### BOKARO STEEL CITY **SYLLABUS-2022-23**

English Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	22	Beehive: Unit 1 The Fun they Had (Prose) The Road Not Taken (Poem) Unit 2 The Sound of Music (Prose) Part I; Moments L-1 The Lost Child	Grammar: Tenses Modals: Writing Diary Entry: Write about the School of your dreams Grammar Modals Contd	GD: Technology in Education can never substitute /replace the teacher.  Writing activity-Work Sheets	Project Work Prepare a Project File on Albert Einstein (Term-1)
May	05	Beehive: Unit 2 The Sound of Music (Prose) Part II	Grammar Modals Contd	Name some differently abled people who are successful despite being handicap. Also prepare a speech on any one such figure	
June	13	Beehive: Unit 2, Wind (Poem) Unit 3, The Little Girl (Prose) Rain on The Roof (Poem) Moments L-2, The Adventures of Toto. L-3 Ishwaran The Story teller	Grammar Sub – Verb Agreement	GD: Man Versus Nature Writing Activity-Newspaper Report Speaking skill-story telling	
July	25	Beehive: Unit 4, A Truly Beautiful Mind (Prose) Unit 4, The Lake Isle of Innisfree (Poem) Unit 5, The Snake and the Mirror (Prose) Moments L-4, The Kingdom of Fools	Grammar: Determiners Writing, Short Story Writing, Descriptive Paragraph based on a person /event	Activity-Draw a Story Map (Mind Map) and write a short story based on the map drawn	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
August	21	Beehive: Unit 6 My Childhood(Prose) Unit 5 A Legend of the Northland (Poem) Moments L-5 The Happy Prince	Grammar: Narration (Commands & Request)	Enactment of an Interview with a renowned person	
September	11	Beehive: Unit 6 No men are Foreign (Poem)	Writing: Revision Grammar: Narration contd (Statements, Questions)	Debate – Topic-Do People have right to object to a specific war?	Collage on Great Sportsperson
October	13	Beehive: Unit 8 Reach for the Top (Prose) Part I & II Moments: L-7 The Last Leaf	Grammar: Revision  Writing: Descriptive Paragraph based on situation	Speaking activity: Talk about the preparedness of the community for a natural disaster  J A M	Prepare a Project file describing the life journey of five Indian women mountaineers ascended Mount Everest
November	23	Beehive: Unit 8, Reach for the Top Part II, On Killing a Tree (Poem)  A Slumber did my Spirit Seal (Poem) Moments L-8, A House is not a Home	Grammar: Revision Writing : Revision	Newspaper clipping/Reading on current topics  Make a Poster on 'Earth Day'  Write a Short Poem on 'Mother Earth'	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
December	16	Beehive: Unit 10 Kathmandu Unit 11 If I were you (Play)	Grammar : Revision Writing: Revision	Speaking Activity: Enactment Imagine you are Gerrard. Enact the play with your friends in the class using the dialogues said in a happy, sarcastic or ironic tone.	
January	22	L-10The Beggar			
February	13	Practice of Sample Worksheets Revision for Annual Exam.			

### **SYLLABUS-2022-23**

Mathematics Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	22	Number System (12pds) Co-Ordinate Geometry (06 pds)	*Introduction, Rational & Irrational form *To find n rational between two given rational number *Terminating & Non terminating form *Representation of rational & Irrational on number line Rationalisation	Activity No. 1 To construct a square root spiral	*Story of л *State 7 reasons why maths is important for 21st century thinking.
May	05	Co-Ordinate Geometry (06 pds) Linear Equation in two variable (9 pds)	Determination & Representation of co-ordinate, Graph of lines *General form of equation & determination of value of a, b & c		*Coronology of Indian Mathematicians with their contributions
June	12	Lines & Angle (08 pds) Euclid's Geometry (04 pds)	*Concept of Parallel line & transversal *Angle relation *concept of triangle *Axioms & Postulates *Terminology	Activity No. 2 To verify experimentally that if two lines intersect each other then vertically opposite angles are equal	*Generation of Pythagorean triplets

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
July	24	Triangles (12pds)  Quadrilaterals (12pds)	*Basic Concept of Congruency *Congruency Criteria SAS, SSS, ASA, RHS *Angle sum property *Properties of different type of quadrilaterals *Mid-point theorem & Converse	Activity No. 3  To Verify exterior angle property of a triangle  Activity No. 4  To verify experimentally that the sum of the angles of a quadrilateral is 360°	*Magic Square  *Mathematical designs and patterns
August	21	Revision for Half yearly			
September	11	Half Yearly Examination			
October	11	Statistics (15pds)  Heron's formula (06pds)	*Concept of bar graph, histogram, frequency, polygon *Empirical formula, mean, median & mode of ungrouped data  *Derivation of formula *Area of Quadrilaterals using	Activity No. 5 To draw histogram for classes of equal widths and varying heights.	
			Heron's formula		
November	23	Circle (15pd)	*Terminology, Chords & Its properties *Angle Relations *Cyclic Quadrilaterals	Activity No. 7 To verify that the angles in the same segment of a circle are equal	
December	16	Surface area & volume (18pd) Area of triangle & Parallelogram (06)	*Derivation along with different problems	Activity No. 9 To find the formula of its surface area of cuboids experimentally	
January		Revision for Final Exam			
February	13	Final Examination			

### **Art Integrated Project Mathematics**

(Related with Goa and Jharkhand)

#### **Name of the Topics**

**Project No. 1** 

**Group A** 

**Number System** :

Project No. 2

**Group B** 

: **Triangle** 

Project No. 3

**Group C** 

**Co-Ordinate Geometry** 

Project No. 4

**Group D** 

**Surface area and volume** 

Project No. 5

**Group E** 

**Probability** :

**Project No. 6** 

**Group F** 

Quadrilaterals

Project No. 7 :

