare a flow chart on Decentralization in India and Legislative powers.</li> </ul>	
<b>March &amp; April</b>	Resources and Development	1. Classification of resources 2. Development of resources 3.Resource planning in India 4. Conservation of resources 5. Land use pattern in India 6. Land degradation and conservation 7. Soil and its classification 8. Soil erosion and conservation	Map work as per the NCERT list	Understand the value of resources and the need for their judicious utilization and conservation.
	Forest and Wildlife Resources	1. Flora and fauna in India 2. Conservation of forest and Wildlife in India 3.Types and distribution of forest and wildlife resources 4. Community and conservation	Map work as per the NCERT list.	Understand the importance of forests and wild life in one environment as well as develop concept towards depletion of resources.
	Water Resources	1. Water scarcity and need for conservation and management 2. Multi purpose river valley projects and integrated water resource management	Map work as per the NCERT list	Comprehend the importance of water as a resource as well as develop awareness towards its judicious use and conservation.
	Agriculture	1.Types of farming 2.Cropping pattern 3. Major crops : rice, wheat, millets, maize, 4. Pulses 5. Food crops other than grains- sugarcane, oilseeds, tea, coffee, horticulture 6.Crops 7. Non food crops 8. Technological and institutional reforms 9.Contribution of agriculture to the national economy.	Map work as per the NCERT list. Activity based questions from the text. ART INEGRATED ACTIVITY Students to form/ create their own Political Party. To make posters and banners of the parties created. Manifesto to be attached in the same file along with party symbols and slogans. Also include the geographies of political party. (Activity to be integrated with Art, English, Hindi and Geography)	Explain the importance of agriculture in national economy. Identify various types of farming and discuss the various farming methods; describe the spatial distribution of major crops as well as understand the relationship between rainfall regimes and cropping pattern. Explain various government policies for institutional as well as technological reforms since independence
<b>May &amp;</b>	<b>Development</b>	1. What Development Promises-Different People, Different Goals	Bhopal Gas Tragedy Interactive discussion in the class on conflicting goals and goals of	Students will be able to 1.Understand - all goals of

<p><b>June</b></p>		<p>2. Income and Other Goals</p> <p>3. National Development</p> <p>4. How to Compare Different Countries or States?</p> <p>5. Income and Other Criteria</p> <p>6. Public Facilities 7. Sustainability of Development</p>	<p>development. Students to find out the reason of this industrial disaster in India in 1984.</p>	<p>development cannot be development for everyone – goal of development of one may be destruction for another. 2. Know that, for a balanced development in the economy, there has to be mix of goals. 3. Have awareness on conservation of resources and efficient utilization of existing resources.</p>
	<p>Sectors of the Indian Economy</p>	<p>1. Sectors of Economic Activities</p> <p>2. Comparing the Sectors</p> <p>3. Historical Change in Sectors</p> <p>4. Rising Importance of The Tertiary Sector in Production</p> <p>5. Where Are Most of The People Employed?</p> <p>6. How to Create More Employment?</p> <p>7. How to Protect Workers in The Organized Sector?</p> <p>8. Sectors in Terms of Ownership; Public and Private sectors</p>	<p>Poster making on Basic Services in India An urban lifestyle today is supported by services like banking, police, hospital, telephone, etc.</p>	<p>Students will be able to 1. Identify various basic services around them for carrying on with their daily routine. 2. Understand the significance of the support system or infrastructure in the economy. 3. Have critical thinking on differentiation of primary, secondary and tertiary sectors with examples.</p>
	<p>Money and Credit</p>	<p>Money as A Medium of Exchange . Modern Forms of Money. Self – Help Groups for The Poor. Loan Activities of Banks . Two Different Credit Situations . Formal Sector Credit in India</p>	<p>Collection of cancelled cheque and expired debit or credit card</p>	<p>Students will be able to 1. Be familiar with the language used to write a cheque – modern form of money. 2. Be aware of various service providers in the economy. 3. Know about the characteristic features of currency.</p>
	<p>CONSUMER RIGHTS (To be used only for Project Work)</p>	<p>1. The Consumer in The Market Place 2. Consumer Rights 3. Learning to Become Well-informed Consumers</p>		<p>Students will 1. Become aware of Consumer Movement in India and be proactive consumers. 2. Understand the significance of COPRA in the economy. 3. Know how to seek redressal in the consumer court if needed. 4. The</p>

				standardization of products in the market by the government.
