

BAL BHARATI PUBLIC SCHOOL, DWARKA

ANNUAL PEDAGOGICAL PLAN

(2023-24)

Class IX



ENGLISH

MONTH	Working Days	COURSE CONTENT	LEARNING OUTCOME	SKILL	TEACHING METHOD
April	18	Beehive- The Fun They Had Beehive - The Road Not Taken Moments- The Lost Child Writing- Story Writing Grammar- Verb Forms	-To enable the students about Robots and Robotic Teachers. - Identify and explain the significance of essential elements in poetry. - To be able to use correct grammatical structure in a sentence. -Understanding and appreciation of the works of Robert Frost -Development of comprehension skills. -Understanding of literary devices	Evaluate, analyze, recall, extrapolate, think critically	Guided Discussion Problem-solving based learning Peer teaching Self-assessment
May	14	Beehive- Wind, The Sound of Music Moments- The Adventures of Toto Writing- Story Writing Grammar- Editing, Tenses	To locate specific information while reading. - To act as a scaffold to understand and empathize with the central character. -To develop the students' critical thinking ability. - To develop the skill to transcribe a text from one form to another. - To develop an understanding of the main idea of the poem. -Understanding and appreciation of the title - Inculcating sensitivity towards animals - Development of comprehension skills. - Understanding of literary devices	Evaluate, Recall, Extrapolate	Listening comprehension, Conversation / Dialogue, Symposium
JULY	23	Beehive: The Little Girl, The Lake Isle of Innisfree Rain on the Roof Moments: Ishwaran The Storyteller In the Kingdom of Fools Writing- Diary Entry	To enable the learners to think creatively. Learning about characterization and self-analysis. To develop the students' critical thinking ability. To develop the skill to transcribe a text from one form to another. To develop an understanding of the main idea of the poem. Development of the skill to sequence events. Development of comprehension skills Understanding of literary devices.	Conceptualization Synthesizing Expressing Analytical thinking Simulate The collaborative effort and team spirit	Pair Work, Extempore, Written assignments

		Grammar Modals and Determiners			
AUGUST	23	Beehive: A Truly Beautiful Mind The Snake and the Mirror Moments- The Happy Prince Writing- Descriptive Paragraph Integrated grammar (Reported Speech)	To enable the learners to think imaginatively and write creatively. Learning about characterization. Use correct grammatical structures, organize and express ideas coherently To develop an understanding of the poem's main idea through the poet's perspective of life. To acquire grammatical accuracy Development of creative writing skills and comprehension skills To plan, organize, and present ideas in a coherent manner.	Analyze Empathy Visualize perceive	Dictionary, Internet, Newspaper, Smart Class Module
SEPT	21	Beehive: A Legend of the Northland My Childhood Writing- Descriptive Paragraph	To enable the learners to think creatively. Learning about characterization and self-analysis. To develop the students' critical thinking ability. To develop the skill to transcribe a text from one form to another.	Logical thinking Observational skills Recognize structure Evaluation	Research Work- Gathering Information Deductive Reasoning Group Work
OCT	21	Beehive: No Men are Foreign Reach for the Top Moments: The Last Leaf Grammar: Integrated grammar Writing: Story	To enhance the knowledge about poetic devices To develop the comprehension skills of the students. To enhance the ability to move beyond the text for extrapolation. To develop the writing skills of the students. The learners will be able to identify and explain the significance of essential elements in poetry. Read texts actively Recognize key passages; raise questions; comprehend the literal and figurative uses of language. Enhancement of the students' inferential skills	Conceptualiz--ation Synthesizing Expressing Analytical thinking Simulate Collaborative effort and team spirit	Guided Discussion Problem-solving based learning Peer teaching Self-assessment

NOV	19	Beehive: If I were you, A Slumber did my Spirit Seal Moments: A House is Not a Home Writing: Descriptive Paragraph	To facilitate the understanding of the text and enhance vocabulary. To enhance the ability to move beyond the text for extrapolation. Acquisition of grammatical accuracy. To develop the writing skills of the students. The learners will be able to identify and explain the significance of essential elements in poetry. Read texts actively: recognize key passages; raise questions; comprehend the literal and figurative uses of language. Enhancement of the students' inferential skills	Evaluate, analyze, recall, extrapolate, think critically	Listening comprehension, Conversation / Dialogue, Symposium
DEC	22	Beehive Kathmandu Moments The Beggar	To facilitate the understanding of the text and enhance vocabulary. To enhance the ability to move beyond the text for extrapolation Acquisition of grammatical accuracy to develop the writing skills of the students The learners will be able to identify and explain the significance of essential elements in poetry. Read texts actively: recognize key passages; raise questions; comprehend the literal and figurative uses of language. Enhancement of the students' inferential skills Teaching Aids /Resources	Evaluate, Recall, Extrapolate	Research Work- Gathering Information Deductive Reasoning Group Work
JANUARY	15	Beehive: On Killing a Tree Moments: -Revision Writing Skills: Descriptive Paragraph Writing	To enable the learners to think creatively. Learning about characterization and self-analysis. To develop the students' critical thinking ability. To develop the skill to transcribe a text from one form to another.	Logical thinking Observational skills Recognize structure Evaluation	Dictionary, Internet, Newspaper, Smart Class Module
FEBRUARY	23	Beehive and Moments: Revision Grammar & Writing	To facilitate the understanding of the text and increase vocabulary. To enhance the ability to move beyond the text for extrapolation	Analyze Empathy Visualize	Pair Work, Extempore, Written assignments

		Revision	Expected Learning Outcome Read texts actively: recognize key passages; raise questions; appreciate complexity and ambiguity; comprehend the literal and figurative uses of language. ☑ The learners will have a better grasp over the language.	perceive	
PT 1	LITERATURE- Beehive - The Fun They Had; The Road Not Taken; Wind; The Sound of Music Moments- The Lost Child; The Adventures of Toto				
Mid Term	LITERATURE- Beehive - The Fun They Had; The Road Not Taken; Wind; The Sound of Music; The Little Girl; The Lake Isle of Innisfree; Rain on the Roof; Moments- Iswaran the Storyteller; In the Kingdom of Fools; The Lost Child; The Adventures of Toto; The Happy Prince GRAMMAR- 1.Editing 2. Omission 3.Transformation of Sentences 4.Parts of Speech (Articles, Prepositions, Conjunctions, Modals) 5.Tenses 6. Determiners 7.Subject-Verb Concord 8.Modals 9. Dialogue Writing WRITING- 1. Diary Entry 2. Story Writing 3. Descriptive Paragraph Portfolio/Notebook Submission (5 marks)				

	Subject enrichment- Brochure Making-Delhi and Sikkim(5 marks) Multiple assessment Choice Board (The Road Not Taken) Bookmark, PPT, Collage, Biography (5 marks)
PT 2	LITERATURE- Beehive- The Snake and The Mirror; My Childhood; No Men are Foreign; Reach for the Top, On Killing a Tree, Moments-The Last Leaf Grammar -Gap Filling, Editing, Dialogue Writing
Annual Exam	Whole Syllabus Portfolio/Notebook Submission (5 marks) Subject enrichment-Delhi and Sikkim– Folk Tales, Book Jacket (5 marks) Multiple assessment Choice Board (My Childhood) Bookmark, PPT, Collage, Biography (5 marks)

विषय - हिंदी

शिक्षण उद्देश्य:-

- 1) दैनिक जीवन में हिंदी में समझने-बोलने के साथ-साथ लिखने की क्षमता का विकास करना।
- 2) हिंदी के किशोर-साहित्य, अखबार व पत्रिकाओं को पढ़ कर समझ पाना और उसका आनंद उठाने की क्षमता का विकास करना।
- 3) औपचारिक विषयों और संदर्भों में बातचीत में भाग लेने पाने की क्षमता का विकास करना।
- 4) हिंदी के जरिए अपने अनुभव संसार को लिखकर सहज अभिव्यक्ति कर पाने में सक्षम बनाना।
- 5) संचार के विभिन्न माध्यमों (प्रिंट और इलेक्ट्रॉनिक) में प्रयुक्त हिंदी के विभिन्न रूपों को समझने की योग्यता का विकास करना।
- 6) कक्षा में बहुभाषिक, बहुसांस्कृतिक संदर्भों के प्रति संवेदनशील सकारात्मक सोच बनाना।
- 7) अपनी मातृभाषा और परिवेशगत भाषा को साथ रखकर हिंदी की संरचनाओं को समझ पाना।

पाठ्य-पुस्तकें:-

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| 1) स्पर्श (भाग-1) | - राष्ट्रीय शैक्षणिक अनुसंधान एवं प्रशिक्षण परिषद् |
| 2) संचयन (भाग-1) | - राष्ट्रीय शैक्षणिक अनुसंधान एवं प्रशिक्षण परिषद् |
| 3) व्याकरण-कुंज | - पी०पी० पब्लिकेशंस |

माह	कार्य दिवस	विषय-वस्तु	उद्देश्य	कौशल	शिक्षण-युक्तियाँ
अप्रैल	18	स्पर्श भाग-1 (गद्य खंड) - • दुख का अधिकार	- सामाजिक विषमता से ऊपर उठकर मानवीय सरोकारों से छात्रों को अवगत करवाना। - भारतीय ग्रामीण परिवेश व संस्कृति की जानकारी।	- नैतिक शिक्षा ग्रहण करेंगे। - कल्पनात्मकता	- इ-सामग्री - स्मार्ट बोर्ड मॉड्यूल - चर्चा विधि - प्रश्नोत्तर विधि - तार्किक चिंतन - व्यावहारिक उदाहरणों से - अनुभव लेखन - शब्दकोश - सहायक पुस्तकें - परियोजना/ गतिविधि कार्य - स्मृति मापन - कहानी/कविता वाचन - कहानी/कविता लेखन
		(पद्य खंड) - • रैदास (पद)	- करणीय-अकरणीय आचरण के प्रति छात्रों को सजग करना। - भाषिक क्षमता का विकास करना।	- अंधविश्वास व भेदभाव से ऊपर उठकर मानवीय मूल्यों में विश्वास प्रकट करेंगे। - कुशल व्यवहार के लिए अभिप्रेरित होंगे।	
		• रहीम (दोहे)	दोहे के माध्यम से नैतिक मूल्यों का ज्ञान व जीवन के व्यावहारिक प्रयोग पर बल दिया जाएगा।	चिंतन कौशल	
		व्याकरण - • अनुस्वार • अनुनासिक • शब्द और पद	- शब्द संरचना से परिचित करवाना। - भाषिक क्षमता का विकास करना। - प्रयोग की विधि व आवश्यकता से परिचित करवाना। - शब्द और पद के अंतर से सोदाहरण परिचित करवाना।	- शब्द कोश में वृद्धि - भाषा कौशलों का विकास	
		रचनात्मक लेखन- • अपठित बोध • अनुच्छेद लेखन • संवाद लेखन	- भाषिक क्षमता का विकास। - सृजनात्मक लेखन क्षमता का विकास व जानकारी। - वार्तालाप कौशल व अवबोधन शक्ति का विकास व जानकारी।	- सृजनात्मकता - कल्पनात्मकता - चिंतन कौशल	
मई	14	संचयन भाग-1			इ-सामग्री

		- गिल्लू - स्मृति	- पशुओं के प्रति संवेदना का भाव जाग्रत करना। - साहस, परिश्रम व दृढ़ निश्चय के बल पर चुनौतियों को स्वीकार करने हेतु छात्रों को अभिप्रेरित करना।	- जीवों के प्रति सहानुभूति रखने हेतु अभिप्रेरित होंगे। - विश्लेषण कौशल	- स्मार्ट बोर्ड मॉड्यूल - चर्चा विधि - प्रश्नोत्तर विधि - तार्किक चिंतन - व्यावहारिक उदाहरणों से - अनुभव लेखन - शब्दकोश - सहायक पुस्तकें - परियोजना/ गतिविधि कार्य - स्मृति मापन - कहानी/कविता वाचन - कहानी/कविता लेखन
		व्याकरण- - उपसर्ग-प्रत्यय - विराम चिह्न	- शब्द-निर्माण की प्रक्रिया सिखाना। - भाषिक क्षमता का विकास। - वार्तालाप क्षमता का विकास करना।	- वैचारिक चिंतन का विकास - सृजनात्मकता	
		रचनात्मक लेखन- - अपठित बोध - अनुच्छेद लेखन	- सृजनात्मक लेखन क्षमता का विकास। - अर्थ ग्रहण व अवबोधन शक्ति का विकास करना।	- चिंतन कौशल - कल्पनात्मकता	
जून	0	ग्रीष्मावकाश			

जुलाई	23	स्पर्श भाग-1 (गद्य खंड) - एवरेस्ट मेरी शिखर यात्रा	बचेंद्री पाल के साहसिक कार्यों व उनके जीवन से अवगत करवाना।	- विभिन्न सूत्रों की क्रमबद्ध जानकारी प्राप्त कर सकेंगे। - चिंतन कौशल	- इ-सामग्री - स्मार्ट बोर्ड मॉड्यूल - चर्चा विधि - प्रश्नोत्तर विधि - तार्किक चिंतन - व्यावहारिक उदाहरणों से - अनुभव लेखन - शब्दकोश - सहायक पुस्तकें
		तुम कब जाओगे अतिथि	अतिथि के लिए अपेक्षित शिष्टाचार एवं व्यावहारिकता से छात्रों को अवगत करवाना।	- मानवोचित अच्छे गुण अपनाने हेतु अभिप्रेरित होंगे। - मेजबान व मेहमान की आचार संहिता से परिचय।	

