

SURENDRANATH CENTENARY SCHOOL, RANCHI
ANNUAL PLAN (2022-2023)

CLASS: X (TERM : I) SUBJECT: ENGLISH lang. & literature			BOOKS: NCERT BOOKS - First Flight, Footprint without Feet, Words and Expressions II		
MONTH	CHAPTER	No. of Periods	LEARNING OBJECTIVES	TOPICS	OUTCOMES
APRIL	Grammar/Writing : Tenses, Modals, Formal letter :Editorial letter. First Flight -A letter to God, Poem- Dust of Snow, Fire &Ice Words and Expressions-The process Approach, Trader and the tailor. SDG16: Peace, Justice & Strong institutions	28	<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 ➤ Sensitize students about victims of natural disaster ➤ 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 	<ul style="list-style-type: none"> • Review of the uses of tense • Application of the Present, Past and Future tense Irregular verbs • Story line, chapter highlights of the chapter A letter to God • Short question answers and HOTS • Editorial Letter following the CODER. • Poem: The Dust of Snow-About the poet, Reference to the context, symbolism, nature – a perennial source of joy • Usage and application of auxiliaries, common errors while using Modals, exemplary methods of using • Modals • Poem-The Fire & Ice-Reference to the context; discussion of contemporary social issues <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> <p>ART INTEGRATED: create your own limericks</p>	<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 – metaphor, imagery, symbol, simile, intention / point of view, rhyme scheme, etc. ➤ Talks on key contemporary issues like social justice, environment, gender, etc.
MAY (WEEK -1 & 2) JUNE (WEEK – 3 &4)	First Flight- Chapter 2, Nelson Mandela: Long walk to freedom SDG16: Peace, Justice & Strong institutions	28	<ul style="list-style-type: none"> ➤ Developed awareness about the social issues ➤ Inspect the system of apartheid and develop an insight into the lives of freedom fighters ➤ Infer that the oppressed and the oppressor alike are robbed of their humanities ➤ Collect data and refer to history to 	<ul style="list-style-type: none"> • About Nelson Mandela, brief history of South Africa • Chapter highlights, Role play on Patriotism, extract-based questions • The Triumph of Surgery-Different shades of the word SURGERY • Short &Long Questions, Reference to the context and HOTS • Subject Verb agreement 	<ul style="list-style-type: none"> ➤ Collects evidences and discusses in groups for reading autobiographies, history and science based literary texts in order to demonstrate comprehension and critical thinking skills.

	<p>Footprints without feet- Chapter- 1, A triumph of surgery Speaking Activity 1 Grammar-Subject Verb Agreement First Flight-chapter 3 Two stories about flying SDG4: Quality Ed Poem- The tiger in the zoo SDG15: Life on land</p>		<p>know more about Nelson Mandela</p> <ul style="list-style-type: none"> ➤ Understand the ironical use in the text – The triumph of surgery ➤ Identify and correct errors in subject-verb agreement ➤ Develop the understanding of subject-verb agreement ➤ Respond to the role of parents in preparing their children to face the challenges of the world ➤ Analyse the message of self-reliance and strong self-belief ➤ Justify that courage or grit is necessary to overcome any obstacles ➤ Empathise with the condition of a caged animal ➤ Develop a suitable opinion about the cruelty of humans towards animals 	<ul style="list-style-type: none"> • Things to remember, Application based questions, exemplars, • Application based questions, exemplars • Gist and details of the chapter. • The first flight- chapter highlights. • The tiger in the zoo, about the poet and poem, comparison, literary devices <p>SKILLS : Research skills and critical thinking ACTIVITY -III EXPERIENTIAL LEARNING:ROLE PLAY Radio Show- (Words & Expressions) Interview of Nelson Mandela. Speaking Activity- SUBJECT ENRICHMENT Book review:- video to be uploaded on e-portfolio</p>	<ul style="list-style-type: none"> ➤ 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. ➤ Writes various pieces of writing in order to demonstrate creativity, critical thinking, correspondence and research skills.
JULY	<p>Grammar- Gap filling Footprints without feet- The thief's story First Flight – The diary of Anne Frank SDG16: Peace, Justice & Strong institutions The ball poem Footprints without feet</p> <p>The Midnight Visitor, A question of Trust Unseen Passages</p>	28	<ul style="list-style-type: none"> ➤ Understand how a person can motivate others to change his or her nature ➤ Evaluate the importance of education in one's life ➤ Develop an understanding about the horrors of Nazi rule witnessed by a Jewish girl ➤ Develop familiarity with social issues ➤ Infer the message embedded – To move forward in life and cope up with loss ➤ Reason a young child's feelings at the loss of a valuable possession ➤ Enable the students to discriminate the good from the evil ➤ Enable the students to think quickly and act wisely and calmly in a situation of danger or surprise ➤ Derive the message of the story that it is important to gauge the person before trusting him or her 	<ul style="list-style-type: none"> • Gap filling- Mixed bag (Tips to solve) • The black airplane, Thinking about the text • Footprints without feet- The thief's story: story line, question framing • First Flight – The diary of Anne Frank: Reading Comprehension: Foreword from The Diary of Lena Mukhina (Words & Expressions);Timeline, Short and Long answer Questions • Ball Poem: About the Poet, literary devices • Discursive paragraph – concept, analysis, decoding, inferring • Chapter highlights of The Midnight Visitor • A Question of trust - story line, Thinking about the text, Short and Long Answer questions <p>SKILLS – critical thinking skills ACTIVITY IV (SUBJECT ENRICHMENT) Listening activity based on audio script ART INTEGRATED PROJECT: Poster Making Group Activity: Project on “The Bengal Famine of 1943” (Multidisciplinary Project)</p>	<ul style="list-style-type: none"> ➤ Is able to use literary and poetic devices effectively. ➤ 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>AUGUST</p>	<p>Letter writing (Complaint) Glimpses of India - Part 1 First Flight Chapter- Glimpses of India Part2 & 3 SDG11: Sustainable cities and communities Speaking Activity Poem- Amanda</p>	<p>28</p>	<ul style="list-style-type: none"> ➤ Develop understanding about the apparel and appearance of bread sellers ➤ Understand the format, language and criteria of writing a complaint letter ➤ Comprehend specific details about the people of Coorg ➤ Appreciate the legends connected with tea and its journey ➤ Evaluate Amanda's situation and suggest solutions ➤ Analyse the situation that leads Amanda to escape into the fantasy world 	<ul style="list-style-type: none"> • Complaint letter - Format, language, criteria, sample question • First Flight – Glimpses of India-Part 1 • A baker from Goa, Reading Comprehension from Words & Expressions • Childhood experience of the author and discussion on traditional Goa. • Short & long questions • Coorg, Tea from Assam -Chapter Reading, highlights & question answers • Exercises from (Words & Expressions), Discussion of short answer questions and H.O.T.S • Poem- Amanda Literary devices, Expressions • Reference to the context. • Revision for exams <p>SKILLS – Writing Skills (Creative and critical thinking) Creative thinking, peer studies and research work skills, Problem solving</p> <p>ART INTEGRATED PROJECT Glimpses of India -Prepare an Itinerary of your excursion trip</p> <p>COMPREHENSION - Reading passage from the Words and Expressions.</p> <p>EXPERIENTIAL LEARNING – Group discussion on the topic “How bakers bake bread now and how the process has changed over the time”</p> <p>SUBJECT ENRICHMENT – Speaking Activity – (from “Words & Expressions”)</p>	<ul style="list-style-type: none"> ➤ analyse the situation that leads Amanda to escape into the fantasy world ➤ analyse the importance of the role of bakers ➤ comprehend specific details about the people of Coorg ➤ Makes use of collocations and idioms in speech and writing in order to demonstrate understanding of how to use vocabulary words and idioms in a sentence correctly. ➤ appreciate the legends connected with tea and its journey
<p>SEPTEMBER</p>	<p>CH- 6 Mijbil the Otter CH-5 Footprint without Feet(Supplementary reader)</p>		<ul style="list-style-type: none"> ➤ Read to appreciate the use of expressions in the text ➤ Comprehend the progression in the story and empathize with animals ➤ Learn to take care about animals and be responsible towards other life forms. ➤ Describe the journey from Basara in Iraq to London and then the encounter of the otter with the other humans including children and 	<ul style="list-style-type: none"> • Chapter highlights of the chapter Mijbil the otter • Flow chart of the journey from Basara to London • Reading of the chapter footprints without feet using stress and intonation • Short question answers and HOTS • Reference to the context from Mijbil the otter • Introduction of analytical paragraph through 	<ul style="list-style-type: none"> ➤ describe the journey from bsara in iraq to london and then the encounter of the otter with the other humans including children and elders. ➤ Writes various pieces of writing