	Globalization and the Indian economy	1. Production Across Countries 2. Interlinking Production Across Countries 3. Foreign Trade and Integration of Markets 4. What Is Globalization? 5. Factors That Have Enabled Globalization 6. World Trade Organization 7. Impact of Globalization in India 8. The Struggle for A fair Globalization  REVISION	Interactive discussion on Brands and MNCs operating in India. (Advantages and disadvantages)	Students will be able to 1. Be aware of various brand logos on various products- quality assurance given to consumers. 2. Understand the condition of small manufacturers in India.
<b>July</b>	Gender, Religion and Caste	<ul style="list-style-type: none"> <li>• Gender and Politics</li> <li>• Religion, communalism and politics</li> <li>• Caste and politics</li> </ul>	<ul style="list-style-type: none"> <li>• Students to submit worksheet on Communalism in India, status of Women in Indian society.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and analyse the challenges posed by communalism to Indian Democracy.</li> <li>• Develop a gender perspective on politics</li> </ul>
	Political Parties	<ul style="list-style-type: none"> <li>• Why do we need Political Parties?</li> <li>• How many Parties should we have?</li> <li>• National Political Parties</li> <li>• State Parties</li> <li>• Challenges to Political Parties</li> <li>• How can Parties be reformed?</li> </ul>	ART INTEGRATED ACTIVITY Students to form/ create their own Political Party. To make posters and banners of the parties created. Manifesto to be attached in the same file along with party symbols and slogans. (Activity to be integrated with Art, English, Hindi and Geography)	<ul style="list-style-type: none"> <li>• Analyse party systems in democracies.</li> <li>• Introduction to major political parties, challenges faced by them and reforms in the country.</li> </ul>
	Outcomes of Democracy	<ul style="list-style-type: none"> <li>• How do we assess democracy's outcomes?</li> <li>• Accountable, responsive and legitimate government</li> <li>• Economic growth and development</li> <li>• Reduction of inequality and poverty</li> <li>• Accommodation of social diversity</li> <li>• Dignity and freedom of the citizens</li> </ul>	<ul style="list-style-type: none"> <li>• Given tables to be discussed</li> <li>• Picture interpretation</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate the functioning of democracies in comparison to alternative forms of governments.</li> <li>• Understand the causes for continuation of democracy in India.</li> <li>• Distinguish between sources of strengths and weaknesses of Indian democracy.</li> </ul>
	Challenges to Democracy ( To be assessed in periodic test only)	<ul style="list-style-type: none"> <li>• Thinking about challenges</li> <li>• Thinking about Political Reforms</li> <li>• Redefining democracy</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the concept through analyzing and discussion.</li> </ul>	<ul style="list-style-type: none"> <li>• Reflect on the different kinds of measures possible to deepen democracy.</li> </ul>
<b>August</b>	Mineral and Energy Resources	1. What are minerals 2. Mode of occurrence of minerals 3. Ferrous and non-ferrous minerals 4. Non-metallic minerals 5. Rock minerals 6. Conserving minerals 7. Conventional and non-conventional sources of energy 8. Conservation of energy resources	Map work as per the NCERT list.	Identify different types of minerals and energy resources and places of their availability. Feel the need for their judicious utilization.



	The Age of Industrialization	<ul style="list-style-type: none"> <li>• Before the Industrial Revolution</li> <li>• Hand Labour and Steam Power</li> <li>• Industrialization in the colonies</li> <li>• Factories Come Up</li> <li>• The Peculiarities of Industrial Growth</li> <li>• Market for Goods</li> <li>• The Inter War Economy (Great Depression)</li> </ul>	<ul style="list-style-type: none"> <li>• Make an assignment on the role of industrialization and the development which brought a change in several countries.</li> <li>• Worksheet on the role/importance of markets for industrial growth,</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarize with the Pro- to Industrial phase and Early – factorysystem.</li> <li>• Familiarize with the process of industrialization and its impact on labour class.</li> <li>• Enable them to understand industrialization in the colonies with reference to Textile industries.</li> </ul>
	Manufacturing Industries	<ol style="list-style-type: none"> <li>1. Importance of manufacturing</li> <li>2. Contribution to national economy</li> <li>3. Classification of industries</li> <li>4. Industrial Location-Agro and mineral based industries</li> <li>5. Industrial pollution and environmental degradation</li> </ol>	Map work as per the NCERT list	Bring out the importance of industries in the national economy as well as understand the regional disparities which resulted due to concentration of industries in some areas. Discuss the need for a planned industrial development and debate over the role of government towards sustainable development.