		व्याकरण- • अर्थ की दृष्टि से वाक्य भेद • स्वर संधि	• शब्द-निर्माण की प्रक्रिया सिखाना। • शब्द-भंडार में वृद्धि करवाना। • संधि के नियमों से अवगत करवाना।	• बुद्धि परीक्षण • भाषा प्रयोग कौशल	• परियोजना/ गतिविधि कार्य • स्मृति मापन • कहानी/कविता वाचन • कहानी/कविता लेखन
		रचनात्मक लेखन- • पत्र लेखन (अनौपचारिक)	• अन्वेषण (खोज-परख) सीख सकेंगे। • संदेश लेखन के प्रारूप से अवगत करवाना।	• रचना कौशल • कल्पनात्मकता	
अगस्त	23	स्पर्श भाग-1 (पद्य खंड) - • गीत -अगीत	• वातावरण के प्रति छात्रों को सजग करना। • पर्यावरण की समस्या को समझने व दूर करने हेतु अभिप्रेरित होंगे।	• वैचारिक चिंतन का विकास।	• इ-सामग्री • स्मार्ट बोर्ड मॉड्यूल • चर्चा विधि • प्रश्नोत्तर विधि • तार्किक चिंतन • व्यावहारिक उदाहरणों से • अनुभव लेखन • शब्दकोश • सहायक पुस्तकें • परियोजना/ गतिविधि कार्य • स्मृति मापन • कहानी/कविता वाचन • कहानी/कविता लेखन
		व्याकरण- • अर्थ की दृष्टि से वाक्य भेद • चित्र वर्णन	• भाषिक क्षमता का विकास करना। • वाक्य-प्रयोग का उचित ज्ञान। • चित्र प्रयोग का उचित ज्ञान।	• सृजनात्मकता • कल्पनात्मकता	
		रचनात्मक लेखन- • अनौपचारिक पत्र लेखन	• भाषा ज्ञान • स्वतंत्र लेखन • अनौपचारिक पत्र लेखन के प्रारूप से अवगत करवाना।	• चिंतन कौशल • भाषिक क्षमता का विकास	
सितंबर	21	व्याकरण- • उपसर्ग-प्रत्यय • शब्द और पद	• शब्द-निर्माण की प्रक्रिया सिखाना • शब्द और पद के अंतर से सोदाहरण परिचित करवाना।	• भाषा कौशलों का विकास • चिंतन कौशल	• इ-सामग्री • स्मार्ट बोर्ड मॉड्यूल • चर्चा विधि • प्रश्नोत्तर विधि • तार्किक चिंतन • व्यावहारिक उदाहरणों से
		रचनात्मक लेखन-			

		• अनुच्छेद लेखन • पत्र लेखन (अनौपचारिक)	• कल्पना को शब्द-रूप देने हेतु अभिप्रेरित करना। • समसामयिक विषयों व समस्याओं से अवगत करवाना।	• तार्किक चिंतन का विकास	• अनुभव लेखन • शब्दकोश • सहायक पुस्तकें • परियोजना/ गतिविधि कार्य • स्मृति मापन • कहानी/कविता वाचन • कहानी/कविता लेखन
अक्टूबर	21	स्पर्श भाग-1 (गद्य खंड) - • वैज्ञानिक चेतना के वाहक : चन्द्रशेखर वेंकट रामन (पद्य खंड)- • अग्निपथ	• पूर्वाग्रहों से मुक्त होकर वैज्ञानिक मूल्य को स्पष्ट करना। • अनुचित साधनों का प्रयोग किए बिना जीवन के प्रत्येक संघर्ष का सामना करने के लिए अभिप्रेरित करना	• वैज्ञानिक मूल्यों का विकास। • संघर्ष का सामना करने के लिए अभिप्रेरित करना	• इ-सामग्री • स्मार्ट बोर्ड मॉड्यूल • चर्चा विधि • प्रश्नोत्तर विधि • तार्किक चिंतन • व्यावहारिक उदाहरणों से • अनुभव लेखन • शब्दकोश • सहायक पुस्तकें • परियोजना/ गतिविधि कार्य • स्मृति मापन • कहानी/कविता वाचन • कहानी/कविता लेखन
		रचनात्मक लेखन • संवाद लेखन • अपठित बोध	• भाषिक क्षमता का विकास • सृजनात्मक लेखन क्षमता का विकास व जानकारी। • वार्तालाप कौशल व अवबोधन शक्ति का विकास व जानकारी।	• सृजनात्मकता • कल्पनात्मकता	

नवंबर	19	(पद्य खंड) - - नए इलाके में - खुशबू रचते हैं हाथ	- आधुनिक युग की तीव्र परिवर्तनशीलता से अवगत करवाना। - श्रमिक समाज की दयनीय स्थिति के कारणों से अवगत करवाकर बदलाव के लिए प्रेरित करवाना।	घात-प्रतिघातों का सामना करने की शक्ति का विकास।	- इ-सामग्री - स्मार्ट बोर्ड मॉड्यूल - चर्चा विधि - प्रश्नोत्तर विधि - तार्किक चिंतन - व्यावहारिक उदाहरणों से - अनुभव लेखन - शब्दकोश - सहायक पुस्तकें - परियोजना/ गतिविधि कार्य - स्मृति मापन - कहानी/कविता वाचन - कहानी/कविता लेखन
		व्याकरण - - स्वर संधि - विराम चिह्न	- संधि के नियमों से अवगत करवाना। - भाषिक क्षमता का विकास	- सृजनात्मकता - कल्पनात्मकता - चिंतन कौशल	
		रचनात्मक लेखन- पत्र लेखन (अनौपचारिक)	- भाषा ज्ञान, स्वतंत्र लेखन - समसामयिक विषयों व समस्याओं से अवगत करवाना।	- तार्किक चिंतन का विकास - सृजनात्मकता	
दिसंबर	22	स्पर्श भाग-1 (गद्य खंड) - शुक्रतारे के समान	छात्रों को सेवाभाव, कर्मठता, व्यवस्थित जीवन-शैली आदि गुणों से अवगत करवाकर अभिप्रेरित करना।	महादेव के गुणों से प्रभावित होकर छात्र उन्हें व्यवहार में लाने के लिए प्रेरित होंगे।	- इ-सामग्री - स्मार्ट बोर्ड मॉड्यूल - चर्चा विधि - प्रश्नोत्तर विधि - तार्किक चिंतन - व्यावहारिक उदाहरणों से - अनुभव लेखन - शब्दकोश - सहायक पुस्तकें - परियोजना/ गतिविधि कार्य - कहानी/कविता वाचन
		संचयन भाग-1	उनाकोटी का महत्त्व स्पष्ट करना।	कल्पनात्मकता	

		• कल्लू कुम्हार की उनाकोटी • मेरा छोटा सा निजी पुस्तकालय	• पुस्तकालय की अहम भूमिका से अवगत करवाना।	• नैतिक मूल्यों का विकास। • कल्पनात्मकता	• कहानी/कविता लेखन
		व्याकरण • अनुस्वार • अनुनासिक	• शब्द संरचना से परिचित करवाना। • भाषिक क्षमता का विकास करना।	• शब्द कोश में वृद्धि • भाषा कौशलों का विकास • सृजनात्मकता	
जनवरी	15	संपूर्ण पाठ्यक्रम से पुनरावृत्ति			
फरवरी	23	संपूर्ण पाठ्यक्रम से पुनरावृत्ति / वार्षिक परीक्षा			
मार्च	20	वार्षिक परीक्षा			
आवधिक परीक्षा-1		<u>परिक्षाओं हेतु पाठ्यक्रम</u> <u>स्पर्श भाग-1</u> (गद्य खंड) - दुख का अधिकार (पद्य खंड) - रैदास के पद, रहीम के दोहे <u>व्याकरण</u> - अनुस्वार, अनुनासिक, शब्द और पद <u>रचनात्मक लेखन</u> - संवाद लेखन			
मध्य सत्र परीक्षा		<u>स्पर्श (भाग-1)</u> (गद्य खंड) - दुख का अधिकार, एवरेस्ट मेरी शिखर यात्रा, तुम कब जाओगे अतिथि			

	(पद्य खंड) - रैदास के पद, रहीम के दोहे, गीत-अगीत <u>संचयन (भाग-1)</u> गिल्लू, स्मृति <u>व्याकरण</u> शब्द और पद, अनुस्वार, अनुनासिक, उपसर्ग, प्रत्यय, स्वर संधि, विराम चिह्न, अर्थ की दृष्टि से वाक्य भेद <u>रचनात्मक लेखन</u> अनुच्छेद लेखन, पत्र लेखन (अनौपचारिक), चित्र वर्णन, संवाद लेखन <u>पठन</u> अपठित बोध <u>आंतरिक मूल्यांकन</u> साहित्य ज्ञानवर्धन- (परियोजना कार्य - दिल्ली और सिक्किम) - 5 अंक बहुविकल्पीय मूल्यांकन - (पसंदीदा बोर्ड गतिविधि) - 5 अंक पोर्टफोलियो - (पाठों पर आधारित गतिविधियाँ) - 5 अंक	
आवधिक परीक्षा-2	<u>स्पर्श (भाग-1)</u> (गद्य खंड) - शुक्रतारे के समान (पद्य खंड) - नए इलाके में, खुशबू रचते हैं हाथ	

	<u>व्याकरण</u> - उपसर्ग, प्रत्यय, अनुस्वार, अनुनासिक <u>रचनात्मक लेखन</u> - चित्र वर्णन	
वार्षिक परीक्षा	<u>स्पर्श (भाग-1)</u> (गद्य खंड) - दुख का अधिकार, एवरेस्ट मेरी शिखर यात्रा , तुम कब जाओगे अतिथि, वैज्ञानिक चेतना के वाहक : चन्द्रशेखर वेंकट रामन, शुक्रतारे के समान (पद्य खंड) - रैदास के पद, रहीम के दोहे, गीत-अगीत ,अग्निपथ, नए इलाके में, खुशबू रचते हैं हाथ। <u>संचयन (भाग-1)</u> गिल्लू, स्मृति, कल्लू कुम्हार की उनाकोटी, मेरा छोटा सा निजी पुस्तकालय <u>व्याकरण</u> - शब्द और पद, अनुस्वार, अनुनासिक, उपसर्ग, प्रत्यय, स्वर संधि, विराम चिह्न, अर्थ की दृष्टि से वाक्य भेद। <u>रचनात्मक लेखन</u> - अनुच्छेद लेखन, पत्र लेखन (अनौपचारिक), चित्र वर्णन, संवाद लेखन <u>पठन</u> - अपठित बोध <u>आंतरिक मूल्यांकन</u> साहित्य ज्ञानवर्धन- (परियोजना कार्य - दिल्ली और सिक्किम) - 5 अंक बहुविकल्पीय मूल्यांकन – (पसंदीदा बोर्ड गतिविधि) - 5 अंक पोर्टफोलियो - (पाठों पर आधारित गतिविधियाँ) - 5 अंक	

MATHEMATICS (CODE 041)

1. To provide the child with the basic mathematical concepts and skills needed to tackle everyday situations.
2. To build confidence, speed and accuracy in basic mathematical skills.
3. Maths lab activities to enliven the learning process and enhance the knowledge of the learners and maintain their interest in mathematics.
4. To motivate and encourage students to find solutions of their own.

RECOMMENDED BOOKS

1. Mathematics – Textbook for class IX – NCERT
2. NCERT Exemplar
3. Mathematics Lab Manual

Month	Course content	Learning objective	Skills	Teaching method/ Strategies
	Ch 1: Number System	Students will be able to, • recall representation of natural numbers, integers, rational numbers on the number line.	Logical thinking, Computational skills, Measurement, Critical thinking, Problem solving, Analytical thinking, Extrapolation, Conceptualization, Synthesizing, Expressing, Evaluation, recognize irrational numbers, Comprehend, Creativity Collaborative effort and team spirit.	1) Activity- To create colourful square root spiral. (Art Integration) 2) You tube modules 3) Brain Storming 4) Collaborative learning method 5) Guided discussion

April (18)		• write rational numbers as recurring/ terminating decimals. • use operations on real numbers. • give examples of non-recurring/non-terminating decimals. • explain existence of non-rational numbers (irrational numbers) such as $\sqrt{2}$, $\sqrt{3}$ and their representation on the number line. • Define nth root of a real number • rationalization of denominators of irrational numbers of the type $c/(a+b\sqrt{x})$ and $d/(\sqrt{x} + \sqrt{y})$ where x and y are natural number and a, b, c and d are integers. • recall the laws of exponents with integral powers. • derive laws for rational exponents with positive real bases		6)Think, pair and share 7)Inductive- Deductive reasoning
	Ch 2: Polynomials	Students will be able to, • define polynomial in one variable with examples and counter examples.	Logical thinking, Mathematical	1)Activity Method: - Verify algebraic identities

		- identify polynomial with specified degree and classify them. - identify and explain the coefficients, terms and zeroes of a polynomial $p(x)$. - analyse that a quadratic polynomial can have at most 2 zeroes and a cubic polynomial can have at most 3 zeroes. - find zeroes of a polynomial. - find the value of the polynomial at a given point. - develop the ability to analyse that whether the given polynomial is divisible by another or not. - Explain and prove factor theorem and apply it to factorise the polynomial. - factorize polynomial $ax^2 + bx + c$, $a \neq 0$ where a, b and c are real numbers, and of cubic polynomials using the Factor Theorem. - recall algebraic expression and identities - verify the identities, $(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$ $(x \pm y)^3 = x^3 + y^3 \pm 3xy(x \pm y)$	communication skills, Measurement, Critical thinking, Problem solving, Analytical thinking, ,Extrapolation, Conceptualization, Synthesizing, Expressing, Evaluation, Recognize irrational numbers, Collaborative effort and team spirit	using origami 2) You tube modules 3) Numerical practice 4) Brain storming 5) Tangram activity 6) Collaborative learning Method 7) Inductive – Deductive Method 8) PowerPoint Presentation	
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		$x^3 + y^3 = (x + y)(x^2 - xy + y^2)$ $x^3 - y^3 = (x - y)(x^2 + xy + y^2)$ $x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)$ Factorise the algebraic expression and understand their utility in computations.		
May (14)	Ch 2: Polynomials	Contd..		
	Ch-3 Coordinate Geometry	Students will be able to, - acquire knowledge and understanding the basic concepts and terms associated with the coordinate plane. - describe the position of a point with reference to x-axis and y-axis. - write the abscissa and ordinate of a point.	Logical thinking, communicating using mathematical terminology while doing abscissa and ordinates etc, Measurement, Critical thinking, Problem solving, analytical thinking, Conceptualization Synthesizing, Observational skills, Evaluation,	1) To obtain the mirror image of a given geometrical figure with respect to both the axes using worksheet. 2) Activity- Students will draw a design on a graph paper and will write the coordinates of the vertices. (Art-integration) 3) Specify and describe location of

	Coordinate Geometry	- differentiate between the position of (x, y) and (y, x) - identify the coordinate of a point in a Cartesian plane. - use coordinate geometry in the given real-life situation.	Collaborative effort and team spirit, representation skills while plotting coordinates	the cities using coordinate geometry. 4)Integration with social science (latitudes, longitudes) 5)Presentation
				6)Discussion method 7)Collaborative learning 8)Think, pair and share 9) You tube modules