	Analytical Paragraph	14	<p>elders.</p> <p>➤ Compare, interpret and analyse factual passages</p>	<p>pie chart, bar graphs, etc</p> <ul style="list-style-type: none"> • Case based study – Analytical writing <p>ACTIVITY- 1</p> <p><u>Experiential Learning:</u></p> <p>Role play of the story footprints without feet using props , creating dialogues etc .</p> <p>Skills: Creative thinking</p> <p>ACTIVITY – II (Chapter -6 UNIT-8) Words and expressions II</p> <p>Listening Activity (Subject enrichment)</p>	<p>in order to demonstrate creativity, critical thinking, correspondence and research skills.</p>
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CLASS: X (TERM : II) SUBJECT: ENGLISH lang. & literature			BOOKS: NCERT BOOKS - First Flight, Footprint without Feet, Words and Expressions II		
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES
SEPTEMBER	POEM – The Trees SDG15 Life on land Chapter -6 (Supplementary Reader) The Making of a scientist GRAMMAR Reported speech Statements and Interrogative sentences	14	<ul style="list-style-type: none"> • Discussion on the topic “Can there be a forest without trees , Compare and contrast freedom of trees with womanhood” • Critical appreciation of the poem demonstrating awareness and empathy for key issues • Literally devices used in the poem • Reference to the context and HOTS • Gap filling • Time line of Richard Ebright’s Achievements • Discuss short questions and long questions SKILLS : Research skills and critical thinking ACTIVITY -III Prepare PPT on (THE NATIONAL AGROFORESTRY OF INDIA)	<ul style="list-style-type: none"> ➤ Developed unawareness about the social issues and gender discrimination ➤ Reiterate the importance of trees for life to survive ➤ Analyse the symbolism that establishes a relation between the trees and womanhood ➤ Classify statements and interrogative sentences ➤ Understand one’s strength and weaknesses 	<ul style="list-style-type: none"> ➤ Identifies and appreciates significant literary elements such as figurative language ➤ analyse the symbolism that establishes a relation between the trees and womanhood
OCTOBER	Chapter -7 (First Flight – Madam rides the bus) POEM – Fog, How to tell wild animals Letter Writing	20	<ul style="list-style-type: none"> • Gist and details of the chapter. • Discuss about Valli and her intent desire to ride the bus • A dairy entry on unforgettable moments of Valli during the rides • Valli’s retrospection about her planning for the bus trip • Critical Appreciation of the poem and literary devices • Discuss on the topic Nature is more powerful than anything that humans can produce (HOTS) 	<ul style="list-style-type: none"> ➤ Recognise the importance of being sensitive towards an individual’s feelings ➤ Evaluate the lesson and Valli’s experiences through travelling ➤ Identify emotions with reference to the event ➤ Engage in creatively expressing the understanding of the poem ➤ Classify the different types of poems (Sonnet) 	<ul style="list-style-type: none"> ➤ Speaks with coherence and cohesion while participating in interactive tasks in order to demonstrate fluency in the language. ➤ critically analyse the theme, moral value imparted through the poem ➤ recognize the importance of being sensitive towards an individual’s feelings

			<ul style="list-style-type: none"> • Introduction of the format, content and key vocabulary <p>SKILLS – Decision making and critical thinking skills</p> <p>ACTIVITY IV (SUBJECT ENRICHMENT)</p> <p>SPEAKING ACTIVITY – Dialogue writing and enacting(Words and expressions II)</p> <p>PROJECT WORK – Collage Making on Ticket collection.</p>	<ul style="list-style-type: none"> ➤ Classify the different types of business letters (Enquiry, order – placement, etc) ➤ 	
NOVEMBER	<p>Chapter -8 The sermon at Banaras (First Flight)</p> <p>Intext Grammar</p> <p>Paragraph Writing</p> <p>The Necklace (Supplementary Reader)</p> <p>The tale of Custard the Dragon. (Poem)</p>	28	<ul style="list-style-type: none"> • Life of Gautam Buddha as a prince • Discover world sufferings and take the path for enlightenment • Gap Filling using conjunctions and uses in speech and writing in order to demonstrate knowledge • Discuss key plot points in the necklace • Character analysis of the protagonist • Discuss the satirical importance of the chapter “Everyone need to be content in life with whatever little he / she has (HOTS) • Comprehend the story of a little girl and her pets • Vocabulary and comprehension check , literary devices <p>SKILLS – Writing Skills (Creative and critical thinking)</p> <p>COMPREHENSION CHECK- Reading passage from the Words and Expressions.</p> <p>SUBJECT ENRICHMENT – Listening Activity (British Council)</p>	<ul style="list-style-type: none"> ➤ Inspect the plot , the style of writing and genre ➤ Discuss life and death as the ultimate truth ➤ Inspect the loss of a loved one and learn to cope -up ➤ Contrast the uses of conjunction ➤ Express Reflective paragraphs using various mechanics of writing ➤ Derive the meaning of unfamiliar terms in a text through the use of context clues ➤ Identify the use of situational irony in a short story ➤ Classify the different types of poems (Ballads) ➤ Respond to the poem in the context of a real life situation. ➤ Interpret the various virtues being brave help others , develop compassion etc 	<ul style="list-style-type: none"> ➤ interpret the various virtues of -being brave, help others, not to boast, develop compassion, infer that good deeds are rewarded. ➤ Identifies and appreciates significant literary elements such as figurative language – metaphor, imagery, symbol, simile, intention / point of view, rhyme scheme, etc. ➤ inspect the loss of a loved one, though natural , causes sorrow.

DECEMBER	<p>Chapter -8 Bholi (Supplementary Reader) SDG-5</p> <p>Chapter – 9 The Proposal (Play from First Flight)</p> <p>Intext grammar – Reported Speech</p>	28	<ul style="list-style-type: none"> • Mind mapping of the chapter Bholi • Theme of the chapter and character sketch • Discussion of short answer questions and H.O.T.S • Discussion about the plot and characters of the play • Discuss the marriage proposal as a farce. • Draw a comparison between Indian and Russian weddings • Script writing and narration <p>SKILLS : Creative thinking, Global citizenship</p> <p>ART INTEGRATED PROJECT on “Cultural differences between weddings in Goa and Jharkhand”</p>	<ul style="list-style-type: none"> ➤ Indicate the need of love, encouragement and education for the disabled to fight against the odds. ➤ Demonstrate ability to discuss elements of drama as a form of literature ➤ Identify the different types of conflicts within the story ➤ Engage in discussions about managing conflicts, anger management, the usage of language, trust, faith and behaviour ➤ Recall the uses of reported speech ➤ Appreciate the humour in the play 	<ul style="list-style-type: none"> ➤ identify the different types of conflict within the story. ➤ understand the characterisation and other element of 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
JANUARY	<p>Chapter – 9 The book that saved the Earth (Supplementary Reader)</p> <p>Poem – For Anne Gregory (First Flight)</p>	7	<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” • Comprehend the concern of the poet • Introduce the concept of divine and platonic love <p>Revision</p>	<ul style="list-style-type: none"> ➤ Help the students to think futuristically ➤ Analyse the poem in real life situations and infer the essence 	<ul style="list-style-type: none"> ➤ analyse the poem in real life situation and infer the essence ➤ Identifies and appreciates significant literary elements such as figurative language – metaphor, imagery, symbol, simile, intention / point of view, rhyme scheme, etc.
FEBRUARY	Revision		Revision	Revision	