**Group G** 

**Statistics** 

### श्री अय्यप्पा पब्लिक स्कूल बोकारो इस्पात नगर

### **पाठ्यक्रम 2022–2023** विषय – हिन्दी

वर्ग — नवम

निर्धारित पुस्तकें:— 1. कृतिका भाग–1

2. रचना सागर (व्याकरण)

3. क्षितिज भाग – 1

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
अप्रैल—2022	22	क्षितिज गद्यखंड –	पशुओं का मनुष्य के प्रति प्रेम	आजादी सबको प्रिय होती है	भारत से विलुप्त
		दो बैलों की कथा		मनुष्य हो या पशु पाठ के	जानवरों की सूची
		ल्हासा की ओर	पर्यावरण की जानकारी	आधार पर तुलनात्मक	तैयार करें।
		पद्यखंड – मेघ आए	मेघ का अतिथि के रूप में आगमन और ग्रामीण संस्कृति में	व्याख्या व विवरण दें।	तिब्बत के लोगों की
			अतिथि सत्कार		
मई—2022	05	प्रेमचंद के फटे जूते	जूते एंव टोपी के महत्व को	अपने पसंदीदा पर्यटक स्थलों	सभ्यता संस्कृति एंव
			बताना	की विशेषताओं को लिखें।	झारखंड की
		व्याकरण —	परिभाषा एंव उनके भेंदों की	जूते एंव टोपी का तुलनात्मक	सभ्यता संस्कृतिकी
		उपसर्ग एंव प्रत्यय	व्याख्या	वर्णन करें।	तुलनात्मक वर्णन
				15 उपसर्ग शब्दों एंव	करें।
				15 प्रत्यय शब्दों की सूची	
				तैयार करें।	
				मेघ या बादल से संबधित किसी अन्य कवि की कविता लिखना	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
जून —2022	13	पद्य खंड -	कृष्ण भक्ति	सूरसागर के किन्ही दो पदों	सूरदास एंव मीरा
		सखियाँ एंव सबद	ईश्वर के प्रति समर्पण की	का भावार्थ लिखें। भक्ति	का कृष्ण के प्रति
		वाख	भावना को दर्शाना	मार्ग में नैर्सिगक सुखों के	आस्था या प्रेम
				रूकावट का उल्लेख करें।	का तुलनात्मक
					वर्णन करें।
जूलाई–2022	25	पद्य — सवैया	गोपियों का कृष्ण के प्रति प्रेमभाव	कृष्ण द्वारा रचित महारास	
				करने के कारणों का वर्णन	
				करें।	
		समास	समास परिभाषा एंव भेदों की	बहुव्रीहि समास एंव कर्मधारय	
			व्याख्या	समास में अंतर स्पष्ट शब्दा-	
		अलंकार	अलंकार के भेदों को बताना एंव	लंकार के भेदों को उदाहरण	
	व्याकरण	विज्ञापन	रूपांतरण	सहित चार्ट बनाएँ।	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
अगस्त-2022	21	पद्य– कैदी और	देश की आजादी में स्वतंत्रता	देश की आजादी में पंजाब के	सरकार की
		कोकिला	सैनानियों की भागीदारी	किन्हीं दो प्रमुख शहीदों के	ग्रामीण स्तर पर
		इस जल प्रलय में		योगदान का वर्णन करें।	शिक्षा के सुधार
					के लिए उठाए
		वाक्य भेद	वाक्यों का रूपांतरण	वाक्य के भेद और उनके	गए आवश्यक
		संदेश लेखन और ई–मेल लेखन	विविध विषयों पर आधारित औपचारिक ई–मेल लेखन	उदाहरणों को चार्ट पेपर	कदमों का
			शुभकामना एंव पर्व त्योहार पर दिए जाने वाले संदेश।	द्वारा दिखाएँ।	उल्लेख करें।
सितम्बर—2022	11	ग्राम श्री	गरीबों की विस्थापन की समस्या	प्रेमचंद द्वारा रचित 'पूस की	
			वसंत ऋतु में प्रकृति का वर्णन	रात' में वर्णित किसानों की	वंसत ऋतु से संबधित स्वरचित कविता लिखें।
				समस्याओं का वर्णन करें।	
				वर्तमान समय में बालश्रम को	भारत में अनाथ बच्चों
अक्टूबर—2022	11	क्षितिज—बच्चे काम पर	बाल मजदूरी	खत्म करने में आप कहाँतक	की स्थिति।
		जा रहे हैं।		अपना योगदान दे सकते हैं? अपने विचाार लिखें।	
		स्ववृत लेखन एंव सूचना लेखन	औपचारिक शैली में व्यवहारिक जीवन से संबधित विषयों पर आधारित सूचना लिखें।		

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21st Century Skills)
नवम्बर—2022	23	क्षितिज–साँवलें सपनों	पर्यावरण सुरक्षा	भारत की किन्हीं दो पक्षी	
		की याद		प्रेमियों की सूची तैयार कर	बाल मजदूरी के कारण
				उनके कार्यो का उल्लेख करें	समस्या और समाधान
	(कृतिका)–	मेरे संग की औरतें	रूढ़िवादी परम्परा का विरोध	वर्तमान समय में महिलाओं	
	व्याकरण—	वाक्य, वाक्य भेद	अर्थ की दृष्टि से वाक्य भेद	की स्वतंत्रता विषय पर एक	
				रचनात्मक लेख लिखें।	
दिसम्बर—2022	16	कृतिका–रीढ़ की हड्डी	स्त्रियों का शिक्षित होना अभिशाप या वरदान पर चर्चा	स्त्रियों की स्थिति एंव वर्तमान में उनकी स्थिति	
			तथा वाद—विवाद	पर तुलनात्मक लेख तैयार	
				करें।	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21st Century Skills)
जनवरी—2023	22	अनुच्छेद संवाद	लेखन कौशल करवाना	डाक्टर और मरीज के बीच	
		लेखन, पत्र लेखन		के संवाद को अपनी कल्पना	
		लघुकथा		से लिखें।	
				21 वीं सदी के कौशल पर	
				एक अनुच्छेद लिखे।	
फरवरी—2023	13	कृतिका , क्षितिज			
		एंव व्याकरण के			
		पढ़ाए गए पाठों की			
		पुनरावृति			
		वार्षिक परीक्षा			
मार्च-2023	23	वार्षिक परीक्षा		·	

