

SURENDRANATH CENTENARY SCHOOL
SESSION – 2024-25
ANNUAL PEDAGOGICAL PLAN
CLASS X

Subject : English Book: First Flight Foot Prints Without Feet Words and Expressions II					
Month	Chapter	No. of pr.	Topics	Learning Objective	Learning Outcome
April	First Flight- 1.A Letter to God 2.Dustof Snow(Poem) 3.Fire and Ice (Poem) FWF- A Triumph of Surgery Gr – Modals, Tenses, Determiners (Revision of previous knowledge) Writing- 1. Letter to the Editor 2.Analytical Paragraph Words and Expressions- The process Approach, Trader and the tailor	20	<ul style="list-style-type: none"> • Story line, chapter highlights of the chapter A letter to God • Poem: The Dust of Snow- About the poet, Reference to the context, symbolism, nature – a perennial source of joy • Poem-The Fire & Ice- Reference to the context; discussion of contemporary social issues The Triumph of Surgery-Different shades of the word SURGERY <ul style="list-style-type: none"> • Review of the uses of tense • Application of the Present, Past and Future tense Irregular verbs • Usage and application of auxiliaries, common errors while using Modals • Editorial Letter following the CODER. <p>ACTIVITY- 1 Experiential Learning: Comparative study between the two stories ‘A letter to God & Trader and the tailor’ Skills: Problem solving and critical thinking</p>	To help the learners <ul style="list-style-type: none"> ➤ Read to appreciate the use of expressions in the text ➤ Respond to the picturesque details ➤ Reason and empathize with the problems faced by the farmers ➤ Understand the concept and correct usage of CODER in writing editorial letters ➤ Inspect the fact that nature treats every creature and object impartially ➤ Deduce that both fiery and cold temperaments have the power to destroy the world ➤ Develop ability to infer answers to questions ➤ Use grammatical items in speech and writing in order to demonstrate knowledge 	Learners will be able to: <ul style="list-style-type: none"> ➤ Read, comprehend, and respond to complex texts independently in order to demonstrate transition from learning to read to reading to learn. ➤ Identify and appreciate significant literary elements such as figurative language – metaphor, imagery, symbol, simile, intention / point of view, rhyme scheme, etc. Talks on key contemporary issues like social justice, environment, gender, etc.

			ART INTEGRATED: create your own limericks		
May	<p>First Flight –</p> <p>1.Nelson Mandela- Long Walk to Freedom</p> <p>2.Two Stories About Flying</p> <p>3.A Tiger in the Zoo(Poem)</p> <p>FWF- The Thief’s Story</p> <p>Writing-Letter of Inquiry</p>	14	<ul style="list-style-type: none"> ● Autobiography- A touching account of horrible atrocities and oppression on the blacks. ● Adopted policy- Apartheid: one of the harshest systems of racial discrimination ● Inhibition and fear of Young Seagull ● Difficulties should be taken by horns and hope should not be abandoned ● Contrast between Tiger confined in zoo and natural habitat ● - The thief's story: story line, question framing ● Format of letter <p>ACTIVITY -II EXPERIENTIAL LEARNING:ROLE PLAY Radio Show- (Words & Expressions) Interview of Nelson Mandela. Speaking Activity- SUBJECT ENRICHMENT Book review</p>	<ul style="list-style-type: none"> ➤ Infer that the oppressed and the oppressor alike are robbed of their humanities ➤ execute the use of expressions in the text. ➤ discuss and make use of experiences in order to relate with those of learning to ride a bicycle ➤ respond to the role of parents in preparing their children to face the challenges of the world. ➤ respond to the proverb- Where there's a will there's a way in the context of the story and life ➤ identify the actions of a tiger in jungle, ➤ Understand how a person can motivate others to change his or her nature ➤ Evaluate the importance of education in one’s life ➤ develop writing skill 	<ul style="list-style-type: none"> ➤ Reads, comprehends, and responds to complex texts independently in order to demonstrate transition from learning to read to reading to learn. ➤ Appreciates nuances and shades of literary meanings, talks about literary devices like onomatopoeic sounds, symbols, metaphors, alliterations, comparisons, allusions, poet’s / writer’s point of view, etc. In order to demonstrate understanding of their significance in literature and narratives. ➤ develop familiarity with social issues and participate in group discussion ➤ Writes letter in order to demonstrate creativity, critical thinking, correspondence and research skills.
June	<p>First Flight-</p> <p>1. From the Diary of Anne Frank</p> <p>FWF- The Midnight Visitor</p>	15	<ul style="list-style-type: none"> ● Anne Frank- One of the most renowned and discussed, Holocaust victims ● Record of her relationship shared by teachers and students ● Chapter highlights of The Midnight Visitor ● Comprehension Check 	<ul style="list-style-type: none"> ➤ Develop an understanding about the horrors of Nazi rule witnessed by a Jewish girl ➤ Enable the students to think quickly and act wisely and calmly in a situation of danger or surprise ➤ infer answers 	<ul style="list-style-type: none"> ➤ develop familiarity with social issues and participate in group discussion ➤ Reads, comprehends, and responds to complex texts independently in order to demonstrate transition from learning to read to reading to learn.

<p>July</p>	<p>First Flight- 1.How to tell Wild Animals (Poem) 2.Glimpses of India 3.Mijbil the Otter 4. The Ball Poem(Poem)</p> <p>FWF- A Question of Trust Gr – Subject Verb Agreement</p> <p>Writing- Complaint letter</p>	<p>28</p>	<ul style="list-style-type: none"> ● Description of animals in a humorous manner ● Poetic and literary devices(Humour and Irony, Paradox) ● Pen- Portrait of traditional Goan Village ● Coorg- a coffee country famous for rainforests and spices ● Anecdotes related to tea ● The bond of love between the author and Mijbil ● Grief stricken- helpless, The epistemology of loss ● A Question of trust - story line, Thinking about the text, Short and Long Answer questions ● Subject Verb agreement <p>ACTIVITY III (SUBJECT ENRICHMENT) Listening activity based on audio script ART INTEGRATED PROJECT: Advertisement Making (Words and Expressions, Pg 97)</p>	<ul style="list-style-type: none"> ➤ respond to the humour inherent in the close proximity with wild animals ➤ use the literary and poetic devices ➤ analyse the importance of the role of bakers ➤ identify details about the location and geographical details about Coorg. ➤ appreciate the legends connected with tea and its journey ➤ learn to take care about animals and be responsible towards other life forms. ➤ Infer the message embedded- - to move forward in life. ➤ Derive the message of the story that it is important to gauge the person before trusting him or her ➤ Develop the understanding of subject-verb agreement 	<ul style="list-style-type: none"> ➤ Appreciates nuances and shades of literary meanings, talks about literary devices like onomatopoeic sounds, symbols, metaphors, alliteration etc. ➤ Reads, comprehends, and responds to complex texts independently in order to demonstrate transition from learning to read to reading to learn. ➤ Uses grammatical items in speech and writing in order to demonstrate knowledge and understanding of its appropriate use in relation to the context.
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August	<p>First Flight- 1.Madam Rides the Bus 2.Amanda(Poem)</p> <p>FWF- 1.Footprints Without Feet 2. The Making of a Scientist Gr- Reported Speech</p> <p>Writing-Analytical Paragraph</p>	28	<ul style="list-style-type: none"> • About Valli and her intent desire to ride the bus. • Talks about Amanda’s need for freedom • Comprehension Check • Reading of the chapter footprints without feet using stress and intonation • Short question answers and HOTS • Time line of Richard Ebright’s Achievements • Statements and interrogative sentences • analytical paragraph through pie chart, bar graphs, etc. <p>ACTIVITY IV (SUBJECT ENRICHMENT) SPEAKING ACTIVITY – Dialogue writing and enacting(Words and expressions II) PROJECT WORK – Collage Making on Ticket collection.</p>	<ul style="list-style-type: none"> ➤ Recognize the importance of being sensitive towards an individual’s feelings ➤ Evaluate the lesson and Valli’s experiences through travelling ➤ evaluate Amanda’s situation and suggest solutions ➤ infer answers ➤ Read to appreciate the use of expressions in the text ➤ Understand one’s strength and weaknesses ➤ Change sentences to indirect speech 	<ul style="list-style-type: none"> ➤ Recognize the importance of being sensitive towards an individual’s feelings ➤ Speaks with coherence and cohesion while participating in interactive tasks in order to demonstrate fluency in the language. ➤ Able to complete the dialogues. ➤ Writes various pieces of writing in order to demonstrate creativity, critical thinking, correspondence and research skills.
September	<p>First Flight- 1.The Sermon at Benaras 2.The Trees (Poem)</p> <p>FWF- The Necklace</p> <p>Gr- Integrated Grammar</p> <p>Writing- Letter for placing order</p>	14	<ul style="list-style-type: none"> • Budha's first Sermon • Trees symbolises womanhood, Freedom of trees- Women at large • Discuss the satirical importance of the chapter “Everyone need to be content in life with whatever little he / she has (HOTS) • Gap filling • Letter writing <p>SKILLS – Writing Skills (Creative and critical thinking)</p> <p>COMPREHENSION CHECK- Reading passage from the Words and</p>	<ul style="list-style-type: none"> ➤ Discuss death as the ultimate truth ➤ reiterate the importance of trees for life to survive ➤ analyze the symbolism that establishes a relation between the trees and womanhood ➤ Identify the use of situational irony in a short story ➤ Learn the use of tenses. ➤ Writes a letter for placing order. 	<ul style="list-style-type: none"> ➤ Reads, comprehends, and responds to complex texts independently in order to demonstrate transition from learning to read to reading to learn. ➤ Identifies and appreciates significant literary elements such as figurative language ➤ Interpret the various virtues of - being brave, help others, not to boast, develop compassion, infer that good deeds are rewarded. ➤ Uses grammatical items in speech and writing in order to demonstrate knowledge and

			Expressions. SUBJECT ENRICHMENT – Listening Activity(British Council)		understanding of its appropriate use in relation to the context.
October	First Flight- 1. Fog(Poem) FWF- Bholi Gr – Reported Speech Writing- Letter for order cancellation.	20	<ul style="list-style-type: none"> • Understands that change is an unavoidable and natural process • Enhances his vocabulary and comprehension of the poem. • Mind mapping of the chapter Bholi • Theme of the chapter and character sketch • Script writing and narration 	<ul style="list-style-type: none"> ➤ Identify emotions with reference to the event ➤ analyse the poem through appropriate inferential questions ➤ Indicate the need of love, encouragement and education for the disabled to fight against the odds ➤ Recall the uses of reported speech 	<ul style="list-style-type: none"> ➤ critically analyse the theme, moral value imparted through the poem ➤ Identify the different types of conflict within the story. ➤ Uses grammatical items in speech and writing in order to demonstrate knowledge and understanding of its appropriate use in relation to the context
November	First Flight- 1. The Tale of Custard the Dragon (Poem) 2. For Anne Gregory (Poem) 3.The Proposal Writing-Analytical paragraph	26	<ul style="list-style-type: none"> • Comprehends The story of a little girl and her pets and understands the genre of the poem • Comprehends the concern of the poet • The concept of Devine and Platonic Love • Lomov is received in Chubukov's house with the purpose of his visit. • The talk on the ' land' and the sudden sprouting of arguments and conflict between Lomov and Natalya. • Analytical paragraph writing <p>ACTIVITY V ART INTEGRATED PROJECT on “Cultural differences between weddings in Goa and Jharkhand”</p>	<ul style="list-style-type: none"> ➤ classify the different types of poems (sonnet, ballad, parable, Acrostic) and specifically detailing about Ballads ➤ infer the contextual meaning. ➤ analyse the poem in real life situation and infer the essence ➤ demonstrate ability to discuss elements of drama as a form of literature. ➤ identify the different types of conflict within the story ➤ Able to analyze the given data. 	<ul style="list-style-type: none"> ➤ Listens for information, gist and details and responds to questions accordingly in order to demonstrate comprehension and ability to infer ➤ Reads stories and literary texts - both fiction and nonfiction with understanding for pleasure and enjoyment in order to demonstrate ability to discuss about these with comprehension and reasoning skills ➤ Writes an analytical paragraph.