	July (23)	Ch 4: - Linear Equations in two variables	The students will be able to, • write linear equation in one variable and extend to that of linear equation in two variables. • write the equation in general form $ax + by + c = 0$. • frame linear equations for a given situation. • explain that a linear equation in two variables has infinitely many solutions. • find solution of a linear equation in two variables algebraically. • represent linear equations in two variables graphically. • relate linear equations in two variables with real life situations. • conclude that a linear equation in two variables has infinitely many solutions. • conclude that every point on the line is solution of the equation and vice-versa.	Logical thinking, Measurement, Critical thinking, Problem solving, analytical thinking, Conceptualization Synthesizing, Observational skills, Evaluation, Collaborative effort and team spirit	1)Activity method- Graph activity 2)Collaborative learning method 3)Activity- Integration with science 4) Integration with Art (Activity method). 5) You tube modules 6)Interactive method 7)Think-pair and share 8) Inductive- deductive reasoning. 9)Brain storming	
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	Ch 5: - Euclid's Geometry	The students will be able to, • observe and explain the history of geometry in India and Euclid's geometry. • define the terms like axioms, postulates and theorems. • Distinguish between axiom, postulate and theorem. • Use the Axioms and five postulates of Euclid's to solve simple problems • Show the relationship between axiom and theorem with examples.	Critical thinking, Logical thinking, Conceptualization, team spirit, visual and spatial ability, procedural thinking, creativity	1) Collaborative learning 2) Think, pair and share 3) Modules 4) PowerPoint presentation
August (23)	Ch 6: Lines and Angles	Students will be able to, • acquire knowledge and understanding of basic concepts and geometric terms.	Procedural thinking while finding the angles, Critical thinking, Analyse, Empathy, visual and spatial ability, procedural thinking, Comprehension Creative thinking	1) To use figures, cut outs 2) Activity: -To verify that vertically opposite angles are equal by paper cutting and pasting method. 3) Group Activity: - Students will write their names using ruler and pencil on

- recognize types of pair of angles and classify them.
- prove that if two lines intersect then vertically opposite angles so formed are equal.
- acquire knowledge and understanding that if a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and its converse.
- explain that the lines which are parallel to a given line are parallel.
- use the above learnt concept in solving problems

an A-4 size sheet and then they will mark different types of angles in them using colour pens.

4)Project-
Integration with
architecture
5)Demonstration
method
6)Collaborative
learning

7) Think, pair and
share

8) Modules

9) PowerPoint
presentation

10) GeoGebra

Ch 7: Triangle

The students will be able to,

- recall congruent figures and identify them.
- define the concept of congruence of different objects and extend it to the congruence of triangles.
- understand that two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence).
- Prove that two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence).
- understand that two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence).
- explain that two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle. (RHS Congruence)
- recognize and use various rules to show congruency of two triangles.
- solve questions using congruence rules.

Critical thinking, Problem solving, Deductive reasoning, Comparison skills, analytical thinking, Conceptualization Synthesizing, Expressing, Evaluation, Logical thinking, Observational skills, Recognize structure, Simulation,

Collaborative effort and team spirit.

		• derive the formula for calculating the area of an equilateral triangle, isosceles right- angled triangle using ‘Heron’s formula’. • develop reverence and respect towards the great mathematician “Heron” and appreciate his contribution in the field of mathematics. • use Heron’s formula to find the area of triangle whose three sides would be given. • apply Heron’s formula effectively in solving problems of real-life situations. • develop interest in mathematics as a problem – solving tool in various fields for its beautiful structures and patterns, etc.		6) Think-pair and share 7) Lecture and Discussion Method 8) PPT & Modules 9) GeoGebra	
October (21)	Ch 8: Quadrilaterals	Students will be able to, • define the properties of different quadrilaterals • verify angle sum property of a quadrilateral.		1) Activity method- Verify the mid-point theorem for a triangle by paper folding and cutting activity. 2) To verify that the sum of both pair of opposite angles of a cyclic quadrilateral is 180° by activity method. 3) Using figures, flash cards	

- apply angle sum property of a quadrilateral in solving questions.
- identify the properties of a parallelogram.
- prove that the diagonal of a parallelogram divides it into two congruent triangles.
- Understand that in a parallelogram opposite sides are equal, and conversely.
- Understand that in a parallelogram opposite angles are equal, and conversely.
- Understand that a quadrilateral is a parallelogram if a pair of opposite sides is parallel and equal.
- Understand that in a parallelogram, the diagonals bisect each other and conversely.
- solve problems using properties and theorems of quadrilaterals.
- apply the properties of parallelogram to the real world.
- identify the criteria needed to prove a quadrilateral to be a parallelogram, rectangle, rhombus and square.
- verify mid-point theorem and its converse.

- 4) Modules
- 5) Brain storming
- 6) Collaborative learning method
- 7) Demonstration method
- 8) Think-pair and share
- 9) Activity method- Properties of quadrilateral will be proved using paper cutting and folding activity.

		• apply midpoint theorem and its converse in solving problems of real-life situations. • Solve questions based on mid-point theorem and its converse.		
November (19)	Ch 14: Statistics	The students will be able to, • define raw data. • define the terms like statistics, data (primary, secondary). • construct a frequency distribution table to classify data. • interpret data from the given bar graph. • interpret data from the give histogram.	Critical thinking, Problem solving, Creative thinking Deductive reasoning, Comparison skills, analytical thinking, Conceptualization Synthesizing, Expressing, Evaluation, Logical thinking, Observational skills, Recognize structure, Simulate, Collaborative effort and team spirit, Empathy, Visual and spatial ability, Procedural thinking	1)Project method 2)Graph Activity Method-draw histogram. 3) Collect problem situation from real life which can be resolved using statistics. 4) Integration with science and social science. 5) Modules 6)Interactive method 7)Think-pair and share 8) Inductive- deductive reasoning 9) Brain storming 10)Collaborative learning

		• convert discontinuous class intervals into continuous class intervals • represent the data using bar graphs, histograms • represent the data using histograms (with varying base lengths) • draw frequency polygons for the given data. • apply the concept learnt in real life situations. • acquainted with different aspects of mathematics used in daily life.			
December (22)	Ch 10: Circles	Students will be able to, • identify circular objects present in the surrounding. • arrive at definition of circle and related concepts- radius, circumference, chord, diameter, arc, secant, sector, segment, subtended angle through examples.	Critical thinking, Problem solving, Deductive reasoning, Comparison skills, analytical thinking, Conceptualization Synthesizing, Expressing, Evaluation, Logical thinking, Observational skills, Recognize structure, Simulate, team	1) Activity- Properties of circle using GeoGebra 2) Activity-Verify that the angles in the same segment of a circle are equal. (paper cutting and pasting method). 3) Activity-Verify that the angle in semi- circle is a right angle by paper folding, pasting and cutting method. 4) Activity-Verify	

		- understand the properties of circle. - understand different properties of circle through hands on activities. - prove that equal chords of a circle subtend equal angles at the centre and understand it's converse. - prove that the angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle. - explain that the perpendicular from the centre of a circle to a chord bisects the chord and conversely, the line drawn through the centre of a circle to bisect a chord is perpendicular to the chord. - explain that the equal chords of a circle (or of congruent circles) are equidistant from the centre (or their respective centres) and conversely.		different properties of circle by paper folding, pasting and cutting method. 5)Interactive method 6)Think-pair and	
		- explain that the angles in the same segment of a circle are equal. - explain that the sum of either of the pair of the opposite angles of a cyclic quadrilateral is 180° and its converse. - solve problems of circles using properties and theorems. - feel the flow of reason while proving a result or solving a problem.		share 7)Inductive-deductive reasoning 8)Brain storming 9)Modules 10)Collaborative learning method	

January (15)	Ch 13: Surface areas and Volume	The students will be able to, - find surface area of right circular cone, sphere, hemisphere. - find volume of right circular cone, sphere, and hemisphere. - apply the concept of perimeter, area and volume in day-to-day life situations. - apply the formula of surface area and volume of 3 d shapes in solving questions.	Logical thinking, teamwork, estimation, Measurement, Critical thinking, Problem solving, analytical thinking, quantitative reasoning, Expression, Conceptualization, Synthesizing, Expressing, Problem solving, Evaluation, Logical thinking, Observational	1)Activity method- Using Nets (for deriving formula) 2)Modules 3)Demonstration Method- To use figures, geometry kit & 3D shapes and solid shapes 4) Activity Method- To find the surface area of a given solid using measurements. 5) Demonstration method 6)Interactive method 7)Think-pair and share 8) Inductive-deductive reasoning 9) Brain storming 10)Interactive method 11)Collaborative learning 12) GeoGebra	

		to develop interest in mathematics as a problem – solving tool in various fields for its beautiful structures and pattern, etc.	skills, recognize structure, Evaluation, Collaborative effort and team spirit, Empathy, Visualize	
PT-1	Ch 1: - Number System Ch 2: - Polynomials			
Mid Term	Ch 1: - Number System Ch 2: - Polynomials Ch 3: - Coordinate Geometry Ch 4: - Linear equation in two variables Ch 5: - Euclid's Geometry Ch 6: - Lines and Angles INTERNAL ASSESSMENT 1 Subject Enrichment- Lab File(5 marks) Multiple Assessment -Choice board Activity (5 marks) Portfolio-Notebook Submission (5 marks)			
PT-2	Ch 7: - Triangles Ch 12: - Heron's Formula			
Annual Exam	Whole Syllabus INTERNAL ASSESSMENT 2 Subject Enrichment- Lab File(5 marks) Multiple Assessment- Choice Board Activity(5 marks) Portfolio- Notebook Submission(5 marks)			

SOCIAL SCIENCE

HISTORY/CIVICS

Month	No Of Working Days	Course Content	Learning Outcome	Skills	Teaching Method
April	18	History Chapter 1: The French Revolution	-Familiarize students with the names of people involved, the different types of ideas that inspired the revolution, the wider forces that shaped it. -Know the use of written, oral and visual material can be used to recover the history of revolutions.	Conclude Collaborative effort Team spirit Analyze Empathy Visualize	• Class room discussions to compare and contrast the conditions prevailed in France that led to revolution with the conditions that led to the first war of Indian Independence. (1857). • Graphic Organisers to critically examine the situations that made the raise in demand of Voting Rights by passive citizens as well as women • Debates to propose solutions to address such imbalances and discriminations that lead to revolutions • Inquiry based learning to appraise the impact of the French

					revolution on the world. Conclude with group Presentations
May	14	Civics Chapter 1: What is Democracy? Why Democracy	-Develop conceptual skills of defining democracy -Understand how different historical processes and forces have promoted democracy. -Develop a sophisticated defense of democracy against common prejudices. -Develop a historical sense of the choice and nature of democracy in India.	Understanding Discussion Analyze Presentation Empathy Visualize Interpretation	World café and Café conversations strategies for introduction of concepts of " Democracy, & features of Democracy • 4 corners strategy to discuss "What & why of democracy? • Students create democratic governance model in the class. • Cartoon interpretation to summarize the benefits of democracy
July	23	Civics Chapter 2: Constitutional Design History ch5:Pastoralism in the Modern world	-Develop conceptual skills of defining democracy -To understand the need for the Constitution -Guiding values of the Indian Constitution -Develop respect for the Constitution and appreciation for Constitutional values -Recognise Constitution as a dynamic and living document - Analyze the impact of modern states, marking of boundaries, contraction of pastures and expansion of markets on pastoralism in the modern world	Understanding Discussion Analyze Presentation Empathy Visualize Interpretation Understanding Discussion Critical analysis	-• Group Discussion to comprehend the purpose of constitution • Poster making/ wall magazine for Comparing and contrasting between Preamble of South African constitution with the preamble of Indian constitution • Role play strategy for creation of Indian constitution • T charts and similar graphic organizers to compare and contrast the lives of Pastoralists pre & post colonialism. • Art integration to depict the evolution of nomadic society

					• Research based presentations using resources provided to compare and contrast the lives and the reasons for poverty of pastoral nomads of India with African Pastoral Nomadic tribes. • Think- Pair- Share and summarize the reading of resources to analyze and infer varying patterns of developments within pastoral societies in different places in India
August	23	History Ch 3: Nazism and Rise of Hitler	-Discuss the critical significance of Nazism in shaping the politics of modern world -Outline key political and social events that contributed to Hitler's rise to power -Get familiarized with the speeches and writings of Nazi leaders -Analyze examples of Nazi Propaganda	Understanding Discussion Critical analysis Visualize	• Watch Video clipping from the last days of Adolf Hitler and discuss the reasons for rise and fall of Hitler • Dramatize the Nazi Propaganda /racial discrimination against Jews • Cartoon interpretation/ Image interpretation • Read passages from “Dairy of Anne frank “and other related literature and discuss the impact of Nazism • Jig saw strategy to critique the genocidal war waged against Jews by the Nazis

Sep	21	Civics Ch3: Electoral Politics.	-Understand representative democracy via competitive party politics -Familiarize with Indian Electoral System -Reason out for the adoption of present Electoral System in India -Develop an appreciation for increased participation of citizens in -Electoral Politics -Recognize the significance of the Election Commission.	Understanding Conclude Respecting self-relate Simulate Collaborative effort and team spirit Analyze Empathy Problem solving	• Role play /have school council elections. • Design and present election manifesto • Create multiple parties and create symbols for elections • Use street play to create awareness about the right to vote.
Oct	21	History ch3:Socialism in Europe and the Russian Revolution	-Explore the history of socialism through the study of Russian Revolution -Familiarize with different types of ideas that inspired the revolution	Explore Understand Analyze	• Interactive Textual interpretations to compare and contrast the situations that led to the rise of Russian& French Revolutions • Student led seminar to cite the impact of Collaboration and communication rendered by the philosophers and leaders in creating awareness amongst the common people • World café' strategy to evaluate the situations that enabled Lenin's Communism. • Socratic Discussions to Interpret the different ideas of philosophers and leaders that shaped the revolution
Nov	19		Discuss the social and cultural	Understanding	Inter Disciplinary Project with

		History Ch4: Forest society and colonialism	world of forest communities through the study of specific revolts -Understand how oral traditions can be used to explore tribal revolts -Analyze the impact of colonialism on forest societies and implication of scientific forestry	Discussion Critical analysis	Chapter 5 of Geography “Natural Vegetation and Wild Life
Dec	22	Civics Chapter 4:Working of Institutions	-Get an overview of Central government structures -Identify the role of Parliament and its procedures -Distinguish between political and permanent executive authorities and functions -Understand the parliamentary system of executives accountability to legislature -Understand the working of Indian Judiciary	Understanding Discussion Analyze Differentiate Presentation Collaborative effort and team spirit Visualize Problem solving	• Watch videos of Parliament and discuss the importance of question hour • Present Moot court to evaluate the rule of Law • Examine the relevant case studies to evaluate the rule of law • Present Mock Parliament session to convert a bill into law • Conduct a mock interview with a parliamentarian • Role play on features of the political and permanent executive
Jan	15	Civics: Ch5 Democratic Rights	-Recognize the need for rights in one’s life. -Understand the availability of rights in a democratic system -Identify and be able to comprehend the fundamental rights given by the Indian Constitution to its citizens -Create awareness regarding the process of safeguarding rights	Understanding Discussion Identification Comprehend	• Declamation on need to have rights and the importance of performing duties. • Debate the need to have rights in the light of study of Saudi Arabia. • Case study to analyze the role of citizens when the rights are exercised or otherwise. • 6 thinking hats to discuss the current issues. • Organize a moot court to discuss the violation of individual rights.