### श्री अय्यप्पा पब्लिक स्कूल बोकारो इस्पात नगर

पाठ्यक्रम 2022-2023 *विषय — संस्कृत* 

वर्ग - नवम

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
अप्रैल—2022	23	1. भारती वसन्तगीतिः		पाठ में प्रयुक्त विशेष्य विशेषण लिखें सरस्वती की पर्यायवाची शब्दों को लिखें	
		2. स्वर्ण काकः		क्त्वा,तुमुन, एवं ल्यप प्रत्यय के 5–5 क्रियाओं को चुनकर वाक्य निर्माण करें	
		संस्कृत व्याकरण			
		<ol> <li>सिंध—स्वर सिंध संस्कृत व्याकरण</li> </ol>	दीर्घ सन्धि, गुण सन्धि, वृद्धि सन्धि	सन्धि वृक्ष तैयार करें ।	
		2. उपसर्ग संस्कृत व्याकरण	आ, वि, प्रति ,उप,अनु, निर्		
		3. अपठित गधांश संस्कृत व्याकरण		गधांश के लिए प्रश्न तैयार करें। `(सामुहिक कार्य)	
मई—2022	05	4. शब्द रूपाणि संस्कृत व्याकरण	अकारान्त पुं. बालकवत्	शब्दरूप कमल तैयार करें ।	महाराणा प्रताप का चित्र बनाकर उनके
			आकारान्त स्त्री. लतावत्		विषय में 5 वाक्य
जून—2022	12	(शेभुषी—प्रथमो भागः) 3. सोमप्रभम्		पांड में प्रयुक्त 10लट् लकार के वाक्यों को चुनकर उन से प्रश्न निर्माण करें ।	संस्कृत में लिखें ।
		संस्कृत व्याकरण			
		5. व्यंजन संन्धि संस्कृत व्याकरण	वर्गीय प्रथमवर्णस्य . तृतीयवर्णे परिवर्तनम्	सन्धि वृक्ष तैयार करें।	
		6. पत्रलेखनम् 7. चित्रवर्णनम्		चित्र बनाकर उसके विषय मे पाँच वाक्य संस्कृत में लिखें	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
जुलाई–2022	25	(शेमुषी प्रथमो भागः)			
		4. कल्पतरूः		पाठ में प्रयुक्त विशेष्य विशेषणों की सूचि तैयार करे।	
		5. सुक्तिमौ क्तिकम्		लट् लकार के पाँच वाक्य लिखकर लोट में बदलें।	
		संस्कृत व्याकरण			गुरू पूर्णिमा का चित्र
		7. धातुरूपाणि (संख्या)	पठ, गम्, वद्, भू क्रीड्	धातुरूप यंत्र तैयार करें।	बनाकर उसके विषय
		(पंचंसु लकारेषु) परस्मैपद			में 5 वाक्य संस्कृत में
		आत्मने पद (लट् लृट लकारे च)	सेव,		लिखें।
		<ol> <li>संस्कृत भाषायाम् अनुवादः (संख्या)</li> </ol>	लट्, लड्, लृट्, लोट् , विधिलिड्ग. लकारेषु च	हिन्दी भाषा में 10 वाक्य लिखकर संस्कृत में अनुवाद करें।	वार्तालाप (Audio) नारी शिक्षा का महत्व।
		9. अनुच्छेद लेखनम् (संख्या)		परोपकार पर 5 वाक्यों में अनुच्छेद लिखें।	
अगस्त–2022	21	(शेमुषी प्रथमो भागः)			
		6. भ्रान्ती बालः		पाठ में प्रयुक्त विशेष्य—विशेषण की सूची तैयार करें।	
				लड़् लंकार के पाँच वाक्य लिखकर उसे लट लंकार में परिवर्तित करें।	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
		10. कारक उपपद विभक्तियः		उपपद विभक्ति के प्रयोग को सामूहिक रूप से चार्ट	
		(क) द्वितीया विभक्ति	परितः, निकषा, प्रति, विना, सह	पेपर पर प्रदर्शित करें।	
		(ख) तृतीया विभक्ति	समम्, सार्धम्, विना, अलम्, हीन		
		(ग) चतुर्थी विभक्ति	रूच, दा (यच्छ्) नम, कूप्		
		11. प्रत्यय (संख्या)	क्त्वा, तुमुन्		
		12. संख्या	1—50 (1—4 केवलं प्रथम विभक्ती)	विभिन्न वस्तुओं का चित्र बनाकर संस्कृत में संख्याओं	
			·	को लिखें।	
सितंबर—2022	22	पुनरावृति—संस्कृत पाठ्यपुस्तक शेमुषी	अर्द्धवार्षिक परीक्षा		
		संस्कृत व्याकरणम् पुनरावृति	अर्द्धवार्षिक परीक्षा		
अक्टूवर—2022	12	(शेमुषी प्रथमो भागः) 7. प्रत्याभिज्ञानम्		पाठ में प्रयुक्त उपसर्ग युक्त पदों को चुनकर लिखें।	दुर्गापूजोत्सव का चित्र बनाकर उसके विषय
		1. सन्धि (संख्या) स्वर— विसर्ग सन्धि—	अयादि सन्धि, यण सन्धि, उत्वं, रत्वं	उदाहरण सहित सन्धि वृक्ष बनाएँ।	में 5 वाक्य संस्कृत में लिखे।
		व्यंजन सन्धि (संख्या)	म स्थाने अनुस्वारः	उदाहरण सहित सन्धि तालिका पूर्ण करें।	·

		Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
	व्यंजन सन्धि (संस्कृत व्याकरण)	जशत्व संधि, म स्थाने, अनुस्वारः	उदाहरण सहित संधि तालिका पूर्ण करें।	
	3. अपठित गधांशः (संस्कृत व्याकरण)		सम्बन्धियों के चित्र बनाकर संस्कृत भाषा में उनका नाम लिखें।)	प्रदर्शनी के लिए (Video)
24	(शेमुषी प्रथमो भागः)		(201 Chimerical)	
	8. लौह तुला		पाँच लट् लकार के वाक्यों को लिखकर उनसे प्रश्ननिर्माण करें।	
			सन्धि–विच्छेद करें।	
	9. स्वर्ण काकः		पाठ में प्रयुक्त 10 अव्ययों को चुनकर उनसे वाक्य निर्माण करें।	
	4. शब्दरूपाणि— (संस्कृत व्याकरण)	उकारान्त पुं–साधुवत् इकारान्त स्त्री–नदीवत्	संस्कृत भाषा में चार पहेलियों लिखें। (पत्रिका के लिए)	
		सर्वनाम शब्दाः—अस्मद् युष्मद्		
	6. पत्रलेखनम् (संस्कृत व्याकरण)		भ्रान्तो बालः पाट के आधार पर संक्षिप्त नाटक प्रस्तुत करें।	नाटक (Video)
	7. चित्रवर्णनम् (संस्कृत व्याकरण)			
	24	(संस्कृत व्याकरण)  24 (शेमुषी प्रथमो भागः)  8. लौह तुला  9. स्वर्ण काकः  4. शब्दरूपाणि— (संस्कृत व्याकरण)  6. पत्रलेखनम् (संस्कृत व्याकरण)  7. चित्रवर्णनम्	3. अपठित गधांशः (संस्कृत व्याकरण)  24 (शेमुषी प्रथमो भागः)  8. लौह तुला  9. स्वर्ण काकः  4. शब्दरूपाणि— (संस्कृत व्याकरण)  उकारान्त पुं—साधुवत् इकारान्त स्त्री—नदीवत् सर्वनाम शब्दाः—अस्मद् युष्मद्  6. पत्रलेखनम् (संस्कृत व्याकरण)  7. चित्रवर्णनम्	3. अपठित गधांशः (संस्कृत व्याकरण)  24 (शेमुषी प्रथमो भागः)  8. लौह तुला  9. स्वर्ण काकः  4. शब्दरूपाणि— (संस्कृत व्याकरण)  4. शब्दरूपाणि— (संस्कृत व्याकरण)  4. शब्दरूपाणि— (संस्कृत व्याकरण)  6. पत्रलेखनम् (संस्कृत व्याकरण)  7. चित्रवर्णनम्

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
दिसंबर—2022	19	(शेमुषी प्रथमो भागः)			लाल बहादुर शास्त्री का चित्र बनाकर
		10. जटायोः शौर्यम्		जटायु एवं रावण के विशेषणों को पाठ से चुनकर लिखें।	उनके विषय में 5वाक्य संस्कृत में लिखें।
		11. पर्यावरणम्		10 सरल वाक्यों को लिखकर उनसे प्रश्न निर्माण करें।	
				उपसर्ग युक्त 5 पदों को चुनकर उपसर्गो को अलग करें।	
		7. धातुरूपाणि (संस्कृत व्याकरण)	नी, दृश्, अस्, कृ, पा	धातु यंत्र तैयार करें।	
		(पंचुसुलकारेषु) परस्मैपद आत्मने पद— लट् लृट लकारे च	लभ्		
		जाराम पद सर् सूट संकार व	er (		
		10. कारक—उपपद विभक्तयः		उपपद विभक्ति के प्रयोग को सामुहिक रूप से चार्ट पेपर	
		(घ) पंचमी विभक्ति	विना, बहिः, भी, रक्ष	पर प्रदशित करें।	
		(ड़) षष्ठी विभक्ति	उपरि, अधः, पुरतः, पृष्ठतः,	(समूह कार्य)	
		(च)सप्तमी विभक्ति	निपुणः, विश्वस्		

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
जनवरी—2022	22	(शेमुषी प्रथमो भागः)			
		12. वाडमनः प्राणस्वरूपम्		तुमुन प्रत्यय युक्त क्रियाओं को लिखकर प्रकृति—प्रत्ययों को लिखें।	
				10 सन्धियुक्त पदों को लिखकर सन्धि विच्छेद करें।	
		11. प्रत्यय (संस्कृत व्याकरण)	ल्यप्, क्त्वतु	प्रत्यय युक्त क्रियाओं का वृक्ष तैयार करें।	
		12. संख्या (संस्कृत व्याकरण)	1—4 (केवलं प्रथमा विभक्ति) 51—100	विभिन्न वस्तुओं के चित्र बनाकर संस्कृत में संख्या लिखें।	
		2. उपसर्ग (संस्कृत व्याकरण)	प्र, अधि, अप, नि, अव	उपसर्ग युक्त पदों के पुष्प तैयार करें।	
		<ul><li>8. संस्कृत भाषायाम् अनुवादः (संस्कृत व्याकरण)</li></ul>	लट्, लृट्, ल्ड्, लोट् विधिलिंड् लकारेषु च	हिन्दी भाषा के 10 वाक्यों का संस्कृत भाषा में अनुवाद करें।	
		9. अनुच्छेद लेखनम्			
TE-TE-T 0000	00	T T T T T T T T T T T T T T T T T T T			
फरवरी—2022	22	पुनरावृति—			
		शेमुषी ( पाठ्यपुस्तक ) पाठ — 7 — 12			
		संस्कृत व्याकरणम् (संपूर्ण)			