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MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT/PT/T1
APRIL	क्षितिज:- पद-सूरदास, नेताजी का चश्मा कृतिका:- माता का अँचल व्याकरण:- वाक्यभेद-रचना के आधार पर, अनुच्छेदलेखन	20	<ul style="list-style-type: none"> ● Week 1क्षितिज:-पद-सूरदास ● कृतिका:- माता का अँचल ● व्याकरण:- वाक्यभेद-रचना के आधार पर ● Week 2 ● क्षितिज:- पद-सूरदास ● कृतिका:- माता का अँचल ● व्याकरण:- वाक्यभेद-वाक्यों की पहचान ● Week 3क्षितिज:- नेताजी का चश्मा ● कृतिका:- माता का अँचल ● व्याकरण:- वाक्यभेद-वाक्य परिवर्तन ● Week 4 क्षितिज:- नेताजी का चश्मा ● कृतिका:- माता का अँचल ● व्याकरण:- अनुच्छेदलेखन <p>ACTIVITY- 1 <u>Experiential Learning:</u> <u>Skills-</u> अपनेबचपनकेअनुभवोंकोकक्षामेंसुनाएंगे</p>	<ul style="list-style-type: none"> □ सूर साहित्य के बारे में जानेंगे □ देशभक्ति की भावना जगेगी □ देश के शहीदों के प्रति सम्मान □ बचपन की क्रियाशीलता से परिचय □ वात्सल्य भाव का ज्ञान □ वाक्य भेद एवं वाक्य की बनावट से परिचय □ 	सूरदास के पद को व्यक्त कर सकेंगे देशभक्ति की सही परिभाषा समझ सकेंगे पिछली सदी के ग्रामीण भारत को समझेंगे वाक्य की बनावट को पहचान सकेंगे	

			<p>ACTIVITY -2 देशभक्ति की भावना को व्यक्त करते हुए विचार विमर्श</p> <p>Skills:</p>			
MAY	<p>क्षितिज:- राम लक्ष्मण परशुराम सम्वाद, कृतिका:- माता का अँचल व्याकरण:- वाच्य,</p>	12	<ul style="list-style-type: none"> ● क्षितिज:- राम लक्ष्मण परशुराम संवाद ● कृतिका:- माता का अँचल ● व्याकरण:- वाच्य की पहचान ● 	<ul style="list-style-type: none"> □ जीवन मूल्यों का विकास □ राम के चरित्र से मर्यादा एवं विनम्रता की सीख □ बचपन के आनंदका अनुभव □ वाच्य के रूपों का परिचय 	<p>जीवन मूल्यों को समृद्ध कर सकेंगे</p> <p>राम के चरित्र की विराटता को जीवन में उतार सकेंगे</p> <p>बचपन के आनंद का अनुभव कर सकेंगे</p>	
JUNE	<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 <p>ACTIVITY1</p> <p><u>Subject Enrichment: बचपन शीर्षक से कविता रचना</u></p> <p>ACTIVITY --2</p> <p><u>Art Integrated:</u></p> <p>Skills:राम चरित मानस की चौपाई को सुर- लय के साथ</p>	<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 □ रचनात्मक लेखन का विकास 	<p>वीरता, साहस, निडरता को अपने जीवन कौशल में उतार सकेंगे</p> <p>खेल-खेल में जीवन कौशल को जीवन में शामिल कर सकेंगे</p> <p>रचनात्मक लेखन की कला का प्रदर्शन करेंगे</p>	

			प्रस्तुति Creative Thinking ACTIVITY-3 <u>Subject Enrichment:</u>			
JULY	क्षितिज:- बाल गोबिन भगत, लखनवी अंदाज़, उत्साह, अट नहीं रही है कृतिका:- साना-साना हाथ जोड़ि व्याकरण:- पदपरिचय, अलंकार, विज्ञापनलेखन, ई-मेल लेखन SDG:	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, विज्ञापनलेखन ● क्षितिज:- लखनवी अंदाज़ ● ● व्याकरण:- अलंकार ● अलंकार की पहचान, विज्ञापनलेखन, ई-मेल लेखन Group discussion- ACTIVITY-1बालगोबिन भगत	<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 का ज्ञान □ बनावटी जीवन की कमियों को जानेंगे 	बालगोबिनभगतजैसेसाधुचरित्रसेप्रेरितहोंगे सामाजिकबदलावमेंक्रांतिकेमहत्वकोजानेंगे बनावटीजीवनजीनेसेबचेंगे शब्दोंकेव्याकरणिकरूपसेपरिचितहोंगे	UT - I नेताजी का चश्मा, राम लक्ष्मण परशुराम सम्वाद, रचना के आधार पर वाक्यभेद, वाच्य, पत्र

			के दैनिक व्यवहार पर टिप्पणी लेखन			
AUGUST	<p>क्षितिज:- आत्मकथ्य, दंतुरित मुस्कान, फसल व्याकरण :- अलंकार सन्देशलेखन, औपचारिक पत्र, निबंध, स्ववृत्त लेखन</p>	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, स्ववृत्त लेखन <p>ACTIVITY - 1 <u>Subject Enrichment: बच्चे की हंसी को व्यक्त करते हुए चित्र बनाएंगे</u></p>	<ul style="list-style-type: none"> □ जयशंकर प्रसाद के मानवीय मूल्यों एवं गुणों के महत्व को जानेंगे □ वात्सल्य प्रेम का प्रदर्शन □ ग्रामीण संस्कृति से लगाव □ बच्चों के प्रति वात्सल्य को जानेंगे □ रचनात्मक लेखन में रुचि 	<p>जयशंकर प्रसाद के जीवन के साथ-साथ मित्रों के प्रति नैतिक मूल्यों को समझ सकते हैं बच्चों के प्रति वात्सल्य का अनुभव कर सकेंगे रचनात्मक लेखन में रुचि बढ़ेगी</p>	<p>PT- II बालगोबिन भगत, उत्साह, अट नहीं रही है माता का अँचल</p> <p>पदपरिचय, अलंकार, विज्ञापन लेखन, सन्देश लेखन</p>

SEPTEMBER	पठित पाठों की पुनरावृत्ति		पुनरावृत्ति	विषयनिष्ठज्ञान	विषयनिष्ठज्ञानसेपरिपूर्णहोंगे	TERM I EXAM पद-सुरदास, नेताजी का चश्मा, राम लक्ष्मण परशुराम सम्वाद, बालगोबिन भगत, बाल गोबिन भगत, लखनवी अंदाज़, उत्साह, अट नहीं रही है आत्मकथ्य, दंतुरित मुस्कान, फसल माता का अँचल, साना-साना हाथ जोड़ि रचना के आधार पर वाक्यभेद, वाच्य, पदपरिचय, अलंकार, अनुच्छेदलेखन, पत्रलेखन, सन्देशलेखन,विज्ञापनलेखन ई-मेल लेखन, स्ववृत्त लेखन
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OCTOBER	क्षितिज:- एककहानीयह भी, व्याकरण:- वाक्यभेद अनुच्छेदलेखन	10	एककहानीयहभी वाक्यभेद- परिवर्तन अनुच्छेदलेखन ACTIVITY 1 <u>eriential</u> <u>ning:आत्मकथाकेआधारपरमनकी</u> <u>ओंकोप्रकटकरेंगे।</u> Skills: वाचनकौशल ACTIVITY -2 Skills:	<input type="checkbox"/> अपनेजीवनकामूल्यांकनकरसकेंगे <input type="checkbox"/> व्यक्तित्वविकासकेप्रतिजागरूकहोंगे <input type="checkbox"/> वाक्यों की बनावट को जानेंगे <input type="checkbox"/> रचनात्मक लेखन कर सकेंगे	अपनेजीवनकामूल्यांकनकरतेहुएस्वानुभूति कोव्यक्तकरसकतेहैं वाक्यकीबनावटएवंरूपान्तरणकरसकेंगे रचनात्मकलेखनमेंअभिरुचिहोगी	
NOVEMBER	क्षितिज:- संगतकार, नौबतखानेमेंइ बादत व्याकरण:- वाच्य स्ववृत्तलेखन, कृतिका:- साना- सानाहाथजोड़ि	18	<ul style="list-style-type: none"> ● संगतकार ● नौबतखानेमेंइबादत ● वाच्यपरिवर्तन/ पहचान ● स्ववृत्तलेखनअभ्यास ● साना-सानाहाथजोड़ि 	<input type="checkbox"/> जीवन में सहयोगियों के महत्व की जानकारी <input type="checkbox"/> बिस्मिल्लाह खान के व्यक्तित्व से परिचय <input type="checkbox"/> प्रकृति की सुंदता से लगाव <input type="checkbox"/> हिंदी के वाक्यों में वाच्य की अवधारणा का ज्ञान <input type="checkbox"/> आत्म परिचय लिखने में समर्थ हो सकेंगे	जीवनकीसफलतामेंसहयोगियोंकेमहत्वको जानसकेंगे बिस्मिल्लाहखानकीगंगाजमुनीतहजीबकोस मझेंगे प्रकृतिकीसुरक्षाकेमहत्वकोसमझेंगे	TERM-II एक कहानी यह भी, दंतुरित मुस्कान, फसल संगतकार, नौबतखाने में इबादत, संस्कृति साना-साना हाथ जोड़ि , मैं क्यों लिखता हूँ रचना के आधार पर वाक्यभेद, वाच्य, पदपरिचय, अलंकार, अनुच्छेदलेखन, पत्रलेखन,