					• Graphic organizer to summarize the coexistence of rights vs duties
Feb	23	Revision	To make the students recapitulate the topics for the annual exam.	Comprehend Discussion Problem Solving	.Guided Discussion -Problem solving based learning -Self-assessment CBSE sample papers will be Solved by the students to make them recapitulate the topics.

GEOGRAPHY

Month	No Of Working Days	Course Content	Learning Outcome	Skills	Teaching Methodology
April	18	India: Size and Location	1. Explain the implication of the location of India & its vast size. 2. Identify & locate standard meridian of India, Tropic of cancer & neighbouring countries. 3 Define the concept of subcontinent & is able to identify countries part of Indian sub-continent. 4. Differentiates between latitudes & longitudes. 5. Appreciate the importance of India's relation with the world through ages.	1. Understand 2. Application 3. Comprehend 4. Distinguish and differentiation 5. Knowledge based 6. Logical Reasoning 7. Map skills	• Use Geo Gebra, Google earth to represent and justify the reasons for the differences in climatic conditions, local and standard time. • Carousel brainstorming strategy for inferring conditions and relationships of the people living in states that are sharing border with the neighbouring countries impact trade and culture.

			6. Develop the skill to locate important latitudes & longitudes passing through India & neighbouring countries of India on the map. 7. Appreciate and understand the implication of the vast longitudinal & latitudinal extent of India. 8. Appreciate the reason why an ocean is named after India.		(Link for Carousel Brain storming Strategy https://www.youtube.com/watch?v=zZxaS7v1-jo) • On map of India hypothetically design two to four alternate longitudes on either side of 82 degrees 30 minutes E and conclude on the selection • Draw out the rationale/ reasons behind fixing (82 degrees 30 minutes E) as a time meridian for India • PPT presentation to present alternate solutions.
May	14	Physical Features of India	1. Recognize the physical features 2. Appreciate the diversity 3. Compare all states of India with the physical features 4. Identify the geographical regions of India	1. Understand 2. Application 3. Comprehend 4. Distinguish and differentiation	• Use Art integrated strategies like gallery walk/Model making to demonstrate how physical features make India a subcontinent. • Role play to depict the lives and relationships

			5. Describe the movements of tectonic plates influencing the physical features 6. Describing, locating and Labeling of the features 7. Understand the major landforms and underlying geological structure; their association with various rocks and minerals as well as nature of soil types	5. Knowledge based 6. Logical Reasoning 7. Map skills	amongst physiographic areas. • Collaborative brainstorming and presentation using different modes such as flipped books, Journals, Collage and other suitable presentations..
July	23	Drainage	1. Enlist the different rivers, the areas they serve and their impact on the economy of That area. 2. Enumerate the different lakes and describe their contribution to the Indian ecology. 3. Present creative solutions to overcome the water pollution also to increase the contribution of water bodies to Indian economy 4. Identify the river systems of the country and explain the role of rivers in human society 5. Justify the statement that the rivers are lifeline of economy with reference to India.	1. Understand 2. Application 3. Comprehend 4. Distinguish and differentiation 5. Knowledge based 6. Logical Reasoning 7. Map skills	• Choice Board strategy where each group to take up one river and focus on the areas they serve and the impact on Economy of that area. • Students will prepare a PPT on lakes. • Street play strategy/poster making/save River songs/ to present awareness on water pollution and suggest solutions

			6. Examine the information about different lakes and infer on their contribution to Indian ecology. 7. Distinguish between the rivers of north and south India		
August & Sep.	44	Wildlife	1. Explain wild life of India 6 Explain the Government efforts to protect the wildlife of our country	1. Understand 2. Application 3. Comprehend 4. Distinguish and differentiation 5. Knowledge based 6. Logical Reasoning 7. Map skills	Inter disciplinary project with History chapter no IV “Forest Society and Colonialism “
October & Nov.	40	Climate	1. Examine and analyze the factors that determine the climate of India 2. Infer how the factors determine the climate of India. 3. Analyze and infer the reasons behind the wide difference between day and night temperatures at	1. Understand 2. Application 3. Comprehend 4. Distinguish and differentiation	• Collect and Read the Weather reports and have a class room discussion to conclude about the factors controlling climate • Watch videos and summarize the findings • Use Mind map/graphic organizers to Enumerate and

			different geographical locations of India. 4. To interpret how monsoon acts as a Unifying bond. 5. Analyse and infer the effect of monsoon winds on rainfall of the Indian subcontinent. 6. Analyse the temperatures between plateau region, Himalayan region, desert region and coastal region. 7. Enumerate and summarize the reasons for the wide difference between temperatures at different geographical locations of India 8. Propose protocols as preventive action for various disasters	5. Knowledge based 6. Logical Reasoning 7. Map skills	summarize the reasons for the wide difference between the day and night temperatures at different geographical locations of India • Read Newspapers, prepare and present mock drills on protocols as preventive action for various disasters
Dec	22	Population	1. Analyze and infer the reasons behind the uneven distribution of population in India with specification to UP & Rajasthan and Mizoram and Karnataka. 2. Explain the population growth and the processes of population change 3 Identify different occupations of the people	1. Understand 2. Application 3. Comprehend 4. Distinguish and differentiation 5. Knowledge based	• Research based learning/ art integration strategy (4 grid analysis) to analyze and infer the reasons behind the uneven distribution of population in India with specification to UP & Rajasthan and Mizoram and Karnataka

			4 Explain various dimensions of National Population policy and understand the need of the adolescents as undeserved groups	6. Logical Reasoning 7. Map skills	
January	15	REVISION			
February	23	REVISION			

ECONOMICS

April and May	32	The Story of Village Palampur (PT1 only)	1. Familiarize with basic concepts through an imaginary story of a village 2. Evaluate the prevailing farming conditions in different states with reasons 3. Examine the factors of production and interdependence of the requirements. 4. Examine the contribution of non-farm activities to the economic growth of the village. 5. Analyze and infer how the prevailing farming conditions impact economic development of different states 6. Enlist the requirements of production and summarize the	Critical thinking Understanding Comprehension Distinguish Differentiate Evaluate Highlight	• Visit a nearest village, interview a farmer/ visit local markets and interview farmers and present it in the class. (Experiential learning strategy) • Poster making/ Concept map and gallery walk to Enlist the requirements of production and summarize the interdependence of these requirements. • Present a business plan for non-farm activities by using the four factors of production
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			interdependence of these requirements. 7. Enlist non-farm activities and depict the link with economic growth.		
July and August	46	People as a resource	1. Understand the demographic concepts 2. Understand how population can be an asset and liability for the nation 3. Understand different types of unemployment and affected people 4. Examine the various factors that constitute the quality of population 5. Analyze the role of government in improving the quality of population. 6. Examine the factors that contribute to unemployment. 7. Analyze and infer the reasons that contribute to the quality of population 8. Enumerate the different schemes of Government in some	Critical thinking Understanding Comprehension Distinguish Differentiate Evaluate Highlight	• Case study on quality of population. (Class room discussion) • Collect sources from Newspaper/ Media and present the findings in the form of a collage or an album • Neighbourhood survey on employment /employability in neighbourhood, analyze the quality of neighbourhood and present in PPT format.

			states and infer on the quality of people there by. 9. Propose solutions to resolve unemployment problem		
September and October	42	Poverty as challenge	1. Understand poverty as challenge 2. Identify vulnerable groups and interstate disparities 3. Appreciate the initiatives of government to alleviate poverty 4. Comprehend that poverty is a multifaceted concept inherent in the rural and urban conditions. 5. Examine the measures taken by the government to eradicate poverty 6. Analyze and infer the reasons of poverty in the rural and urban areas. 7. Evaluate the efficacy of government to eradicate poverty. 8. Compare how poverty estimates have transformed from 1993-94 to 2011-12 Examine the link between education and poverty	Critical thinking Understanding Comprehension Distinguish Differentiate Evaluate Highlight	• PPT presentation using case study given in NCERT text on the reasons of rural and urban poverty. • Declamation with data to Evaluate the efficacy of government to eradicate poverty • Debate whether education can remove poverty

Nov and Dec	41	Food security in India	1 Understand the concept of food security 2 Appreciate and analyze the role of government in ensuring food supply 3. Examine the critical role of food security for its masses. 4. Justify the rationale for the system of food security in India. 5. Appraise the contributory role of Public Distribution system to address FSI Substantiate the role of green revolution in strengthening the PDS. 6. Enumerate various aspects of food security that will ensure continuity of supply to the masses. 7. Examine, analyze and infer various sources of data that point to the rationale of FSI. 8. Enumerate different features of PDS that directly address FSI. 9. Analyze and infer the impact of Green revolution in strengthening the PDS.	Critical thinking Understanding Comprehension Distinguish Differentiate Evaluate Highlight	• Case study and group discussion to substantiate the link between a well-structured food security system and continuity of supply to masses. • Invite relevant Govt. officials to speak on FSI &PDS. Panel discussion/seminar on the impact of the green revolution and PDS.
January	15	REVISION			

Feb	23	REVISION			
TERM 1		PT-1	History: Ch5 Civics: Chapter1 Geography: Chapter1 Economics:Chapter1		
		Mid-Term	History : Ch :1 and 3 Civics: Ch: 1,and 2 Geography: Ch: 1, 2,and 3 Economics: Chapter 2 Internal Assessment 1 : Subject Enrichment: 5 marks(Art integrated) Portfolio(project based) -5 marks Multiple Assessment(choice board activity)-5 marks		
TERM -2		PT-2	History : Ch.3 Civics: Ch. 3 Geography Ch.4 Economics: Ch. 3		

		Annual Examination	History: ch1,2,3,4 Civics: Ch1,2,3,4 Geo: Ch1,2,3,4,5,6 Eco: Ch2,3,4 Internal assessment 2 : Subject Enrichment: 5 marks (Art integrated) Portfolio -5 marks (project based) Multiple Assessment:5 marks (choice board activity)		
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SCIENCE
PHYSICS

APRIL	18	Chapter 7: Motion– • Definition with examples • Scalar and vector quantities • Motion along a straight line • Distance, Displacement, Uniform motion, Non uniform motion, Speed, Average speed, Average velocity, SI units ,Numerical • Acceleration and retardation, Uniform acceleration, and non-uniform acceleration. • Numericals • Graph: concept	Students will be able to: • get aware about meaning of rest and motion • The learners would be able to understand that rest and motion are relative. • Differentiate between distance and displacement. • Identify and categorize scalar and vector quantities. • Calculate the average speed in a given situation. • State the examples of uniformly accelerated motion. • Understand the difference between acceleration and retardation.	• Sorting physical quantities as scalar and vector quantities. • Represent motion graphically. • Solve numericals. • Improve and integrate fine arts in concrete learning. • State the uses of d-t graphs. • Synthesize graphs representing different types of motion.	• Smart Board Content (EXTRA MARKS) • Links from you tube. • Associate mnemonic activity. • 5 E's • STEAM
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		and importance,	- To understand and evaluate the numerical value of different quantities and also associate it with their units. - To correlate various physical quantities like distance, displacement, average speed, acceleration and retardation with day to day observations. - Integrate fine arts and mnemonic devices to develop skills to memorize.		
		<u>Practicals (Physics):</u> To verify the laws of reflection of sound			
MAY	14	Chapter 7: Motion (contd) - Graphical representation of motion by d-t graph - Calculation of speed from d-t graph. - Graphical representation of motion by v – t graph. - Calculation of acceleration and distance from v-t graph - Numericals based on graphs.	- Understand the importance of graphs for representing different types of motion. - Identify the type of motion from d-t graph and v-t graph. - Understand and evaluate speed, acceleration and distance from various graphs.	- Develop numerical solving skills. - Derive the three equations of motion graphically. - Evaluate speed in circular motion - Represent motion of given situation in graphical manner.	- Smart Board Content (EXTRA MARKS) - Links from you tube. - Associate mnemonic activity. 5 E's - STEAM

		- Numerical problems based on equations of motion. - Uniform circular motion <u>Practicals (Physics):</u> To verify the laws of reflection of sound.			
JULY	23	Chapter-8 Force and Laws of motion. - Force– Definition, effects, Types of forces, Balanced and unbalanced forces. - Inertia of a body, inertia and mass - Newton’s First Law of motion - Definition of inertia. - Reasoning questions based on first law. - Newton's second law of motion - Derive $F=ma$	- understand force and its effects - Understand meaning of balanced and unbalanced forces. - Understand newton’s laws and their applications in daily life. - Explain the terms like inertia, impulse and momentum. - Calculate force acting on an object, the momentum associated with any moving object.	- Differentiate between balanced and unbalanced forces. - Evaluate the numerical value of force and momentum. - Explain the laws of motion in various situations	- Smart Board Content (EXTRA MARKS) - Links from you tube. - Associate mnemonic activity. 5 E’s - STEAM

		PRACTICALS (Physics): To determine the density of solid (denser than water) by using a spring balance and a measuring cylinder.			
AUG	23	Chapter-8 Force and Laws of motion (contd) - Newton's second law of motion(contd.) - Derive $F=ma$ - Momentum, definition and units Reasoning questions and numericals based on second law. - Newton's third law of motion - Reasoning Questions based on third law. Chapter 9: Gravitation. - Introduction - Newton's Law of gravitation - Importance	- Understand the concept of conservation of momentum. - Apply the conceptual fact that there is conservation of momentum only if there is no external force. - Understand the importance of newton's law of gravitation.	- Calculate change of momentum in different situations. - Use the second law in deriving force and integrate it with the three equations of motion in solving numericals.	- Smart Board Content (EXTRA MARKS) - Links from you tube. 5 E's - STEAM - Associate mnemonic activity.