### **SYLLABUS-2022-23**

**Science** Physics Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	22	Ch-8, Motion (07 pds)	Distance & displacement, velocity, uniform and non uniform motion along a straight line, acceleration, distance time graph velocity time graph for uniform motion & uniformly accelerated motion.	Graphical representation of motion. Distance time graph velocity –time graph	
Мау	05	Ch-8, Motion (02 pds)	Derivation of equation of motion by graphical method & Uniform circular motion. Elementary idea of uniform circular motion	*Verification of Newton's first	Hydraulic lift
June	12	Ch-9, Force & Laws of Motion (03 pds)	Force & Motion, Newton's laws of Motion Inertia of a body, Inertia	law of motion by using carom coins on a table	·
July	24	Ch-9, Force & Laws of Motion (03 pds	& mass momentum, Force & acceleration. , action & reaction forces	*Verification of Newton's third law of motion by using balloon by flowing air into it.	
August	21	Ch-10, Gravitation (07 pds)	Gravitation, Universal law of gravitation, gravity, acceleration due to gravity, mass & weight, freefall flotation, thrust & pressure, buoyancy Archimedes Principle.	*To find the density of a solid using Hydraulic lift, spring balance & measuring cylinder	
September	11	Revision	Revision	1	

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
October	11	Ch-11, Work & Energy (04 pds)	Work done by a force, different, energy forms of energy, kinetic energy, potential energy. Law of conservation of energy. Rate of doing work (Power)	Establishing the relation between the loss in weight of solid when immersed in strongly salty water & in tap water with the weight of water displaced by it.	To make working model to show sound produces vibration
November	23	Ch-12, Sound (07 pds)	Nature of sound and its propagation in various media. speed of sound, range of hearing in humans, ultrasound, reflection of sound echo.	*To Verify laws of reflection of sound.  *To determine the velocity of	Make a light spot dance to show propagation
December	16			a pulse propagated through a stretched string/slinky.	of sound.
January & February	22/13	Revision	Revision	*To observe echo in a large vacant room.	

### **SYLLABUS-2022-23**

Chemistry Science Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	22	Ch-1, Matter in our	Characteristics of particles.	To prepare a chart of 3	
		Surroundings.	State of Matter, Interconversion of states of matter.	states of matter.	
May	05	Ch-1, Matter in our Surroundings.	Evaporation	To observe the factors affecting evaporation	(AIP) Climate
June	12	Ch-2, Is matter around us	Pure substances and its properties. Mixture and types of mixtures. Separation techniques physical	*To prepare the true solution, colloidal solution and suspension	
July	24	pure?	and chemical changes.	*To Study Tyndall effect	(AIP) Purification of water
August	21	Revision	Revision		
September	11	Revision	Revision & Half Yearly examination		
October	11	Ch-3, Atoms & Molecules	Laws of chemical combinations, Daltons Atomic Theory. Atoms & Molecules, Chemical formula, Mole concept.	To verify the law of conservation of mass in a chemical reaction	Preparation of a chart of 10 chemical compounds used in house- hold activities.
November	23	Ch-4, Structure of an Atom	Sub-atomic particles. Thomson's model Gold Foil Experiment. valency, Atomic No., mass-No.	*To study Thomson's model of atom.	Prepare the Chart of the following:
December	16	Ch-4, Structure of an Atom	Rutherford's model of atom. Bohr's model of Atom. Isotopes and Isobars	To Study Rutherford's modal of atom. To study Bohr's atomic model	i) Thomson's atomic model
January	22	Revision	Revision		ii)Rutherford's atomic model
February	13	Revision	Revision & Half Yearly examination		iii) Bohr's atomic model

### **SYLLABUS-2022-23**

**Science** Biology Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
	-		*What are living organisms made of? *Structural Organization of cell, cell membrane,	*Observation of plant cell.	To Prepare stained temporary mount of
April	22	Ch-5, The Fundamental	cell wall, nucleus, cytoplasm.	*temporary mounts of cells	onion peel, Human
May	05	Unit of Life.	Cell organelles- Endoplasmic reticulum, Golgi bodies, lysosomes, mitochondria	from different sources. *Demonstration of Endosmosis	cheek cell & to record their observation and draw labeled diagram
June	12		*Cell contd Plastid & Vacuoles  *Chromosomes- Basic structure, Number	& Exosmosis	Innovative skills
July August	15 21	Ch-6, Tissues	*Are plants and animals made of same type of tissues?  *Plant tissue, Meristematic tissue, Permanent tissue, Animal tissue, Epithelial tissue, Connective tissue, Muscular tissue, Nervous tissue.	-Apical meristem causes growth in length -Study of stem tissues -Study of epidermis -Study of blood cells	-To identify parenchyma, collenchymas, sclerenchyma tissues in plantsTo identify striped muscles fibres & nerve cells in animals AIP (Food resources)
September	11	Revision and Half Yearly Exam			