						सन्देशलेखन, विज्ञापनलेखन ई-मेल लेखन, स्ववृत्त लेखन
DECEMBER	क्षितिज:- संस्कृति व्याकरण:- पदपरिचय मैं क्यों लिखता हूँ	20	<ul style="list-style-type: none"> □ यहदंतुरितमुसकान □ फसल □ नौबतखानेमेंइबादत □ पदपरिचय □ साना-सानाहाथजोड़ि <p>ACTIVITY1 Subject Enrichment:किसीपर्यटनस्थलका आंखोंदेखाहालअनुच्छेदमेंप्रस्तुतकरेंगे</p> <p>ACTIVITY --2 Art Integrated:बिस्मिल्लाहखानकीसंगीतसाधनाकेसम्बंधमेंएकपरियोजनातैयारकरेंगे।</p> <p>Skills:रचनात्मकलेखनकाकौशल</p> <p>ACTIVITY-3 Subject Enrichment:</p>	<ul style="list-style-type: none"> □ समाज के लिए आविष्कार या सिद्धान्तों के जनकों के अवदान को समझेंगे □ वाक्य में प्रयुक्त शब्दों का सम्पूर्ण व्याकरणिक परिचय का ज्ञान □ प्रकृति की विराटता को जानेंगे 		
JANUARY	पठित पाठों की पुनरावृत्ति					PRE-BORD सीबीएसई द्वारा निर्धारित सभी पाठ

FEBRUARY	पठित पाठों की पुनरावृत्ति		पुनरावृत्ति	□		

SURENDRANATH CENTENARY SCHOOL, RANCHI
ANNUAL PLAN (2023-2024) -

CLASS: X SUBJECT: संस्कृत			BOOKS : NCERT SANSKRIT TEXTBOOK FOR CLASS X शेमुषी भाग 2 , व्याकरण विधि ,अभ्यासवान् भव -2			
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT/PT/T1
APRIL	शुचिपर्यावरणम् (काव्य) SDG : 17.लक्ष्य प्राप्ति में सामूहिक साझेदारी	18	शुचिपर्यावरणम् (काव्य)सस्वरपाठ, अर्थ, भाव । शेमुषी भाग -शुचिपर्यावरणम् (काव्य) , प्रश्नोत्तर। व्याकरण - व्याकरण संधि व्याकरण - व्याकरण,समास, प्रत्यय ACTIVITY- 1 कलासमेकितपरियोजना (सस्वरपाठ) Skill : भाषा कौशल का विकास , रचनात्मक कौशल का विकास ।	प्रकृति प्रेम । विभक्ति , वचन , लिंग , पुरुष एवं कर्ता के साथ क्रिया का सम्बन्ध । संधि का ज्ञान। समास तथा प्रत्यय का ज्ञान । वाच्यपरिवर्तनम् ।	पर्यावरण के महत्व का ज्ञान। व्याकरण बिन्दुओं पर कौशल का विकास। समास तथा प्रत्यय के बारिकियों की समझ। वाक्य रचना की समझ।	
May	बुद्धिर्बलवतीसदाः	12	शेमुषी भाग 1- बुद्धिर्बलवतीसदा अर्थ ,भाव, प्रश्ननिर्माण और प्रश्नोत्तर। उपपदविभक्ति , वाक्य प्रयोग। ACTIVITY - कथाक्रम Skills:वाक्य रचना कौशल विकास ।	बुद्धि का बल । समासप्रकरण संधिप्रकरण प्रत्यय।	बुद्धिमत्ता का महत्व तथा प्रयोग की समझ की कौशल विकास। पाठ में प्रयुक्त व्याकरण बिन्दुओं की बारिकियों की समझ।	
JUNE	व्याकरण	12	चित्रवर्णनम् अनुवाद ACTIVITY-परियोजनाकार्य , अनुभवजन्यशिक्षण Skills : आलोचनात्मक चिंतन कौशल का विकास।भाषा कौशल का विकास।	अनुवाद ,रूप ,उपपद विभक्ति। अनुच्छेद लेखनम्	चित्र के आधार पर वाक्य रचना की कौशल विकास। कारक विभक्ति और उपपदविभक्ति की कौशल का विकास।	U . T - शुचिपर्यावरणम् व्याकरण
JULY	जननीतुल्यवत्ता	24	शेमुषी भाग 2 - जननीतुल्यवत्ता अर्थ ,भाव, प्रश्ननिर्माण और प्रश्नोत्तर। जननीतुल्यवत्ता पाठ का व्याकरण अंश की पहचान। उपपदविभक्ति वाक्य प्रयोग अनुवाद चित्रवर्णनम् व्याकरण - उपपदविभक्ति वाक्य प्रयोग अनुवाद चित्रवर्णनम्	नैतिक मूल्य व्याकरण ज्ञान उपपदविभक्ति ज्ञान रचनात्मक ज्ञान ।	मातृत्व प्रेम के महत्व की समझ का विकास। नीति नियमों की जानकारी तथा महत्व का ज्ञान रचनात्मक कौशल का	

			ACTIVITY व्याकरण उपपदविभक्तिचार्ट प्रायोगिकशिक्षण Skill :वाक्य रचना कौशल विकास। नैतिक मूल्यों का विकास।		विकास।	
AUGUST	शिशु लालनम्	24	शेमुषी भाग 2 - शिशु लालनम् अर्थ, भाव और शब्दार्थ। अपठित गद्यांश: शिशु लालनम् प्रश्नोत्तर पपदविभक्ति वाक्य प्रयोग, अनुवाद, चित्रवर्णनम्, पत्र लेखनम् ACTIVITY - प्रश्न निर्माण Skill :वाक्य रचना कौशल विकास। नैतिक मूल्यों का विकास।	नैतिक मूल्य व्याकरण ज्ञान उपपदविभक्ति ज्ञान रचनात्मक ज्ञान।	वात्सल्य प्रेम की समझ का विकास। पितृ स्नेह एवं बड़ों के प्रति सम्मान की भावना का विकास।	P.T बुद्धिर्बलव तीसदा जननीतुल्य वत्सा व्याकरण
SEPTEMBER	सुभाषितानि SDG : 4.गुणवत्तापूर्ण शिक्षण	12	शेमुषी भाग 2-"सुभाषितानि" श्लोकों के अर्थ, भाव और श्लोकों पर आधारित प्रश्नोत्तराणि। भ्रान्तो बालः पाठ का कथाक्रम। व्याकरण - व्याकरण संधि व्याकरण - व्याकरण, अव्यय, प्रत्यय ACTIVITY- 1 "सुभाषितानि" के श्लोकों पर आधारित प्रश्नोत्तराणि। Skill : भाषा कौशल का विकास। रचनात्मक कौशल का विकास।	जीवन पद्धति से सम्बन्धित अनमोल वचनों का ज्ञान। विभक्ति, वचन, लिंग, पुरुष एवं कर्ता के साथ क्रिया का सम्बन्ध। संधि का ज्ञान। समास तथा प्रत्यय का ज्ञान।	अनमोल वचनों के महत्व की समझ। नीति नियमों को जीवन अपनाने की प्रेरणा।	Term 1 exam शुचिपर्यावरणम्बुद्धिर्बलवतीसदा जननीतुल्य वत्सा सम्पूर्ण व्याकरण
OCTOBER	सौहार्द प्रकृतेः शोभा SDG: 17 लक्ष्य प्राप्ति में सामूहिक साझेदारी।	12	शेमुषी भाग-2 सौहार्द प्रकृतेः शोभा अर्थ, भाव, प्रश्ननिर्माण और प्रश्नोत्तर। उपपदविभक्ति, वाक्य प्रयोग। चित्रवर्णनम्, अनुवाद ACTIVITY - कथाक्रम Skills: रचनात्मक कौशल विकास।	प्रकृति के माध्यम से स्वार्थरहित विकास का ज्ञान। विभक्ति, वचन, पुरुष का ज्ञान। व्याकरणात्मक ज्ञान। प्रयोगात्मक ज्ञान।	शुद्धपर्यावरण के महत्व का ज्ञान। प्रयोगात्मक कौशल विकास। व्याकरणात्मक कौशल विकास।	