		- Numericals - Free fall PRACTICALS (Physics): To determine the density of solid (denser than water) by using a spring balance and a measuring cylinder.			
SEP	21	Chapter 9: Gravitation (contd) - Difference between ‘g’ and ‘G’. - Derive formula of ‘g’ - Value of ‘g’ on earth. - Factors on which ‘g’ depends. - Equations of motion during free fall. - Numericals based on free fall - Difference between mass and weight. - Weight of an object on moon.	- Differentiate between g and G; mass and weight. - Calculate quantities using equations of motion during a free fall. - Comprehend during free fall or a ball when thrown upwards, how ‘g’ varies. - Compare the weight of a body with different ‘g’.	- Evaluate the numerical value of g at different places like earth and moon. - Calculate the weight of a given object on moon and earth. - Apply the fact that mass is a constant anywhere in the universe.	- Smart Board Content (EXTRA MARKS) - Links from you tube. - Associate mnemonic activity. 5 E’s - STEAM

		PRACTICALS (Physics): To establish the relation between the loss in weight of a solid when fully immersed in (a). Tap water (b) Strongly salty water, with the weight of water displaced by it by taking at least two different solids.			
OCT	21	Chapter 9: Gravitation (contd.) • Thrust • Pressure • Applications • Numericals on Thrust and pressure • Upthrust /Buoyancy • Why do objects float or sink? • Archimedes Principle • Numericals • Density • Numericals based on density	• To relate thrust as a kind of force • To comprehend that pressure is the effect of force when it acts on a surface. • To explain the applications of thrust and pressure. • Understand the concept of flotation.	• Learn to apply that a floating body loses all its weight. • Relate Archimedes' principle with floating objects. • Solve numericals on various bodies with varying densities in different liquids floating or sinking. • Comparison of densities of different substances.	• Smart Board Content (EXTRA MARKS) • Links from you tube. • Associate mnemonic activity. • 5 E's • STEAM

		PRACTICALS (Physics): To establish the relation between the loss in weight of a solid when fully immersed in (a). Tap water (b) strongly salty water, with the weight of water displaced by it by taking at least two different solids.			
NOV	19	Chapter 10: Work and energy Introduction • Work done by constant force • Positive and negative work • Numericals • Energy and its Forms • Kinetic energy	• Understand the term work as defined in science. • Apply the concept of scalar product even though force happens to be a vector quantity. • List all situations when work is said to be not done. • Identify and list different types of energy. • Understand the phenomenon of transformation of energy. • Understand the relation between commercial and SI unit of energy.	• To analyse the various examples showing transformation of energy. • Derive expression of KE and PE • Comprehend the billing process of commercial unit of electrical energy. • Conserving natural resources and using electrical appliances at power saving mode.	• Smart Board Content (EXTRA MARKS) • Links from you tube • 5 E's • STEAM

		- Derive the expression for KE - Numericals on KE - Potential energy - Derive the expression for PE - Numericals on PE - Transformation of energy - Law of conservation of energy - Conversion of PE to KE during a free fall - PE is path independent. - Power - Numericals PRACTICALS (Physics): To determine velocity of a pulse propagated through a stretched string/slinky			
DEC	22	Chapter 11: Sound - Introduction - Production of sound	- Understand the phenomena of production as well as the propagation of sound - List various characteristics of a wave - Differentiate between different types of waves.	- Differentiate a pulse from a wave - Sort the difference between wave velocity and particle velocity. - Classify a longitudinal wave from a transverse wave.	- Smart Board Content (EXTRA MARKS) - Links from you tube. 5 E's

		• Propagation of sound • Types of waves (Longitudinal and transverse waves) • Characteristics of a sound wave – Wavelength, speed, amplitude and frequency • Numericals • Speed of sound in different media • Characteristics of a sound (pitch, loudness, quality) • Reflection of sound PRACTICALS (Physics): To determine velocity of a pulse propagated through a stretched string/slinky	• Study the characteristics of a sound • Understand the phenomenon of reflection of sound. •	• Compare speed of sound with that of light. • Segregate sound as pleasant, noisy, loud, soft and shrill or gruff.	• STEAM
JAN	15	• Echo • Numericals based on echo. • Reverberation	• Know about the conditions that are required for an echo to take place. • Understand the meaning of reverberation • Comprehend the concept of ultrasound and its applications.	• Apply concept of multiple reflection of sound in real life situations. • Understand the concept of ultrasound in echolocation by bats. • Calculate the distance using the concept of SONAR	• Smart Board Content (EXTRA MARKS) • Links from you tube. • 5 E's

		• Uses of multiple reflection of sound • Range of Hearing • Infrasound • Ultrasound • Applications of ultrasound PRACTICALS (Physics): To determine velocity of a pulse propagated through a stretched string/slinky	• List the applications of ultrasound	• Explain working of human ear	• STEAM
FEBRUARY	23	PHYSICS: Revision			
MARCH	20	Annual exams.			
PT 1		• Chapter 7: Motion			
Mid Term		• Chapter 7:Motion, • Chapter 8:Force and laws of motion, • Chapter 9:Gravitation (till free fall)	<u>Internal Assessment 1:</u> S E A(5 MARKS)(art integration project)- Prepare a PPT(max 10 slides) on any 5 types of musical instruments of Sikkim mentioning the type of musical instrument(Wind,String or percussion) and the way sound is produced in them. PBA MID TERM(5 MARKS)Project based activity-Design and make a toy on any one of the following topics		

		• Mid Term (80 marks) Multiple Assessment (5 marks) Subject Enrichment (5 marks) Practical Based Assessment (5 marks) Notebook- (5 marks)	-laws of motion -Positive,negative and zero work done -Law of conservation of Energy -Gravity		
PT 2		• Chapter 9:Gravitation(full chapter)			
		• Chapter 10:Work and energy (full chapter),			
Annual exam		• Chapter 7: Motion • Chapter 8:Force and laws of motion • Chapter 9:Gravitation • Chapter 10: Work and energy • Chapter 11: Sound Annual Term(80 marks) Multiple Assessment (5 marks) Subject Enrichment (5 marks) Practical Based Assessment (5 marks) Notebook- (5 marks)			

CHEMISTRY

Month	Days	Course content	Learning outcome	Skills	Teaching method/ Strategies used
APRIL	18	CH – 1 MATTER IN OUR SURROUNDINGS - Physical nature of matter - Characteristics of particles of matter - States of matter - Interconversion of states - Effect of change of pressure - Evaporation PRACTICAL: TRUE SOLUTIONS,SUSPENSIONS AND COLLOIDS	- Particulate nature of matter - States of matter – solid, liquid, gas – and their properties - Nature of attraction between particles in each states - Matter can shift from one state to another under certain conditions - Effect of temperature and pressure on such changes - Definition of evaporation, sublimation, deposition - Factors affecting evaporation, and its cooling effect	- Understanding - Identification - Analytical skills - Recognition	- Use of e – content. - Activity using lab manual demonstration - Interactive Board - Smart class modules to visualise concepts - Art integration - Activity-based learning through model making - Classroom lectures - Animated videos - Interactive board modules 5 E's
MAY	14	CH – 2 IS MATTER AROUND US PURE - Characteristics of pure substances - Types of pure substances	- Definition of pure substance - Identifying pure substances - Differentiate between mixtures on the basis of their properties - Easily recognise types of mixtures	- Differentiation - Conceptual application - Practical skills	- Use of e – content. - Activity using lab manual demonstration - Interactive Board - Smart class modules to visualise concepts

		• Elements • Classification of elements – metals, non-metals and metalloids • Compounds • Properties of compounds • Mixtures • Types of mixtures – homogeneous and heterogeneous mixtures • Characteristics of mixtures PRACTICAL: Compounds and mixtures	• Applications of different types of elements on the basis of their classification • Differentiation of element types • Properties of metals, non-metals and metalloids • Types of chemical reactions	• Experimentation Arithmetic skills	• Art integration • Activity-based learning through model making • Classroom lectures • Animated videos • Numericals • Interactive board modules • 5 E's
JULY	23	CH – 2 IS MATTER AROUND US PURE(CONTD.) • Solutions • Aqueous, non-aqueous • Characteristics of a solution • Concentration of a solution • Suspensions	Understanding of solubility • Differentiating between saturated and unsaturated solution • Factors affecting solubility of solutions	• Experimentation • Practical application • Understanding • Critical thinking	• Use of e – content. • Activity using lab manual demonstration • Interactive Board • Smart class modules to visualise concepts • Art integration • Activity-based learning through model making

		• Characteristics of suspensions • Colloid • Characteristics of Colloid • Separation of components of a mixture PRACTICAL: Physical and chemical changes	• Distinguish between true solution, suspension and colloid on the basis of their properties • Various techniques of separation and why they are used • Practical usage of separation		• Classroom lectures • Animated videos • Numericals • Interactive board modules • 5 E's
			techniques • Understanding real-world application of separation techniques		
AUG	23	CH – 3 ATOMS AND MOLECULES • Laws of chemical combination - law of conservation of mass & law of constant proportion • Dalton's atomic theory • What is an atom? • Atomic symbols • Atomic mass • Atomicity • Molecules	• Definition of law of conservation of mass • Definition of law of constant proportion • Relate the postulates of Dalton's atomic theory with laws of chemical combination • Identification of chemical symbols • Definition and formation of molecules • Classification of molecules • Understand atomicities of similar and dissimilar elements	• Visual understanding • Application • Critical thinking	• Use of e – content. • Activity using lab manual demonstration • Interactive Board • Smart class modules to visualise concepts • Art integration • Activity-based learning through model making • Classroom lectures • Animated videos • Numericals

		• Molecule of an element and a compound • Molecular formula - Valency			• Interactive board modules • 5 E's
SEP	21	CH – 3 ATOMS AND MOLECULES (CONTD.) • Ions • Types of ions • Cations • Anions • Radical • Ionic compounds • Writing chemical formulas • Mole concept	• Positive and negative charges on atoms and molecules • Utilising knowledge of ions to write chemical formulae • Definition and significance of the mole in real world • Unified mass, and calculation of unified mass of particles	• Conceptual application of ions and symbols • Arithmetic skills • Critical thinking • Real world application	• Use of e – content. • Activity using lab manual demonstration • Interactive Board • Smart class modules to visualise concepts • Art integration • Activity-based learning through model making • Classroom lectures • Animated videos • Numericals • Interactive board modules • 5 E's
OCT	21	CH – 4 STRUCTURE OF ATOM • Electrical nature of matter • Discovery of electron (cathode ray tube experiment) • Discovery of proton	• Discovery of electrons and their properties • Discovery of protons and their properties • Drawbacks of each theoretical model • Significance of Bohr's breakthrough	• Reflective thinking. • Collaborating Learning	• Use of e – content. • Activity using lab manual demonstration • Interactive Board • Smart class modules to visualise concepts

		- Thomson's atomic model - Rutherford's scattering experiment - Bohr's model of an atom - Atomic Number - Mass Number PRACTICAL: LAW OF CONSERVATION OF MASS	Definition of atomic and mass numbers	- Critical thinking - Problem solving	- Art integration - Activity-based learning through model making - Classroom lectures - Animated videos - Numericals - Interactive board modules 5 E's
NOV-DEC	41	CH – 4 STRUCTURE OF ATOM - Bohr-Bury scheme - Isotopes - Isobars	- Rules governing Bohr's model - Electronic configurations of first 20 elements - Difference between isotopes and isobars - Change in chemical properties and their uses	- Reflective thinking. - Collaborative Learning - Critical thinking - Problem solving	- Use of e – content. - Activity using lab manual demonstration - Interactive Board - Smart class modules to visualise concepts - Art integration - Activity-based learning through model making - Classroom lectures - Animated videos - Numericals
JAN	15	REVISION	The students will be able to: - Recapitulate their learning. - Produce their learning in the form of written and oral assessment.	- Reflective thinking. - Collaborative Learning	- Guided Discussion. - Problem solving based learning

			• Reflect upon their interpretation skills. • Reflect upon their writing and learning skills.	•Critical thinking •Problem solving	• Numericals •Interactive board modules
FEB	23	REVISION			
PT1		CH-1 MATTER IN OUR SURROUNDINGS			
MID-TERM		CH-1 MATTER IN OUR SURROUNDINGS CH-2 IS MATTER AROUND US PURE?			
PT2		CH-3 ATOMS AND			
		MOLECULES			
FINAL		CH-1 MATTER IN OUR SURROUNDINGS CH-2 IS MATTER AROUND US PURE? CH-3 ATOMS AND MOLECULES CH-4 STRUCTURE OF THE ATOM			

