## **Annual Pedagogical Plan 2020-2021**

Class I

**Subject: English** 

Class : I		Subject : English	Teacher : Deepa Suku	
MONTH	TOPICS	LEARNING OBJECTIVES	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	My home and my family	Students will be able to:	<ul> <li>paste the picture of their family</li> </ul>	Students able to handle the :
	* dictionary skills	<ul> <li>know and identify the memb-</li> </ul>	<ul> <li>circle the family members</li> </ul>	<ul> <li>importance of family</li> </ul>
	<ul> <li>sounds (vowels, consonants)</li> </ul>	ers of a family	<ul> <li>identify the new words in the grid</li> </ul>	<ul> <li>new words and spelings</li> </ul>
		<ul> <li>meanings and spellings of</li> </ul>	<ul> <li>arranging the words in alphabetical</li> </ul>	<ul> <li>affection between family</li> </ul>
		new words	order.	members
		<ul> <li>appreciate the importance of family</li> </ul>		
		<ul> <li>write and talk about self</li> </ul>		
				-
JULY	* A ride to school	<ul> <li>meanings and spellings of</li> </ul>	* make faces for the different	puctuality and dicipline
	* articles	new words	feelings.	<ul> <li>resposibility of a family</li> </ul>
	<ul> <li>phonetics</li> </ul>	<ul> <li>understand and use articles</li> </ul>	* story telling	member
	<ul> <li>completing sentences</li> </ul>	<ul> <li>write about school and class</li> </ul>	* showing flash cards to identify words	<ul> <li>communication skills.</li> </ul>
		<ul> <li>list the people who help one</li> </ul>	* rhyme	
		in daily life		
AUGUST	*The cap seller and the monkey	<ul> <li>read and understand the</li> </ul>	picture composition	* thinking at right time
	* naming words	written text	* identity wild animals and pet animals	<ul> <li>kindness towards animals</li> </ul>
		<ul> <li>understand naming words</li> </ul>	from the given picture	<ul> <li>communication skills</li> </ul>
		<ul> <li>complete a picture story</li> </ul>	* name the pictures	
			* showing classedge	
			* story telling	
SEPTEMBER	*Save water	* love towards nature	<ul> <li>paste the pictures of different</li> </ul>	* respect and protect
	*different occupations	* pronounce the short /o/ sound	sources of water	nature.
	*is, am or are	* importance of water	* role play	<ul> <li>importance of saving water</li> </ul>
	* this, that, these, those	* think creatively and critically	visit a water body	* simple present tense
OCTOBER		HALF	YEARLY EXAMINATION	

	The make decaleling	* road and understand the state	* make a family tree	* reconst augmi and
NOVEMBER	*The ugly duckling	read and understand the story	* make a family tree	* respect every one.
	* young ones	* understand play	* role play * describe about school	* kindness towards animals * describe a noun
	* adjectives	understand big and little		accented a mount
		<ul> <li>understand describing words</li> </ul>	* find out young one,s name	* write sentences
		with naming words	* interaction	
		<ul> <li>write a picture composition</li> </ul>		
	* Appu finds new friends	* read and understand the story	<ul> <li>writing a thank you note</li> </ul>	* friendship
	* animal sounds	<ul> <li>animals and their sounds</li> </ul>	* imitation of animal sounds	* identification of animal sounds
	* verb	<ul> <li>understand action words</li> </ul>	<ul> <li>identify animal sounds (listening)</li> </ul>	<ul> <li>usage of action words</li> </ul>
	* singular, plural	* write a thank you note	<ul> <li>ask the students doing actions</li> </ul>	* one and many
			* talk about their friends	* confidence to address a gathering
DECEMBER	* At the zoo	* read and understand the text	* paste the pictures of animals	* love and care towards
	* homes of animals	* understand animal homes	and their homes.	animals
	* has and have	* understand has / have	* talk about their own things	* importance of freedom
	nas and nave	* share incidents	* giving a situation for role play	* useage of has / have
		* work in groups	* giving classedge activities	* reading skills
		Work in Brooks	Biring classcope acciriacs	resum grans
JANUARY	* Tina learns to share	* read and understand a	describing pictures	* love and care towards
	* opposities	picture story	* role - play a given scene	nature
	* prepositions	<ul> <li>use of prepositions</li> </ul>	<ul> <li>doing games</li> </ul>	* positions
		<ul> <li>identify silent b in given words</li> </ul>	<ul> <li>talk about position of things</li> </ul>	* sharing
		* listen for details	* reading test	* communication skills
FEBUARY	* The three wishes	* read and understand the text	describing a picture	* role of patience and
PEBOART	* conjunctions	* play in groups	* group activity role play	Intelligence in life
		* talk about a topic	* individual talk share their wishes	
	* synonyms	* use joining words to join two	* match the words with their meanings	<ul> <li>useage of conjunctions</li> <li>identify words</li> </ul>
		sentences	* join the sentences and and but	dentity words
		active to the same of the same	Join the sentences and and but	
	* Healthy food	* identify true sentences  * use of homophones and	* write two or three sentences about	* good manners.
	* sentences	other related words	your favourite fruit	* aware of health
			,	arrai e or ricaier
	* word grid	* making of sentences	* making of fruit salad * find the name of the fruits in the grid	useage of sentences     sending skills
		* healthy food		* reading skills
		* read and understand text	* conducting quiz	<ul> <li>developing presentation skill</li> </ul>
	ANNUAL EXAMINATION			