October November	11 23	Ch-15, Improvement in food resources	*Improvement in crop yield. *Crop variety improvement.*Crop production improvement.	-To visit cattle farm, Poultry farm, fish farm & observe	To study the effect of eutrophication.
November	23	Tood resources	*Crop protection management.*Storage of grains*Animal Husbandry*Cattle farming *Poultry farming*Fish production *Bee-keeping	types of breeds and note the type of ration, coursing and lighting facilities give to them.	Make a survey of agricultural practices in Jharkhand AIP(Diseases and pollution survey based)
December	11	Ch-14, Natural Resources (Internal Assessment)	*The breath of life Air  *Role of the atmosphere in climate control  *The movement of Air winds  *Rain  *Air Pollution  *Water pollution  *Biogeochemical cycles  *The water cycle  *The nitrogen cycle  *The carbon cycle  *The greenhouse effect  *The Oxygen cycle  *The ozone layer	Make a Chart / Modal of Biogeochemical cycle.	
January & February		Revision for Annual Examination			

### **SYLLABUS-2022-23**

#### Social Science Std. IX

Month	No. of working days	Sub.	Chapter/Unit Topic	Sub Topic	Activities	Projects (21st Century Skills)
April	22	H-1	The French Revolution	H-1, Revolution & Everyday Life	*Learning outcome of French Revolution {Worldwide impact of French Revolution}	*Political & Social Skill development *Thinking Skills
May	05	G-1	INDIA Size & Location	G-1, India's Neighbour	*Question & Answer discussion	
June	13	C-2 E-1	What is Democracy? Why Democracy?	C-2, Why democracy is better than other form of Govt.?	*Develop a sophisticated defense of Democracy Critical thinking (Merits & Demerits of Democracy)	
		C-1	The story of village Palampur	E-1, What is Modern farming	*Analyse- (Benefits & drawbacks of it)	
July	25	H-1 G-2	The French Revolution Physical features of India	H-1, A Constitutional Monarchy G-2 The major landforms of India	G-2, Make a project file on 'The Himalayan Ranges'	[Critical
		C-2	Constitutional Design	C-2, Why do we need a constitution?	Analytical Assessment-tabular form) C-2, Is there any country without constitution 'Debate']	Thinking]
		H2	Socialism In Europe and Russian Revolution	H-2- Meaning & Causes, of socialism.		

Month	No. of working days	Sub.	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
August	21	E-2	People as Resource.	E-2, Understanding 'The Demographic Concept of population.	E-2, *The Demographic concept of population of India-Group Project E-2, Analytical Assessment Skill	*[File work, collage, PPT, Poster,
		G-2	The physical features of India	G-2, The Indian Desert	G-2, How do the physical features influence the life style of the people?	Charts & Maps etc] Skill
		G-3	Drainage	G-3-Importance of River system		Development
September	11	H-1 H-2 G-1 G-2 G-3 E-1 E-2 C-2	The French Revolution Rise of socialism & Russian Revolution Size & Location Physical features of India Drainage The story of village Palampur People, as Resource What is Democracy Constitutional Design Map Practice Work	G-1, India's Neighbour  Revision Classes/Doubt Clearance Oral/Written etc.	*Question & Answer discussion	
October	12	H-3	Nazism and Rise of Hitler (cont)  Electoral Politics	H-3- Factors responsible for rise of Nazism and rise of Hitler C-3, Is it good to have healthy	*C-3, Class Debate Reason behind the adopter of the present Electoral System:	Leadership quality
		C-3		Political Competition.		Critical thinking.

November	24	H-3 G-4	Nazism and Rise of Hitler (cont.) Climate	G-4, Unifying Role of Monsoon The major landforms of India	Question and answer session	
		•	Giiriace	E-3, meaning and causes of	G-4, A project Work on 'Importance of	Critical &
		E-3	Poverty as a challenge.	poverty (Rural/Urban)	Unifying Role of the Monsoon'	Analytical thinking]
December	19	H-3	Nazism and Rise of Hitler	H-3, Meaning and causes of	H-3, Q & A Session	Awareness
December	19	H-4	Forest , society & colonialism	Nazism	A project on 'Concern about the need	Generation
		G-4	Natural vegetation & wildlife	C-5, Conservation of Flora and Fauna	to protect Flora & Fauna'	Certeration
		C-4	Working of institution	C-3- Facts about Indian Parliamentary system		
January	22	H-3	NAZISM & Rise of Hitler	H-3, The First W.W & the treaty	H-3, Why was the treaty of Versailles	Skill
		E-4	Food security in India	of Versailles	considered a humiliating treaty?	development
		C-4	Working of Institution (cont)	C-4, Indian Constitution	Distinguish between political and	on posture,
		G-4	Climate	Formation of constituent	permanent executive.	gesture,
		G-5	Natural Veg. & Wild life	Assembly, its "objective &		expression
		E-3	Poverty as a challenge	ideology"		etc.
		G-6 C-5	Population	C-5- Factors about civil liberties		
		C-5	Democratic Rights	C-5- Factors about civil liberties		
February	22	H-1	French Revolution			
,		H-2	Socialism in Europe			
		H-3	Nazism & Rise of Hitler	Revision Classes/Doubt		
		C-3	Electoral Politics	Clearance Oral/Written etc.		
		C-4	Working of Institution	Map Practice Classes		
		G-4	Climate	Quiz, Oral & Written Class Test		
		G-5	Natural Veg. & Wild life			
		E-3	Poverty as a challenge			
		H-4 G-6	Forest society & colonialism Population			
		C-5	Democratic Rights			
		E-4	Food security in India			

### **SYLLABUS-2022-23**

### Information Technology (IT)

Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April + May	22 + 5	Part A Employability Skills Unit 1 Communication Skills	*Introduction to communication  *Verbal and Non verbal communication  *Working Skills: Part of speech, sentence  *Pronunciation Basics,  *Greeting and Introduction,  *Talking about self	<ul> <li>Introduction to communication skill.</li> <li>Listing Do's and don'ts for avoiding common body language.</li> <li>Writing Pros and cons of written, verbal and non verbal communication.</li> </ul>	Projects: Make a file on Role Plays on communication process on related sector/job.
June	13	Part B Unit 2 Introduction to IT-IT'es Industry	*Introduction to IT  *IT enabled Services  *IT BPM Industry and its structure.  *IT applications.	Write the importance of IT Industry in Indian Economy	(Technology Skill) Surf on internet about IT industries, working in India & Prepare a PPT.
July	25	Unit 2 Data Entry and Keyboard Skills. *Pointing Device *Typing ergonomics • Sitting posture • Position of hand • Position of fingers *Typing software *Typing speed and accuracy	*Introduction  *Key board skills  *types of keys.  *Guide for typing.  *Importance of pointing device in GUI environment.  *Type a paragraph and measure your speed.	Write the name of all types of keys     Role and functions of pointing devices in GUI environment.	Write the name of typing software also write the importance of it.