<b>September</b>	Lifelines of national economy	<ol style="list-style-type: none"> <li>1. Means of transport :Roadways, railways, pipeline, waterways and airways</li> <li>2. Communication: personal and private communications</li> <li>3. International Trade</li> <li>4. Tourism as trade</li> </ol>	Map, data, statistical diagrams	Explain the importance of transport and communication in the ever-shrinking world. Understand the role of trade and tourism in the economic development of a country
	<b>The Rise of Nationalism in Europe</b>	The French Revolution and the Idea of the Nation • The Making of Nationalism in Europe • The Age of Revolutions: 1830-1848 • The Making of Germany and Italy • Visualizing the Nation • Nationalism and Imperialism	<ul style="list-style-type: none"> <li>• Briefly describe the process of Unification of Germany and Unification of Italy. A worksheet to be submitted on the above.</li> <li>• “The First clear expression of nationalism came with the ‘French Revolution’ in 1789. Write an article on the above in 100-150 words.</li> </ul>	<ul style="list-style-type: none"> <li>• Familiarize the students with the Spring of Nations in 1848.</li> <li>• It will help students how Nationalism was the ideological impetus that, in a few decades, transformed Europe.</li> </ul>
	Nationalism in India	<ul style="list-style-type: none"> <li>• The First World War, Khilafat and Non - Cooperation</li> <li>• Differing Strands within the Movement</li> <li>• Towards Civil Disobedience</li> <li>• The Sense of Collective Belonging</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize the role of Gandhi in India’s struggle for independence.</li> <li>• Analyze the nature of the several peasant movements led against the British Raj.</li> </ul>	<ul style="list-style-type: none"> <li>• Enlighten the students that how Indian nationalism developed d as a concept against the colonial British Raj.</li> <li>• To learn about Indian nationalism as an instance of territorial nationalism, inclusive of all its people, despite their diverse ethnic, linguistic and religious backgrounds.</li> </ul>
	Print Culture and the Modern World	<ul style="list-style-type: none"> <li>• The First Printed Books</li> <li>• Print Comes to Europe</li> <li>• The Print Revolution and its Impact</li> <li>• The Reading Mania</li> <li>• The Nineteenth Century</li> <li>• India and the World of Print</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the role of print culture and the circulation of western ideas brought by European society.</li> <li>• Familiarize with pictures, cartoons, extracts from propaganda literature and</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasize on Print revolution and the formation of print culture.</li> <li>• Focuses on reading and printing presses.</li> <li>• Enable them to understand the Religious reforms</li> </ul>

		Religious Reform and Public Debates • New Forms of Publication • Print and Censorship	newspaper debates on important events and issues in the past.	and public debates. • To learn on the idea of revolution brought by print culture on the society. • It will help the students to know about censorship led by the imperialistic regimes.
	The Making of a Global World:	The Pre-modern world The Nineteenth Century (1815-1914) The Inter war Economy	<ul style="list-style-type: none"> <li>• Show that globalization has a long history and point to the shifts within the process.</li> <li>• Analyze the implication of globalization for local economies.</li> </ul> <p>Discuss how globalization is experienced differently by different social groups.</p>	Examines given information, in order to analyze and evaluate.
<b>October</b>	Print Culture and the Modern World	<ul style="list-style-type: none"> <li>• The First Printed Books • Print Comes to Europe • The Print Revolution and its Impact</li> <li>• The Reading Mania • The Nineteenth Century • India and the World of Print • Religious Reform and Public Debates • New Forms of Publication • Print and Censorship</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the role of print culture and the circulation of western ideas brought by European society. • Familiarize with pictures, cartoons, extracts from propaganda literature and newspaper debates on important events and issues in the past.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasize on Print revolution and the formation of print culture. • Focuses on reading and printing presses. • Enable them to understand the Religious reforms and public debates. • To learn on the idea of revolution brought by print culture on the society. • It will help the students to know about censorship led by the imperialistic regimes.</li> </ul>
	The Making of a Global World:	The Pre-modern world The Nineteenth Century (1815-1914) The Inter war Economy	<ul style="list-style-type: none"> <li>• Show that globalization has a long history and point to the shifts within the process.</li> <li>• Analyze the implication of globalization for local economies.</li> </ul> <p>Discuss how globalization is experienced differently by different social groups.</p>	Examines given information, in order to analyze and evaluate.