**Subject: EVS** 

Class: I	Subject : EVS	Teacher : Deepa Suku	

MONTH	TOPICS	LEARNING OBJECTIVES	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	* about me	* Students will be able to :	* paste their photograph	* Students able to handle the :
		<ul> <li>talk about themselves</li> </ul>	when they were born	* self respect
			and present	
	* my body	<ul> <li>understand external body parts</li> </ul>	<ul> <li>paste pictures of sense</li> </ul>	* unity
		* sense organs	organs.	* use of sense organs
		<ul> <li>working of body parts</li> </ul>	<ul> <li>showing body parts</li> </ul>	<ul> <li>working of body parts</li> </ul>
			<ul> <li>asking names of body parts</li> </ul>	
			<ul> <li>label the body parts.</li> </ul>	
			* rhyme (two little eyes)	
	* my family	* understand about family members	* make a family tree	* loving and caring of
		<ul> <li>understand types of families</li> </ul>	* talk about family members	family members
			* identify families from the given	* togetherness
			picture	* concept of family bonding
JULY	* our food	<ul> <li>understand about food</li> </ul>	* paste the pictures of	* save food
		<ul> <li>different meals in a day</li> </ul>	food from plants and	* importance of drinking water
		* sources of food	animals	* good manners.
		<ul> <li>good food habits</li> </ul>	<ul> <li>Group activity make sandwich</li> </ul>	<ul> <li>importance of healthy food</li> </ul>
		* importance of water	<ul> <li>identifying different tastes</li> </ul>	* sources of food
			<ul> <li>identity fruits and vegetables</li> </ul>	
	* houses	* different types of houses	* origami (house making )	*cleanliness
		* different rooms in a house	* draw your home	* types of houses
		<ul> <li>different building materials</li> </ul>	* visit a flat	* need to live in a house
		* need of house	* find out a kutcha house in their	
			village	
	* clothes	* types of clothes	* collect pictures of	
		different seasons	people in different	
		clothes in different seasons	uniforms.	donating clothes
		<ul> <li>making of clothes</li> </ul>	collect different cloth materials	* caring of clothes
			* group discussion	different clothes worn during
			* use classedge	different seasons
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AUGUST	* my school	* love towards school	<ul> <li>make list of five things</li> </ul>	<ul> <li>love and respect teachers</li> </ul>
	my school	* different rooms in a school	you find in a classroom	* different rooms in a school
		* caring of things in school	and in a playground	* caring of public property
	* my neighbourhood	* places in our neighbourhood	* picture collection of different places	* waste management.
		<ul> <li>useful services from neighbourhood</li> </ul>	<ul> <li>visit neighbourhood places</li> </ul>	<ul> <li>togetherness</li> </ul>
		* cleanliness	* find the people who help us *	good habits.
	* good food habits	* good and healthy habits	* write five sentences	* healthy habits.
		<ul> <li>importance of exercise</li> </ul>	about good habits.	<ul> <li>maintain healthy mind and body</li> </ul>
			* talk about daily routine	
EPTEMBER	* air	* types of air	* find from nature how	<ul> <li>love towards nature.</li> </ul>
		* properties of air	fishes and trees breathe	* various forms in which we feel air
		* dirty air	<ul> <li>showing video about wind and storm</li> </ul>	<ul> <li>how does air get polluted</li> </ul>
	* water	* uses of water	* collect pictures of water	* save water for future.
		* sources of water	animals and plants	* sources of water
		* save water	* visit a water body	
			<ul> <li>identify dirty water and clean water</li> </ul>	
CTOBER		н	ALF YEARLY EXAMINATION	
OVEMBER	* festivals	* national festivals	* collect pictures of national and	* kindness
OVENIBER	rescivais	* religious festivals	religious festivals	* love towards nation.
		religious resultais	* showing videos	unity in diversity
				unity in diversity
			* group discussion	

DECEMBER	* animal world	* wild animals	* collect pictures of	<ul> <li>kindness towards animals</li> </ul>	
		* domestic animals	animal driven carts.	<ul> <li>animals also living things.</li> </ul>	
		* pet animals	* visit a farm	<ul> <li>different kinds of animals</li> </ul>	
		* helpful animals	* find the insects and birds from the	•	
		<ul> <li>animal homes, birds and insects</li> </ul>	garden		
	* world of plants	* types of plants	* nature walk	* know about various types of plants	
		* part of a plant	* collect and paste the	* consideration for future.	
		* uses of plants	leaves of different plants	* their parts and their uses	
JANUARY	* in the sky	* to know about sun	* draw the different	<ul> <li>developing observation skill</li> </ul>	
		* the moon and stars	shapes of moon.	<ul> <li>to understand the changes in day</li> </ul>	
			<ul> <li>observe the night sky and day sky</li> </ul>	<ul> <li>and night</li> </ul>	
			* draw the night sky and day sky		
	* weather and season	* the difference between weather	* find the names of	* protecting and take care	
		and season	seasonal fruits and	of nature.	
		* winter season, summmer season and	vegitables	co-relate with nature	
		* rainy season	* find different clothes in different	* different climates in different	
			* seasons	seasons	
	I	To the state of th	Ta	I	
FEBRUARY	* how we travel	<ul> <li>different means of transport</li> </ul>	* paste the pictures	* save for future.	
		• fuels	different means of	energy conservation	
		<ul> <li>animals used for transportation</li> </ul>	transport	* sharing	
				<ul> <li>good relationship.</li> </ul>	
				<ul> <li>different means of transport</li> </ul>	
	* let us be safe	<ul> <li>safety at home</li> </ul>	* make a first aid box	<ul> <li>obey traffic rules.</li> </ul>	
		* at school	at home.	<ul> <li>enable the leaner to stay safe and</li> </ul>	
		* at the playground	<ul> <li>colour zebra crossing</li> </ul>	be equipped to stay safe	
		* on the road	* draw traffic signals		
				<u> </u>	
MARCH	ANNUAL EXAMINATION				