BIOLOGY

Month	Days	Course content	Learning outcome	Skills	Teaching method/ Strategies used
APRIL	18	CH – 5 THE FUNDAMENTAL UNIT OF LIFE PRACTICAL: To prepare temporary stained mounts of : a) onion peel	The students will be able to: • trace the discovery of cell • compare unicellular and multicellular organisms on the basis of their observation • differentiate between prokaryotic and eukaryotic cell on the basis of their structure • recognize the different shapes and sizes of cells of different organisms	Knowledge, Comprehension Evaluation, Analysis Analysis, Application Comprehension Knowledge, Understanding Comprehension, Application Analysis, Comprehension Knowledge, Comprehension, Analysis Problem solving, Logical thinking Evaluation, Analysis,	• Demonstration cum lecture method • Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching

		b) Human cheek cells and to record observations and draw their labelled diagrams.		Co-operative Learning Synthesis, Knowledge, Application, Creative Thinking	
MAY	14	CH – 5 THE FUNDAMENTAL UNIT OF LIFE (contd.)	• identify the components of plant cell and animal cell. • relate the structure and functions of	Knowledge Understanding	• Demonstration cum lecture method
		PRACTICAL: To prepare temporary stained mounts of : a) onion peel b) Human cheek cells and to record observations and	different components of plant and animal cells. • draw animal cell and plant cell and label their organelles. • differentiate between animal cell and plant cell on the basis of their structure and function. • observe and discover the movement of molecules of substances of different concentrations into the cell and relate it to day to day activities. • appreciate the co-ordination and co- operation of different cell organelles for proper functioning of a cell. • discover the environmental impact on diffusion and osmosis.	Evaluation Synthesis Application, decision making Comprehension, Analysis Critical thinking Evaluation, Analysis	• Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching

		draw their labelled diagrams.			
JULY	23	CH – 6 TISSUES PRACTICAL: To identify parenchyma, collenchyma and sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals from prepared slides and draw their labelled diagrams.	The students will be able to: • conceptualize the meaning of the term ‘Tissue’ with examples. • analyze the reason of having different types of tissue in plants and animals on the basis of different body design and needs. • compare different types of meristematic tissue on the basis of their location and function • reason out the restricted growth of a plant or a branch through activity. • discover the relationship between different types of permanent tissue on the	Comprehension knowledge Analysis, Evaluation Comprehension, Critical thinking Comprehension, Evaluation, Analysis Synthesis, Analysis Problem Solving Analysis, Logical thinking Synthesis, Knowledge Analysis, Comprehension	• Guided Discussion • Activity based teaching • Problem solving based learning

			basis of location, structure and function. • differentiate between meristematic tissue and permanent tissue		• Peer teaching • Demonstration cum lecture method
			on the basis of their structure and function.		
AUGUST	23	CH – 6 TISSUES (contd.) PRACTICAL: To identify parenchyma, collenchyma and sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibers and nerve cells in animals from prepared slides and draw their labelled diagrams.	The students will be able to: • discover the relationship between different types of permanent tissue on the basis of location, structure and function. • differentiate between meristematic tissue and permanent tissue on the basis of their structure and function. • admire the role of tissue (xylem) in maintaining moisture in the atmosphere, water cycle etc. in nature	Application, Understanding, Analysis Analysis, Synthesis Comprehension Evaluation, Analysis Synthesis	• Guided Discussion • Activity based teaching • Problem solving based learning

				Comprehension, Application, Synthesis	• Peer teaching • Demonstration cum lecture method
SEPTEMBER	21	REVISION	Revision of chapter 5 and 6 for mid term		
OCTOBER	21	CH 6– TISSUES (contd.)	• classify different types of animal tissues on the basis of their structure and function. • co-relate the structure, functions & location of different types of epithelial tissue. • interpret the importance of having different types of tissues in different organs. • categorize and interpret the importance of different types of connective tissue. • establish the relationship between the	Application, Creativity Synthesis Comprehension Application Evaluation Synthesis Comprehension	• Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching • Demonstration cum lecture method
			structure and function of nervous tissue. • draw different types of plant tissues and animal tissues.		

			• appreciate the co-ordination of different types of tissues for proper functioning of an organ across and find ways to solve them.		
NOV	19	CH – 12 IMPROVEMENT IN FOOD RESOURCES	The students will be able to: • Identify the nutrients required for growing plants. • evaluate the effects of nutrient deficiency. • adopt the different methods of preparing manure. • compare the qualities of manure and fertilizers in maintaining soil fertility. • justify the benefits of organic farming in present day scenario.	Analysis Comprehension Evaluation Comprehension Analysis, Application Application Knowledge Application Evaluation Comprehension	• Guided Discussion • Activity based teaching • Problem solving based learning • Peer teaching • Demonstration cum lecture method
DEC	22	CH – 12 IMPROVEMENT IN FOOD RESOURCES (contd.)	The students will be able to: • adopt the different patterns of growing crops for improving the production.	Evaluation, Self awareness	

			• evaluate the importance of mixed farming. • analyze& appreciate the role of some ancient techniques in improving crop production • evaluate the harmful effects of excess use of pesticides, weedicides and fertilizers.	Synthesis, Coping with stress, Comprehension Evaluation Application, Environment awareness Synthesis Knowledge	
			• assess the benefits and harm in using new techniques in crop production. • interpret the correct way of cattle farming, poultry, fish faming and apiculture. • solve problems based on the knowledge/concept in this lesson • analyze the hypothetical problems given by the teacher and do “Research work” to find out a possible solution. • recognize and adopt the eco friendly activities of cultivation.	Analysis Evaluation Comprehension Application Analysis Analysis, Knowledge Application Evaluation Synthesis Comprehension	
JAN	15	REVISION	The students will be able to: • Recapitulate their learning.	• Reflective thinking. •Collaborating Learning	• Guided Discussion. • Problem solving based learning

			• Produce their learning in the form of written and oral assessment. • Reflect upon their interpretation skills.	• Critical thinking • Problem solving	• Peer teaching
FEB	23	REVISION	• Reflect upon their writing and learning skills.		
MARCH	FINAL EXAMS				
PT1	PT1 – Chapter 5				
MID TERM	Chapters 5, 6 (upto plant tissues) Multiple Assessment- (Mid Term)- Choice board- Chemistry Subject Enrichment (Mid Term)- Art Integrated activity Portfolio-(Mid Term)- (These marks include physics, chemistry and biology)				
PT2	PT2 – Chapter 6				
ANNUAL EXAM	Chapter 5, 6 and 12 Multiple Assessment- (Annual Exam)- Choice board Subject Enrichment (Annual Exam)- Art Integrated activity - CHEMISTRY- HOW DOES SOIL AFFECT THE pH OF WATER Portfolio-(Annual Exam)- (These marks include physics, chemistry and biology)				

Artificial Intelligence

BOOK NAME:- CBSE HANDBOOK

PART A:- EMPLOYABILITY SKILLS (10 Marks)

Unit 1 : Communication Skills (*)

Unit 2 : Self-Management Skills (3 marks)

Unit 3 : ICT Skills (3 marks)

Unit 4 : Entrepreneurial Skills (4 marks)

Unit 5 : Green Skills (*)

* marked units are to be assessed through Internal Assessment/ Student Activities. They are not to be assessed in Theory Exams

PART B:- SUBJECT SPECIFIC SKILLS (40 Marks)

☞ Unit 1: Introduction to Artificial Intelligence (AI) (10 marks)

☞ Unit 2: AI Project Cycle (15 marks)

☞ Unit 3: Neural Network (5 marks)

☞ Unit 4: Introduction to Python (10 marks)

PART C: PRACTICAL WORK (35 Marks)

PYTHON Practical file (15 marks)

(Unit 4: Introduction to Python Practical File with minimum 15 Programs)

PYTHON Practical exam (15 marks)

Viva Voce (5 marks)

PART D:- PROJECT WORK (15 Marks)

Project Work / Field Visit / Student Portfolio * relate it to Sustainable Development Goals

Month		Course Content	Learning Outcomes	<u>Pedagogical Strategies</u> Session / Activity / Practical/ Assessment	Skills
April	18	PART B-SUBJECT SPECIFIC SKILLS	To identify and appreciate Artificial Intelligence and describe its applications in daily life.	Session: Introduction to AI and setting up the context of the curriculum Activity: Dream Smart Home idea Learners to design a rough layout of floor plan of their dream smart home.	- Understanding - Designing - Critical thinking - Problem solving
April	18	UNIT 1: Excite	To relate, apply and reflect on the Human-Machine Interactions. To identify and interact with the three domains of AI: Data, Computer Vision and Natural Language Processing.	Activity: The AI Game - Learners to participate in three games based on different AI domains. - Game 1: Rock, Paper and Scissors (based on data) - Game 2: Mystery Animal (based on Natural Language Processing -NLP) - Game 3: Emoji Scavenger Hunt (based on Computer Vision -CV)	- Understanding - Analysing - Critical thinking - Reflective thinking
			To undergo an assessment for analysing progress towards acquired AI-Readiness skills.	Activity: AI Quiz (Paper Pen/Online Quiz)	
			To imagine, examine and reflect on the skills required for futuristic job opportunities.	Activity: To write a letter Writing a Letter to one's future self. Students will write a letter to self-keeping the future in context. They will describe what they have learnt so far or what they would like to learn someday	- Understanding - Critical thinking - Reflective thinking
		Unit 1- Relate	Students will relate to application of Artificial Intelligence in their daily lives. To unleash their imagination towards smart homes and smart cities. To relate, apply and reflect on the Human-Machine Interactions.	Video Session: To watch videos on Smart cities and Smart Homes	- Understanding - Analysing - Critical thinking - Problem Solving

		Unit 1- Purpose	To understand the impact of Artificial Intelligence on Sustainable Development Goals to develop responsible citizenship.	Session: Introduction to UN Sustainable Development Goals Activity: Set of pictures will be shown to the students and students will identify the Sustainable Goal. Students to answer questions on Sustainable Development Goals	- Understanding - Analysing - Critical thinking - Problem Solving
May	14	PART B-SUBJECT SPECIFIC SKILLS Unit 4 Chapter 2 Introduction to Python Chapter 4 Lists in Python	Acquire introductory Python programming skills in a very user- friendly format.	Session: - Introduction to Python language - Introducing python programming and its applications Practical: Python Basics - Students go through lessons on Python Basics(Variables, Arithmetic Operators, Expressions, Data Types - integer, float, strings, using print() and input()) - Students will try some simple problem solving exercises on Python Compiler. Practical: Python Lists - Students go through lessons on Python lists - Students will try some basic problem solving exercises using lists on Python Compiler. Assessment/ Class Test- Online Quiz	Understanding Computational Thinking Identifying Critical Thinking Problem Solving
July	23	PART B-SUBJECT SPECIFIC SKILLS UNIT 1 Possibilities	- To research and develop awareness of skills required for jobs of the future. - To imagine, examine and reflect on the skills required for the futuristic opportunities. - To develop effective communication and collaborative work skills.	Session: Theme-based research and Case Studies - Students will listen to various case-studies of inspiring start-ups, companies or communities where AI has been involved in real-life. - Students will be allotted a theme around which they need to search for present AI trends and have to visualize the future of AI in and around their respective theme. Activity: Job Ad Creating activity Students will figure out how AI is going to transform the nature of jobs in future	- Understanding - Analysing - Critical thinking - Problem Solving

		AI Ethics	To understand and reflect on the ethical issues around AI.	Video Session: Discussing about AI Ethics Activity: Ethics Awareness Various case studies will be discussed in the class and students will write their point of view about AI Ethics	• Understanding • Analysing • Critical thinking • Problem Solving
			To gain awareness around AI bias and AI access.	Session: AI Bias and AI Access • Discussing about the possible bias in data collection • Discussing about the implications of AI technology	
		Part A:- Employability Skills Unit 2: Self Management Skills	Apply stress management techniques Demonstrate the ability to work independently	• Guided Discussion • Power point presentation Notes, Assignments and Pen and Paper Test Preparing a write-up on an essay on experiences during a holiday trip	Understanding Analysing Identifying
AUGUST	23	PART B-SUBJECT SPECIFIC SKILLS Unit 2: AI Project Cycle	Identify the AI Project Cycle framework.	Tool Used:- Power point Presentation Session: Introduction to AI Project Cycle • Problem Scoping • Data Acquisition • Data Exploration • Modelling • Evaluation	• Understanding • Problem Solving • Identifying • Critical Thinking
			Learn problem scoping and ways to set goals for an AI project.	Activity: Brainstorm around the theme provided and set a goal for the AI project. • Discuss various topics within the given theme and select one. e.g. Restaurant Buffet problem • List down/ Draw a mind map of problems related to the selected topic and choose one problem to be the goal for the project.	• Understanding • Problem Solving • Identifying • Critical Thinking
		Problem Scoping	Identify stakeholders involved in the problem scoped. Brainstorm on the ethical issues involved around the problem selected.	Activity: To set actions around the goal. • List down the stakeholders involved in the problem. • Search on the current actions taken to solve this problem. • Think around the ethics involved in the goal of your project.	• Understanding • Problem Solving • Identifying • Critical Thinking

				Understand the iterative nature of problem scoping for in the AI project cycle. Foresee the kind of data required and the kind of analysis to be done.	Activity: Data and Analysis • What are the data features needed? • Where can you get the data? • How frequent do you have to collect the data? • What happens if you don't have enough data?	
				Share what the students have discussed so far.	Presentation: Presenting the goal, actions and data.	
			Unit 2 AI Project Cycle - Data Acquisition	Identify data requirements and find reliable sources to obtain relevant data.	Activity: Introduction to data and its types. Students work around the scenarios given to them and think of ways to acquire data.	
			Unit 2 AI Project Cycle Data Exploration	To understand the purpose of Data Visualization	Session: Data Visualisation • Need of visualising data • Ways to visualise data using various types of graphical tools.	
				Use various types of graphs to visualise acquired data.	Activity: Let's use Graphical Tools • To decide what kind of data is required for a given scenario and acquire the same. • To select an appropriate graphical format to represent the data acquired. • Presenting the graph sketched.	
			Unit 2 AI Project Cycle Modelling	Understand, create and implement the concept of Decision Trees.	Session: Decision Tree • To introduce basic structure of Decision Trees to students.	
					Activity: Decision Tree • To design a Decision Tree based on the data given.	