<b>Nov. &amp; Feb</b>	<b>REVISION AND PRE BOARD</b>			

## Subject: Information Technology

MONTH	TOPIC	SUB -TOPICS	OBJECTIVES/LAB PRACTICALS/ ACTIVITIES	LEARNING OUTCOMES
<b>FEB &amp; MARCH</b>	UNIT 1 : COMMUNICATION SKILLS – II	<ul style="list-style-type: none"> <li>• Methods of communication</li> <li>• Verbal</li> <li>• Non-verbal</li> </ul> <p style="text-align: center;">Visual</p>	<ul style="list-style-type: none"> <li>-Writing pros and cons of knowledge of</li> <li>-Listing do's and don'ts for avoiding common body language mistakes.</li> </ul>	Demonstrate knowledge of various methods of communication
		<ul style="list-style-type: none"> <li>• Communication cycle and importance of feedback</li> <li>• Meaning and importance of feedback</li> <li>• Descriptive feedback – written comments or conversations.</li> <li>• Specific and non-specific feedback.</li> </ul>	<ul style="list-style-type: none"> <li>-Constructing sentences for providing descriptive and specific feedback.</li> </ul>	Provide descriptive and specific feedback.
		<ul style="list-style-type: none"> <li>• Barriers to effective communication–types and factors</li> <li>• Measures to overcome barriers in effective communication.</li> </ul>	<ul style="list-style-type: none"> <li>- Enlisting barriers to effective communication</li> <li>-Applying measures to overcome barriers in communication</li> </ul>	Apply measures to overcome barriers in communication.
		<ul style="list-style-type: none"> <li>• Principles of effective communication</li> <li>• 7 Cs of effective communication.</li> </ul>	<ul style="list-style-type: none"> <li>-Constructing sentences that convey all facts required by the receiver</li> <li>-Expressing in a manner that shows respect to the receiver of the message.</li> <li>-Exercise and games an applying 7Cs of effective communication.</li> </ul>	Apply principles of communication.
		<ul style="list-style-type: none"> <li>• Writing skills to the following:</li> <li>• Sentence, Phrase</li> <li>• Kinds of Sentences</li> <li>• Kinds of Sentences</li> <li>• Parts of Speech</li> <li>• Articles</li> <li>• Construction of a paragraph</li> </ul>	<ul style="list-style-type: none"> <li>-Demonstration and practice of writing sentences and paragraphs on topics related to the subject</li> </ul>	Writing skills
		<ul style="list-style-type: none"> <li>• Meaning and importance of stress management</li> <li>• Stress management techniques - physical exercise, yoga, meditation</li> </ul>	<ul style="list-style-type: none"> <li>-Exercises on stress management techniques –yoga, meditation, physical, exercises.</li> <li>- Preparing a write-up on an essay an experiences during a holiday trip</li> </ul>	Apply stress management techniques
<b>APRIL-MAY</b>	UNIT 2 : SELF- MANAGEMENT SKILLS – II			

		<ul style="list-style-type: none"> <li>• Enjoying, going to vacations and holidays with family and friends.</li> <li>• Taking nature walks</li> </ul>		
		<ul style="list-style-type: none"> <li>• Importance of the ability to</li> <li>• Importance of the ability to</li> <li>• Describe the types of self-awareness.</li> <li>• Describe the meaning of self-motivation and self regulation.</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstration on working independently goals.</li> <li>-Planning of an activity Executing tasks in a specific period, with no help or directives</li> <li>-Demonstration on the qualities required for working independently.</li> </ul>	Demonstrate the ability to work independently
	UNIT 3 : BASIC ICT SKILLS – II	<ul style="list-style-type: none"> <li>• Classes of operating systems</li> <li>• Menu, icons and task bar on the desktop</li> <li>• File concept, file operations, file organization, directory structures, and file-system structures</li> <li>• Creating and managing files and folders</li> </ul>	<ul style="list-style-type: none"> <li>-Identification of task bar, icons, menu, etc.</li> <li>-Demonstration and practising of creating, renaming and deleting files, and folders, saving files in, folders and sub-folders., restoring files and folders from recycle bin</li> </ul>	Distinguish between different operating systems