**Subject: Maths** 

	Topic	Learning objective	Pedagogical	Learning	Assessment strategy
			Practices	Outcomes	
June	1. Looking back	Students will be able to understand,  Numbers from 1 to 10  Number line  Counting back Before between after Comparing numbers Increasing decreasing order Knowing ordinals Addition and subtraction  WORK SHEET: 1	Class edge activity	Students will be able to realise,  Numbers from 1 to 10  Number line Counting back Before between after Comparing numbers Increasing decreasing order Ordinals Addition and subtraction	Oral question, Work sheet
July	2.Numbers from 11 to 20	Students will be able to understand,  Places in numerals  The abacus  Comparing numbers from 1 to 20	Assignment	Students will able to realise,  Places in numerals  The abacus  Comparing numbers from 1 to 20	Pen and paper test, Oral questions
	3. Addition and subtraction (with in 20)	Students will be able to understand,      Addition by counting     Addition using the number line     Addition table	Interactive lecture	Students will be able to realise,      Addition by counting     Addition using number line     Addition table	Oral questions, Work sheet
		WORK SHEET :2			

August	3. Addition and	Students will be able to understand,  • Addition of 3 or more numbers	Text book activity	Students will be able to realise,  • Addition of 3 or more numbers	Work sheet , pen and
	subtraction (with in 20)	Subtraction     Subtraction using number line     Word problems		Subtraction using number line     Word problems	paper test
	11. Patterns	Students will be able to understand, • Patterns	Class edge activity	Students will be able to realise,  • patters	Work sheet, class edge activity
	12. Data handling	Students will be able to,  Complete the table	Assignment	students will be able to realise,  complete table by observation	Class edge activity work sheet
		WORK SHEET :3			
Septemb	4. number from 21 to 100	Students will be able to understand,  Number 20 to 30  Counting by ten  Tens ones  Expanded forms  Number and number names  Comparing numbers  Ascending and descending	Class edge activity	Number 20 to 30     Counting by ten     Tens and ones     Expanded forms     Number and number names     Comparing numbers     Ascending and descending orders	Work sheet, Oral questions, Pen and paper test
October		REVISION AND HALF YEARLY EXAMINATION			
Novembe r	5. More on addition and subtraction	Students will be able to understand,     Adding tens and ones     Adding two digit number without carrying     Subtracting ones from two digit numbers without borrowing     Word problems	Assignment , Class edge activity	Adding tens and ones     Adding two digit number without carrying     Subtracting ones from two digit numbers without borrowing     Word problems	Class edge activity, Pen and paper test

		WORK SHEET : 4			
Decembe r	6.Multiplic ation	Multiplication as repeated addition     Multiplication tables of 1,2,5, and 10	Interactive lecture, assignment	Multiplication as repeated addition     Multiplication tables of 1,2,5, and 10	Text book activity, Class edge activity
January	7.Money	Students will be able to understand,  Coins and notes  Word problems	Discussion, demonstration	Students will be able to realise,  Coins and noes Importance of money	Oral questions, Text book activity
	8.Measure ments	Students will be able to understand,  Comparing lengths  Weight and capacity	Class edge activity assignment	Students will be able to realise,  Comparing lengths  Weight and capacity	Oral questions Pen and paper test
		WORK SHEET :5			
February	9. Time	Reading clock     Days of the week     Months of the year	Class edge activity Interactive lecture	Reading clock     Days of the week     Month of the year	Oral questions Puzzles
	10.shapes	Students will be able to understand,  Plane shapes Curved shapes Straight lines Solid shapes Sliding and rolling shapes	Class edge activity demonstration	Students will be able to realise,  Plane shapes Curved shapes Straight lines Solid shapes Sliding and rolling shapes	Oral question Text book activity
		REVISION FOR ANNUAL EXAM ANNUAL EXAM			