			Understand and visualise computer's ability to identify alphabets and handwritings.	Activity: Pixel It - To create an "AI Model" to classify handwritten letters. - Students develop a model to classify handwritten letters by diving the alphabets into pixels. - Pixels are then joined together to analyse a pattern amongst same alphabets and to differentiate the different ones.	
SEPTEMBER	21	PART B-SUBJECT SPECIFIC SKILLS Unit 4 Python Python- Control Statements- if statement, for loop and while loop	Learning the concepts of loops- for loop and while loop	Session with the help of Power-point presentation: Revision of Python Lists For loop, while loop	Understanding Analysing Problem Solving Identifying Critical Thinking
				Practical: Python loops with the help of Google colab- Python notebook - Students will learn the concept of python loops. - Students will learn for loop with the help of range() and in operator - while loop programs	
				Assessment/ Class Test- Online quiz	
OCTOBER	21	PART B: UNIT 3: NEURAL NETWORK:	Understand and appreciate the concept of Neural Network through gamification.	Session: Introduction to neural network • Relation between the neural network and nervous system in human body • Describing the function of neural network.	Identifying Understanding Analysing
				Recommended Activity: Creating a Human Neural Network	

				• Students split in four teams each representing input layer (X students), hidden layer 1 (Y students), hidden layer 2 (Z students) and output layer (1 student) respectively. • Input layer gets data which is passed on to hidden layers after some processing. The output layer finally gets all information and gives meaningful information as output.	
NOVEMBER	19	PART A- Unit 5: Green Skills	• Demonstrate the knowledge of importance, problems and solutions related to sustainable development	• Power-point presentations • Notes&Assignment • Pen and Paper Test Online Quiz ACTIVITIES 1. Identify the problem related to sustainable development in the community • Group discussion on the importance of respecting and conserving indigenous knowledge and cultural heritage	• Understanding • Analysing • Problem Solving • Identifying • Critical Thinking
		PART A- Unit 4: Entrepreneurial Skills	List the characteristics of successful entrepreneur	• Powerpoint presentations • Notes&Assignment • Pen and Paper Test • Online Quiz ACTIVITIES 1. Writing a note on entrepreneurship as career option 2. Collecting success stories of first generation and local entrepreneurs 3. Listing the entrepreneurial qualities analysis of strength and weaknesses • Group discussion of self- qualities that students feel are needed to become successful entrepreneur	• Understanding • Analysing • Problem Solving • Identifying • Critical Thinking
		PART A- Unit 1: Communication	• Demonstrate knowledge of various methods of communication • Provide descriptive and specific	• PowerPoint presentations • Notes Assignment • Pen and Paper Test & Online Quiz	• Understanding • Analysing • Problem Solving

DECEMBER	22	Skills	feedback • Apply measures to overcome barriers in communication • Apply principles of communication Demonstrate basic writing skills		• Identifying Critical Thinking
JANUARY	15	PART A- Unit 3: Basic ICT Skills	Distinguish between different operating systems Apply basic skills for care and maintenance of computer	• PowerPoint presentations • Demonstration • Notes • Assignment Pen and Paper Test & Online Quiz	• Understanding • Analysing • Problem Solving • Identifying Critical Thinking
FEB MAR	23 20	Revision and Annual Exam	The students will be able to: •Recapitulate their learning. •Produce their learning in the form of written and oral assessment. • Reflect upon their interpretation skills. • Reflect upon their writing and learning skills.	• Guided Discussion. • Problem solving based learning • Peer teaching	• Reflective thinking. •Collaborating Learning •Critical thinking •Problem solving
PT1			PT1 AI:- Part B-Unit 1(Excite, Relate, Purpose) (Pg 9,10, 14- 39) Python:- Chapter 1,2 (Pg 10-23, 29-42) Multiple Assessment (5 marks) Practical Based assessment (5 Marks) Note Book Submission (5 Marks)		

MID TERM	AI:- Part B- Unit 1 (Excite, Relate, Purpose, Possibilities, AI Ethics) , Unit 2 Pg 82-97 Python:- Chapter 1, 2 (Pg 10-23, 29-42), Chapter 4 (Pg65-74) Employability skills- Self Management Skills Practical:- Midterm exam for 50 marks Multiple Assessment (5 marks) Practical Based assessment (5 Marks) Note Book Submission (5 Marks)
PT2	PT3 AI:- Part B- Unit 3 Python:- Chapter 5 (Pg 75-85), Employability skills- Entrepreneurial Skills Multiple Assessment (5 marks) Practical Based assessment (5 Marks) Note Book Submission (5 Marks)
ANNUAL EXAM	100% syllabus for 50 marks.

संस्कृतम्

अधिगम-उद्देश्य

1. संस्कृत के माध्यम से छात्रों को भारतीय संस्कृति की सम्यक जानकारी प्राप्त करने योग्य बनाना।
2. संस्कृत भाषा के शुद्ध उच्चारण पर बल देना।
3. नैतिक मूल्यों एवं अनुशासन आदि भावों का विकास करना।
4. विद्यार्थियों में संस्कृत लिखने, पढ़ने व समझने के लिए रूचि उत्पन्न करना।

पाठ्यपुस्तकानि

1. 'मणिका' प्रथमो भाग: पाठ्यपुस्तकम् (प्रकाशनम्-केन्द्रीय माध्यमिक शिक्षा बोर्ड)
2. 'मणिका-अभ्यासपुस्तकम्'-प्रथमो भाग: - (प्रकाशनम्-केन्द्रीय माध्यमिक शिक्षा बोर्ड)

मासाः	कार्य- दिवसाः	विषय-वस्तुः	शिक्षणोद्देश्यः	कौशल	शिक्षण-युक्तियाँ
अप्रैल	18	पाठ -१ अविवेकः परमापदां पदम् पाठः-२ पाथेयम् व्याकरणम् – संस्कृतवर्णमाला (वर्तनी- उच्चारणस्थानानि) स्वरसन्धिः:- >दीर्घः, गुण, वृद्धिः, यण्, अयादि >व्यञ्जनसन्धिः - वर्गीप्रथमवर्णस्य तृतीयवर्णे परिवर्तनम् (जश्त्वसन्धिः), 'म' स्थाने अनुस्वारः >विसर्गसन्धिः – उत्त्वम्, शत्वम्, षत्वम्, सत्वम्	>छात्र पाठ के माध्यम से जानेंगे कि बिना विचारे किए गए कार्य से जीवन में बहुत बड़ा संकट उत्पन्न हो सकता है , अतः सोच-समझकर ही किसी भी कार्य को करना चाहिए। > छात्र सुभाषितश्लोकों में निगूढ संस्कृत एवं भारतीय संस्कृति के अनुपम ज्ञान एवं संदेश को आत्मसात् करेंगे। > छात्र पाठ में आये नवीन शब्दों को ग्रहण कर सकेंगे।	> कल्पनाशीलता > विश्लेषणात्मकता > आत्मचिंतन > भावात्मकता	> उदाहरण विधि > आगमन एवं निगमन विधि > दृश्य-श्रव्य सामग्री द्वारा शिक्षण
मई	14	रचनात्मककार्यम्- > अपठित-अवबोधनम् > चित्रवर्णनम् > संवादः/कथापूर्तिः > अनुवादः व्याकरणम्- शब्दरूपाणि (पुल्लिङ्गशब्दाः) >अजन्ताः - कारान्त - बालकवत्, इकारान्त- कविवत्, उकारान्त--साधुवत्	> पाठ के माध्यम से छात्र पौराणिक कथानकों से परिचित होंगे। > छात्रों के वाचन एवं पठन कौशल का विकास होगा	> सृजनात्मकता > काठिन्य-निवारण > कल्पनाशीलता	> प्रत्यक्ष विधि > व्याख्यान विधि > आगमन एवं निगमन विधि > दृश्य-श्रव्य सामग्री द्वारा शिक्षण

		> हलन्तः – भवत् (स्त्रीलिङ्गशब्दाः) > अजन्ताः - आकारान्त-लतावत् > ईकारान्त- नदीवत् (नपुंसकलिङ्गशब्दाः) > अजन्ताः – अकारान्त-फलवत् (सर्वनामशब्दाः) अस्मद्, युष्मद्, तत्, किम् (त्रिषु लिङ्गेषु)			
जून	00				
जुलाई	23	पाठः – ३ विजयतां स्वदेशः रचनात्मककार्यम्- > अपठित-अवबोधनम् > चित्रवर्णनम् > संवादः/कथापूर्तिः > अनुवादः धातुरूपाणि> > (परस्मैपदिनः)- भू, नम्, गम्, अस्, प्रच्छ्, कृ, ज्ञा, क्षाल्, नी (पञ्चसु लकारेषु) > (आत्मनेपदिनः)सेव्, लभ्, रुच् (लटलकारे लृटलकारे च)	> छात्रों में अच्छे चरित्र , आचरण एवं परोपकार की भावना विकसित होगी। > छात्रों में महाराणा प्रताप के जीवन चरित्र से देशभक्ति की भावना का विकास होगा । > छात्र पाठ में निहित मौलिक ज्ञान को अपने जीवन में उतार पाएँगे साथ ही माता-पिता के महत्व को समझेंगे	> सृजनात्मकता > विश्लेषणात्मकता > भावात्मकता > काठिन्य-निवारण	> प्रत्यक्ष विधि > व्याख्यान विधि > समस्या समाधान विधि > प्रदर्शन विधि > दृश्य-श्रव्य सामग्री द्वारा शिक्षण
अगस्त	23	पाठः – ४ विद्यया भान्ति सद्गुणाः पाठः- ५ कर्मणा याति संसिद्धिम् >कारक-उपपद-विभक्तयः ➤ द्वितीया –समया/निकषा, प्रति, विना, परितः, उभयतः ➤ तृतीया - सह/ समम्/ सार्धम्, विना, अलम्, हीन ➤ चतुर्थी - रुच्, दा (यच्छ्), नमः, कुप्, अलम् (सामर्थ्ये) ➤ पञ्चमी - विना, बहिः, भी, रक्ष् ➤ षष्ठी -उपरि, अधः, पुरतः, पृष्ठतः, वामतः, दक्षिणतः	> पाठ के माध्यम से छात्र पञ्चतन्त्र की रचना के प्रमुख उद्देश्य एवं सद्गुणों के निर्माण में विद्या के महत्व को जानेंगे । > पाठ के माध्यम से छात्र जानेंगे कि अहङ्कार ज्ञान को नष्ट कर देता है एवं कर्मनिष्ठता से व्यक्ति सभी सिद्धियों को प्राप्त कर सकता है । > छात्र प्राचीन संस्कृत कथानकों से परिचित होंगे। > छात्रों के पठन-वाचन कौशल का विकास होगा।	> रचनात्मकता > कल्पनाशीलता > विश्लेषणात्मकता > काठिन्य निवारण	> समूह चर्चा > आगमन एवं निगमन विधि > उदाहरण विधि > व्याख्यान विधि

		➤ सप्तमी -स्निह्, विश्वस्, निपुण, कुशल			
सितम्बर	21	पाठ:-६ तत् त्वम् असि >पठित- अवबोधनम् (गद्यांश, पद्यांश, नाट्यांश, श्लोकान्वयः, >प्रश्न-निर्माणम् >घटनानुसार कथा-लेखनम् >प्रश्नानां निर्माणम्-(एकपदेन , बहुविकल्पात्मकाः) >अपठित-अवबोधनम् >रचनात्मककार्यम्- >अनुच्छेदः >संवादः /कथापूर्तिः >पत्रम् >चित्रवर्णनम् >भाषानुवादः	>पाठ के माध्यम से छात्र जानेंगे कि अहङ्कार ज्ञान को नष्ट कर देता है। > छात्र पाठ के माध्यम से ज्ञान के महत्व को समझेंगे एवं उसे प्राप्त करने के लिए अत्यंत धैर्य की आवश्यकता होती है ये जानेंगे। > छात्र पाठ को पढ़ सकेंगे एवं संस्कृत के नवीन शब्दों से परिचित होकर वाक्य निर्माण कर सकेंगे	> आत्म-चिंतन > विश्लेषणात्मकता	> प्रत्यक्ष विधि > समूह चर्चा > आगमन एवं निगमन विधि > उदाहरण विधि
अक्टूबर	21	पाठ-७ तरवे नमोऽस्तु > अव्ययानि ➤ स्थानबोधकानि- अत्र, तत्र, अन्यत्र, सर्वत्र, यत्र, एकत्र, उभयत्र ➤ कालबोधकानि- यदा, तदा, सर्वदा, एकदा, पुरा, अधुना, अद्य, श्वः, ह्यः ➤ प्रश्नबोधकानि- किम्, कुत्र, कति, कदा, कुतः, कथम्, किमर्थम् ➤ अन्यानि- च, अपि, यदि, तर्हि, यथा, तथा, सम्यक्, एव >प्रत्ययाः (क्त्वा, तुमुन ल्यप्, शतृ) >अपठित-अवबोधनम् >रचनात्मककार्यम्- >अनुच्छेदः >संवादः /कथापूर्तिः >पत्रम्	>छात्र पाठ के माध्यम से निरन्तर सत्कार्य करने वाले महान् वृक्षों का हमारे जीवन में कितना महत्व है, इस विषय को समझेंगे। > छात्रों को प्रत्ययों के प्रयोग में निपुण बनाना	> रचनात्मकता > कल्पनाशीलता > विश्लेषणात्मकता > काठिन्य निवारण > आत्मचिंतन	> समूह चर्चा > आगमन एवं निगमन विधि > उदाहरण विधि > व्याख्यान विधि > समस्या समाधान विधि > दृश्य-श्रव्य सामग्री द्वारा शिक्षण

		>चित्रवर्णनम् >भाषानुवादः >संख्या: – 1-100 (1-4 केवलं प्रथमा विभक्तौ)			
नवम्बर	19	पाठ-८ न धर्मवृद्धेषु वयः समीक्ष्यते पाठ -९ कवयामि वयामि यामि व्याकरणम्- >अपठित-अवबोधनम् >रचनात्मककार्यम्- >अनुच्छेदः >संवादः /कथापूर्तिः >पत्रम् >चित्रवर्णनम् >भाषानुवादः	>पाठ के माध्यम से छात्र जानेंगे कि ज्ञानवृद्ध मनुष्य का महत्व वयोवृद्ध मनुष्य से कई अधिक होता है। >छात्र राजा भोज के महान् जीवनचरित्र से परिचित होंगे।	> वाचन कौशल > विश्लेषणात्मकता > भावात्मकता > काठिन्य-निवारण	> समूह चर्चा > आगमन एवं निगमन विधि > उदाहरण विधि > व्याख्यान विधि
दिसम्बर	22	पाठ-१० भारतीयम् विज्ञानम् (केवलम् आन्तरिकमूल्याङ्कनाय) पाठ-११ भारतेनास्ति मे जीवनम् जीवनम् (केवलम् आन्तरिकमूल्याङ्कनाय) व्याकरणम्- >अपठित-अवबोधनम् >रचनात्मककार्यम्- >अनुच्छेदः >संवादः /कथापूर्तिः >पत्रम् >चित्रवर्णनम् >भाषानुवादः	>छात्र भारतीयसंस्कृति एवं संस्कृत में छिपे विज्ञान के महत्वपूर्ण रहस्यों से परिचित होंगे। >पाठ में दिए गए पद्यों के माध्यम से छात्रों में मातृभूमिभारतभूमि के प्रति त्याग, स्नेह एवं भक्ति की भावना का विकास होगा।	> विश्लेषणात्मकता > काठिन्य-निवारण	> प्रत्यक्ष विधि > समूह चर्चा > उदाहरण विधि
जनवरी	15	पुनरावृत्तिः	छात्र पठित पाठों की पुनरावृत्ति करेंगे एवं तत्संबंधित कठिनाईओं का निराकरण करेंगे	> श्रवण-वाचन कौशल > सृजनात्मकता > विश्लेषणात्मकता	> प्रत्यक्ष विधि > समूह चर्चा > उदाहरण विधि
फरवरी	23	पुनरावृत्तिः	छात्र पठित पाठों की पुनरावृत्ति करेंगे एवं तत्संबंधित कठिनाईओं का निराकरण करेंगे	> विश्लेषणात्मकता > काठिन्य-निवारण	> समूह चर्चा
मार्च	20	पुनरावृत्तिः	छात्र पठित पाठों की पुनरावृत्ति करेंगे एवं तत्संबंधित कठिनाईओं का निराकरण करेंगे	> विश्लेषणात्मकता > काठिन्य-निवारण	> समूह चर्चा