December	FWF- The Book that saved the Earth Gr- Integrated grammar	15	<ul style="list-style-type: none"> • Introduce the concept of aliens and martians • Discussion the usage of wit and humour in the story • Discussion of H.O.T.S “Cultural differences between various races can cause confusion and conflict” • Determiners,modals,tenses 	<ul style="list-style-type: none"> ➤ Help the students to think futuristically ➤ Able to apply the grammatical knowledge 	<ul style="list-style-type: none"> ➤ Comprehend the text to infer answers. ➤ Able to do the exercises.
January			Revision		
February			Revision		

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SESSION – 2024-25
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Subject- हिंदी Book- क्षितिज भाग-2, कृतिका भाग-2, नवयुग हिंदी व्याकरण					
Month	Chapter	No. of pr.	Topics	Learning Objective	Learning Outcome
April '24	<p>क्षितिज:- पद- सुरदास, नेताजी का चश्मा</p> <p>कृतिका:- माता का अँचल</p> <p>व्याकरण:- वाक्यभेद- रचना के आधार पर, अनुच्छेदलेखन</p>	20	<p>क्षितिज:- पद- सुरदास</p> <p>कृतिका:- माता का अँचल</p> <p>व्याकरण:- वाक्यभेद- रचना के आधार पर</p> <p>क्षितिज:- नेताजी का चश्मा</p> <ul style="list-style-type: none"> • कृतिका:- माता का अँचल • व्याकरण:- वाक्यभेद- वाक्य परिवर्तन • व्याकरण:- अनुच्छेदलेखन 	<ul style="list-style-type: none"> ➤ सूर साहित्य के बारे में जानकारी ➤ देशभक्ति की भावना का जागरण ➤ देश के शहीदों के प्रति सम्मान ➤ बचपन की क्रियाशीलता से परिचय ➤ वात्सल्य भाव का ज्ञान ➤ वाक्य भेद एवं वाक्य की बनावट से परिचय 	<p>प्राचीन साहित्य एवं सुरदास के साहित्य को समझ सकेंगे।</p> <p>देशभक्ति के सही रूप का आकलन कर सकेंगे।</p> <p>शहीदों के प्रति सम्मान की भावना का जागरण होगा।</p> <p>वाक्य की बनावट को पहचान सकते हैं।</p>

May '24	<p>क्षितिज:- राम लक्ष्मण परशुराम सम्वाद, कृतिका:- माता का अँचल व्याकरण:-वाच्य अपठित गद्यांश एवं काव्यांश</p>	12	<ul style="list-style-type: none"> • क्षितिज:- राम लक्ष्मण परशुराम संवाद • कृतिका:- माता का अँचल • व्याकरण:- वाच्य की पहचान • अपठित गद्यांश एवं काव्यांश, कथन एवं कारण प्रश्न 	<ul style="list-style-type: none"> ➤ जीवन मूल्यों का विकास ➤ राम के चरित्र से मर्यादा एवं विनम्रता की सीख ➤ बचपन के आनंद को अनुभव करेंगे ➤ वाच्य के रूपों का परिचय 	<p>जीवन मूल्यों के साथ साथ बड़े-गुरुजनों के प्रति कर्तव्यों को जीवन में उतार सकेंगे।</p> <p>राम के चरित्र से जीवन की मर्यादा का आकलन करने में समर्थ होंगे।</p> <p>बचपन के आनंद का अनुभव करेंगे।</p> <p>रचनात्मक लेखन करने में समर्थ हो सकेंगे।</p>
June '24	<p>क्षितिज:- राम लक्ष्मण परशुराम संवाद, बालगोबिन भगतकृतिका:- माता का अँचल व्याकरण:- वाच्य, अनौपचारिक पत्र</p>	12	<ul style="list-style-type: none"> • क्षितिज:- राम लक्ष्मण परशुराम संवाद • कृतिका: माता का अँचल • व्याकरण :-वाच्य परिवर्तन • क्षितिज:- बालगोबिन भगत • व्याकरण:- वाच्य परिवर्तन, औपचारिक पत्र 	<ul style="list-style-type: none"> ➤ लक्ष्मण के चरित्र से वीरता, साहस, निडरता आदि गुणों को ग्रहण करेंगे ➤ खेल - खेल में सीखने की क्षमता बढ़ेगी <p>रचनात्मक लेखन का विकास</p>	<p>वीरता, साहस, निडरता आदि गुणों के महत्व को समझ सकेंगे।</p> <p>खेल से भी जीवन मूल्यों का विकास होता है, ये समझेंगे।</p> <p>रचनात्मक लेखन कार्य कर सकते हैं।</p>
July '24	<p>क्षितिज:- बाल गोबिन भगत, लखनवी अंदाज़, उत्साह, अट नहीं रही है कृतिका:- साना-साना हाथ जोड़ि व्याकरण:- पदपरिचय, अलंकार, विज्ञापनलेखन</p>	20	<ul style="list-style-type: none"> • . क्षितिज:- बालगोबिन भगत • कृतिका:- साना- साना हाथ जोड़ि • व्याकरण:-पदपरिचय • क्षितिज:- बाल गोबिन भगत • कृतिका:- साना- साना हाथ जोड़ि • व्याकरण:-पदपरिचय • क्षितिज:- उत्साह, अट नहीं रही है • कृतिका:-साना- साना हाथ जोड़ि • व्याकरण:- पदपरिचय, 	<ul style="list-style-type: none"> ➤ सादगी एवं निष्ठापूर्ण जीवन की प्रेरणा ➤ मेहनती जीवन की प्रेरणा ➤ प्रभु की सच्ची भक्ति ➤ जीवन के आनंद का अनुभव ➤ सामाजिक बदलाव के लिए क्रांति के महत्व को जानेंगे ➤ बनावटी जीवन की कमियों को जानेंगे 	<p>सादगीपूर्ण जीवन के प्रति प्रेरित होंगे।</p> <p>जीवन में परिश्रम के महत्व को समझेंगे।</p> <p>सामाजिक बदलाव के लिए क्रांति की भूमिका समझेंगे।</p> <p>बनावटी जीवन की कमियों को समझ सकते हैं।</p>

			<p>विज्ञापनलेखन</p> <ul style="list-style-type: none"> • क्षितिज:- लखनवी अंदाज़ • • व्याकरण:- अलंकार <p>अलंकार की पहचान, विज्ञापनलेखन</p>		
August '24	<p>क्षितिज:- आत्मकथ्य, दंतुरित मुस्कान, फसल</p> <p>व्याकरण :- अलंकार सन्देशलेखन, औपचारिक पत्र, निबंध</p> <ul style="list-style-type: none"> • अपठित गद्यांश एवं काव्यांश, कथन एवं कारण प्रश्न 	20	<ul style="list-style-type: none"> • आत्मकथ्य • व्याकरण :- अलंकार की पहचान • क्षितिज:- मानवीय करूणा की दिव्य चमक • व्याकरण :- अलंकार की पहचान • क्षितिज:- दंतुरित मुस्कान, फसल • व्याकरण:-अलंकार की पहचान • क्षितिज:- फसल • व्याकरण:- औपचारिक पत्र, • कथन एवं कारण प्रश्न 	<ul style="list-style-type: none"> ➤ जयशंकर प्रसाद के मानवीय मूल्यों एवं गुणोंके महत्व को जानेंगे ➤ वात्सल्य प्रेम का प्रदर्शन ➤ ग्रामीण संस्कृति से लगाव ➤ बच्चों के प्रति वात्सल्य को जानेंगे <p>रचनात्मक लेखन में रुचि</p>	<p>जयशंकर प्रसाद के जीवन से मानवीय मूल्यों को समझ सकते हैं।</p> <p>वात्सल्य के महत्व को जानेंगे।</p> <p>ग्रामीण संस्कृति से परिचित होंगे।</p> <p>रचनात्मक लेखन में रुचि होगी।</p>
September '24	<p>क्षितिज:- एक कहानी यह भी, व्याकरण:- वाक्यभेद अनुच्छेदलेखन</p>		<p>एक कहानी यह भी वाक्यभेद- परिवर्तन अनुच्छेदलेखन</p> <ul style="list-style-type: none"> ➤ 	<ul style="list-style-type: none"> ➤ अपने जीवन का मूल्यांकन कर सकेंगे ➤ व्यक्तित्व विकास के प्रति जागरूक होंगे ➤ वाक्यों की बनावट को जानेंगे <p>रचनात्मक लेखन कर सकेंगे</p>	<p>अपने जीवन का स्वमूल्यांकन कर सकते हैं।</p> <p>प्रकृति की सुंदरता एवं प्रकृति सुरक्षा के लिए चिन्तनशील होंगे।</p> <p>वाच्य की अवधारणा को समझ सकते हैं।</p> <p>आत्मपरिचय लिख सकते हैं।</p>

October '24	<p>क्षितिज:- उत्साह, अट नहीं रही है</p> <p>व्याकरण:- वाच्य स्ववृत्त लेखन, कृतिका:- साना- साना हाथ जोड़ि</p>	12	<ul style="list-style-type: none"> ● उत्साह- ● अट नहीं रही है ● वाच्यपरिवर्तन/ पहचान ● स्ववृत्त लेखन अभ्यास ➤ साना-साना हाथ जोड़ि 	<ul style="list-style-type: none"> ➤ सामाजिक जीवन में क्रांति के महत्व को जानेंगे ➤ प्रकृति की सुंदरता से लगाव ➤ हिंदी के वाक्यों में वाच्य की अवधारणा का ज्ञान ➤ आत्मपरिचय लिखने में समर्थ हो सकेंगे 	<p>सामाजिक परिवर्तन के लिए क्रांति की आवश्यकता को समझेंगे।</p> <p>प्रकृति की सुंदरता एवं सुरक्षा के प्रति जागरूक होंगे।</p> <p>वाच्य की अवधारणा को समझेंगे।</p>
November '24	<p>क्षितिज:- यह दंतुरित मुस्कान, फसल, नौबत खाने में इबादत</p> <p>व्याकरण:- पदपरिचय साना-साना हाथ जोड़ि</p>	16	<ul style="list-style-type: none"> ● ➤ यह दंतुरित मुस्कान ➤ फसल ➤ नौबत खाने में इबादत ➤ पद परिचय ➤ साना-साना हाथ जोड़ि 	<ul style="list-style-type: none"> ➤ बच्चे के प्रति माँ बाप के वात्सल्य को जानेंगे ➤ फसल के उत्पादन में मनुष्य की कर्मठता के महत्व को जान सकेंगे ➤ शहनाई वादक बिस्मिल्लाह खान की मनुष्यता को समझ सकते हैं ➤ वाक्य में प्रयुक्त शब्दों का सम्पूर्ण व्याकरणिक परिचय का ज्ञान 	<p>बच्चे के प्रति माँ-बाप के लगाव को महसूस करेंगे।</p> <p>फसल के उत्पादन में कर्मठ लोगों की भूमिका को समझेंगे।</p> <p>वाक्य में प्रयुक्त शब्दों का सम्पूर्ण व्याकरणिक परिचय दे सकेंगे।</p>

				प्रकृति की विराटता को जानेंगे	
December '24	<p>क्षितिज:- संस्कृति, संगतकार</p> <p>व्याकरण:- अलंकार</p> <p>कृतिका:- मैं क्यों लिखता हूँ</p> <p>सन्देशलेखन,</p>	16	<p>➤ संस्कृति</p> <p>➤ संगतकार</p> <p>➤ अलंकार</p> <p>➤ मैं क्यों लिखता हूँ</p> <p>➤ सन्देशलेखन</p> <p>➤ विज्ञापन</p>	<p>➤ सभ्यता एवं संस्कृति के अंतर समझ सकेंगे</p> <p>➤ जीवन में सहयोगी की भूमिका के महत्व को जानेंगे</p> <p>➤ काव्य में अलंकार को समझेंगे और अपनी कविता में अलंकार का प्रयोग कर सकेंगे</p> <p>➤ कवि या लेखकों के लिखने के उद्देश्य को जानेंगे</p> <p>रचनात्मक लेखन में</p>	<p>सभ्यता एवं संस्कृति के अंतर को समझेंगे।</p> <p>जीवन में सहयोगी की भूमिका को चिह्नित कर पाएंगे।</p> <p>अलंकार प्रयोग एवं पहचान में समर्थ हो पाएंगे।</p> <p>रचनात्मक लेखन में दक्षता प्राप्त कर सकते हैं।</p>
				दक्षता	

SURENDRANATH CENTENARY SCHOOL, RANCHI
SESSION – 2024 - 25
ANNUAL PEDAGOGICAL PLAN
CLASS - X

SUBJECT: MATHEMATICS			BOOKS: 1. MATHEMATICS FOR CLASS X, NCERT 2. MATHEMATICS FOR CLASS X EXEMPLER. 3. MATHEMATICS CLASS X, R S AGARWAL. 4. LABORATORY MANUAL – MATHEMATICS CLASS X		
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES
APRIL	CH – 8 Introduction to Trigonometry	25 Periods	Revision: <ul style="list-style-type: none"> • Real Numbers • Polynomials • Basic Geometrical terms and definitions. CH- 8: Introduction to Trigonometry: <ul style="list-style-type: none"> • Trigonometry ratios of an acute angle of a right-angled triangle. • Proof of their existence. • The ratios whichever are defined at 0° and 90°. And values of the trigonometric ratios of 30°, 45° and 60°. • Relationships between the ratios. • Trigonometric Identities. • Summary (Concept Map). Skills: <ul style="list-style-type: none"> • Quality Education. • Develop critical thinking/ problem solving skills by analysing and applying 	Revision: To help the learners <ul style="list-style-type: none"> • Reinforce learning. • Improve retention and reduce anxiety. • Assess and gauge knowledge and practice and apply knowledge. CH – 8 Introduction to Trigonometry To help the learners <ul style="list-style-type: none"> • Describe trigonometry and study the relationship between side and angle of a triangle. • Define and distinguish various trigonometric ratios and describe and verify sine, cosine, tangent, cosecant, secant, cotangent of the angle. • Use given trigonometric ratios and find and verify other trigonometric ratios/angles of the triangle. • Compute the T- Ratios of specific angles and use these for different angles. • Compute and apply trigonometric identities and simplify and solve mathematical identities. 	Learners will be able to: <ul style="list-style-type: none"> • Remember important concepts, figures, formulas and methodologies that studied in the previous classes. CH- 8: Introduction to Trigonometry: Learners will be able to <ul style="list-style-type: none"> • Determines all trigonometric ratios with respect to a given acute angle (of a right triangle) in order to use them in solving problems based on T- Ratios and Identities.