**Subject: Malayalam** 

Longterm outcome Month Topic Short term outcome Pedagogical practice June.അക്ഷരങ്ങൾ വായാന ത്രാക്ഷാനത്താന് താലക്കണ ചിത്രങ്ങൾ ന്ന്രൂയിറഞ എഴുത്ത് (റ.ന.ത.പ.വ.ര.ല ട,മ)പഠിക്കുന്നു പദങ്ങൾ Julymunoaunomich വായാന ചിതങ്ങൾ സാശാക്ഷരങ്ങളും (6319---6315) പദങ്ങൾ അവചേർന്നപദങ്ങളും എഴുത്ത് പഠിക്കുന്നു ചിത്രങ്ങൾ Augroupoaeaoaso സ്വരാക്ഷരങ്ങളും വായാന (എ---അഭ) എഴുത്ത് പദങ്ങൾ അവചേർന്നപദങ്ങളും ചാത്ട് പഠിക്കുന്നു Sepസാരചിഹ്നങ്ങൾ ചിത്രങ്ങൾ പദങ്ങൾ വായന (0370---629) എഴുത്ത് പദങ്ങൾ കണ്ടെത്തുന്നു octസമപിഹ്നങ്ങൾ എഴുത്ത് ചിത്രങ്ങൾ J136313(10) പദങ്ങൾ (എ---അം) വായാന കണ്ടെത്തുന്നു Novau ഞ്ജനാ-ചിത്രഞ്ഞൾ വ്യത്ജനാക്ഷരങ്ങളും വായന എഴുത്ത് ക്ഷറങ്ങൾ പദങ്ങൾ പദങ്ങളും പഠിക്കുന്നു ക----ണ) Decayത്ജനാ-ചിന്തങ്ങൾ വാതാന വ്യത്ജനാക്ഷരങ്ങൾ ക്ഷരങ്ങൾ എഴുത്ത് പദങ്ങൾ പദങ്ങൾ പഠിക്കുന്നു (ത---o) ചാരിട്ട് ചിത്രങ്ങൾ ചില്ലക്ഷരങ്ങളെ Janചില്ലക്ഷരങ്ങൾ വായാന (ൻ,ർ,ൾ,ൺ,ൽ) പദങ്ങൾ തിരിച്ചറിയുന്നു എഴുത്ത് കുട്ടക്ഷരങ്ങൾപ്രദങ്ങൾ കൂട്ടക്ഷരങ്ങൾ ചിതങ്ങൾ വായന (ക്ക---m) എഴുത്ത് പദങ്ങൾ പഠിക്കുന്നു Feb കൂട്ടക്ഷരങ്ങൾ കൂട്ടക്ഷരങ്ങൾപ്രദങ്ങൾ ചിത്രങ്ങൾ വായന ( A---- any) എഴുത്ത് പദങ്ങാൾ വഠിക്കുന്നു Maraboon പുനരാവർത്തനം

**Subject: Hindi** 

zMONTH	TOPIC	SHORT TERM GOALS	PEDAGOGICAL PRACTICES	LONG TERM GOALS (LEARNING OUTCOMES) STUDENTS WILL BE ABLE TO;	ASSESSMENT STRATEGY
JUNE	svaraxar	svaraxaraoM ka AByaasa krnaa, svaraxar pZnao AaOr ilaKnao ko ilae Ca~aoM kao tOyaar krnaa, SaudQa ]ccaarNa isaKanaa.	ica~aoM kl sahayata sao Axar isaKanaa.	svaraoM ka &ana, ]ccaarNa evaM laoKna kl trlka kl jaanakarl imalanaa.	AxaraoM kao phcaananaa.
		kaya-p~k:I			
JULY	vyaMjanaaxar- k sao Na tk (punaravat-na)	vyaMjanaaxar- k sao Na tk AByaasa krnaa, vyaMjanaaxar pZnao AaOr ilaKnao koilae Ca~aoM kao tOyaar krnaa, SaudQa ]ccaarNa isaKanaa.	ica~aoM kl sahayata sao vyaMjanaaxar isaKanaa.	Alaga Alaga vyaMjanaaxaraoM kao phcaanao kl xamata	ica~ doKkr vyaMjanaaxar phcaananaa.
		kaya-p~k: II			
AUGUST	vyaMjanaaxar-t sao &tk	vyaMjanaaxar-t sao & tk AaOr ibanaa maa∼a ko SabdaoM ka AByaasa	ica~aoM kl sahayata sao vyaMjanaaxar	Alaga Alaga vyaMjanaaxaraoM kao phcaanao kl	ica~ doKkr vyaMjanaaxar phcaananaa.

		krnaa.	isaKanaa.	xamata	
		kaya-p~k: III			
SEPTEMBER	ibanaa maa~a, Aa kl maa~a (punaravat-na)	Aa, [ kl maa~a ko Sabd pZnao, ilaKnao AaOr ]ccaarNa krnao kao isaKanaa.	AxaraoM kao jaaoDkr ilaKnao kl trlka samaJaanaa.	Axar imalaakr nae Sabd banaanao kl xamata p`aPt krnaa.	AxaraoM kao jaaoDkr Sabd banaanaa.
		punaravat-na evaM AQa- vaaiYa-k prlxaa			
OCTOBER	[,[- kl maa~a (punaravat-na)	[-, ] kl maa~a ko Sabd pZnao, ilaKnao AaOr ]ccaarNa krnao kao isaKanaa.	AxaraoM pr maa~a lagaakr ilaKnao kao isaKanaa.	Axar imalaakr nae Sabd banaanao kl xamata p`aPt krnaa.	svaraxar kao ]nakl maa~a sao imalaana krnaa.
NOVEMBER	],},? kl maa~a (punaravat-na)	} , ? kI maa∼a ko Sabd pZnao,ilaKnao AaOr ]ccaarNa krnao kao isaKanaa.	AxaraoM pr maa~a lagaakr ilaKnao kao isaKanaa.	Axar imalaakr nae Sabd banaanao kl xamata p`aPt krnaa.	Sabd pUra krnao kao donaa.
		kaya-p~k: Iv			
DECEMBER	e ,eo kl maa~a (punaravat-na)	e ,eo kl maa~a ko Sabd ]ccaarNa AaOr ilaKnao kl trlka isaKanaa.	AxaraoM pr maa~a lagaakr ilaKnao kao isaKanaa.	Axar imalaakr nae Sabd banaanao kl xamata p`aPt krnaa.	jaaoDI banaanao kao donaa.
JANUARY	Aao,AaO kI maa~a (punaravat-na)	Aao,AaooOo kI maa~a ko Sabd ]ccaarNa AaOr ilaKnao kI trIka isaKanaa.	AxaraoM pr maa~a lagaakr ilaKnao kao isaKanaa.	Axar imalaakr nae Sabd banaanao kl xamata p`aPt kmaa.	Sabd dokr ]namaoM maa~a lagaanao kao khnaa.