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
July	25	Unit 3 Digital Documentation	*Introduction *Electronic typewriter Libre Office Writer Creating, Editing & Saving documents Find and Replace Spelling & Grammar Synonyms, Thesaurus Formatting Text & document	<ul> <li>Write the name of all types of keys</li> <li>Role and functions of pointing devices in GUI environment.</li> <li>Crete &amp; save a new document.</li> <li>Use find &amp; replace feature to replace misspelt word.</li> </ul>	Write the name of typing software also write the importance of it.  (Technology Skills) Using writer create a document & apply formatting, also apply
		Unit 2 Self Management Skills	*Introduction Strength & Weakness, self confidence *Positive thinking *Personal Hygiene *Grooming		bullets & numbering.  Prepare a Poster/Collages for
		Unit 3 Basic ICT Skills	*ICT, ICT tools *Parts of computers *Mathematical operations	•Discuss on the role of ICT in Personal life and Work Place.	showing the role of ICT at work place.
August	21	Libre Office Writer	*Insert element in writer document. *creating and managing tables. *Splitting and merging tables *Printing a document *Mail merge	<ul> <li>Apply Bullets to form a list.</li> <li>Draw a table with the help of insert table option.</li> <li>Create mail merge</li> </ul>	Create a document to insert table using draw table option steps of creating mail merge
September	11	Revision & Practical exam	Assessment		

October	12	Part A Unit 4 Entrepreneur Skill  Unit 5 Green Skill	* Entrepreneurship *Role of Entrepreneur *Qualities of successful Entrepreneur * Entrepreneur Vs Employment *Wages Employment  *Society & Environment *Conserving natural resources. *Sustainable development	GD on role and feature of Entrepreneur  GD on hazards of deteriorating environment	Prepare a Chart showing advantages of Entrepreneurship over wages. (Learning Skills) Prepare a Poster showing Environment conservation.
November	24	Part B Unit 4 Electronic Spreadsheet	*Libre Office Calc.  *Part of Calc., Work Sheet  *Cell, Cell address, *cell range  *Operators, Functions, *Formula, Formatting Worksheet  *Formatting alignment of cell range  *Fill handles, cell referencing  *Creating Chart	<ul> <li>Create a table &amp; use formatting on the sheet table.</li> <li>In a spread sheet show the students name with fill handle.</li> </ul>	Prepare a Chart showing the cell referencing.  Prepare a Chart showing the use of formula & functions.
December	16	Unit 5 Digital Presentation.	*Libre Office Impress (Intro) *Characteristic of quality presentation *Running slide show. *Working with slides *Slide layout *Workspace views	<ul> <li>Discuss the characteristic of good quality presentation.</li> <li>Prepare a new presentation with the help of new slide.</li> <li>Use different layout of side to form a table/inserting shapes, pic.</li> </ul>	Create a file to write the importance on Libre office at work place. Create a ppt. with the help of slide design.
January	22	Unit 5 Digital Presentation.	*Formatting text and changing alignment *Bullets and numbering. *Working with tables *Adding, Formatting images. Managing graphic object Grouping /Ungrouping Working with slide, Adding transistor		(Technology skill) Prepare a presentation (ppt) on the importance of IT in education sector.
February		Revision & Practical Exam	ination		

#### **SYLLABUS-2022-23**

**Physical Education** Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	22	*Introduction of Physical Education *Basket Ball	→Meaning and concept of Physical Education  →Changing trends in Physical Education  →Measurement  →Rules and regulation  →Specific and General warming up.  →Skills	-Dribbling -Shooting -Passing -Defence	Develop 6 slogans on promoting healthy eating habit.
May & June	05 + 12	*Physical fitness  *Chess	<ul> <li>→Meaning and concept</li> <li>→Components of physical fitness</li> <li>→Development of Physical fitness through games</li> <li>→Rules and Regulations.</li> <li>→Skills</li> </ul>	-How to move various chess piecesHow to note down the moves of chess	Gather information on the Mission Swachch Vidyalaya
July	24	*Measurement of Growth  *Foot Ball	→Measurement of Height and weight →Body composition →Waist and hip ratio →Measurement →Rules and Regulations →Warming up General and Specific →Skills	-Kicking -ball control -passing -tackling	Any of the team game

August	21	*First Aid Measures  *Volleyball	→Meaning and concept  →Introduction to General  →PRICER and its effect  →Measurements  →Rules and Regulations  →Warming up General and Specific  →Skills	-Service -Passing -Attack -Block	And one Traditional Game
September	11	*Sociological aspects of Physical Education	<ul> <li>→Meaning and concept of sports culture and society</li> <li>→Role of family school in sports socialization</li> <li>→Role of Society in Sports Socialization</li> </ul>	Half Yearly Exam	
October	11	*Physical Education and Sports for CWSN  Kho- Kho	<ul> <li>→Physical Education Programmes for Physical challenged.</li> <li>→Physical Education Pragrammes for visually impaired</li> <li>→ Physical Education Programmes for Dumb and deaf</li> <li>→Measurements</li> <li>→Rules and Regulations</li> <li>→General and specific Warming up</li> <li>→Skills</li> <li>Physical challenged Warming up General and Specific</li> <li>→Skills</li> </ul>	-Running -Chasing	Yogic Arona (3)
November + December	23 + 11	*Community Recreation  *Sports and Human Resources	→Meaning and concept of recreation →Recreational activities for different age groups. →Recreation activities for family →Roles of sports in creating fit citizens →Fit citizen on asset for the family society and nation →Fit citizen and productivity.		Pranayama