<p style="text-align: center;">May</p>	<p style="text-align: center;">CH – 1 Real Numbers</p>	<p style="text-align: center;">14 Periods</p>	<p>CH – 1 Real Numbers: Introduction</p> <ul style="list-style-type: none"> • The Fundamental Theorem of Arithmetic, • Revisiting Irrational numbers. • Revisiting Rational Numbers and Their decimal Expansions. • Summary (Concept Map). <p>Skills:</p> <ul style="list-style-type: none"> • Quality Education. • Develop critical thinking/ problem solving skills by analysing and applying various mathematical concepts. 	<p>CH – 1 Real Numbers. To help the learners</p> <ul style="list-style-type: none"> • Use the Fundamental theorem of Arithmetic and calculate HCF and LCM of the given numbers in the context of the given problem. • Recall the properties of irrational number and prove that whether the sum / difference /product/quotient of two numbers is irrational or not. • Apply theorems of irrational number and prove whether a given number is irrational or not. 	<p>CH – 1 Real Numbers. Learners will be able to</p> <ul style="list-style-type: none"> • Generalise properties of numbers and relations among them studied earlier, to evolve results, such as fundamental theorem of arithmetic in order to apply them to solve problems related to real life context.
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<p style="text-align: center;">JUNE</p>	<p style="text-align: center;">CH – 2 Polynomials CH – 4 Quadratic Equations</p>	<p style="text-align: center;">16 periods</p>	<p>CH – 2 Polynomials</p> <ul style="list-style-type: none"> • Zeros of a polynomial. • Relationship between zeros and coefficients of quadratic polynomials. • Summary (Concept Map). <p><u>ACTIVITY- 1</u> <u>Experiential Learning</u> Lab Activity 1: To draw and analyse the graph of a quadratic polynomial.</p> <p>CH – 4 Quadratic Equations</p> <ul style="list-style-type: none"> • Standard form of a quadratic equation. • Solutions of a quadratic equations by factorization, and by using quadratic formula. • Relationship between discriminant and nature of roots. • Situational problems based on quadratic equations related to day to day activities. • Summary (Concept Map). <p>Skills:</p> <ul style="list-style-type: none"> • Quality Education. • Develop critical thinking/ problem solving skills by analysing and applying various mathematical concepts. 	<p>CH – 2 Polynomials To help the learners</p> <ul style="list-style-type: none"> • Recall degree of Polynomials and find the number of zeroes of polynomial. • Analyse the graph of the polynomials and find the number of zeroes of polynomial. • Compute zeroes of the polynomials and verify the relationship between zeroes and the coefficients. • Compute the sum and product of zeroes of the polynomial and find the quadratic polynomial. <p>CH – 4 Quadratic Equations To help the learners</p> <ul style="list-style-type: none"> • In the form of Quadratic Equation represent the given situation algebraically. • Rewrite the given equations in the standard form and check whether they are quadratic or not. • Solve quadratic equations through factorisation and middle term splitting and find its roots. • Use the quadratic formula and find the roots of quadratic equation and find out the nature of its roots. 	<p>CH – 2 Polynomials Learners will be able to</p> <ul style="list-style-type: none"> • Use algebraic and graphical method of finding zeroes of a polynomial in order to establish a relationship between them. <p>CH – 4 Quadratic Equations Learners will be able to</p> <ul style="list-style-type: none"> • Demonstrates knowledge of application of various strategies in order to find roots and determine the nature of roots of a given
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<p style="text-align: center;">JULY</p>	<p style="text-align: center;">CH – 3 Pair of Linear Equations in two Variables. CH- 6 Triangles</p>	<p style="text-align: center;">14 +12 =26 Periods</p>	<p>CH – 3 Pair of Linear Equations in two Variables.</p> <ul style="list-style-type: none"> • Pair of linear equations in two variables and graphical method of their solution. • Conditions of consistency/ inconsistency. • Algebraic conditions for number of solutions. • Solution of a linear equations in two variables algebraically by substitution and by elimination. • Simple situational problems. • Summary (Concept Map). <p><u>Subject Enrichment</u> <u>Lab Activity 2 :</u> To obtain the conditions for consistency of a pair of linear equations in two variables.</p> <p>CH- 6 Triangles</p> <ul style="list-style-type: none"> • Introduction, Similarity of Triangles, Basic Proportionality Theorem, Converse of basic proportionality theorem, Criteria for Similarity of Triangles, AAA, SAS and ASA Similarity criteria. • Summary (Concept Map). <p><u>Lab Activity 3</u> To verify the basic proportionality theorem using activity method. ACTIVITY - 3 <u>Art Integrated:</u> Modal of Similar triangles using card board. Skills: Creative Thinking</p>	<p>CH – 3 Pair of Linear Equations in two Variables.</p> <p>To help the learners</p> <ul style="list-style-type: none"> • State the properties of linear equation and classify the given equations as linear or non-linear. • Interpret the concepts of linear equations and represent any given situation algebraically and graphically. • Plot the lines corresponding to the given two linear equations and comment on the nature/behaviour of the lines representing the linear equations. • Use different algebraic methods and solve a pair of linear equations. • Use the most appropriate algebraic method and solve the given pair of linear equations. • Rewrite the given equations which are reducible to a pair of linear equations and find the solutions and find the solution of those equations. <p>CH – 6 Triangles</p> <p>To help the learners</p> <ul style="list-style-type: none"> • Distinguish between congruency and similarity and understand the concept of similar figures. • Compute the angles and ratio of sides of polygons and determine their similarity. • Compute the angles and ratio of sides of triangles in order to determine their similarity. 	<p>CH – 3 Pair of Linear Equations in two Variables.</p> <p>Learners will be able to</p> <ul style="list-style-type: none"> • Use graphical and algebraic methods in order to find solutions of pairs of linear equations in two variables. <p>CH- 6 Triangles</p> <p>Learners will be able to</p> <ul style="list-style-type: none"> • Use reasoning in order to differentiate between congruent and similar figures. • Use different geometric criteria established such as basic proportionality theorem etc. In order to establish properties for similarity of two triangles.
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<p style="text-align: center;">AUGUST</p>	<p style="text-align: center;"> CH – 7 Coordinate Geometry. CH – 14 Statistics CH – 15 Probability </p>	<p style="text-align: center;"> 10 +12 + 6 = 28 periods </p>	<p>CH – 7 Coordinate Geometry.</p> <ul style="list-style-type: none"> • Concepts of coordinate geometry. • Graphs of linear equations. • Distance formula and Section formula. • Summary (Concept Map). <p><u>Experiential Learning</u> Lab Activity 4 : To derive the Distance formula using graph paper</p> <p>CH – 14 Statistics</p> <ul style="list-style-type: none"> • Mean, median and mode of grouped data. • Summary (Concept Map). <p>CH – 15 Probability</p> <ul style="list-style-type: none"> • Classical definition of probability, problems on finding the probability of an event. • Summary (Concept Map). <p>Lab Activity 5 : To determine experimental probability of 1, 2, 3, 4, 5 or 6 by throwing a die and compare them with their theoretical probability.</p> <p>Skills:</p> <ul style="list-style-type: none"> • Quality Education. • Develop critical thinking/ problem solving skills by analysing and applying various mathematical concepts. 	<p>CH – 7 Coordinate Geometry. To help the learners</p> <ul style="list-style-type: none"> • Apply and derive distance formula and determine the distance between two coordinates on the graph. • Apply distance formula and solve various mathematical and real-life problems graphically. • Apply and derive section formula and divide the line segment in a given ratio. • Apply distance and section formula and determine the vertices /diagonal/mid-points of given geometrical shapes. <p>CH – 14 Statistics To help the learners</p> <ul style="list-style-type: none"> • Apply direct and assumed mean method to calculate the mean of grouped data. • Compute the mode of the given data. • Apply formula for the median of a given grouped data and calculate missing values of frequency. • Differentiate between mean, median and mode with examples and use most effective measure of central tendency in various cases <p>CH – 15 Probability To help the learners</p> <ul style="list-style-type: none"> • Find the classical definition of probability. • Simple problems on finding the probability of an event. 	<p>CH – 7 Coordinate Geometry. Learners will be able to</p> <ul style="list-style-type: none"> • Derive formulae to establish relations for geometrical shapes in the context of a coordinate plane, such as finding the distance between two given points, in order to determine coordinates of a point between any two given points and section formula and its uses in solving various problems. <p>CH – 14 Statistics Learners will be able to</p> <ul style="list-style-type: none"> • Calculate mean, median and mode in order to apply them to real life contexts. <p>CH – 15 Probability Learners will be able to</p> <ul style="list-style-type: none"> • Calculates in order to determine the probability of a given event.
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<p style="text-align: center;">SEPTEMBER</p>	<p style="text-align: center;">CH – 9 Some Applications of Trigonometry</p>	<p style="text-align: center;">10 Periods</p>	<p>Revision of CH – 1, CH -2, CH – 3, CH – 4, CH – 6 CH - 7 CH – 8 CH - 14 and CH - 15</p> <p>CH – 9 Some Applications of Trigonometry</p> <ul style="list-style-type: none"> • Angle of elevation, Angle of Depression, problems on heights and distances. • Summary (Concept Map). <p><u>Activity 2</u></p> <p><u>Experiential Learning :</u> Construct a Clinometre and measure the height of your school building.</p> <p>Skills:</p> <ul style="list-style-type: none"> • Quality Education. • Develop critical thinking/ problem solving skills by analysing and applying various mathematical concepts. 	<p>CH – 9 Some Applications of Trigonometry</p> <p>To help the learners</p> <ul style="list-style-type: none"> • Identify line of sight and determine angle of elevation and angle of depression. • Apply trigonometric ratios and determine heights and distances of the objects in the real-life context. • Apply trigonometric ratios and determine heights and distances of the objects / structures in the real-life context. 	<p>CH – 9 Some Applications of Trigonometry</p> <p>Learners will be able to</p> <ul style="list-style-type: none"> • Determine all trigonometric ratios with respect to a given acute angle in order to use them in solving problems in daily life contexts like finding heights of different objects.
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<p style="text-align: center;">OCTOBER</p>	<p style="text-align: center;">CH – 5 Arithmetic Progressions CH – 10 Circles</p>	<p style="text-align: center;">10 + 10 = 20 Periods</p>	<p>CH – 5 Arithmetic Progressions</p> <ul style="list-style-type: none"> • Introduction of Arithmetic Progression. • Derivation of nth term and sum of the first n terms of A.P. <ul style="list-style-type: none"> • Application of A.P and their application in solving daily life problem. • Summary (Concept Map). <p>CH – 10 Circles</p> <ul style="list-style-type: none"> • Tangent to a circle at a point of contact, Prove that the tangent at any point of a circle is perpendicular to the radius through the point of contact, Prove that the length of tangents drawn from an external point to a circle are equal. <ul style="list-style-type: none"> • Summary (Concept Map). <p><u>Experiential Learning:</u> Lab Activity 6 – Identify arithmetic progression in some given list of series. Lab Activity 7 – To find the sum of the first n natural numbers. Lab Activity 8 – To verify the length of tangents from an external points are equal in length. Skills: Curiosity, Critical Thinking.</p>	<p>CH – 5 Arithmetic Progressions To help the learners</p> <ul style="list-style-type: none"> • Produce patterns and observe that succeeding terms are obtained by adding a fixed number to the preceding terms. • Distinguish between finite and infinite A.P and determine the nature and write the last term of the given A.P • Calculate the nth term of a given A.P and find its terms and their nature and solve real-life word problems. • Calculate the sum of a given A.P and get the solution of real-life word problems and solve contextual problems. • Calculate the last term of the given A.P and find solution of real-life word problems. <p>CH – 10 Circles To help the learners</p> <ul style="list-style-type: none"> • Draw, Identify and differentiate between secant and tangent of a circle and prove and apply various theorems related to circles. • Prove and apply theorems related to tangent of a circle and determine number of tangents from the given points and determine length of the tangents. 	<p>CH – 5 Arithmetic Progressions Learners will be able to</p> <ul style="list-style-type: none"> • Develop strategies in order to apply the concept of AP to daily life situations. <p>CH – 10 Circles Learners will be able to</p> <ul style="list-style-type: none"> • Apply theorems related to tangent of a circle in order to determine number of tangents from the given point and determine the length of the tangent.
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<p>NOVEMBER</p>	<p>CH – 12 Areas Related to Circles CH – 13 Surface Areas and Volumes</p>	<p>12 + 14 = 26 Periods</p>	<p>CH – 12 Areas Related to Circles</p> <ul style="list-style-type: none"> • Introduction, Perimeter and Area of a Circle, Circumference of a Circle. • Areas of a Sector and Segment of a Circle, Areas of Combinations of Plane Figures. • Summary (Concept Map). <p><u>Experiential Learning</u> ACTIVITY - 3 Construct circular disc / Combination of figures using cardboard and find the area.</p> <p>CH – 13 Surface Areas and Volumes.</p> <ul style="list-style-type: none"> • Surface areas of combinations of cubes, cuboids, spheres, hemispheres and right circular cylinders and cones. • Volumes of combinations of cubes, cuboids, spheres, hemispheres and right circular cylinders and cones. • Summary (Concept Map) <p><u>SDG 4</u> - Quality Education with case study based questions so that the students see the usefulness of Maths while instilling values and attitude towards it.</p>	<p>CH – 12 Areas Related to Circles To help the learners</p> <ul style="list-style-type: none"> • Describe the relationship between circumference and diameter of a circle and define π. • Apply the concepts of circumference and area of circles and solve in for various circular objects in real life. • Describe sector and segment of a circle and differentiate between the two. • Describe minor and major sector and minor and major segment of a circle and differentiate between two. • Calculate the length of an arc of a circle and comment whether it is the major or minor arc. • Calculate the area of various combinations of plane figures and apply the concepts of circles. <p>CH – 13 Surface Areas and Volumes To help the learners</p> <ul style="list-style-type: none"> • Apply formulae of surface area and volume of 3D solids and derive the surface area of combination of solid shapes. • Combine different solid shapes to create a new solid form and apply the formula to find the surface area and volume. • Use concepts of surface areas and volumes for variety of 3-D objects and apply them into real life situations. 	<p>CH – 12 Areas Related to Circles Learners will be able to</p> <ul style="list-style-type: none"> • Apply the concepts of Theorems in order to solve questions based on circumference and area of circles, sector and segment of a circle and differentiate between the two and solve in for various circular objects in real life. <p>CH – 13 Surface Areas and Volumes. Learners will be able to</p> <ul style="list-style-type: none"> • Visualize objects in surrounding as a combination of different solids like cylinder and a cone, cylinder and a hemisphere, combination of different cubes etc. In order to find their surface areas and volumes.
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DECEMBER			Revision + 2 nd terminal examination		
JANUARY			SQP + Previous years board Question paper + pre-Board examination		
FEBRUARY			Remedial classes		