		kaya-p~k:v			
FEBRUARY	AM , A: kI maa∼a (punaravat-na)	Anausvaar AaOr ivasaga- ko icah\na kao pZnao, ilaKnao AaOr ]ccaarNa krnao kao isaKanaa.	AxaraoM pr maa~a lagaakr ilaKnao kao isaKanaa.	Axar imalaakr nae Sabd banaanao kl xamata p`aPt krnaa.	Anausvaar evaM ivasaga- kl AMtr pUCnaa.
MARCH	punaravat-na	svaraxar,vyaMjanaaxar AaOr svaraoM kI maa~a ko SabdaoM ka punaravat-na AaOr vaaiYa-k prIxaa	maUlyaaMkna		

## **Annual Pedagogical Plan 2020-2021**

Class II

**Subject: Maths** 

Month	Topic	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	1. Looking back	Students will be able to  Read and write numbers upto 100  Understand the numberline Identify Patterns Understand the placevalue Compare and order numbers Aware about Addition and Subtraction. Understand Geometrical Shapes and Fun with numbers.	Smart class     Discussion	Students will be able to  read and write numbers.  Write digits as per number line  Write digits as per place value  Compare and write numbers  Add and subtract different numbers with carrying and with borrowing  Write about geometrical shapes andfun with numbers.	Pen and paper test     Work sheet
	8. Even and Odd numbers		• project	Students will able to realise Even and odd numbers Pairs	

July	2. numbers upto 1000	Students will able to  Understand building numbers upto 1000  Number names  Place value and face value  Expanded form  3 digit number on abacus  Comparing and ordering numbers.	Realia    Smart class	Students will be able to realise  Read and write numbers upto 1000 Place value and face value Expanded form Ascending and descending order	Oral questions     Pen and paper test
August	3. Addition  4. Subtraction	Students will able to  Understand Adding 2 and 3 digits numbers without and with carrying  Understand subtracting 3 digit numbers with and without borrowing  Addition and subtraction together	Smart class     Pose questions      Smartclass     Interactive lecture	Students will be able to realise  Add 3 digit numbers  Solve word problems Students will be able to realise  Subtract 3 digit numbers  Solve word problems	<ul> <li>Oral questions</li> <li>Pen and paper test</li> <li>Pen and paper test</li> <li>Class edge activity</li> </ul>
September	5.Multiplication	Students will be able to  Understand multiplication on number line Properties of multiplication Multiplication tables from 1 to 10	Pose questions     Discussions	Students will be able to realise  • Multiplication and its properties • More multiplication • About multiplication tables	Oral questions     Pen and paper test

October	6.More on multiplication	Understand multiplying 2 and 3 digit number by 1 digit number     Multiplication by tens	Smart class     Realia	Students will be able to realise  • More about multiplication and its	<ul> <li>Pen and paper test</li> <li>Quiz</li> </ul>
November	7.Division	Students will be able to  Understand equal sharing and grouping Dividing equally Division as repeated subtraction Division on number line	Smart class     Pose questions	properties  Students will be able to realise  Division as repeated subtraction  Division on number line  More division  Solve word problems	Oral questions     Worksheet
December	9.Measurement 10.Money	Students will be able to  Understand length, weight and capacity  Students will be able to  Understand addition and subtraction of money  Exchanging money	Smart class     Discussions      Smart class     Interactive lecture	Students will be able to realise  • Length, weight, capacity and its units • Solve problems  Students will be able to realise • Addition and subtraction of money • Solve word problems	Oral questions     Pen and paper test     Pen and paper test     Class edge activity

January	11.Time and Calander	Students will be able to  Understand telling time of half an hour  Explore the minutes and hours  Days of week  Months of year  Calendar and seasons	Pose questions     Realia	Students will be able to realise  Time reading Days of a week Months of year Calendar and seasons	Oral questions     Pen and paper test
	12. Geometry	Understand plane shapes     Straight and curved lines     Solid shapes	Smart class     Discussion	Students will be able to realise  • plane and solid shapes  • Drawing straight line using ruler  • About curved lines	<ul> <li>Pen and paper test</li> <li>Class edge activity</li> </ul>
February	14.Patterns 15.Data Handling	Understand patterns around us     Patterns using match sticks  Students will be able to     Analyse data	Interactive lecture     Discussion      Pose questions     Discussion	Students will be able to realise  The types of patterns  Students will be able to realise  data handling	Oral questions     Quiz      Pen and paper test     Oral questions
March	13.Fractions	Understand about fraction as a part of whole	Project     Pose questions	Students will be able to realise  • fractions	<ul> <li>Worksheet</li> <li>Class edge activity</li> </ul>