पूर्वमध्य-सत्र (पी.टी.-१)	मणिका-पाठ -१,२ व्याकरणम् – अपठित-अवबोधनम्,संवादः,संधिः,चित्रवर्णनम्, संस्कृतवर्णमाला (वर्तनी- उच्चारणस्थानानि)
मध्य-सत्र	मणिका - पाठ-१,२,३,४,५ व्याकरणम् -- अपठित-अवबोधनम्,पत्रम्,संवादः,संधि , वर्तनी- उच्चारणस्थानानि,चित्रवर्णनम्, धातुरूपाणि, शब्दरूपाणि, उपपदविभक्तयः, अनुवादः
	आंतरिक-मूल्यांकनम् 1. बहुविध-मूल्यांकनम् - (छात्राः स्वेच्छया 'विकल्पफलकेन' कमपि गतिविधिमाध्यमं विचित्य छात्रजीवने सद्गुणानां वृद्धये विद्यायाः महत्त्वम् इति विषयं प्रतिपादयिष्यन्ति ।) 2. विषयसम्बर्धन-गतिविधिः - ('पर्यावरण-संरक्षणे सिक्किम-राज्यस्य योगदानम्' इति विषयमधिकृत्य पी.पी.टी/ दृश्य-श्रव्य-प्रदर्शन/चित्रकला चेत्यादीनां निर्माणं कृत्वा संस्कृतभाषायां प्रदर्शयिष्यन्ति ।) 3. निवेशसूचिः(Portfolio)/गतिविधयः ((छात्राः 'योगः कर्मसु कौशलम्' इत्यस्मिन् विषये A3 पृष्ठे चित्राणि निर्माय संस्थाप्य वा तस्य विषये संस्कृतभाषायां दश-वाक्यानि लेखिष्यन्ति ।) 4. परियोजनाधारित-गतिविधिः - ((छात्राः आपणकेन्द्रस्य प्रतिरूपनिर्माणं कृत्वा संस्कृतभाषायां तस्य विषये वदिष्यन्ति ।)
उत्तरमध्य-सत्र (पी.टी.-२)	मणिका - पाठ- ६,७ , ८ व्याकरणम् -- अपठित-अवबोधनम्,संवादः, चित्रवर्णनम्,प्रत्ययाः,पत्रलेखनम्,संख्यावाचक-शब्दाः- (१-१०० पर्यन्त) , अव्ययपदानि, अनुवादः
वार्षिक-परीक्षा	मणिका- पाठ -१,२,३,४,५, ६,७ , ८,९ व्याकरणम् - 1. <u>उच्चारणस्थानानि</u> 2. <u>स्वरसन्धिः-</u> >दीर्घः, गुण, वृद्धिः, यण्, अयादि >व्यञ्जनसन्धिः - वर्गीप्रथमवर्णस्य तृतीयवर्णे परिवर्तनम् (जश्त्वसन्धिः), 'म' स्थाने अनुस्वारः >विसर्गसन्धिः – उत्त्वम्, शत्वम्, षत्वम्, सत्वम् 3. <u>शब्दरूपाणि-</u> (<u>पुल्लिङ्गशब्दाः</u>) >अजन्ताः - कारान्त - बालकवत्, इकारान्त-कविवत्, उकारान्त--साधुवत् >हलन्तः – भवत् (<u>स्त्रीलिङ्गशब्दाः</u>) >अजन्ताः - आकारान्त- लतावत्>ईकारान्त - नदीवत् (<u>नपुंसकलिङ्गशब्दाः</u>)

>अजन्ता: – अकारान्त-फलवत्

(सर्वनामशब्दाः)

>अस्मद्, युष्मद्, तत्, किम् (त्रिषु लिङ्गेषु)

4. धातुरूपाणि

> (परस्मैपदिनः)- भू, नम्, गम्, अस्, प्रच्छ, कृ, ज्ञा, क्षाल्, नी (पञ्चसु लकारेषु)

> (आत्मनेपदिनः) सेव्, लभ्, रुच् (लट्लकारे लृटलकारे च)

5. कारक-उपपद-विभक्तयः

>द्वितीया – समया/निकषा, प्रति, विना, परितः, उभयतः

>तृतीया - सह/ समम्/ सार्धम्, विना, अलम्, हीन

>चतुर्थी - रुच्, दा (यच्छ), नमः, कुप्, अलम् (सामर्थ्ये)

>पञ्चमी - विना, बहिः, भी, रक्ष्

>षष्ठी -उपरि, अधः, पुरतः, पृष्ठतः, वामतः, दक्षिणतः

>सप्तमी -स्निह्, विश्वस्, निपुण, कुशल

6 अपठित-अवबोधनम्

7 संवादः /कथापूर्तिः

8 पत्रम् (औपचारिकम् अथवा अनौपचारिकम्)

9 चित्रवर्णनम् अथवा अनुच्छेदलेखनम्

10 संख्या: – 1-100 (1-4 केवलं प्रथमा विभक्तौ)

11 अव्ययानि

- स्थानबोधकानि- अत्र, तत्र, अन्यत्र, सर्वत्र, यत्र, एकत्र, उभयत्र
- कालबोधकानि- यदा, तदा, सर्वदा, एकदा, पुरा, अधुना, अद्य, श्वः, ह्यः
- प्रश्नबोधकानि- किम्, कुत्र, कति, कदा, कुतः, कथम्, किमर्थम्
- अन्यानि- च, अपि, यदि, तर्हि, यथा, तथा, सम्यक्, एव

12 प्रत्ययाः (क्त्वा, तुमुन ल्यप्, शतृ)

आंतरिक-मूल्यांकनम्

1. बहुविध-मूल्यांकनम् - (छात्राः स्वेच्छया 'विकल्पफलकेन' कमपि गतिविधिमाध्यमं विचित्य प्रकृतौ वृक्षाणां महत्ता इति विषयं प्रतिपादयिष्यन्ति ।)
2. विषयसम्वर्धन-गतिविधिः -

(‘दिल्ल्यां निरन्तरं वर्धमानस्य प्रदूषणस्य सम्भावित-कारणानि प्रदूषणनिदानोपायाः च’ इति विषयमधिकृत्य पी.पी.टी/ दृश्य-श्रव्य-प्रदर्शन/चित्रकला चेत्यादीनां निर्माणं कृत्वा संस्कृतभाषायां प्रदर्शयिष्यन्ति ।)

3. निवेशसूचिः(Portfolio)/गतिविधयः (छात्राः महाराणा-प्रतापेन सम्बद्धां कामपि कथां चित्रकथा माध्यमेन संस्कृतभाषायां प्रस्तौष्यन्ति ।)

4. परियोजनाधारित-गतिविधिः - (छात्राः ‘संस्कृते सन्निहितं विज्ञानम्’ इत्यस्मिन् विषये प्रतिरूपनिर्माणंकृत्वा तस्य विषये संस्कृतभाषायां वदिष्यन्ति ।)

COMPUTER SCIENCE

LEARNING OUTCOMES:

- Students will be able to understand the basics of webpage designing
- Students will be able to use the HTML document structure to create simple webpages.
- Students will be able to use the tags and their attributes to create attractive webpages.
- Students will be able create hyperlinking in the webpages.
- Students will be able to create a website based on a real-life theme eg: Horoscope, School, etc.

Month	No. of Working Days	Course Content
April	18	Introduction to HTML 1. Basic terminologies of HTML 2. HTML document structure 3. Steps of creating, saving and viewing the webpage. 4. Creating a simple webpage using tags such as: a. <h1> to <h6> tags b. <body> c. <p> tag
May	14	Tags and their attributes 1. Attributes of <body> tag 2. Align attribute for a. <h1> to <h6> tags b. <p> tag 3. Using tag 4. Using Formatting tags such as <i> <u> <strike>

July	23	Using text formatting tags 1. tag and its attributes: size, color, face 2. Formatting tags: <blockquote> , <sup> , <sub> , <pre> 3. <HR> tag and its attributes: Align, width, size, noshade, color 4. Introduction to list
August	23	Introduction to Lists in HTML 1. What are lists? 2. Types of Lists: a. Unordered Lists b. Ordered Lists c. Definition Lists
September	21	Creating Nested Lists in a webpage Inserting images in a webpage using tag.
October	21	Creating Tables in a webpage 1. Structure and components of table tag 2. Table attributes- border, bordercolor, Bgcolor, background, cellpadding, cellspacing, width, height
November	19	Formatting tables 1. Using attributes of <td> tag.- Align, valign, Bgcolor, background, rowspan, colspan Introduction to hyperlinking in webpage Types of Hyperlinking 1. External Hyperlinking 2. Internal Hyperlinking
December	22	Linking two webpages using external hyperlinks
January	15	Linking two sections of the same webpage using internal hyperlinking

February	23	Revision and Project work Creating a complete website on any real-life theme.
March	20	Annual Exams

ART

LEARNING OBJECTIVES: To enrich students with various aspects of modern as well as traditional art.

VALUES TO BE INCULCATED: To foster the spirit of peace and harmony, celebrate festivals through art, develop love for animals and birds through art and craft.

Month	No. of Working Days	Course Content
April	18	Composition based on nature such as landscapes, seascapes, compositions to show seasons, moods of nature etc. from life or from imagination. , Canvas Painting
May	14	Still life with Poster/Water Colours
July	23	Figurative and abstract compositions from imagination, Canvas Painting
August	23	Landscape with mixed media and water/poster Colours, Canvas Painting
September	21	Learn from Masters, Canvas Painting
October	21	Canvas Painting
November	19	Composition on Indian festivals, Compositions based on folk painting style of India.
December	22	Portraits and Canvas Painting
January	15	Poster design on social theme, Canvas Painting
February	23	Folk on National Integration
Mid-Term	20	Assessment: Art File and Canvas
Annual Examination		Assessment: Art File and Canvas

MUSIC

LEARNING OBJECTIVES: To enrich students with various aspects of modern as well as traditional music.

VALUES TO BE INCULCATED: To foster the spirit of peace and harmony, celebrate festivals through music, develop love for every one and for our society especially through real music.

Month	No. of Working Days	Course Content
April	18	Satrarambh song, prayers,songs& National Anthem
May	14	Community songs, Tagore song, National Song&Prayers
July	23	Patriotic songs, Prayers, National Anthem,etc.
August	23	Independence day song,Prayers, National anthem,etc.
September	21	Janmashtami song,Gandhi jayanti song, Prayers & Anthem.
October	21	Community songs, patriotic songs, prayers & Anthem.
November	19	Annual day, patriotic songs, prayers & Anthem.
December	22	Christmas song,community songs, prayers & Anthem,
January	15	Basant panchami song,Community songs, patriotic songs, prayers &Anthem
February	23	Community songs, patriotic songs, prayers &Anthem
Mid-Term		Assessment: Participation in various school functions.
Annual Examination		Assessment: Participation in school events

DANCE

Month	No. of Working Days	Course content
April	18	Shiva Gaurishloka chanting. Body oriented exercise. Revision of classical and folk steps.
May	14	Some contemporary steps. Holiday homework (theory)
July	23	Checking of holiday homework (theory). Some more contemporary steps.
August	23	A contemporary dance.
September	21	Dance complete. Selection of annual day.
October	21	Annual day preparation going on.
November	19	(a) Practice of annual day. (b) Theory about annual day.
December	22	(a) A folk dance. (b) Show some dance video.
January	15	(a) Folk dance complete. (b) Taal putting on hand.
February	23	(a) Revision of all. (b) Theory about dance.
Syllabus	Mid Term	Grading to be done on the basis of attendance in class performance, participation in school events in Term 1.

	Annual Exam	Grading to be done on the basis of attendance in class performance, participation in school events in Term 2.
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INSTRUMENTAL MUSIC

LEARNING OBJECTIVES:-

1. To create proper sense of swarasandlayas through talabadhalankars.
2. Tuning and playing musical instruments: Sitar, Sarod, Violin, Flute, Tabla , Guitar, Harmonium, Tanpura.

Month	No. of Working Days	Course content
April	18	1. Description of basic Indian raga - YAMAN - BHUPALI / Hansdhwani
May	14	1. Description of basic taal/few kayda a on Tabla - Teen tal Thika and its variation - Jhaptal
July	23	Bandish and some taans on raga yaman on teen taal.
August	23	One orchestra composition.
September	21	Structure of orchestra and application of different instruments in an orchestra.
October	21	One project on Indian classical music and viva test. Selection of orchestra composition for annual day and starting practice on that composition.
November	19	Practice for annual day orchestra.
December	22	One raga based bhajhan (raghupatiraghav or vaishnavjanato).
January	15	One patriotic song on different instruments (national anthem or sarejhanha se achha).

February	23	Practice of solo performance on different instruments.
Syllabus	Mid Term	Grading to be done on the basis of attendance in class performance, participation in school events in term 1.
	Annual Exam	Grading to be done on the basis of attendance in class performance, participation in school events in term 2.

General Knowledge

- GK paper will be held only during Midterm and Final exams.
- The maximum marks for this paper will be of 50 marks.
- The question paper of GK should **not** be in the form of a worksheet.
- It should have the following break-up:

SECTION	A	B	C	D	E
CONTENT	General Awareness	Current Affairs	Mental Aptitude	Comprehension	Life Skills
No. of Questions	10	10	10	10	10
Marks	10	10	10	10	10

- Current Affairs will be covered from the 2 months prior to the GK exam. Midterm (August) and for Final Term (February).