SURENDRANATH CENTENARY SCHOOL
SESSION – 2024-25
ANNUAL PEDAGOGICAL PLAN
CLASS X

Subject: PHYSICS					
Books: 1) SCIENCE TEXTBOOK FOR CLASS X (NCERT)					
2) NUMERICAL PHYSICS-X (LAXMI PUBLICATIONS)					
3) LAB MANUAL SCIENCE-X (BLUE PRINT)					
Month	Chapter	No. of pr.	Topics	Learning Objectives	Learning Outcomes
April '24	<p>RECAPITULATION</p> <p>CH-9</p> <p>LIGHT-REFLECTION AND REFRACTION</p>	12	<ul style="list-style-type: none"> ● Overview of full syllabus ● Fundamental and derived units of physical quantities to be dealt in the syllabus ● Definition of SI unit of physical quantities. ● Operations on numbers in standard form ● Revision of light, reflection and its types. ● Types of images (real and virtual) ● Plane mirror and spherical mirrors. ● Terms associated with spherical mirrors and image formation. <p>ACTIVITY-1 <u>Subject Enrichment</u>:-</p> <p>Determination of focal length of a concave mirror by focusing a distant object.</p>	<p>Enable learners to:</p> <ul style="list-style-type: none"> ● define SI units ● operate large numbers easily ● recall concept of reflection ● differentiate real and virtual images ● State the laws of reflection of light, in order to understand how light travels in a medium when it encounters another object. ● Outline the rule of image formation by spherical mirrors in order to complete the ray diagrams by drawing reflected rays. ● represent the path of incident ray and reflected ray in order to decipher the position and nature of image formed 	<p>Learners will be able to :</p> <ul style="list-style-type: none"> ● define SI units ● operate large numbers easily ● recall concept of reflection ● differentiate real and virtual images ● State the laws of reflection of light, in order to understand how light travels in a medium when it encounters another object. ● Outline the rule of image formation by spherical mirrors in order to complete the ray diagrams by drawing reflected rays. ● represent the path of incident ray and reflected ray in order to decipher the position and nature of image formed

<p>May '24</p>	<p>CH-9 LIGHT-REFLECTION AND REFRACTION (Contd.)</p>	<p>6</p>	<ul style="list-style-type: none"> ● Uses of spherical mirrors. ● Sign convention for reflection by spherical mirrors. ● Mirror formula and magnification. ● Refraction of light. ● Refraction through a rectangular glass slab. 	<ul style="list-style-type: none"> ● express u, v, f in the mirror formula in order to apply sign convention in solving word problems to find the unknown variable. ● deduce the nature and size of image by magnification in order to relate height of object with height of image. ● demonstrate the path of light when it travels through a rectangular glass slab, in order to Formulate laws of refraction of light. 	<ul style="list-style-type: none"> ● express u, v, f in the mirror formula in order to apply sign convention in solving word problems to find the unknown variable. ● deduce the nature and size of image by magnification in order to relate height of object with height of image. ● demonstrate the path of light when it travels through a rectangular glass slab, in order to Formulate laws of refraction of light.
<p>June '24</p>	<p>CH-9 LIGHT-REFLECTION AND REFRACTION (Contd.)</p>	<p>12</p>	<ul style="list-style-type: none"> ● The refractive Index. ● Absolute refractive index and related numerical problems. ● Refraction by spherical lenses. ● Image formation by lenses. ● Image formation in lenses using ray diagrams. ● Sign convention for spherical lenses. ● Lens formula and magnification. ● Related numerical problems. ● Power of a lens and related numerical. 	<ul style="list-style-type: none"> ● Compare the speed of light in one medium with another in order to calculate refractive index. Represent the path of incident & reflected light rays from a concave lens ,in order to decipher the position and nature of the image formed. ● Illustrate the path of incident & reflected light Rays from a convex lens,in order to decipher the position and nature of the image formed. ● Construct the lens formula for a lens relating v, u, f; in order to find an unknown variable given 	<ul style="list-style-type: none"> ● identify the angle of incidence and the angle of refraction. The student should be able to relate the direction which light bends (towards or away from the normal) if given the relative speed of light in the two medium

			<p>ACTIVITY-2</p> <p><u>Subject Enrichment:</u></p> <p>i) Determination Of Focal length of a convex lens by focusing a distant object.</p> <p>ii) Tracing the path of the rays of light 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.</p> <p>ACTIVITY-3</p> <p><u>Experiential Learning:-</u> Activity to show what caused the objects to be visible in one kind of a liquid and not in others.</p> <p>Skills-Creative and critical thinking</p>	<p>the other two.</p> <ul style="list-style-type: none"> ● State the magnification- for a lens, in order to relate height of Object with height of image. ● Calculate the power of a lens, in order to determine its power to converge or diverge. 	<ul style="list-style-type: none"> ● relate magnification of image with object and image distance.
July '24	CH- 10 HUMAN EYE AND COLOURFUL WORLD	12	<ul style="list-style-type: none"> ● The human eye. ● Power of Accommodation. ● Defects of vision and their correction 	<ul style="list-style-type: none"> ● Illustrate the parts and function of the human eye, in order to understand how humans see the objects around them. 	<ul style="list-style-type: none"> ● Eye helps us in visualizing objects and also helps us in light perception, color, and depth perception. ● The human eye consists of

	<p>SDG:- Good Health and-well Being</p>		<ul style="list-style-type: none"> ● Refraction of light through a prism. ● Dispersion of white light by a glass prism. ● Formation of Rainbow. ● Atmospheric Refraction. ● Scattering of light. 	<ul style="list-style-type: none"> ● Describe how focal length of eye changes, in order to understand how humans see close and far objects. ● Identify the defects of vision in the human eye(myopia, hypermetropia, presbyopia) and their causes, in order to devise a correction method for them. ● Examine the path of light rays through a prism,in order to determine how light gets deviated when travelling through a prism. ● Trace the path of white light rays through a prism,in order to determine that white light is made of seven colours. ● Elaborate the process of atmospheric refraction,in order to understand natural phenomena like twinkling of stars and advance sunrise and delayed sunset. ● Explain the process of scattering of light, in order to understand natural phenomena, like the Tyndall effect, blue colour of the sky. 	<p>the following parts: Sclera, cornea, iris, pupil, lens, retina, and optic nerve.</p> <ul style="list-style-type: none"> ● When the atmosphere refracts more star-light towards us, the star appears to be bright and when the atmosphere refracts less star-light. ● Scattering of light that we come across in day-to-day life are: Blue colour of the sky ● Out of the seven components present in sunlight, blue colour is scattered the most by the particles present in the atmosphere and hence, the sky appears blue.
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August '24	<p>CH- 10</p> <p>HUMAN EYE AND COLOURFUL WORLD(Contd.)</p> <p>CH-11</p> <p>ELECTRICITY</p>	12	<p><u>Art Integrated Learning:-</u></p> <p>Trace the path of white light rays through a prism, in order to determine that white light is made of seven colour.</p> <ul style="list-style-type: none"> ● Electric current and circuit. ● Electric potential and potential difference. ● Circuit diagram and Ohm's law <p>ACTIVITY</p> <p><u>Experiential Learning:</u></p> <p>Group activity to understand electric circuit, electric charge,electric current and electric potential by making a simple circuit containing wires,switch, cells and a torch bulb.</p> <p>Skills:Curiosity,Critical Thinking.</p>	<ul style="list-style-type: none"> ● Evaluate the charge flowing through a conductor in a given time, in order to calculate current flowing through it. ● Determine work done in moving a charge across two points, in order to calculate potential difference between two points ● Identify the electrical components and their functions, in order to build a functioning circuit. ● Plot a graph between voltage and current, in order to prove ohm's law & find resistance 	<ul style="list-style-type: none"> ● Define electric charge , electric current , electric circuit , one ampere etc. ● · Recall S I unit of physical quantities used, learn formula used. ● Draw different electric symbols and electric circuits. ● solve numerical problems given in the text books.
September '24	<p>CH-9 & 10</p>		<p>Revision of CH-9 & 10</p> <p>SA,LA and HOTS Questions</p> <p>Diagram practice.</p>		

October '24		9	<ul style="list-style-type: none"> ● Factors on which resistance of a conductor depends. ● Resistance of a system of resistors. ● heating effect of electric current ● electric power <p><u>Subject Enrichment-</u></p> <ul style="list-style-type: none"> ● Verification of ohm's law. ● equivalent resistance of two resistors when connected in series/parallel 	<ul style="list-style-type: none"> ● Define resistivity and its range for different materials, in order to classify substances as conductors, alloys and insulators. ● Determine the resultant resistance in a series and a parallel combination, in order to identify the suitable combination like house etc. ● explain and calculate the heating effect of electric current in order to learn how appliances like heater and iron works. ● Calculate power in order to represent electric consumption in domestic circuits. 	<ul style="list-style-type: none"> ● Define resistivity and its range for different materials, in order to classify substances as conductors, alloys and insulators. ● Determine the resultant resistance in a series and a parallel combination, in order to identify the suitable combination like house etc. ● explain and calculate the heating effect of electric current in order to learn how appliances like heater and iron works. ● Calculate power in order to represent electric consumption in domestic circuits.
November '24	<p>CH-12</p> <p>MAGNETIC EFFECTS OF ELECTRIC CURRENT</p>	12	<ul style="list-style-type: none"> ● Magnetic field and field lines. ● Magnetic field due to a straight current carrying conductor. ● Magnetic field due to a straight current carrying circular loop. ● Magnetic field due to a straight current carrying solenoid. ● Force on a current carrying conductor in a magnetic field. ● Domestic Electric 	<ul style="list-style-type: none"> ● Draw magnetic field lines for a bar magnet, in order to identify the magnetic field strength at different points around a magnet. ● Represent magnetic field lines for a straight current carrying conductor, in order to identify the magnetic field strength at different points around it. ● Draw magnetic field lines for a current carrying circular loop, in order to identify the magnetic field strength at different points 	<ul style="list-style-type: none"> ● Electricity and Magnetism - The goal is for students to learn how magnetic poles interact. Also, they will learn the shape of the magnetic lines of force and how the domains of a magnet are arranged. ● Electromagnets- The students will make an electromagnet and determine the strength of the electromagnet.