		<ul style="list-style-type: none"> <li>• Importance and need of care and maintenance of computer</li> <li>• Cleaning computer components</li> <li>• Preparing maintenance schedule</li> <li>• Protecting computer against viruses</li> <li>• Scanning and cleaning viruses</li> <li>• and removing SPAM files, temporary files and folders</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstration of the procedures to be followed for cleaning, care and maintenance of hardware and software</li> </ul>	Apply basic skills for care and maintenance of computer
<b>JUNE</b>	UNIT 4 : ENTREPRENEURIAL SKILLS – II	<ul style="list-style-type: none"> <li>• Entrepreneurship and society</li> <li>• Qualities and functions of an entrepreneur.</li> <li>• Role and importance of an entrepreneur.</li> <li>• Myth about entrepreneurship, Entrepreneurship as a career option.</li> </ul>	<ul style="list-style-type: none"> <li>-Writing a note on entrepreneurship as career option</li> <li>-Collecting success stories of first generation and local entrepreneurs.</li> <li>-Listing the entrepreneurial qualities – analysis of strength and weakness.</li> <li>-Group discussion of self-qualities that students feel are needed to become successful entrepreneur Collect information and related data for a business Make a plan in team for setting up a business</li> </ul>	List the characteristics of successful entrepreneur
<b>JULY</b>	UNIT 5 : GREEN SKILLS – II	<ul style="list-style-type: none"> <li>• Definition of sustainable development</li> <li>• Importance of sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>-Identify the problem related to sustainable development in the community</li> </ul>	Demonstrate the knowledge of importance problems and solutions related to related development

		<ul style="list-style-type: none"> <li>• Problems related to sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>-Group discussion on the importance of respecting and conserving indigenous knowledge and cultural heritage</li> <li>-Discussion to the responsibilities and benefits of environmental citizenship, including the conservation and protection of environmental values.</li> <li>-Preparing models on rain water harvesting drip/sprinkler irrigation, vermin-compost solar energy, solar cooker, etc.</li> </ul>	
<b>AUGUST</b>	Unit 1: Digital Documentation (Advanced)	<ul style="list-style-type: none"> <li>• Styles/ categories in Word Processor</li> <li>• Styles and Formatting window.</li> <li>• Fill Format.</li> <li>• Creating and updating new style from selection</li> <li>• Load style from template or another document.</li> <li>• Creating a new style using drag-and-drop.</li> <li>• Applying styles.</li> </ul>	<ul style="list-style-type: none"> <li>• List style categories. Select the style from the Styles and Formatting window.</li> <li>• Use Fill Format to apply a style to many different areas quickly.</li> <li>• Create and update new style from a selection.</li> <li>• Load a style from a template or another document.</li> <li>• Create a new style using drag-and drop.</li> </ul>	Create and Apply Styles in the document
		<ul style="list-style-type: none"> <li>• Options to insert image to document from various sources.</li> <li>• Options to modify, resize, crop and delete an image. Drawing objects and its properties.</li> <li>• Creating drawing objects and changing its properties. Resizing and grouping drawing objects.</li> <li>• Positioning image in the text.</li> </ul>	<ul style="list-style-type: none"> <li>Insert an image to document from various sources.</li> <li>• Modify, resize, crop and delete an image.</li> <li>• Create drawing objects</li> <li>• Set or change the properties of a drawing object</li> <li>• Resize and group drawing objects</li> <li>• Position the image in the text</li> </ul>	Insert and use images in document
<b>SEPTEMBER</b>		<ul style="list-style-type: none"> <li>• Templates.</li> <li>• Using predefined templates.</li> <li>• Creating a template.</li> <li>• Set up a custom default template.</li> <li>• Updating a document.</li> <li>• Changing to a different template.</li> <li>• Using the Template.</li> </ul>	<ul style="list-style-type: none"> <li>• Create a template</li> <li>• Use predefined templates.</li> <li>• Set up a custom default template.</li> <li>• Update a document.</li> <li>• Change to a different template.</li> <li>• Use the Template.</li> </ul>	Create and use template
		<ul style="list-style-type: none"> <li>• Table of contents. Hierarchy of headings. Customization of table of contents.</li> </ul>	<ul style="list-style-type: none"> <li>• Create table of contents. Define a hierarchy of headings.</li> <li>• Customize a table of contents.</li> </ul>	Create and customize table of contents