## **Revision and Exam**

**Subject: Malayalam** 

Martoമലകോവസാനം	ംനാഡാദനം	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	അസൂയ നന്നല്ലെന്ന് കുട്ടി അറിയുന്നു
The state of the s		പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	കഴിവുകളെ വളർത്തുന്നു
ടമോഷണത്തിന് ലഭിച്ചശിക്ഷ	വായന,മഹാന്മാ- രൂടെകഥകളറിയു ന്നതിന്	ആശയംഗ്രഹിക്കുന്നു പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	കളളം പറയുന്നത് നല്ലതല്ലെന്നറിയുന്നു
Jan7സംസാരിക്കുന്ന	യെസാദനം	പാഠാനുബന്ധ	സ്വാതന്ത്ര്യത്തിന്റെ
പ്രാവ്	വായന,	പ്രവർത്തനങ്ങൾ	മഹത്വംഅറിയുന്നു
Decചീരപ്പാട്ട്	ഈണം	പാഠാനുബന്ധ	കൃഷിയെ
	കണ്ടെത്തുന്നു	പ്രവർത്തനങ്ങൾ,	അറിയുന്നു
Novsœwordmiloomil	വായന,മഹാന്മാര	രെ പാഠാനുബന്ധ	ഭാഷാപരമായശേഷി
	അറിയുന്നു	പ്രവർത്തനങ്ങൾ	വളർത്തുന്നു
ഠct4ഒരുചെരുപ്പു കുത്തിയുടെ കഥ	നാത്കധ അനാഹ്നാദധം'	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	അദധാനത്തിന്റെ മഹത്വം അറിയുന്നു
Sep 3 വെള്ളം	പുതിയപദങ്ങ	ംൾ പാഠാനുബന്ധ	വെള്ളം
	പഠിക്കുന്നു	പ്രവർത്തനങ്ങൾ	അമുലൂമാണ്
2ഹൈനയും	വായന, ചിഹ	ുന്നു പ്രവർത്തനങ്ങൾ	ചിഹ്നങ്ങൾ
ചങ്ങാതിമാരും	ങ്ങൾ അറിയ		ഉറപ്പിക്കുന്നു
Aug1.അമ്മയും	പാമായണം	പാഠാനുബന്ധ	നിരീക്ഷണപാടവം
കുഞ്ഞും	കവിപരിചയം	പ്രവർത്തനങ്ങൾ	വളർത്തുന്നു
Juiyവ്യഞ്ജനാക്ഷരങ്ങ ചില്ലക്ഷരങ്ങളും കുട്ടക്ഷരങ്ങളും	ദളും പുതിയപദഒ കണ്ടെത്തു	to the second se	വളർത്തുന്നു വായനാശീലം
ചിഹ്നങ്ങളും ചിഹനങ്ങളും	ും പുഃനസ്മരണ	ചിഹ്നങ്ങളും പദങ്ങളും ഓർമ്മിക്കുന്നു	അക്ഷരത്തെന്റ് ഇല്ലാതാകുന്നു

**Subject: English** 

MONTH	TOPICS	LEARNING OBJECTIVE	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	1. Too much sun. (prose) *Summer. (poem)	*Understand the value of friendship *To know them to about vowels *To enable them to understand the use of nouns	*Writing a paragraph	*Understood the value of friendship *Known about vowels *Understood the use of nouns
JULY	2. Naughty Karan. (prose)  *All the bells were ringing. (poem)	* Inculcate the value of sharing. *To make them to understand the concept of singular and plural	*Word web  *Story writing	* Inculcate the value of sharing. *Understood the concept of singular and plural

AUGUST	3. Nipun learns a lesson. (prose)	*To develop a good food habits. *To enable them to understand the pronouns	*Group discussion  *Role play	* Developed a good food habits. * Understood d the pronouns
SEPTEMBER	4. Abu Ali counts his donkeys. (prose)  *Bee! I' m expecting you. (poem)	*Students will be able to accept their mistakes. *To make them to understand the use of adjective	*Paragraph writing  *Web chart	*Could be able to accept their mistakes. *Understood the use of adjective
OCTOBER	5. Knock, knock who's there?(prose)	*Students will be able to obey their elders *To enable them to understand the use of action words end with – "ing"	*Prepare invitation card  *Role play	*Could be able to obey their elders *Understood the use of action words end with – "ing"
NOVEMBER	6. Honeybees (prose)	*To inculcate the value of unity.  *To make them to understand the use of adverbs	*Picture composition.  *Story writing.	* Inculcate the value of unity.  *Understood the use of adverbs.

DECEMBER	7. The baboon's umbrella(prose)  *Princess sleepy head (poem)	*Students will be able to select right things at right time *To enable them to understand the use of has/have *Make them to understand the use of possessive nouns	*Role play	*Able to select right things at right time. * understood the use of has/have. * understood the use of possessive nouns.
JANUARY	8. Who stole Nicky's peanuts? (prose)  *I'm late for school. (poem)	*Inculcate the value of truthfulness. *To make them to understand the use of past tense	*Paragraph writing *group discussion	*Inculcate the value of truthfulness. * understood the use of past tense
FEBRUARY	9. Gandhiji passes his own examination.(prose)	*Inculcate the value of honesty.  *To enable them to understand the use of preposition	*Letter writing  *Group discussion	*Inculcate the value of honesty.  * Understood the use of preposition
MARCH	10. The shoemaker and the elves. (prose)	* To understand the value of compassion.* To enable them to understand the concept of conjunction	*Story telling  *Role play	*Understood the value of compassion.  * Understood the concept of conjunction