			<p>circuits.</p> <p><u>Art Integrated learning:-</u> Analyse the Significance of neutral, earth and live Wire, in order to understand formation of a domestic electric circuit with the help of label diagram</p>	<p>around it.</p> <ul style="list-style-type: none"> ● Outline magnetic field lines for at current carrying solenoid, in order to identify the magnetic field strength at different points around it.State Fleming's Left-Hand rule, in order to understand the working of an electric motor. ● Analyse the significance of neutral, earth and live wire, in order to understand formation of a domestic electrical circuit. 	
December '24	CH-9,10,11,12	9	Revision of CH – 10,11 & 12 SA, LA and HOTS Questions Diagram practice		
January '25	CH-9,10,11,12	9	Revision of CH – 10,11 & 12 SA, LA and HOTS Questions Diagram practice		

SURENDRANATH CENTENARY SCHOOL,RANCHI
ANNUAL PLAN 2024-25

Class: X
Subject: Chemistry

Book: NCERT Book for Science
Lab Manual: Blue Print

Month	Chapter	No. of Periods	Topic	Learning objective	Learning Outcome
April	Chemical reaction and Equations	15	<ul style="list-style-type: none"> • Physical and chemical changes Chemical changes caused due to chemical reaction. • Representation of a chemical reaction as a chemical equation. Concept of word equation and symbolic equation. • Balancing a given chemical equation. • Converting a word equation into symbolic equation and balancing it. Identifying the given reaction as combination or decomposition. <p><u>Experiential learning:</u> <u>Activity 1</u> To observe the burning of magnesium ribbon and check the nature of product formed. Skills: Critical thinking. <u>Activity2</u> To observe the reaction of quick lime with water. Skills: Critical thinking</p>	<ul style="list-style-type: none"> ➤ Relate the substances taking part in chemical reaction and formed as a result to identify the reactants and products. ➤ Use chemical symbols and formulae properly to acquire the skill of writing chemical equation. ➤ Apply law of conservation of mass in order to balance the chemical equation. <p>Categorise the given reaction in terms of reactants and products as combination and decomposition</p>	<ul style="list-style-type: none"> ➤ To relate the substances taking part in chemical reaction and formed as a result to identify the reactants and products. ➤ To use chemical symbols and formulae properly to write the chemical equation. ➤ To apply law of conservation of mass in order to balance the chemical equation. <p>To categorise the give reaction in terms of reactants and products as combination and decomposition reaction</p>

May	Chemical Reaction and Equations		<ul style="list-style-type: none"> Classify the reaction as displacement or double displacement reaction. Reactivity series and displacement reaction Precipitation and neutralization reaction. Oxidation and reduction in terms of addition and removal of oxygen and hydrogen. Identifying the oxidizing and reducing agents. <p>Activity3</p> <ul style="list-style-type: none"> To observe the reaction between copper sulphate solution and iron nails. <p>Skills: Technical ability, critical thinking</p>	<ul style="list-style-type: none"> Classify the given reaction as displacement and double displacement based on the reactants involved and products formed. Understanding the reactivity series and its application in displacement reactions. Predict the reaction as oxidation or reduction based on addition or removal of oxygen or hydrogen. <p>Detect changes in smell, colour, taste of food items in order to explain the oxidation of food articles.</p>	<ul style="list-style-type: none"> To classify a given reaction as displacement or double displacement reaction. To understand the application of reactivity series in displacement reaction. <p>To predict the reaction as oxidation or reduction and identify the substance oxidized/reduced</p>
June	Acids, bases and salts	18	<ul style="list-style-type: none"> Formation of H^+ and OH^- ions in aqueous solution of acids and bases. Taste of acids and bases Nature of acids as mineral or organic and their strength. Presence of various acids in different food items. 	<ul style="list-style-type: none"> Write down the ions present in an aqueous solution of acid or a base to explain why aqueous acid/ base conduct electricity. Recall the taste of acids and bases in order to point out if the given food item contains acid or base. <p>Observe the action of given substance With various indicators to find out their nature</p>	<ul style="list-style-type: none"> To identify the ions present in the aqueous solution of acids/bases. <p>To be able to relate the nature of substance with its taste and its nature to be acidic or basic.</p>
July	Acids, bases and salts		<ul style="list-style-type: none"> Action of indicators on acids and bases and their change in behavior. Reaction of metals with acids to give hydrogen gas. Reaction of metal carbonates and Bicarbonates with acids to give carbon dioxide. 	<ul style="list-style-type: none"> Detect the formation of hydrogen gas on treatment of a metal with dilute acid. Detect the formation of carbon dioxide on treatment of metal carbonate or bicarbonate with dilute acids. 	<ul style="list-style-type: none"> To detect the formation of hydrogen gas on treatment of a metal with dilute acid. To detect the formation of carbon dioxide on treatment of metal carbonate or bicarbonate with dilute acids.

			<p>Reaction of some metals with bases. Nature of metal and non metal oxides formed.</p> <ul style="list-style-type: none"> • <u>Experiential learning:</u> <p><u>Activity 1</u></p> <ul style="list-style-type: none"> • To observe the action of dilute sulphuric acid on zinc granules and check the gas formed. • To observe the action of dilute hydrochloric acid on sodium carbonate and check the gas formed. <p>SDG4-Quality education.</p>		
August	Acids, bases and salts		<ul style="list-style-type: none"> • Importance of pH in our daily lives • Manufacture of sodium hydroxide, common salt, washing soda, baking soda, bleaching powder and plaster of paris. • Learning the chemical reactions involved in the formation of above compounds. • Understanding the uses of these compounds in our day to day life. <ul style="list-style-type: none"> ○ Skills: data collection and analysis. <p><u>Activity2</u></p> <ul style="list-style-type: none"> • To observe the change in colour of pH paper on treatment with lemon juice, toothpaste, soap solution, milk, tap water and orange juice. <ul style="list-style-type: none"> ○ Skills: Technical ability 	<ul style="list-style-type: none"> ➤ Understand the concept of pH. ➤ Know the general methods of preparation of some common chemical compounds . <p>Understand the chemical reactions involved in preparation of those compounds and identify their uses.</p>	<ul style="list-style-type: none"> ➤ To understand the concept of pH. ➤ To know various practical applications of pH in everyday life. <p>To know the preparation, properties and uses of some important chemical compounds such as bleaching powder, baking soda, washing soda etc</p>

			SDG9-Industry,innovationand infrastructure.		
September	Chapters 1 & 2 Metals and nonmetals	14	<p>Revisionofchapters1&2HOTS questions from both the chapters.</p> <ul style="list-style-type: none"> • Reaction of metals with oxygen, water and dilute acids. • Reactivity series and its application. • Evolution of hydrogen and its detection. • Specific conditions for reaction of different metals with water and the products formed in each case. <p>Activity1</p> <ul style="list-style-type: none"> • To observe the reaction of magnesium with water and iron with steam. <p>Skills: criticalthinking, knowledge</p>	<ul style="list-style-type: none"> ➤ Predict the products when metals and nonmetals react with oxygen, water, dilute acids. ➤ Writing balanced chemical equations for the above chemical reations. ➤ Analyse the process of getting metals from their oxides, carbonates and sulphides in order to extract them from their ores. 	<ul style="list-style-type: none"> ➤ To understand the reactions of metals and nonmetals with water, dilute acids etc ➤ To be able to write balanced chemical equations for the above reactions. <p>To know the basic processes involved in extraction of metals from their ores and different techniques involved depending upon the nature of metal and its reactivity</p>
October	Metals and nonmetals		<ul style="list-style-type: none"> • Occurrence of metals in nature as minerals and ores. Different types of ores. General principles involved in extraction of metals. • Principles involved in extraction of metals and process involved. Purification and refining of metals and their uses. <p>Corrosion of metals and its prevention</p>	<ul style="list-style-type: none"> ➤ Understand the bonding between metals and nonmetals ➤ Drawing electron dot structures of some common ionic compounds ➤ Knowing the general principles involved in extraction of metals. ➤ Explain the process of electrolytic refining in order to assess how to obtain pure metal from impure samples. <p>Observe corrosion in metal articles and its process in order to develop Ways to prevent corrosion by forming alloys, painting, galvanizing.</p>	<ul style="list-style-type: none"> ➤ To know the bonding between metals and nonmetals. ➤ To be able to draw the electron dot structures of some ionic compounds. ➤ To know the process of metallurgy. <p>To know the process of electrolytic refining</p>

November	Carbon and its Compounds	22	<ul style="list-style-type: none"> • Electronic configuration of carbon and its tetravalency. • Anomalous behavior shown by carbon. • Catenation <p>Activity1</p> <ul style="list-style-type: none"> • <u>Subject enrichment:</u> • To understand the contribution of IUPAC in Organic chemistry. • Skills: technical ability, attention to detail. • Drawing electron dot structures of various carbon compounds to classify them as alkanes, alkenes and alkynes. • Draw the structure of carbon compounds involving functional groups to understand their properties. Writing the formula of compounds in the same homologous series. • Predicting the properties of compounds on the basis of the homologous series they are present in. Using the rules specified by IUPAC, writing the names of various carbon compounds containing • Functional groups. • Burning of saturated and 	<ul style="list-style-type: none"> ➤ Write down the electronic configuration of carbon in order to predict the formula of carbon compounds and illustrate the structure of molecules of carbon compounds with chain, branched and ring structure. ➤ Able to make and understand the electron dot structures of various saturated and unsaturated carbon compounds. ➤ Understand the classification of hydrocarbons as alkanes, alkenes and alkynes. ➤ Know about common functional groups and nomenclature of compounds containing them. ➤ Writing the formula of compounds falling in one homologous series ➤ To observe the burning of carbon compounds in oxygen to classify them as saturated and unsaturated compounds. ➤ Illustrate the chemical properties of carbon compounds as oxidation, combustion, addition substitution etc along with balanced chemical reaction. ➤ Identify reaction of carbon with chlorine in the presence 	<ul style="list-style-type: none"> ➤ To understand the reason for existence of carbon in different allotropic forms. ➤ To know about catenation and its impact. <p>To understand the concept of existence of hydrocarbons and their types.</p> <ul style="list-style-type: none"> ➤ To be able to draw the electron dot structures of some covalent compounds. ➤ To understand the classification of hydrocarbons into straight chain, branched chain, cyclic etc ➤ To know the basic IUPAC rules for nomenclature of hydrocarbons. ➤ To be able to draw different isomeric structure and write their IUPAC names. ➤ To know about homologous series and its characteristics. ➤ Burning of different compounds. ➤ Reaction of various Hydrocarbons/carbon with Chlorine in presence of Light. ➤ Reaction of Alkenes with hydrogen in the presence
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			<p>unsaturated compounds differently.</p> <ul style="list-style-type: none"> • Reaction of hydrocarbons with oxygen, hydrogen etc • Reaction of alkenes with hydrogen in the presence of nickel catalyst. Reaction of alkanes with chlorine in the presence of light. • Various chemical tests to distinguish between ethanol and ethanoic acid. Cleansing action of soaps and micelle formation. <p>Activity2 Experiential learning To test the given compounds as ethanol and ethanoic acid using various chemical tests.</p> <ul style="list-style-type: none"> • Skills: Attention to detail, technical ability • SDG9-Industry, innovation and infrastructure. 	<p>of light.</p> <p>➤ Performing various tests to distinguish between ethanol and ethanoic acid. To describe the formation of micelle in order to understand how soap works.</p>	<p>of Nickel catalyst.</p> <p>➤ Classification of Saturated/Unsaturated compounds. Tests to distinguish between ethanol and ethanoic acid.</p>
December	Sample papers & revision				
January	Sample papers & revision				