		*Athletics	→Sprint Race →Middle distance race →Throwing events →JUMPING EVENTS →Rules and Regulations	Running Jumping Throwing	Project File on Athletics Events.
January + February	22 + 13	*Adventure Sports  *Personality Development and Yoga	<ul> <li>→Meaning and objective</li> <li>→Introduction to the concept of camping and tracking.</li> <li>→To organize size, materials required and safety measures.</li> <li>→Meaning and personality</li> <li>→Dimensions of personality.</li> <li>→Role of Yoga in personality</li> <li>Development</li> </ul>	Various Yoga Asana	Project File on any three Yoga Asana.

### **SYLLABUS-2022-23**

#### Art & Craft Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	22	*Elements of Art Still life Nature Study Landscape	Colour, Line, Shape, Form, Texture value, Landscape with water colour	Still life with pencil shading use 2B, 4B, 6B pencils	
May + June	05 + 12	*Poster (Save Animals) *Best out of waste	Draw & colour Save animal poster with poster colour.	Make anything on Best out of waste.	
July	25	*Acrylic or oil painting on canvas composition in water colour.	Draw & colour Village scene with oil or acrylic colour.	Composition, clay modelling	Oil or Acrylic painting
August	21	*Rangoli Design *Fabric painting	Making a Rangoli with colour	Cloth painting Draw and shade vegetable trees flowers etc.	
September	11	*colour wheel	Primary colours, secondary colours, tertiary colours	Cloth painting	Assessment I
October	12	*Collage, Modern Art	Make a collage with newspaper	Cloth painting Make colour wheel using primary, secondary ands tertiary colours	
November	24	*Glass painting	Draw and colure glass painting with glass colour.	Glass painting Or Create a story board	Glass painting
December	19	*Stick drawing warli art	Draw and colour Warli Art	Draw cartoon character with stick	
January	22	*Geometrical Design *Ornamental Design *Legendary Articles	Draw a Village scene with the help of geometrical shape.	Ornamental design Make a 3D work with the help of paper.	
February	14	Theory & Revision Assessment II	MCQ	G.D. question & answers	

#### **SYLLABUS-2022-23**

#### **DANCE** Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April	*Introduction of Abhinaya *A brief history of Indian Dance		What is abhinaaya, Angik, Vachik, Aharya, Satwik definitions	Angikam slogam dance, Revision of previous Bharatnatya classes.	
May	05	*Famous dancers	Knowledge about famous dancers	Paste the pictures of famous dancers	
June			Greeva Bhed, Shiro bhed & Drushti Bhed Practical work		
July	25	*Adavu based choreography	Nattadavu, Paraval & Pakka adavu step by step draw the picture	Nattadavu, Parval & Pakka adavu based dance.	
August	21	*Ganesh Vandana	To know the mythology one should learn Ganesh Vanadana	Ganesh vandana lyrics and meaning and dance.	
September	11	*Guruvandana	Revision	Guruvandana dance	Assessment I
October	12	*Devi Stuti	Devi Stuti lyrics and meaning	Devi stuti dance	
November	24	Introduction of Kathak	Knowledge about Kathak and famous dancers	Bhumi pranamam, teen taal, tatkar, tora.	
December	19	Kathak	Knowledge about aamad, tukra, teehai, bol & taal	Aamad, tukara, teehai	
January	22	Music instruments	Introduction of music instruments & usage of classical dance	Dance choreography based on instrumental music	
February	14	Folk Dance & Dance Makeup	Knowledge of folk dances, benefits of dance.	Difference between Folk dance & Classical Dance, Lesson on dance makeup	
March		Revision			

### **SYLLABUS-2022-23**

### **MUSIC**

Std. IX

Month	No. of working days	Chapter/Unit Topic	Sub Topic	Activities	Projects (21 <sup>st</sup> Century Skills)
April + May	23 + 05	Definition Basic Knowledge of Notation system	Sangeet, Naad, Dhwani, Swar Saptak, Aaroh, Avroh, Gat, Lay., Matra, Basic knowledge of rotation system	Prayer, Three devotional song.	
June	13	*Tabla, Sargam, Alankar	Teental Parichay, Bol, Yaman parichay, Alalnkar		To collect photographs of great Musicians, with a write-up on their introduction
July	25	Introduction of Indian music, Tabla, song in Yaman	A brief Introduction of Indian Music, Teental, Dardra, Kaharwa with Dugun, Song		All types of musical instrument and the artist who play them, (To be pasted in the Scrap book)
August	21	Definition of some musical terms, Patriotic Song, Rakhi and Krishna Song	Sam Taal, Khali Matra, Aavartan, Patriotic Song, Rakhi Geet and Krishna Song.		To listen to music programme on radio and TV.
September	22		Revision		
October	12	Deepawali Song, Alankar, Taal, Durga Stuti.	Alankar practice, Dadra, Kaharwa Taal, Deepawali Song, Devi Geet.		
November	24	Raag, Deepawali Song	Bilawal, Raag Bhairav, Deepawali Song, Song in Raaga.		
December	19	Tabla (Taal), Song	Different taal practice single and double bit, Christmas Song.		
January	22	Theory. Song	History of Indian Music, Knowledge of instrument and accompaniment, New Year Song		
February			Revision		