NOVEMBER	विचित्र: साक्षी व्याकरण SDG: 4. 16 शान्ति और न्याय के लिए संस्थान सूक्तय: SDG: गुणवत्तापूर्ण शिक्षण	24	शेमुषी भाग 2-"विचित्र: साक्षी" सस्वरपाठ कृत्वा शुद्ध वाचनम्।"विचित्र: साक्षी" अर्थ, भाव, शब्दार्थ, प्रश्नोत्तराणि । पाठ से व्याकरण -संधि, समास, प्रत्यय एवं अव्ययों की पहचान। नाटक कौशल का अभ्यास। नाटक का मंचन । ACTIVITY-" नाटक" कलासमेकित शिक्षण। Skills : आलोचनात्मक चिंतन कौशल का विकास। भाषा कौशल का विकास।	नैतिक शिक्षा , अन्याय का प्रतिरोध और न्याय की समझ । व्याकरणात्मक ज्ञान। रचनात्मक ज्ञान । प्रयोगात्मक ज्ञान। नैतिकता का ज्ञान। व्याकरण ज्ञान उपपदविभक्ति ज्ञान रचनात्मक ज्ञान ।	न्याय और अन्याय में भेद का ज्ञान। व्याकरणात्मक कौशल विकास।	UT2 सुभाषितानि व्याकरण
DECEMBER	अन्योक्तयः पत्रलेखनम् अनुच्छेद लेखनम्	24	शेमुषी भाग1 - वाङ्मनः प्रमाणस्वरूपम्- अर्थ, भाव और शब्दार्थ । अपठित गद्यांशः पत्रलेखनम् वाक्य प्रयोग, अनुवाद ,चित्रवर्णनम् ACTIVITY - पत्रलेखनम् Skill : रचनात्मक कौशल विकास । नैतिक मूल्यों का विकास।	नैतिक मूल्य व्याकरण ज्ञान उपपदविभक्ति ज्ञान रचनात्मक ज्ञान ।	नैतिक मूल्यों का ज्ञान। रचनात्मक कौशल विकास।	प्रीबोर्ड-1 सम्पूर्ण व्याकरण सम्पूर्ण पाठ्यक्रम
JANUARY	संपूर्ण पाठ्यक्रम	24	प्रश्न पत्र अभ्यास पुनरावृत्ति	संपूर्ण पाठों का महत्वपूर्ण अंशों की आवृत्ति।	अभ्यास प्रश्न-पत्र का अभ्यास।	प्रीबोर्ड-2 , सम्पूर्ण पाठ्यक्रम
FEBRUARY					सम्पूर्ण पाठ्यक्रम की आवृत्ति।	Term 2 exam सम्पूर्ण पाठ्यक्रम

SURENDRANATH CENTENARY SCHOOL, RANCHI
ANNUAL PLAN (2023-2024) - TERM I

CLASS: X SUBJECT: MATHEMATICS			BOOKS: 1. MATHEMATICS FOR CLASS X, NCERT 2. MATHEMATICS FOR CLASS X EXEMPLER. 3. MATHEMATICS CLASS X, R S AGARWAL.			
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT/PT/T 1
APRIL	CH – 8 Introduction to Trigonometry	25 Periods	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 various mathematical concepts. 	CH – 8 Introduction to Trigonometry : <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. 	CH- 8: Introduction to Trigonometry: 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.	

May	CH – 1 Real Numbers	14 Periods	<p>CH – 1 Real Numbers:</p> <p>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.</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.</p> <p>Generalises 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 contexts.</p>	
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JUNE	CH – 2 Polynomials CH – 4 Quadratic Equations	16 periods	<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 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</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</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</p> <p>Uses algebraic and graphical method of finding zeroes of a polynomial in order to establish a relationship between them.</p> <p>CH – 4 Quadratic Equations</p> <p>Demonstrates knowledge of application of various strategies in order to find roots and determine the nature of roots of a given</p>
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JULY	CH – 3 Pair of Linear Equations in two Variables. CH- 6 Triangles	14 +12 =26 Periods	<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> <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> <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 and 	<p>CH – 3 Pair of Linear Equations in two Variables. Uses graphical and other methods in order to finds solutions of pairs of linear equations in two variables.</p> <p>CH- 6 Triangles Uses reasoning in order to differentiate between congruent and similar figures. Uses different geometric criteria established earlier such as basic proportionality theorem etc. In order to establish properties for similarity of two triangles.</p>	Date : 03.07.23 CH : 8, 1 and 2.
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AUGUST	CH – 7 Coordinate Geometry. CH – 14 Statistics CH – 15 Probability	10 +12 + 6 = 28 periods	<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.</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</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</p>	<p>CH – 7 Coordinate Geometry.</p> <p>Derives 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> <p>CH – 14 Statistics</p> <p>Calculates mean, median and mode in order to apply them to real life contexts.</p> <p>CH – 15 Probability</p> <p>Calculates in order to determine the probability of a given event.</p>	
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SEPTEMBER	CH – 9 Some Applications of Trigonometry	10 Periods	<ul style="list-style-type: none"> Revision of CH – 1, CH -2, CH – 3, CH – 4, CH – 6 CH - 7 CH – 8 CH -14 and CH - 15 <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>Activity 2</p> <p><u>Experiential Learning :</u></p> <p>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> <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>Determines 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.</p>	<p>PT : Date : 4.09.23 CH – 3, 4, 6 and 7 TERM I EXAM – 1, 2, 3, 4, 6, 7, 8, 14 and 15</p>
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OCTOBER	CH – 5 Arithmetic Progressions CH – 10 Circles	10 + 10 = 20 Periods	<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></p> <p>Lab Activity 6 – Identify arithmetic progression in some given list of series.</p> <p>Lab Activity 7 – To find the sum of the first n natural numbers.</p> <p>Lab Activity 8 – To verify the length of tangents from an external points are equal in length.</p> <p>Skills: Curiosity, Critical Thinking.</p>	<p>CH – 5 Arithmetic Progressions</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</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</p> <p>Develops strategies in order to apply the concept of AP to daily life situations.</p> <p>CH – 10 Circles</p> <p>Students will be able to apply theorems related to tangent of a circle in order to determine number of tangents from the given points and determine the length of the tangent.</p>	
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NOVEMBER	CH – 12 Areas Related to Circles CH – 13 Surface Areas and Volumes	12 + 14 = 26 Periods	<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</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</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 The Students will be able apply the concepts/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> <p>CH – 13 Surface Areas and Volumes. Visualizes 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.</p>
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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, RANCHI ANNUAL PLAN
(2023-2024)**