SURENDRANATH CENTENARY SCHOOL
SESSION – 2024-25
ANNUAL PEDAGOGICAL PLAN
CLASS X

Subject - Biology					
Book- NCERT SCIENCE TEXTBOOK FOR CLASS X&LAB MANUAL(Blueprint)					
Month	Chapter	No. of pr.	Topics	Learning Objective	Learning Outcome
April 24	CH- 5 Life Processes SDG :3 GOOD HEALTH AND WELL-BEING	18	Revision of previous knowledge- Recapitulation of academic vocabulary – nutrition, respiration, excretion, reproduction, environment, etc Nutrition – Types Autotrophic nutrition in detail, Light and CO ₂ necessary for photosynthesis Opening and closing of Stomata <ul style="list-style-type: none"> • Holozoic Nutrition in Amoeba and Human beings • Respiration – Aerobic and Anaerobic • Respiration in Human beings- Tidal and residual volume, movement of ribs and diaphragm during inhalation and exhalation, • Transport system in Human Beings - Human heart, Blood and blood vessels, Human heart- Pulmonary and systemic circulation, structure of human heart, Blood- its composition and functions. Blood vessels- Arteries, veins and capillaries ACTIVITY: Role play – Holozoic nutrition in Amoeba ACTIVITY -2 Group discussion on “Warm blooded animals have four chambered heart”. Skills: Critical thinking	To help the learners Explain the process of absorption of CO ₂ and H ₂ O in order to understand nutrition in autotrophs List and explain the strategies employed by heterotrophs to take up food List the enzymes and their functions involved in human digestive system Outline and explain the ways of breakdown of glucose by various pathways Illustrate the process of transport of oxygenated and deoxygenated blood by human heart Describe the functions of blood vessels, blood and lymph in human	Learners will be able to: <ul style="list-style-type: none"> ➤ Compare autotrophic nutrition and heterotrophic nutrition ➤ Describe autotrophic nutrition in plants and heterotrophic nutrition in humans ➤ Explain the processes like aerobic and anaerobic respiration ➤ List the components of blood ➤ Explain the mechanism of circulation of blood in human body ➤ Describe the need of transport system ➤ Draw labelled diagrams of digestive, respiratory, circulatory systems ➤ Draw flow charts/ concept maps/ graphs – such as digestive, respiratory and circulatory systems. ➤ Develop awareness on maintaining good health

<p>May 24</p>	<p>CH- 5 Life Processes</p> <p>SDG : 3</p> <p>GOOD HEALTH AND WELL - BEING</p>		<ul style="list-style-type: none"> • Transportation in plants-Transport of water and minerals through xylem • Transpiration – a necessary evil, root pressure • Transport of food through phloem <p>Experiential Learning-Put a twig of plant in coloured water and observe it.</p> <ul style="list-style-type: none"> • Excretion in Human beings, Artificial kidney <p>Excretion in plants</p> <p>Case study - A situation with some information about renal disease will be given.</p> <p>Skills: Critical thinking and self awareness</p>	<ul style="list-style-type: none"> ➤ Illustrate the process involved in transport of materials through xylem and phloem in plants ➤ Describe the mechanism of filtration of blood in the kidneys and excretion of wastes in human body 	<ul style="list-style-type: none"> ➤ Explain the process of ascent of sap and translocation ➤ List the components of our excretory system and explain the process of filtration of blood ➤ Draw labelled diagrams of excretory system
<p>June 24</p>	<p>CH- 6 Control and Coordination</p>	<p>16</p>	<ul style="list-style-type: none"> • Control and Coordination in Animals – Nervous system: Structure of a neuron, stimulus and conduction of messages, synapse, Central nervous system and Peripheral nervous system • Parts of brain and the actions controlled by the brain • Spinal cord, cranial and spinal nerves, Stimuli and responses <p>ACTIVITY1</p> <p>Subject Enrichment: Lab Experiment-</p> <ol style="list-style-type: none"> 1. Light is necessary for photosynthesis. 2. CO₂ is released during respiration. 3. Stomata on the surface of a leaf <p>ACTIVITY --2</p> <p>Art Integrated project</p> <p>Model of a neuron using clay/any waste material</p> <p>Skills: Creative Thinking</p>	<ul style="list-style-type: none"> ➤ List the components of our nervous system ➤ Illustrate the location and functions of different parts of human brain ➤ Explain the conduction of message through nerves ➤ Draw the structure and explain functioning of a neuron 	<ul style="list-style-type: none"> ➤ Describe the components of our nervous system ➤ List the various lobes of human brain and their functions ➤ Explain the process of conduction of nerve impulse ➤ Draw a labelled diagram of a neuron ➤ Draw flow chart on reflex arc ➤ Make models of neuron/ reflex arc

<p>July 24</p>	<p>CH- 6 Control and Coordination</p> <p>SDG: 3</p> <p>GOOD HEALTH AND WELL - BEING</p>		<ul style="list-style-type: none"> • arc in order to explain how reflex actions take place in humans • Illustrate the functions of endocrine glands in human body in order to understand functioning of hormones • Examine tropic movements in plants in order to understand how plants respond to environmental triggers like light, gravity and water • Nastic movement in touch-me-not plants <p>Case study on common disorders of endocrine glands A situation with some information about hormonal disorders (Goitre/ Diabetes) will be given. Skills: Critical thinking and self awareness ACTIVITY- 1 Learning wheel on endocrine glands and hormones in human beings Skills: Creative thinking</p>	<ul style="list-style-type: none"> ➤ Draw reflex arc in order to explain how reflex actions take place in humans ➤ Illustrate the functions of endocrine glands in human body in order to understand functioning of hormones ➤ Examine nastic/ tropic movements in plants in order to understand how plants respond to environmental triggers like touch, light, gravity and water 	<ul style="list-style-type: none"> ➤ Draw a labelled diagram of a reflex arc ➤ List the components of reflex arc ➤ Explain the hormonal control on human physiology ➤ Describe tropic and nastic movements in plants ➤ Relate the growth of root, shoot and nastic movements with respect to light, gravity and touch
<p>August 24</p>	<p>Ch- 13 Our Environment</p> <p>SDG – 12 Responsible consumption and production</p>	<p>14</p>	<ul style="list-style-type: none"> • Biodegradable and non-biodegradable wastes and their impact on environment • Ecosystem and its components • Natural and artificial ecosystems • Food chains and food webs • Food chains and food webs, Trophic levels, Energy flow, Energy pyramids, Biomagnification • Ozone formation, its role, causes of ozone depletion and its ill effects on human health <p>HOTs: Calculations based on energy flow through different trophic levels of a food chain Skills: Critical thinking ACTIVITY – 1 Art Integrated Learning- Impact of</p>	<ul style="list-style-type: none"> ➤ Classify different waste products as biodegradable and non-biodegradable in order to assess their effect on environment ➤ Tabulate the organisms feeding on another and energy transfer between them in order to form a food chain or a food web ➤ Classify biotic and abiotic components and their interaction with each other ➤ Describe the formation and importance of ozone in order to identify ways to protect it from depletion 	<ul style="list-style-type: none"> ➤ Classify biotic and abiotic components and their interaction with each other ➤ Describe the formation and importance of ozone in order to identify ways to protect it from depletion ➤ take steps to promote sustainable development ➤ Take initiatives to protect environment ➤ Describe ozone formation and its importance ➤ Minimise the use of aerosols, CFCs to prevent ozone depletion ➤ Make models using eco-friendly materials

			<p>non – biodegradable substances on Forest Ecosystem (Jharkhand) and Marine ecosystem (Telangana)- Collage making, slogan writing, songs or any art form</p> <p>Students spread awareness on ill effects of non-biodegradable substances on animals by distributing cloth bags having messages for animal protection.</p> <ul style="list-style-type: none"> • Skills: Creative & critical thinking 		
September 24	CH- 5, 6 & 13		<p>Revision of CH –6, 7 & 15 SA, LA and HOTS Questions</p> <p>Diagram practice</p>		
October 24	CH- 7 How do Organisms Reproduce?	12	<ul style="list-style-type: none"> • Modes of reproduction used by single organisms- Fission, fragmentation, Regeneration, Budding, Vegetative reproduction, spore formation • Sexual reproduction, Why the sexual mode of reproduction? Sexual reproduction in flowering plants • Reproduction in human beings, development of embryo, role of placenta, seminal vesicles and prostate gland • Reproductive health, bacterial and viral STDs, methods of contraception <p>ACTIVITY- Subject Enrichment: Observe permanent slides of binary fission in Amoeba and budding in yeast.</p>	<ul style="list-style-type: none"> ➤ Illustrate the process of fission in amoeba, leishmania and plasmodium in order to understand how unicellular organisms divide ➤ Illustrate the process of fragmentation in Spirogyra, regeneration in Planaria, budding in Hydra, vegetative propagation in plants and spore formation in Rhizopus ➤ Label the different parts of a flower and explain their functions ➤ Explain double fertilisation in plants ➤ List down the changes occurring in male and female body in teenage years in order to understand effects of puberty ➤ Describe the changes taking place in female body without/ after fertilisation ➤ List various methods of contraception 	<ul style="list-style-type: none"> ➤ Compare binary fission in <i>Amoeba</i> with <i>Leishmania</i> ➤ Explain the differences among various modes of asexual reproduction ➤ Explain the differences between fragmentation in <i>Spirogyra</i> and regeneration in <i>Planaria</i> ➤ Describe double fertilisation in plants ➤ Draw labelled diagrams of a bisexual flower and pollen germination and fertilisation ➤ Describe secondary sexual characters in male and female ➤ Explain gamete formation and fertilisation ➤ Describe the embryonic development in mother's womb, role of placenta ➤ Explain various methods of contraception and their needs in controlling STDs and preventing pregnancy

November 24	CH- 8 Heredity and Evolution	12	<ul style="list-style-type: none"> • Accumulation of variation during reproduction, Heredity, Rules of Inheritance of Traits – Mendel’s combinations, How do these traits get expressed – monohybrid and dihybrid crosses • Sex determination- sex chromosomes, environmental sex determination <p>ACTIVITY 1- Evolution “ Telephone” Students stand in a line. A complicated message whispered in the ear of the first student and the last one says that loudly.</p>	<ul style="list-style-type: none"> ➤ Explain how changes in DNA can lead to stronger/better species ➤ State and explain Mendel’s traits and Laws of Inheritance ➤ Explain the combination of sex chromosomes in order to understand how sex is determined in humans 	<ul style="list-style-type: none"> ➤ Relate variations with reproduction ➤ Explain Mendelian traits and their transmission through generations ➤ Describe sex determination in man and role of environment in sex determination ➤ Relate more number of females in some organisms like turtle due to global warming ➤ Respect diversity
December 24	CH- 5, 6, 7, 8 & 13		<ul style="list-style-type: none"> • Life Processes - Nutrition, respiration, transportation and excretion • Control and Coordination- Nervous and chemical control in humans, tropic and nastic movement in plants and phytohormones • Reproduction- asexual and sexual • Mendel’s Laws of Inheritance, sex determination <p>Our environment- Biodegradable and non-biodegradable wastes, Biomagnification</p>		
January 25	CH- 6, 7, 8, 9 & 15				PRE- BOARD

SURENDRANATH CENTENARY SCHOOL, RANCHI
SESSION – 2024-25
ANNUAL PEDAGOGICAL PLAN
CLASS – X

CLASS: X SUBJECT: GEOGRAPHY & ECONOMICS				BOOKS : CONTEMPORARY INDIA II UNDERSTANDING ECONOMIC DEVELOPMENT	
MONTH	CHAPTER	No. of Periods.	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES
APRIL 24	Revision work	6	Previous Chapters	<ul style="list-style-type: none"> Brainstorming on how the resources are interdependent in nature and the need to develop them in India. 	<ul style="list-style-type: none"> Enumerate how the resources are interdependent, justify how planning is essential in judicious utilization of resources and the need to develop them in India.
APRIL 24	Resources & Development Development	6	<ul style="list-style-type: none"> Classification of Resources Land use pattern in India Land degradation and conservation Classification of soil Soil erosion and conservation. Different people different goals. National development. Comparison of countries through national income/PCI. Public facilities. 	<ul style="list-style-type: none"> Familiarize with types of resources on the basis of origin, Ownership and status of development. Understand the value of resources and the need for their judicious utilization & conversation. Acquaintance with the changing land use pattern, land degradation and conservation measures. Students will be able to understand the types of soil and their distribution. Familiarization of some macro- economic concept Understanding the traditional notion of development, national income and per capita income. Familiarizing the students 	<p>Locates on map/describes features/defines/lists/recalls/classifies/compares in order to demonstrate skills of recognizing and retrieving facts, figures & narrating processes</p> <ul style="list-style-type: none"> Recognizes differences/ different perspective/ different situations, etc. in order to demonstrate sensitivity and appreciation skills. Examines and evaluates collected/ given information in order to construct views/arguments/ ideas on its basis.