**Subject: Hindi** 

1		1	1		T
MONTH	TOPIC	SHORT TERM GOALS	PEDAGOGICAL	LONG TERM	ASSESSMENT
			PRACTICES	GOALS	STRATEGY
				(LEARNING OUTCOMES)	
				STUDENTS WILL	
				BE ABLE TO:	
JUNE	svaraxar,vyaMjanaax	svaraxar AaOr	]ccaarNa prjaaor	AxaraoM kI	Axar
	ar AaOr ibanaa	vyaMjanaaxaraoM ka	dokr vaacana	phcaana kmao	phcaananaa.
	maa~a	AByaasa kmaa.dao	kmaa.	maoM saxama	
		AxaraoM vaalao ibanaa		haonaa.	
		maa~a ko Sabd.			
		kaya-p~k:			
JULY	ibanaa maa~a	tlna evaM caar AxaraoM	ica~aoM kl	vaNaa-o kao	ica~aoM ko
		vaalao ibanaa maa~a ko	sahayata sao	imalaakr nae	naama ilaKnaa.
		Sabd.	Ca~aoM kao Sabd	Sabd banaanaa.	
			&ana donaa.		
		kaya-p~k:∥			
AUGUST	Aa,[kl maa~a	Aa, [kl maa~avaalao	pustk AaOr	vaNaa-o kao	maa~a lagaakr
	-	Sabd isaKanaa ,]nako	SyaamapT kl	imalaakr nae	Sabd ilaKnaa.
		Aga- baaoQa kmaa.	sahayata sao	Sabd banaanaa.	
		Tiga bado da milad.	pZanaa evaM	Casa bandanad.	
			ilaKanaa.		
		1	IIdNdIIdd.		
		kaya-p~k∶III			

SEPTE4MBER	[-,] kI maa~a	[-,] kI maa~avaalao Sabd isaKanaa. ]nako Aqa- baaoQa krnaa ,punaravat-na.	pustk AaOr SyaamapT kl sahayata sao pZanaa evaM ilaKanaa.	vaNaa-o kao imalaakr nae Sabd banaanaa.	Axar jaaoDkr Sabd banaanaa.
OCTOBER	},?kI maa~a	AQa- vaaiYa-k prlxaa ? kl maa~a ko Sabd ka Aqa- baaoQa krnaa.ibanaa maa~a sao ? kl maa~a tk punaravat- na	pustk AaOr SyaamapT kl sahayata sao Pa`Snaao%tr evaM pUra kmao kao isaKanaa.	vaNaa-o kao imalaakr nae Sabd banaanaa.	imalaana krnaa.
NOVEMBER	e, eo,Aao kImaa∼a	e , eo ,Aao kI maa∼a ko Sabd ka Aqa- baaoQa kmaa.	pustk AaOr SyaamapT kl sahayata sao pZanaa evaM ilaKanaa.	vaNaa-o kao imalaakr nae Sabd banaanaa.	ica~ doKkr]%tr ilaKnaa.
DECEMBER	AaO,AM kI maa∼a	kaya-p~k: IV AaO kl maa~avaalao Sabd isaKanaa evaM ]nako Aqa- baaoQa krnaa.Anausvaar isaKanaa.	pustk AaOr SyaamapT kl sahayata sao pZanaa evaM ilaKanaa.	vaNaa-o kao imalaakr nae Sabd banaanaa.	SabdaoM maoM Anausvaar lagaanaa.
JANUARY	ivasaga- evaM caMd`ibandu	ivasaga- evaM caMd`ibandu ko ]ccaarNa AaOr laoKna kl trlka isaKanaa.	pustk AaOr SyaamapT kl sahayata sao pZanaa evaM ilaKanaa.	vaNaa-o kao imalaakr nae Sabd banaanaa.	maa~ae^ phcaanakr ilaKnaa.
		kaya-p∼k∶∨			

FEBRUARY	cauihyaa AaOr nallaU , gaulagaula ka caa^d ,iganatl.	Aqa- , ivalaaoma Sabd AaOr p`Snaao%tr isaKanaa.	hava Baava sao paz pZanaa.p`Snaao% tr evaM vyaakaraNa isaKanaa.	dUsaraoM kI sahayata kmaa .baDaoM kI baat maananaa.	vaacana krnaa,.
MARCH	punaravat-na	pizt pazaoM ka punaravat-na evaM vaaiYa-k prlxaa.			

## Annual Pedagogical Plan 2020-2021

Class III

Subject: EVS

MONTH	CHAPTER	SHORT -TERM LEARNING OUTCOMES	PEDAGOGICAL STRATEGIES	LONG-TERM LEARNING OUTCOMES	ASSESSMENT STRATEGY
JUNE	➤ Learning in a family	<ul> <li>student learn to identify the different members of his/her family</li> <li>learn to share things with family</li> <li>have an caring attitude towards the family members</li> </ul>	➤ Discussion ➤ Audio-visual aids	➤ The child will be well mannered ➤ They will be having helping mentality ➤ Will have love and empathy ➤ towards all	➤ Oral questions ➤ Pen - paper test
	➤ House we live in	<ul> <li>pupil gets an idea about the house they live in</li> <li>they get to know the different types of houses</li> <li>get to know that house should be clean</li> </ul>	<ul> <li>Audio-visual aids</li> <li>dicussion</li> </ul>	➤ Get to know about the different architectural materials needed while making a house	➤ Quiz ➤ Oral test ➤ Pen-paper test
				➤ Cleaning house is necessary for maintaining health and hygiene	