CLASS: X SUBJECT: PHYSICS			BOOKS: NCERT SCIENCE TEXT BOOK FOR CLASS X LABMANUAL(BluePrint)			
MONT H	CHAPTER	No. of Peri ods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT/PT/T1
APRIL	CH- 10 Light- Reflection and Refraction.	12	<ul style="list-style-type: none"> ➤ Reflection of light. ➤ Spherical mirrors. ➤ Image formation by spherical mirrors. ➤ Representation of images formed by spherical mirrors using ray diagrams. ➤ Uses of spherical mirrors. ➤ Sign convention for reflection by spherical mirrors. ➤ Mirror formula and magnification. ➤ Refraction of light. ➤ Refraction through a rectangular glass slab. <p>ACTIVITY-1 Subject Enrichment:-Determination of focal length of a concave mirror by focusing a distant object.</p>	<ul style="list-style-type: none"> ➤ 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. ➤ 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>.Differentiate between real and virtual images. Recognize and use key words relating to mirrors. Use ray tracing to demonstrate reflection.</p> <p>The student should be able to 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>	
M A Y	CH- 10 Light- Reflection and Refraction.Cont d.	6	<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. 	<ul style="list-style-type: none"> ➤ Compare speed of light in one medium with another in order to calculate refractive index.Represent the path of incident & reflected light trays from a concave lens ,in order to decipher the position and nature of image formed. ➤ Illustrate the path of incident & reflected light 		

				Rays from a convex lens, in order to decipher the position and nature of image formed.		
JUNE	CH- 10 Light-Reflection and Refraction. Contd.	12	<ul style="list-style-type: none"> ➤ Lens formula and magnification. ➤ Related numerical problems. <p>Power of a lens and related numerical.</p> <p>ACTIVITY-1</p> <p><u>Subject</u></p> <p><u>Enrichment.i)</u> 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-2</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>	<ul style="list-style-type: none"> ➤ Construct the lens formula for a lens relating v, u, f; in order to find an unknown variable given the other two. ➤ 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. 		
JULY	CH- 11 Human eye and colourful world. SDG:- Good Health and well-being	12	<ul style="list-style-type: none"> ➤ The human eye. ➤ Power of Accommodation. ➤ Defects of vision and their correction ➤ Refraction of light through a prism. ➤ Dispersion of white light by a glass prism. ➤ Formation of Rainbow. 	<ul style="list-style-type: none"> ➤ Illustrate the parts and function of human eye, in order to understand how humans see the objects around them. ➤ Describe how focal length of eye changes, in order to understand how humans see close and far objects. ➤ Identify the defects of vision in 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. 	<p>Eye helps us in visualizing objects and also helps us in light perception, color, and depth perception.</p> <p>The human eye consists of the following parts: Sclera, cornea, iris, pupil, lens, retina, and optic nerve.</p> <p>When the atmosphere refracts more star-light towards us, the star appears to be bright and when the atmosphere refracts less star-light.</p>	U.T.-1 CH- 10

AUGUST	CH- 11 Human eye and colourful world. Contd.	9	<ul style="list-style-type: none"> ➤ Atmospheric Refraction. Scattering of light. <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"> ➤ 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 Tyndall effect, blue colour of the sky. 	<p>Scattering of light that we come across in day-to-day life are: Blue colour of the sky:</p> <p>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.</p>	P.T.- CH- 11
SEPTEMBER	CH-10&11		Revision of CH-10 & 11 SA, LA and HOTS Questions Diagram practice.			TERM-1, CH-10&11.
OCTOBER	CH-12 Electricity SDG:- Quality education.	12	<ul style="list-style-type: none"> ➤ Electric current and circuit. ➤ Electric potential and potential difference. <p>ACTIVITY-1 <u>Experiential Learning:</u> 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. Skills: Curiosity, Critical Thinking.</p> <ul style="list-style-type: none"> ➤ Circuit Diagram. ➤ Ohm's Law. ➤ Factors on which resistance of a conductor depends. ➤ Resistance of a system of resistors. <p><u>Subject Enrichment-</u></p> <ul style="list-style-type: none"> ➤ Verification of ohm's law. ➤ Determination of equivalent resistance of two resistors when connected in series and parallel. 	<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 ➤ 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. 	<p>Define electric charge, electric current, electric circuit, one ampere etc.</p> <p>Recall S I unit of physical quantities used.</p> <p>learn formula used.</p> <p>Draw different electric symbols and electric circuits.</p> <p>solve numerical problem given in the text book and assignments (other books).</p>	

NOVEMBER	CH-12&CH-13 Magnetic effects of current.	9	<p>Magnetic field and field lines.</p> <p>Magnetic field due to a straight current carrying conductor.</p> <p>Magnetic field due to a straight current carrying circular loop.</p> <p>Magnetic field due to a straight current carrying solenoid.</p> <p>Force on a current carrying conductor in a magnetic field.</p> <p>Art Integrated learning:- 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>	<ul style="list-style-type: none"> ➤ Explain and calculate the heating effect of electric current, in order to learn working of appliances like heater and iron. ➤ Calculate power, in order to represent electric consumption in domestic circuits. ➤ 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 around it. ➤ Outline magnetic field lines for a 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 	<p>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.</p> <p>Electromagnets- The students will make an electromagnet and determine the strength of the electromagnet.</p>	
DECEMBER.	CH-13 Revision.	9	<ul style="list-style-type: none"> ➤ Domestic Electric circuits. 	<ul style="list-style-type: none"> ➤ Analyse the significance of neutral, earth and live wire, in order to understand formation of a domestic electrical circuit. 		
JANUARY	CH-10,11&12.	9	Revision of CH – 10,11 & 12 SA, LA and HOTS Questions Diagram practice			

SURENDRANATH CENTENARY SCHOOL, RANCHI

ANNUAL PLAN 2023-24

Class: X

Book: NCERT Book for Science

Subject: Chemistry

Lab Manual: Blue Print

Month	Chapter	No. of Periods	Topic	Learning objective	Learning Outcome	UT/PT/Term
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>Activity 2</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 give 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>Activity 3</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. 	UT 1 (31.07.23)

			<p>Reaction of some metals with bases. Nature of metal and nonmetal 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>SDG 4- 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>Activity 2</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, tapwater 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>	PT 1 (21.08.23)

			SDG 9- Industry, innovation and infrastructure.			
September	Chapters 1 & 2 Metals and nonmetals	14	<p>Revision of chapters 1 & 2 HOTS 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>Activity 1</p> <ul style="list-style-type: none"> To observe the reaction of magnesium with water and iron with steam. <p>Skills: critical thinking, 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 reactions. 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>	Term 1
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 Activity 1 <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 	<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. 	<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>	Term 2
December	Carbon and its compounds		<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> ➤ 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. <p>Writing the formula of compounds falling in one homologous series .</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. 	
January	Carbon and its compounds		<ul style="list-style-type: none"> Burning of saturated and unsaturated compounds differently. Reaction of hydrocarbons with oxygen, hydrogen etc 	<ul style="list-style-type: none"> ➤ To observe the burning of carbon compounds in oxygen to classify them as saturated and unsaturated compounds. ➤ Illustrate the chemical 	<ul style="list-style-type: none"> ➤ Burning of different compounds. ➤ Reaction of various Hydrocarbons/carbon with Chlorine in presence 	Pre-Board

			<ul style="list-style-type: none"> • 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>Activity 2 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 SDG 9- Industry, innovation and infrastructure. 	<p>properties of carbon compounds as oxidation, combustion, addition substitution etc along with balanced chemical reaction.</p> <ul style="list-style-type: none"> ➤ Identify reaction of carbon with chlorine in the presence of light. ➤ Performing various tests to distinguish between ethanol and ethanoic acid. <p>To describe the formation of micelle in order to understand how soap works.</p>	<p>of Light.</p> <ul style="list-style-type: none"> ➤ Reaction of Alkenes with hydrogen in the presence of Nickel catalyst. ➤ Classification of Saturated/Unsaturated compounds. ➤ Tests to distinguish between ethanol and ethanoic acid. 	
February	Chapters 3 & 4		Revision of chapters 3 & 4. HOTS questions from the chapter.			