				<p>about the income and other goals.</p> <ul style="list-style-type: none"> Analysing the need of sustainable development. 	
MAY 24	Forest and Wildlife Sectors of Indian Economy	6	<ul style="list-style-type: none"> Biodiversity in India Categorisation of species. Vanishing forests Community and conservation 	<ul style="list-style-type: none"> Understand the importance of forests and wildlife. Understand the ability and knowledge of how forest and wildlife conservation and management relate to the economy and environment, both currently and in the future. 	<ul style="list-style-type: none"> Examines phenomena, events and their occurrence in order to explain cause and effect relationship between them.
JUNE 24	Water Resources Sectors of Indian Economy	6	<ul style="list-style-type: none"> Availability of water resources on earth Causes of water scarcity Multi-purpose River valley projects Rainwater harvesting Primary, secondary, tertiary economic activities. Economic Interdependence GDP Historical change in sectors 	<ul style="list-style-type: none"> Comprehend the importance of water as a resource as well as develop awareness towards its judicious use and conservation. Identify major employment generating sectors. Reason out the government investment in different sectors of economy. Analyse how primary, secondary, tertiary sectors are interdependent and complementary to each other. 	<ul style="list-style-type: none"> Examines and evaluate given text/ visual, both known and unknown, such as maps/ texts/ symbols/ diagrams/ photos/ posters/ pie diagram/ newspaper clippings/etc. in order to interpret them. Extrapolates in order to predicts events and phenomena.

<p>JULY 24</p>	<p>Agriculture Sectors of Indian Economy</p>	<p>12</p>	<ul style="list-style-type: none"> • Division of Sectors as organised and Unorganised • Significant features of Indian agriculture. • Types of farming. • Cropping seasons. • Major crops. • Technological and Institutional reforms in agriculture. • Contribution of Agriculture in Indian Economy. • Bhoodaan, Gramdaan. • Challenges being faced by Indian Farmers. 	<ul style="list-style-type: none"> • To make aware of a major employment generating sector. • To understand how to create more employment. • To analyse various govt. schemes like MNREGA. • To analyse protective measures for unorganised sector worker. • To know the basic differences between Public and Private sectors. 	<ul style="list-style-type: none"> • Examine phenomena, events, and their occurrence in order to explain cause and effect relationship between them.
<p>AUGUST 24</p>	<p>Mineral and Energy Resources Money and Credit System</p>	<p>12</p>	<ul style="list-style-type: none"> • What is a mineral/ • Mode of occurrence of minerals. • Flow-chart classifying minerals. • Conservation of minerals. • Conventional and non-conventional sources of energy. • Conservation of energy resources. • Money as a medium of exchange. • Modern forms of money. • Loan activities of banks. • Case studies. • Formal and informal sources of credit. • Self help Groups for the poor Case study of Bangladesh. 	<ul style="list-style-type: none"> • Identify different types of minerals, energy resources and their distribution/availability. • Feel the need for their judicious utilization. • To understand Conventional and Non-conventional Energy resources. • To understand the slogan” Energy saved is energy produced”. • Understand money as an economic concept. • Understand the role of financial institutions from the point of view of day-to-day life. 	<ul style="list-style-type: none"> • Locates on map/describes features,/defines/ lists/ recalls/ classifies/compares/ distinguishes, in order to demonstrate skills of recognizing and retrieving facts, figures, and narrating processes. • Examines and evaluates collected/given information in order to construct views/arguments/ideas on its basis.

SEPTEMBER 24	Manufacturing Industries Globalization and the Indian Economy	6	<ul style="list-style-type: none"> • Map Practice/Revision • 1st Term Q. Paper discussion. • Importance of manufacturing. Production across countries. 	<ul style="list-style-type: none"> • 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 specific areas. 	<ul style="list-style-type: none"> • Examine and evaluates given text/visual, both known and unknown, such as maps/ texts, symbols/diagrams/pie charts/newspaper clippings/etc. in order to interpret them.
OCTOBER 24	Do	8	<ul style="list-style-type: none"> • Agro based industry, • Mineral based industries • Industrial Pollution and environmental degradation. • Foreign trade and integration of markets. • Factors enabling the globalisation. • World trade Organisation. Struggle for fair globalization. 	<ul style="list-style-type: none"> • Discuss the need for a planned industrial development and debate over the role of govt. towards decentralization and sustainable development. • Students will be able to understand the types of industries on the basis of materials used. • Students will understand the industrial pollution and measures to control it. • The way shown by NTPC of sustainable development. • Explain the working of the Global Economic Phenomena. • Students will be able to understand the factors that enabled globalization, trade practices, steps to attract foreign investment and the functioning of World Trade Organization. • To familiarise with the various debate outcomes 	<ul style="list-style-type: none"> • Examine and evaluates given text/visual, both known and unknown, such as maps/ texts, symbols/diagrams/pie charts/newspaper clippings/etc. in order to interpret them

				for fair globalisation.	
NOVEMBER 24	Lifelines of Indian Economy Globalization and the Indian economy	10	<ul style="list-style-type: none"> • Interdisciplinary project with chapter 3 of history, The making of global world and chapter 4 of economics, Globalization and the Indian economy 	<ul style="list-style-type: none"> • CG-7 Develops an understanding of the economy of a nation, with specific reference to India. • CG-8 Evaluates the economic development of a country in terms of its impact on the lives of its people and nature. 	<ul style="list-style-type: none"> • Enumerate the concept of globalization and its definition, evolution, and impact on the global economy. • Evaluate the key role of the key major driver of globalization and their role in shaping the global economic landscape in various countries. • Comprehends the significance of role G20 and its significance in the light of India's present role.
DECEMBER 24	Do	10	Do	<ul style="list-style-type: none"> • Discussion/Debates on the positive impact of Globalization on the lives of people.. 	
JANUARY 25	Revision			Pre board Examination	
FEBRUARY 25					

SURENDRANATH CENTENARY SCHOOL
SESSION – 2024-25
ANNUAL PEDAGOGICAL PLAN
CLASS X

Class X Subject: History/Political science			Books : I) India & the contemporary world II II) Democratic politics II		
Month	Chapter	No. of pr.	Topics	Learning Objective	Learning Outcome
April '24	Ch:1 Power sharing Contd.... Ch:1 Nationalism in Europe contd.... SDG: Peace, Justice and Strong Institutions	12	<ul style="list-style-type: none"> •Recapitulation •The French Revolution and the Idea of the nation •The making of Nationalism in Europe •Case studies of Belgium and Sri Lanka •Why power sharing is desirable? <p>Subject Enrichment: Concept map</p>	<ul style="list-style-type: none"> •Examine the impact of the French Revolution on the European countries in the making of Nation state. •Explore the nature of the diverse social movements of the time(1830-1848) •Examines and comprehends how democracies handle demands and needs for power sharing 	<ul style="list-style-type: none"> •Infer how the French Revolution had an impact on the European countries in the making of nation state. • Enumerate and evaluate the validity of the nature of the diverse social movements of the time. •Enumerate the need for power sharing in democracy.
May '24	Nationalism in Europe	03	<ul style="list-style-type: none"> •The age of Revolutions •The making of Germany and Italy. •Visualizing the Nation • Nationalism and Imperialism 	<ul style="list-style-type: none"> •Examine the ways by which the idea of Nationalism emerged and led to the formation of nation state. •Comprehends how the World War 1 triggered by the scramble for colonies in the Balkan states 	<ul style="list-style-type: none"> •Illustrate that the quest for Imperialism triggered the first World war
June '24	Power Sharing	03	<ul style="list-style-type: none"> •Forms of power sharing <p>Activity: Power point presentation (Power sharing)</p>	<ul style="list-style-type: none"> •Analyze the challenges faced by countries like Belgium and Sri Lanka ensuring effective power sharing 	<ul style="list-style-type: none"> •Summarize the purpose of power sharing in preserving the unity and stability of the country.

July '24	CH: 2 Nationalism in India CH:2 Federalism	12	<ul style="list-style-type: none"> •The first world war, Khilafat and Non-Cooperation •Differing strands with in the movement •Towards Civil disobedience •The sense of Collective Belongingness •What is Federalism? <p>Subject Enrichment: Map work</p>	<ul style="list-style-type: none"> •Discuss the impact of the of the first world war on triggering two defining movements (Khilafat and non-cooperation) •Assess / appraise the role of Mahatma Gandhi and other leaders in the two movements (NCM&CDM) •Comprehend the theory and practice of Federalism in India 	<ul style="list-style-type: none"> • Summarize the aspects of the First world war that triggered two defining movements (Khilafat and non-cooperation) •Evaluate the effectiveness of the strategies applied by Gandhiji and other leaders in the two Movements . •Analyse and infer how federalism is being practiced in India
August '24	Ch:5 Print Culture and the modern world Ch:2 Federalism SDG: 4 Quality Education SDG:16 Strong Institutions	12	<ul style="list-style-type: none"> •The first printed books •Print comes to Europe •The Print Revolution and its Impact •The reading mania. •The nineteenth century •India and the world of print to print and censorship. •What makes India a federal country? •How is federalism practised in India? •Decentralization in India 	<ul style="list-style-type: none"> •Examine the development of print from its beginnings in East Asia to its expansion in Europe and India. •Analyze the impact of the spread of technology and consider how social life and culture changed with coming of print •Analyze the policies and politics that has strengthened federalism in practice 	<ul style="list-style-type: none"> •Enumerate the development of print from its beginnings in East Asia to its expansion in Europe •Compare and contrast the old tradition of hand written manuscripts versus the print technology •Summarize the role of Print revolution and its impact on World &India's political,social and economic conditions •Analyse the policies and politics that has strengthened federalism in practice
September '24	Ch:3 Gender, Religion and Caste SDG:4 Quality Education	06	<ul style="list-style-type: none"> •Gender and politics •Religion, Communalism and Politics •Caste and Politics 	<ul style="list-style-type: none"> •Examines the role and differences of Gender, religion and Caste in practicing Democracy in India •Analyses the different expressions based on these differences are healthy or otherwise in a Democracy 	<ul style="list-style-type: none"> •Enumerates how the differences in gender, religion and Caste impact the practicing healthy or otherwise in a Democracy.
October '24	Ch: 4 Political Parties Ch:5 Outcomes of Democracy	12	<ul style="list-style-type: none"> •Why do we need Political Parties? •How many Parties should we have? •National Political and State Parties •Challenges to Political Parties •How do we assess Democracy's outcome till Dignity and freedom 	<ul style="list-style-type: none"> •Examine the role, purpose and no. of Political Parties in Democracy •Evaluate the contributions made by political parties in making of Indian democracy. • Comprehends the expected and actual outcomes of democracy in view of quality of government, economic wellbeing ,Inequality, 	<ul style="list-style-type: none"> • Enumerates the role purpose and no. of Political Parties in Democracy •Justifies the contributions made by national and regional parties in successful functioning of Indian democracy. •Analyses and infers why sometimes the gap occurs

			of the Citizens	social differences, conflict, freedom and dignity.	between expected outcome and actual outcome effects the success of Democracy.
November '24	Ch: The making of global world. Sub topics(1 to 1.3)	06	• The Pre modern world (To be assessed internally)	• Explore the various aspects of how the world changed profoundly in the 19 th century	•Summarize the changes that transformed the world in terms of economy , political , social.
December '24	Ch:4 The age of Industrialization (To be assessed internally)	06	•Pre and post Industrialization	• Examine Economic, Political,Social features of pre and post Industrialization	•Analyse and infer how the Industrialization impacted colonies with reference to India.
January '25	History Ch: 1,2,5,3 Political science Ch: 1,2,3,4,5	12	•REVISION	Preparation for board examination	-----

SURENDRANATH CENTENAY SCHOOL RANCHI
ANNUAL PLAN 2024-25

CLASS: X			BOOKS: Artificial Intelligence by Sumita Arora		
SUBJECT: Artificial Intelligence(417)			Supplement:- Facilitator Handbook by CBSE		
MONTH	CHAPTER	No. of Periods	TOPIC	LEARNING OBJECTIVES	LEARNING OOUTCOME
APR.	Part B: Unit 1:- Introduction to AI	8	Foundational concept of AI Basics of AI AI Domains and Technology AI Application, AI Ethics	To help the learners able to discuss “What is AI” and “What is not AI” Able to have better understanding of AI	Learners are able to Understand the use of AI in real life and ethical concern involved in AI development.
MAY	Unit 2 AI Project Cycle CONTD....	4	Introduction to AI Project Cycle Understanding Problem Scoping Data Acquisition Activity: - Balloon Debate on Positive and Negative outcome of AI as per allotted theme. Experiential Learning: - Quick draw with google	Recapsulate the different phases of AI Project Cycle and relate it with real world example.	Understand the stages involved in the AI Project cycle, importance of project planning, data collection, data exploration technique.
JUNE	Unit 2 AI Project Cycle	4	Data Exploration Modelling, ANN, Evaluation Subject Enrichment- Activity 1,2,3 and 4 in page no 69 - 70	Recapsulate the different phases of AI Project Cycle and relate it with real world example.	Know the importance of evaluation and various metrics available for evaluation.
JULY	Unit 4:- Data Science	8	Introduction to Data Science Application of Data Science Python for Data Sciences Understanding K-near neighbour	Introduce themselves to data science, their application and how to apply AI project cycle on data science problems.	Explore various application working on the principle of data science.
AUG.	PART A:- Unit 1 and Unit 2 Communication and Self Management Skill	8	Communication Cycle Principle of effective communication 7C’s of Communication Stress Management Self motivation and self regulation	Able to demonstrate knowledge of various method of communication and various stress management techniques.	Use different principles of communication to make it effective and strongly facing stress in life.
SEP.	Part B: Unit 7:- Evaluation	4	Model Evaluation Confusion Matrix:- Accuracy, Precision , Recall and F1 Score	Evaluate the result of an AI machine and check whether result is as expected or not.	Understand various model evaluation terminologies, create confusion matrix for given scenario.