		<ul style="list-style-type: none"> <li>• Character styles. Maintaining a table of contents.</li> </ul>	<ul style="list-style-type: none"> <li>• Apply character styles. Maintain a table of contents.</li> </ul>	
		<ul style="list-style-type: none"> <li>• Advance concept of mail merge in word processing,</li> <li>• Creating a main document,</li> <li>• Creating the data source,</li> <li>• Entering data in the fields,</li> <li>• Merging the data source with main document,</li> <li>• Editing individual document,</li> <li>• Printing a letter and its address label</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to print the label using mail merge, do the following to achieve</li> <li>• Create a main document,</li> <li>• Create the data source,</li> <li>• Enter data in the fields,</li> <li>• Merge the data source with main document,</li> <li>• Edit individual document,</li> <li>• Print the letter and address label</li> </ul>	Implement Mail Merge
<b>OCTOBER</b>	UNIT 2: ELECTRONIC SPREADSHEET (ADVANCED)	<ul style="list-style-type: none"> <li>• Using consolidating data. Creating subtotals.</li> <li>• Using “what if” scenarios. Using “what if” tools</li> <li>• Using goal seek and solver.</li> </ul>	<ul style="list-style-type: none"> <li>• Use consolidating data Create subtotals</li> <li>• Use “what if” scenarios Use “what if” tools</li> <li>• Use goal seek and solver</li> </ul>	Analyse data using scenarios and goal seek.
		<ul style="list-style-type: none"> <li>• Setting up multiple sheets. Creating reference to other sheets by using keyboard and mouse.</li> <li>• Creating reference to other document by using keyboard and mouse.</li> <li>• Relative and absolute hyperlinks <ul style="list-style-type: none"> <li>• Hyperlinks to the sheet.</li> <li>• Linking to external data.</li> <li>• Linking to registered data sources.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Setup multiple sheets by inserting new sheets.</li> <li>• Create reference to other sheets by using keyboard and mouse</li> <li>• Create reference to other document by using keyboard and mouse.</li> <li>• Create, Edit and Remove hyperlinks to the sheet.</li> <li>• Link to external data.</li> <li>• Link to registered data source.</li> </ul>	Link data and spreadsheets
		<ul style="list-style-type: none"> <li>• Setting up a spreadsheet for sharing.</li> <li>• Opening and saving a shared spreadsheet. Recording changes.</li> <li>• Add, Edit and Format the comments.</li> <li>• Reviewing changes – view, accept or reject changes. Merging and comparing.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up a spreadsheet for sharing.</li> <li>• Open and save a shared spreadsheet.</li> <li>• Record changes.</li> <li>• Add, Edit and Format the comments.</li> <li>• Review changes – view, accept or reject changes.</li> <li>• Merge and compare sheets.</li> </ul>	Share and review a spreadsheet
		<ul style="list-style-type: none"> <li>• Using the macro recorder. Creating a simple macro. Using a macro as a function.</li> <li>• Passing arguments to a macro.</li> <li>• Passing the arguments areas values.</li> </ul>	<ul style="list-style-type: none"> <li>• Use the macro recorder. Create a simple macro. Use a macro as a function.</li> <li>• Pass arguments to a macro.</li> <li>• Pass the arguments are as values.</li> <li>• Write macros that act like built-in functions</li> <li>• Access cells directly.</li> </ul>	Create and Use Macros in spreadsheet

		<ul style="list-style-type: none"> <li>• Macros to work like built-in functions.</li> <li>• Accessing cells directly.</li> <li>• Sorting the columns using macro.</li> </ul>	<ul style="list-style-type: none"> <li>• Sort the columns using macro.</li> </ul>	
<b>NOVEMBER</b>	UNIT 3: DATABASE MANAGEMENT SYSTEM	<ul style="list-style-type: none"> <li>• Concept and examples of data and information,</li> <li>• Concept of database,</li> <li>• Advantages of database,</li> <li>• Features of database,</li> <li>• Concept and examples of Relational database,</li> <li>• Concept and examples of field, record, table, database,</li> <li>• Concept and examples of Primary key, composite primary key, foreign key,</li> <li>• Relational Data base management system (RDBMS) software.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the data and information,</li> <li>• Identify the field, record, table in the database,</li> <li>• Prepare the sample table with some standard fields.</li> <li>• Assign the primary key to the field,</li> <li>• Identify the primary key, composite primary key, foreign key.</li> </ul>	Appreciate the concept of Database Management System