SURENDRANATH CENTENARY SCHOOL, RANCHI
ANNUAL PLAN (2023-2024)

CLASS: X SUBJECT: BIOLOGY			BOOKS: SCIENCE Textbook For Class X Lab Manual (Blue Print)			
MONTH	CHAPTER	No. of Pds	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT / PT / T1
APRIL	CH- 6 Life Processes	18	<ul style="list-style-type: none"> What are life processes? Nutrition – Types Autotrophic nutrition in detail, Light and CO₂ necessary for photosynthesis Opening and closing of Stomata 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 <p>ACTIVITY: Role play – Holozoic nutrition in Amoeba ACTIVITY -2 Group discussion on “Warm blooded animals have four chambered heart”.</p>	<ul style="list-style-type: none"> ➤ Explain the process of absorption of CO₂ and H₂O 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 	<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 	
	CH- 6 Life Processes		<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 Excretion in plants <p>Case study - A situation with some information about renal disease will be given. 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 mechanism of transport through xylem and phloem ➤ Explain the mechanism of urine formation and excretion of wastes 	
MAY	SDG : 3 GOOD HEALTH AND WELL-BEING					

JUNE	CH- 7 Control and Coordination	16	<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 Subject Enrichment: Lab Experiment- 1. Light is necessary for photosynthesis. 2. CO₂ is released during respiration. 3. Stomata on the surface of a leaf ACTIVITY --2 Art Integrated project Model of a neuron using clay/any waste material 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 	
JULY	CH- 7 Control and Coordination SDG: 3 GOOD HEALTH AND WELL -BEING		<ul style="list-style-type: none"> Reflex arc and reflex actions in humans Functions of endocrine glands in human body in order to understand functioning of hormones Tropic movements in plants and 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 	UT I CH - 6

AUGUST	Ch- 15 Our Environment SDG - 12	14	<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</p> <p>Skills: Critical thinking</p> <p>ACTIVITY – 1</p> <p>Art Integrated Learning- Impact of non – biodegradable substances on Forest Ecosystem (Jharkhand) and Marine ecosystem (Goa)- Collage making, slogan writing, songs or any art form Students spread awareness on ill effects of non-biodegradable substances on animals by distributing cloth bags having messages for animal protection.</p> <p>Skills: Creative& critical thinking</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"> ➤ Makes efforts to conserve environment and minimise the use of non-biodegradable materials ➤ Realize interdependency and interrelationship between biotic and abiotic factors of environment ➤ Segregate biodegradable and non- biodegradable was takes steps to promote sustainable development ➤ Describe ozone formation and its importance ➤ Minimise the use of aerosols, CFCs to prevent ozone depletion 	PT I CH- 6 & 7
SEPTEMBER	CH- 6,7 &15		Revision of CH –6, 7 & 15 SA, LA and HOTS Questions Diagram practice			TERM I EXAM – CH- 6,7 & 15

OCTOBER	CH- 8 How do Organisms Reproduce?		<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 	
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NOVEMBER	CH- 9 Heredity	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"> ➤ 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 	<ul style="list-style-type: none"> ➤ Connect variations with reproduction ➤ Describe Mendelian traits and their transmission through generations ➤ Explain transmission of sex chromosomes and role of environment in sex determination ➤ List the reason for more number of females in some organisms like turtle due to global warming 	SECOND TERMINAL EXAM CH- 6,7,8,9& 15
DECEMBER	Revision of CH- 6, 7,8,9 & 15		<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>	<ul style="list-style-type: none"> ➤ Get familiar with the pattern of exam ➤ Practise VSA/ SA and case based questions 		
JANUARY	CH- 6, 7,8,9 & 15					PRE- BOARD EXAM CH- 6,7,8,9 & 15
FEBRUARY						

SURENDRANATH CENTENARY SCHOOL, RANCHI
ANNUAL PLAN (2022-2023)

CLASS: X SUBJECT: GEOGRAPHY & ECONOMICS				BOOKS : CONTEMPORARY INDIA II UNDERSTANDING ECONOMIC DEVELOPMENT	
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOME
APRIL	Resources & Development	12	<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 & conservation. 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 about the income and other goals. Analysing the need of sustainable development. 	<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.

MAY	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	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.

JULY	Agriculture Sectors of Indian Economy	12	<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.
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<p>AUGUST</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.
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SEPTEMBER	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.
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OCTOBER	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. <p>Struggle for fair globalization.</p>	<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 for fair globalisation. 	<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
NOVEMBER	Lifelines of Indian Economy Globalization and the	10	<ul style="list-style-type: none"> • Roadways: six types of roads. <p>Railways: Factors, distribution, challenges</p>	<ul style="list-style-type: none"> • Explain the importance of transport and communication in the ever shrinking world. • Understand the role of in the economy of nation.trade and tourism in 	

DECEMBER	Do	10	<ul style="list-style-type: none"> • Pipelines • Major ports of India. • Airways: Its expansion • Indian Postal services: six channels • STD, ISD • Newspapers, Films <p>International Trade: Export and Import, Tourism</p>	<ul style="list-style-type: none"> • Students will be able: To understand the different modes of transport and influencing physical and man-made factor. To understand road,rail and air transport in India. 	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
JANUARY	Revision			Pre board Examination	--

			SURENDRANATH CENTENARY SCHOOL, RANCHI ANNUAL PLAN (2023-2024) TERM I			
CLASS: X SUBJECT: HISTORY AND POLITICAL SCIENCE				BOOKS: INDIA AND THE CONTEMPORARY WORLD-II DEMOCRATIC POLITICS II		
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT/PT/T1
APRIL	Lesson-2 Nationalism in India. Lesson-1 Power sharing. SDG:16 Peace, Justice and Strong Institutions	12	The First World War,Khilafat, Non-cooperation,Differing strands with in the movement,Towards Civil Disobedience, The sense of Collective belonging .(Map work as per the board syllabus) Belgium and Srilanka, Majoritarianism in Srilanka,Accomodation in Belgium,Why power sharing is desirable? Forms of Power Sharing.	Students will be able to: <ul style="list-style-type: none"> To understand the Impact of first world war. To appreciate the efforts done by freedom fighters To value the freedom that they enjoy today. To build their Critical thinking skills To acquaint with the writings and ideals of different political groups. To analyse how the advent of Mahatma Gandhi turned around the political movement in India. To enhance how common mass of people contribute to the growth of Nationalism and Patriotism. ACTIVITY:MAP WORK <ul style="list-style-type: none"> To examine the case studies of Belgium and Srilanka 	<ul style="list-style-type: none"> Students examines and evaluates the information in order to construct views /arguments/ideas . For example: The reasons of world war and its economic impact on India. Analyse the Power sharing arrangements and the importance of power sharing in a democracy. 	

				<ul style="list-style-type: none"> To appreciate the efforts done by Belgium government to unite the country. To do the comparative analysis between prudential and moral reason behind power sharing. To appreciate that how Power sharing can reduce conflicts and fulfill our expectations in real life. <p>Experiential learning: Speech on Power sharing</p>		
MAY	Lesson-3 Making of Global world SDG:16 Peace, Justice, Strong Institutions	6	The Pre-Modern World, The Nineteenth century (1815-1914) The Inter War Economy, Rebuilding a World Economy: The Post-war Era.	<ul style="list-style-type: none"> To learn about the earliest form of Globalisation -Silk routes,food connect and causes of conquests. To understand the systems of World Economy, role of technology. Rebuilding a World Economy: The post war Era, decolonization and Independence. <p>Experiential learning: Project work on Before and after Globalisation</p>	<ul style="list-style-type: none"> Understands the world before and after Globalisation. Able to differentiate the positive aspects of Global world. Think Critically the importance of global world in context of present day Problems. 	
JUNE	Lesson-3	6	Gender and Politics	<ul style="list-style-type: none"> To think critically that how gender division is 	<ul style="list-style-type: none"> Appreciate the changing and 	