OCT.	Part B:- Unit 5:Computer Vision Unit 6:- Natural Language Processing Unit 7 Evaluation	8	Computer Vision Concept and OpenCV Understanding convolution operator and CNN. Introduction to NLP Revisiting NLP cycle Human Vs Computer Languages and NLP <u>AIL:-Practical assignment on chatbots in Page no 292.</u>	* Know how computer recognise any image. *Explore that how AI machine process human voice.	* Understand and visualize computer's ability to identify alphabets and handwritings. *Unleash their imagination towards smart homes and build an interactive story around it.
NOV.	Part A: Unit 3:- Basic ICT Skills Unit 4: Entrepreneurial Skills Unit 5: Green Skills	8	Operating system Function of OS Basic computer maintenance Entrepreneurship and its impact Entrepreneurial qualities and Role Entrepreneurship as a career Sustainable Development Challenges in Sustainable development Overcoming challenges in SDG	* Make them well acquainted with different hardware and software unit of a computer system. * Gather information about an entrepreneur and choosing this as a career. * Enlist various challenges that is holding us back to achieve our SDG Goals.	* Work confidently on a any OS with its basic functionalities. * Discuss and analyse the option available as career in entrepreneurship. * Does know about various challenges that we face to achive our SDG Goals and make a green economy.
DEC.	Revision Practical Examination	8	Revision of Unit 1 to 7 of PART B.		
JAN.		8	PRE BORAD EXAMINATION		

SURENDRANATH CENTENARY SCHOOL
SESSION – 2024-25
ANNUAL PEDAGOGICAL PLAN
CLASS X

Subject संस्कृतम् Books मञ्जूषा , व्याकरणनिधि , अभ्यासवान् भव , अभ्यासपुस्तिका						
Month	Chapter	No. of pr.	Topics	Learning Objective	Learning Outcome	
April '24	स्वपरिचयः पुनरावृत्ति शुचिपर्यावरणम् (काव्य) व्याकरण समास,संधि वाच्यपरिवर्तनम्	15 18 10 14	<ul style="list-style-type: none"> ● स्वपरिचयः ● प्रश्नपत्रनुसारम् प्रश्ननिर्माण शीर्षक-पत्र लेखनम् आदयः बिदवः चर्चा । ● शेम्षी भाग2 ● शुचिपर्यावरणम् (काव्य) ● पाठ से अर्थ,भाव और प्रश्नोत्तराणि । ● शुचिपर्यावरणम् (काव्य) ● पाठ में प्रयुक्त व्याकरण। ● अर्थात् संधि, समास, प्रत्यय एवं अव्ययों की पहचान। ● व्याकरण - समास-प्रकरण 	<p>विद्यार्थियों को ज्ञान-बोध- विद्यार्थी अपना परिचय देते समय- वाक्य - निर्माण करने ,कर्तृपद क्रियापद इत्यादि का ज्ञान-बोध ।</p> <p>विद्यार्थियों को ज्ञान-बोध विद्यार्थी काव्य को पढ़कर विभिन्न प्रश्नों और उनके उत्तर एवं व्याकरण अंश का बोध प्राप्त करने में समर्थ होंगे।</p> <p>विद्यार्थियों को ज्ञान-बोध विद्यार्थी संधि, समास, प्रत्यय एवं अव्ययों की पहचान में सक्षम होंगे ।</p>	<p>विद्यार्थी सक्षम हुए – आत्म परिचय माध्यमेन वाक्य निर्माण में समक्ष होंगे।</p> <p>प्रत्यय का समुचित प्रयोग करने में।</p> <ul style="list-style-type: none"> •शुद्ध वाचन - कौशल का विकास। •लकार परिवर्तन में परिपक्वता। •नैतिकता का विकास। <p>विद्यार्थी काव्य को पढ़कर विभिन्न प्रश्नों और उनके उत्तर एवं व्याकरण अंश का बोध प्राप्त करने में समर्थ।</p> <p>विद्यार्थी संधि, समास, प्रत्यय एवं अव्ययों की पहचान में सक्षम हुए। वाच्यपरिवर्तनम् प्रकार-परिवर्तन में सक्षम हुए।</p>	

May '24	बुद्धिर्बलवती सदा व्याकरण समासप्रकरण संधिप्रकरण पत्र-लेखनम्	12	<ul style="list-style-type: none"> • बुद्धिर्बलवतीसदा(व्याकरण के अंश) • समासप्रकरण संधिप्रकरण • प्रत्यय • व्याकरण • समासप्रकरण, संधिप्रकरण • प्रत्यय • अनुवाद ,रूप ,उपपद विभक्ति। • अनुच्छेद लेखनम् 	विद्यार्थी पाठ के अन्तर्गत समासप्रकरण, अनुवाद ,रूप ,उपपद विभक्तिअनुच्छेद , लेखनम् का ज्ञान प्राप्त करें।	विद्यार्थी पाठ के अन्तर्गत समासप्रकरण, अनुवाद ,रूप ,उपपद विभक्तिअनुच्छेद , लेखनम् का ज्ञान प्राप्त किया।	विद्यार्थी पाठ के अन्तर्गत समासप्रकरण, अनुवाद ,रूप ,उपपद विभक्तिअनुच्छेद , लेखनम् का ज्ञान प्राप्त किया।
June '24	सूक्तयः अभ्यासवान् भव प्रत्ययअनुवाद ,रूप ,उपपद विभक्ति। अनुच्छेद लेखनम्	20	<ul style="list-style-type: none"> • पाठ से अर्थ,भाव और प्रश्नोत्तराणि । • पाठ में प्रयुक्त व्याकरण। • अर्थात् संधि, समास, प्रत्यय एवं अव्ययों 	विद्यार्थी पाठ से अर्थ,भाव और प्रश्नोत्तराणि समास-प्रकरण द्वन्द्व एवं अव्ययीभाव समास)संधि-प्रकरण पाठ्यक्रम में सम्मिलित सभी संधियों की	विद्यार्थी पाठ से अर्थ,भाव और प्रश्नोत्तराणि । संधि-प्रकरण पाठ्यक्रम में सम्मिलित सभी संधियों को सीखने में समर्थ होंगे।	विद्यार्थी पाठ से अर्थ,भाव और प्रश्नोत्तराणि समास-प्रकरण द्वन्द्व एवं अव्ययीभाव समास)संधि-प्रकरण पाठ्यक्रम में सम्मिलित सभी संधियों को सीखा।
July '24	जननीतुल्य वत्सला चित्रवर्णनम् पत्रलेखनम् अभ्यासवान् भव	24	<ul style="list-style-type: none"> • जननीतुल्यवत्सला • पाठ का प्रश्नोत्तराणि • जननीतुल्यवत्सला • पाठ का अर्थ भाव और प्रश्ननिर्माण। • पत्रलेखनम्- प्रश्न पढ़कर, पत्र लिखकर ,अर्थ स्पष्ट करके, शब्दों को समझकर और विभक्ति,वचन, लिंग के अनुसार पत्रलेखनम्। • चित्रवर्णनम् के आधार पर 	विद्यार्थी को जननीतुल्यवत्सला पाठ का प्रश्नोत्तराणि करने का ज्ञान-बोध होगा।	विद्यार्थी को जननीतुल्यवत्सला पाठ का प्रश्नोत्तराणि करने का ज्ञान-बोध हुआ।	

August '24	पत्रलेखनम्, चित्रवर्णनम् अनुच्छेद लेखनम् अभ्यासवान् भव	24	<ul style="list-style-type: none"> ● रचनात्मक कार्य ● पत्रलेखनम्, 	विद्यार्थी रचनात्मक कार्य, पत्रलेखनम्, चित्रवर्णनम् और अनुच्छेद लेखन में दक्षता हासिल हुई।	<ul style="list-style-type: none"> ● रचनात्मक कार्य ● पत्रलेखनम्, चित्रवर्णनम् ● अनुच्छेद लेखनम् 	
September '24	शिशु लालनम्	24	<ul style="list-style-type: none"> ● शिशु लालनम् पाठ का अर्थ, भाव और प्रश्नोत्तराणि। ● शिशु लालनम् पाठ का अर्थ, भाव और प्रश्नोत्तराणि प्रश्नपत्रम् अभ्यास करवाना। ● प्रश्नपत्रम् अभ्यास करवाना। 	विद्यार्थी अर्थ, भाव और प्रश्नोत्तराणि प्रश्नपत्र हल करने में समर्थ होंगे।	विद्यार्थी अर्थ, भाव और प्रश्नोत्तराणि प्रश्नपत्र हल करने में समर्थ हुए।	
October '24	जननी तुल्यवत्सला	12	<ul style="list-style-type: none"> ● पाठ से अर्थ, भाव और प्रश्नोत्तराणि। 	विद्यार्थियों को ज्ञान-बोध- अर्थ, भाव और प्रश्नोत्तर तथा व्याकरण ज्ञान ग्रहण करेंगे।	विद्यार्थी अर्थ, भाव और प्रश्नोत्तर तथा व्याकरण समझने में सक्षम हुए।	
November '24	सुभाषितानि सौहार्द प्रकृतेः शोभा विचित्र साक्षी	24	<ul style="list-style-type: none"> ● पाठ से अर्थ, भाव ● पाठ का अर्थ भाव और प्रश्ननिर्माण। ● पत्रलेखनम्- प्रश्नोत्तर। 	विद्यार्थी पाठों को समुचित रूप से समझने में समर्थ होंगे।	विद्यार्थी अर्थ, भाव और प्रश्नोत्तर तथा व्याकरण समझने में सक्षम हुए।	
December '24	अन्योक्तयः प्रश्नोत्तर माध्यमेन प्रश्ननिर्माण तथा	15	<ul style="list-style-type: none"> ● श्लोकों के अर्थ, भाव, अन्वय एवं प्रश्नोत्तर। ● अनुवाद ● रूप ● उपपद विभक्ति ● अनुच्छेद लेखनम् 	विद्यार्थी पाठों को समुचित रूप से समझने में समर्थ होंगे। श्लोकों के अर्थ, भाव, अन्वय एवं प्रश्नोत्तर समझने में समर्थ।	विद्यार्थी अर्थ, भाव और प्रश्नोत्तर तथा व्याकरण समझने में सक्षम हुए।	

	अशुद्धिशोधनम्					
January '25	अभ्यास प्रश्न पत्रों को हल करवाना । अभ्यास-कार्य	24	खण्ड क, ख, ग, घ का एकसाथ अभ्यास-कार्य <ul style="list-style-type: none"> समासप्रकरण संधिप्रकरण प्रत्यय व्याकरण समासप्रकरण, संधिप्रकरण प्रत्यय अनुवाद, रूप, उपपद विभक्ति। अनुच्छेद लेखनम् अभ्यासवान् भव। 	विद्यार्थी क, ख, ग, घ का एकसाथ अभ्यास-कार्य करके पूरे प्रश्न पत्र हल करने में दक्षता हासिल करेंगे।	विद्यार्थी खण्ड क, ख, ग, घ का एकसाथ अभ्यास-कार्य अर्थ, भाव और प्रश्नोत्तर तथा व्याकरण समझने में सक्षम हए।	
February '25	प्रश्नोत्तर माध्यमेन घटनानुसारेण अभ्यास-कार्य। प्रश्ननिर्माण	20	<ul style="list-style-type: none"> पाठ से अर्थ, भाव और प्रश्नोत्तराणि । पाठ में प्रयुक्त व्याकरण। अर्थात् संधि, समास, प्रत्यय एवं अव्ययों की पहचान। व्याकरण - समास-प्रकरण (द्वन्द्व एवं अव्ययीभाव समास) व्याकरण संधि-प्रकरण 	विद्यार्थी अर्थ, भाव और प्रश्नोत्तर तथा पाठ में प्रयुक्त व्याकरण।। अर्थात् संधि, समास, प्रत्यय एवं अव्ययों की पहचान में सक्षम होंगे ।	विद्यार्थी अर्थ, भाव और प्रश्नोत्तर तथा व्याकरण समझने में सक्षम हए।	

			पाठ्यक्रम में सम्मिलित सभी संधियों की			
March '25	परीक्षा		<ul style="list-style-type: none">• बोर्ड वार्षिक परीक्षा	वार्षिक परीक्षा	<ul style="list-style-type: none">• बोर्ड वार्षिक परीक्षा	