		<ul style="list-style-type: none"> <li>• Introduction to a RDBMS</li> <li>• Database objects – tables, queries, forms, and reports of the database,</li> <li>• Terms in database – table, field, record,</li> <li>• Steps to create a table using table wizard, Data types in Base,</li> <li>• Option to set primary key Table Data View dialog box DDL Commands</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to a RDBMS</li> <li>• Database objects – tables, queries, forms, and reports of the database,</li> <li>• Terms in database – table, field, record,</li> <li>• Steps to create a table using table wizard, Data types in Base,</li> <li>• Option to set primary key Table Data View dialog box DDL Commands</li> </ul>	Create and edit tables using wizard and SQL commands
		<ul style="list-style-type: none"> <li>• Inserting data in the table,</li> <li>• Editing records in the table,</li> <li>• Deleting records from the table,</li> <li>• Sorting data in the table,</li> <li>Referential integrity,</li> <li>• Creating and editing relationships – one to one, one to many, many to many,</li> <li>• Field properties.</li> </ul>	<p>Demonstrate to:</p> <ul style="list-style-type: none"> <li>• Insert data in the table, Edit records in the table, Delete records from table, Sort data in the table,</li> <li>• Create and edit relationships</li> <li>• one to one, one to many, many to many,</li> <li>• Enter various field properties.</li> </ul>	Perform operations on table
		<ul style="list-style-type: none"> <li>• Database query,</li> <li>• Defining query,</li> <li>• Query creation using wizard,</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare a query for given criteria,</li> <li>• Demonstrate to create query using wizard, and using design view,</li> <li>• Edit a query,</li> </ul>	Retrieve data using query

		<ul style="list-style-type: none"> <li>• Creation of query using design view,</li> <li>• Editing a query,</li> <li>• Applying criteria in query – single field, multiple fields, using wildcard,</li> <li>• Performing calculations,</li> <li>• Grouping of data,</li> <li>• Structured Query Language (SQL).</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate to apply various criteria in query – single field, multiple fields, using wild card,</li> <li>• Performing calculations using query in Base,</li> <li>• Demonstrate to group data,</li> <li>• Use basic SQL commands,</li> </ul>	
		<ul style="list-style-type: none"> <li>• Forms in Base,</li> <li>• Creating form using wizard,</li> <li>• Steps to create form using Form Wizard,</li> <li>• Options to enter or remove data from forms</li> <li>• Modifying form,</li> <li>• Changing label, background,</li> <li>• Searching record using Form,</li> <li>• Inserting and deleting record using Form View, • Concept of Report in Base,</li> <li>• Creating Report using wizard,</li> <li>• Steps to create Report using Wizard.</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate the various steps to create Form using Form Wizard,</li> <li>• Enter or remove data from Forms,</li> <li>• Demonstrate to modify Forms,</li> <li>• Demonstrate to change label, background,</li> <li>• Search record using Form,</li> <li>• Insert and delete record using Form View,</li> <li>• Illustrate the various steps to create Report using Report Wizard, • Demonstrate various examples of Report.</li> </ul>	Create Forms and Reports using wizard
<b>DECEMBER</b>	<b>UNIT 4: WEB APPLICATIONS AND SECURITY</b>	<ul style="list-style-type: none"> <li>• Illustrate use of various options under Computer Accessibility like Keyboard, mouse, sound, display setting serial keys, cursor options</li> <li>• use of toggle keys, filter keys, sticky keys, sound sentry, show sounds etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate use of various options under Computer Accessibility like Keyboard, mouse, sound, display setting serial keys, cursor options</li> <li>• use of toggle keys, filter keys, sticky keys, sound sentry, show sounds etc.</li> </ul>	Working with Accessibility Options.