	Gender, Religion and Caste SDG:4 Quality Education		Religion, Communalism and Politics, Caste and Politics	<p>not based on biology but on social expectation and stereotype.</p> <ul style="list-style-type: none"> To appreciate the women's movements aimed at equality in personal and family life as well. To understand that problem begins when religion is seen as the basis of the Nation. To critically analyse that still untouchability has not ended completely despite Constitution prohibition. <p>ACTIVITY:CASTE AND POLITICS.(PRESENTATION)</p>	<p>challenging role of women in the Contemporary world.</p> <ul style="list-style-type: none"> Comprehend specific detail about the role of Caste and Politics. 	
JULY	<p>Lesson-4 The age of Industrialisation</p> <p>Lesson-4 Political parties</p> <p>SDG:16 Strong Institutions</p> <p>SDG:4 Quality Education</p>	12	<p>Before the Industrial revolution Hand Labour and Steam Power, Industrialisation in the Colonies.</p> <p>Why do we need Political parties? How many Parties should we have? National and state political parties.</p>	<ul style="list-style-type: none"> To familiarise with proto – Industrial phase and Early – factory system. To analyse the journey of India's dominance in the International market in textiles to loss of its own markets. To analyse Party system in India. To introduce major political parties and 	<ul style="list-style-type: none"> Analyse the difference between Proto - Industrialisation and Early factory system. Makes use of thinking critically About emergence of India as a global world leader Analyse the different forms of 	<p>UT History Lesson-2 Pol.sci Lesson-1</p>

			Challenges to Political Parties.	Challenges faced by them in a democracy. Subject Enrichment: Concept map	party system prevalent in the world and why India has chosen Multi party system .	
AUGUST	Lesson-4 The age of Industrialisation SDG:4 Quality Education Lesson-2 Federalism SDG:16 Strong Institutions	12	The Peculiarities of Industrial Growth, Market for Goods What is Federalism? What makes India a Federal country? How is Federalism Practised? Decentralisation in India.	<ul style="list-style-type: none"> To familiarise with the concept of Gomasthas. To learn the process of Industrialisation and its impact on labour class. Enable them to understand industrialisation in the Colonies with reference to the textile Industries. To analyse Federal provisions and Institutions To understand Decentralisation in India. Subject Enrichment: Concept map	<ul style="list-style-type: none"> Understand the impact of Industrialisation on different sections of society. Describes how colonisation affected the textile market of India. learns the concept of decentralisation in India. Analyse the federal provisions. 	PT 23.08.23 History -lesson 3 Political science Lesson-2
SEPTEMBER	Revision History - lesson=2,3,4 Political parties Lesson-1,2,3,4,	12	History lesson- 2,3,4 all topics Political science lesson-1,2,3,4all topics	<ul style="list-style-type: none"> To make them revise the lessons thoroughly. 	<ul style="list-style-type: none"> Able to make use of understanding the lessons and think critically and thoroughly. 	History Lesson- 2,3,4 Political science Lesson- 1,2,3,4

			SURENDRANATH CENTENARY SCHOOL, RANCHI ANNUAL PLAN (2023-2024) TERM II			
CLASS: X SUBJECT: HISTORY AND POLITICAL SCIENCE				BOOKS: INDIA AND THE CONTEMPORARY WORLD-II DEMOCRATIC POLITICS II		
MONTH	CHAPTER	No. of Periods	TOPICS	LEARNING OBJECTIVES	LEARNING OUTCOMES	UT/PT/T1
OCTOBER	Lesson- 1 Nationalism in Europe	12	The French revolution and the Idea of Nation The making of Nationalism in Europe, The age of revolutions (1830-1848)	<ul style="list-style-type: none"> To discuss the form in which Nationalism developed along with the formation of nation states in Europe. Establish the relationship and bring out difference between European Nationalism and anti- colonial Nationalisms. 	<ul style="list-style-type: none"> Understands the concept of nation-states. Learns the difference between European Nationalism and anti colonial Nationalism. 	
	Lesson-5 Outcomes of Democracy		How do we assess Democracy's outcomes? Accountable, Responsive, Legitimate government. Economic growth and development. Reduction of inequality and poverty. Dignity and freedom of Individual.	<ul style="list-style-type: none"> To evaluate the functioning of Democracies in comparison to other forms of governmental system prevalent in the world. To understand the causes for continuation of Democracy in India 	<ul style="list-style-type: none"> Learns the causes for emergence of Democracy as the most prevalent form of government today 	

				<ul style="list-style-type: none"> Challenges to democracy in India. Subject Enrichment: Concept map		
NOVEMBER	Lesson-1 Nationalism in Europe Lesson- 5 Print Culture and the modern. SDG:4 Quality Education	12	The making of Germany and Italy, Visualising the Nation, Nationalism and Imperialism The first printed books, Print comes to Europe ,The Print Revolution and its Impact ,The reading mania, The Nineteenth Century.	<ul style="list-style-type: none"> To understand the way the idea of Nationalism emerged and lead to the formation of nation States in Europe and other parts of the world. To identify the link between the Print Culture and the circulation of ideas. To understand that forms of writing have a specific history and that they reflect historical changes within society and shape the forces of change. Subject Enrichment: Concept map	<ul style="list-style-type: none"> Understands the link between Print culture and circulation of Ideas which later helped in challenging the power of many arbitrary Institutions. 	
DECEMBER	Lesson-5	12	India and the World of Print,	<ul style="list-style-type: none"> To learn about the first print technology in 	<ul style="list-style-type: none"> Examines phenomena, events and their 	

	Print Culture and the modern world. SDG: Quality Education		Religious Reform and Public Debates, New forms of Publication, Print and Censorship.	China, Japan, and Korea. <ul style="list-style-type: none"> • To evaluate and present the changes in last hundred years. • To review writings of thinkers about science, reason and rationality. • To learn about changes of Oral culture to Print culture, from manuscripts to books and from vernacular books to English books. • To understand the emerged New ideas through the clashes of opinions and religious fears about the printed material. • To create Pan-Indian identities. 	occurrence in order to explain cause and effect relationship between them.	
JANUARY	History and Political Science REVISION	12	PRE-BOARD	<ul style="list-style-type: none"> • To make them revise for the Pre board exams . 	<ul style="list-style-type: none"> • Learns and understands the lessons thoroughly. 	
FEBRUARY						

SURENDRANATH CENTENAYR SCHOOL RANCHI
ANNUAL PLAN 2023-24

CLASS: X SUBJECT: Artificial Intelligence(417)			BOOKS: Artificial Intelligence by Sumita Arora			
MONTH	CHAPTER	No. of Periods	TOPIC	LEARNING OBJECTIVES	LEARNING OOUTCOME	UT/ PT/T1
APR.	Part B: Unit 1:- Introduction to AI	8	Foundational concept of AI Basics of AI AI Domains and Technology AI Application AI Ethics	After we finish this unit students will be Able to discuss “What is AI” and “What is not AI” Able to have better understanding of AI	At the end of this Unit students are able to Identify the application or tool which has use of AI or no usage of AI.	
MAY	Unit 2 AI Project Cycle CONTD....	4	Introduction to AI Project Cycle Understanding Problem Scoping Data Acquisition Activity: - Ballon 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.	Decode different phases of AI project Cycle.	
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.	Decode different phases of AI project Cycle.	UT I:- Part B:- Unit 1 and 2
JULY	Unit 3:- Advance Python	8	Jupyter notes and other python development platforms Python basics in a new flavour Python conditional and loops.	Make them familiar with two popular platform to work on python i.e Jupyter notes and Sypyder IDE	Familiar on Jupyter platform to work on python with various logic to be in use.	
AUG.	Unit 4:- Data Science	8	Introduction to Data Science Application of Data Science Python for Data Sciences Understanding K-near neighbour model	Introduce themselves to data science, their application and how to apply AI project cycle on	Explore various application working on the principle of data science.	PT I:- Part B:- Unit

				data science problems.		2,3,4
SEP.	PART A:- Unit 1 and Unit 2 Communication and Self Management Skills	4	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.	HALF YEARLY EXAMIN ATION
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 Model Evaluation <u>AIL:-Practical assignment on chatbots in Page no 292.</u>	After we finish this unit students will be able to * Know how computer recognise any image. * Explore that how AI machine process human voice. * Evaluate the result of an AI machine and check whether result is as expected or not.	At the end of this Unit students are able to 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			