		<ul style="list-style-type: none"> <li>• Network and its types.</li> <li>• Client Server Architecture, Peer to-peer (P2P) Architecture, • internet, World Wide Web,</li> <li>• benefits of networking</li> <li>• internet, getting access to internet,</li> <li>• internet terminology</li> <li>• Some of the commonly used Internet connectivity options</li> <li>• Data transfer on the Internet</li> </ul>	<ul style="list-style-type: none"> <li>• Identify applications of Internet</li> <li>• comparing various internet technologies</li> <li>• identifying types of networks and selecting internet</li> </ul>	Understand Networking Fundamentals



	<ul style="list-style-type: none"> <li>• learn key features of instant messaging</li> <li>• Creating an instant messaging account</li> <li>• Launching Google Talk</li> <li>• Signing In into your Google Talk Account</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate steps to create instant messaging account</li> <li>• Signing In into your Google Talk Account</li> </ul>	Introduction to Instant Messaging
	<ul style="list-style-type: none"> <li>• learn to chat with a contact that is already added to your contact list.</li> <li>• sending text chat messages instantly by double-clicking on a contact.</li> <li>• general rules and etiquettes to be followed while chatting.</li> <li>• chatting on various types of messengers</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate chat with a contact and send messages,</li> <li>• chatting with various messenger services</li> </ul>	Chatting with a Contact – Google Talk
	<ul style="list-style-type: none"> <li>• learn and appreciate a blog and its creation with the help of some blog providers</li> <li>• set up title and other parameters in a blog posting comments</li> <li>• using offline blog editors</li> </ul>	Illustrate Blog Creation and setting various parameters in it	Creating and Publishing Web Pages – Blog ...-
	Concept to create blogs using a blog application and publish the blog whenever internet connectivity is available.	<ul style="list-style-type: none"> <li>• Demonstration on how to create blogs using a blog application offline.</li> <li>• posting messages in an offline application</li> <li>• Publish the blog whenever internet connectivity is available using various examples</li> </ul>	Using Offline Blog Editors
	<ul style="list-style-type: none"> <li>• concept of e-commerce and various online applications</li> <li>• importance of secure passwords</li> </ul>	<ul style="list-style-type: none"> <li>• Illustration of online shopping using various ecommerce sites</li> <li>• Demonstration of securing passwords for online transactions.</li> </ul>	Online Transaction
	<ul style="list-style-type: none"> <li>• Need of internet security</li> <li>• Cyber threats like phishing, emailspoofing, char spoofing etc.</li> <li>• best practices for internet security and secure passwords</li> <li>• concept of browser, cookies, backup, antivirus</li> <li>• clearing data in browsers</li> </ul>	<ul style="list-style-type: none"> <li>• illustration of internet security threats through various ways</li> <li>• cyber security tips</li> <li>• tips for secure passwords</li> <li>• demonstration of strong passwords using various websites.</li> <li>• clearing data stored in browser applications.</li> </ul>	Internet Security

		<ul style="list-style-type: none"> <li>• Basic safety rules to follow at workplace – Fire safety,</li> <li>• Falls and slips, Electrical safety,</li> <li>Use of first aid. • Case Studies of hazardous situations.</li> </ul>	<ul style="list-style-type: none"> <li>• Practice to follow basic safety rules at workplace to prevent accidents and protect workers – Fire safety,</li> <li>• Falls and slips, Electrical safety, Use of first aid.</li> </ul>	Maintain workplace safety
		<ul style="list-style-type: none"> <li>• Accidents and emergency,</li> <li>• Types of Accidents,</li> <li>• Handling Accidents</li> <li>• Types of Emergencies.</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate to handle accidents at workplace,</li> <li>• Demonstrate to follow evacuation plan and procedure in case of an emergency.</li> </ul>	Prevent Accidents and Emergencies
		<ul style="list-style-type: none"> <li>• Hazards and sources of hazards,</li> <li>• General evacuation procedures,</li> <li>• Healthy living.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify hazards and sources of hazards,</li> <li>• identify the problems at workplace that could cause accidents,</li> <li>• Practice the general evacuation procedures in case of an emergency.</li> </ul>	Protect Health and Safety at work
<b>December &amp; February</b>	<b>REVISION</b>			