JULY	➤ Food we eat	<ul> <li>Child identifies the plants and animals around them</li> <li>Understands that we must eat good food</li> </ul>	➤ Group discussion ➤ Hands on learning	<ul> <li>Child follows         <ul> <li>a balanced</li> <li>diet</li> </ul> </li> <li>Minimise the         <ul> <li>use of junk</li> <li>food</li> </ul> </li> </ul>	<ul> <li>➤ Oral questions</li> <li>➤ Pen - paper test</li> <li>➤ Quiz</li> </ul>
	➤ Cooking food	<ul> <li>Students identify the different types of cooking</li> <li>Classifies the different utensils used for cooking</li> <li>Understands the importance of food</li> <li>REVISION AND PT 1 EXAM</li> </ul>	➤ Video clip ➤ Interactive sessions	<ul> <li>Students make the use of safe cooking methods</li> <li>Try to prepare new dishes</li> </ul>	➤ Puzzles ➤ Quiz ➤ Pen-paper test
AUGUST	➤ We need water	<ul> <li>Student understands the uses of water</li> <li>Classify the different sources of water</li> <li>Identifies clean water</li> </ul>	➤ Story telling ➤ Video clip	<ul> <li>Students make         the use of rain         water harvesting</li> <li>Save each drop of         water</li> <li>Purify drinking         water</li> <li>Uses different         tips for storing         and saving water</li> </ul>	➤ Oral questions ➤ Summarising ➤ Pen – paper test
	<ul> <li>Keeping healthy and fit</li> </ul>	<ul> <li>Understands that we exercise daily to be healthy</li> </ul>	Role play	<ul> <li>Maintains health and hygiene</li> </ul>	➤ Word games ➤ Project

		<ul> <li>Must have good food habits</li> <li>Should wash our hands daily</li> <li>Should keep our body clean</li> <li>Should not eat uncovered food</li> <li>Have good sleep</li> </ul>	➤ Group discussion ➤ Video clip	<ul> <li>Prepares home mad cooked food</li> </ul>	➤ Pen-paper test ➤ Quiz
	➤ Plants around us	<ul> <li>Recognise the different size of trees</li> <li>Classify the shapes of leaves</li> <li>Understand that some plants can be used as medicines</li> <li>We can also use plants for cooking</li> </ul>	➤ Group discussion ➤ Video clip ➤ Hands on training	<ul> <li>Students can classify plants into herbs, shrubs and trees</li> <li>They can cultivate medicinal plants as an occupation</li> <li>Can engage in plant tissue culturing</li> </ul>	➤ Projects ➤ Science exhibitions ➤ Pen-paper test
SEPTEMBER	➤ Animals around us	<ul> <li>Students can classify animals according to their size</li> <li>They know that animals are friends</li> <li>We should take care of animals</li> </ul>	<ul> <li>➤ Group discussions</li> <li>➤ Video clip</li> <li>➤ Story telling</li> </ul>	<ul> <li>They show love and compassion towards animals</li> <li>Can engage in animal tissue culturing</li> </ul>	➤ Pen-paper test ➤ Quiz ➤ Puzzles
	➤ Creepy crawlies	<ul> <li>Understands that insects are social too</li> <li>Some of the insects are harmful</li> <li>Most insect are useful</li> </ul>	➤ Science cards ➤ Video clips ➤ Story telling	➤ Take doctors support while getting injured with harmful insects	➤ Pen-paper test ➤ Quiz

		REVISION AND HALF YEALY EXAMINATION		➤ Use earthworms for vermicomposting	
OCTOBER	➤ About Birds	<ul> <li>Analyse the different part of birds</li> <li>Classify the different bird feathers</li> <li>Recognise that some birds do not fly</li> <li>Understands that Birds live in nest</li> <li>Recognise that some birds live in water</li> </ul>	➤ Story telling ➤ Video clips ➤ Group discussions	<ul> <li>Can engage in ornithology</li> <li>Love and empathy towards birds</li> </ul>	➤ Pen-paper test ➤ Summarising ➤ Quiz ➤ puzzles
NOVEMBER	➤ Work we do	<ul> <li>Understands that different people have different jobs</li> <li>Understands that making childrens do work in harmful places is wrong.</li> </ul>	➤ Video clips ➤ Hands on training	<ul> <li>Help them to choose an ambition</li> <li>Understand the different job opportunities</li> <li>Help children trapped in different harmful working places.</li> </ul>	➤ Summarising ➤ Puzzles ➤ Pen-paper test
	➤ Games we play	<ul> <li>Classify different types of games</li> <li>Recognise that games help us to relax</li> <li>It gives us exercise</li> </ul>	<ul> <li>➤ Hands on training</li> <li>➤ Science cards</li> <li>➤ Video clips</li> </ul>	<ul> <li>Helps children to make use of their leisure time</li> <li>Maintain their body fit</li> </ul>	➤ Puzzles ➤ Quiz ➤ Pen-paper test

	➤ Art of pot making	<ul> <li>Understands that vessels can also be made from clay</li> <li>Analyse the way of making clay pots</li> </ul>	<ul> <li>➤ Video clips</li> <li>➤ Group         discussion</li> <li>➤ Science cards</li> </ul>	Buy good quality clay pots	➤ Summarising ➤ Pen-paper test
DECEMBER	➤ Story of cloth making	<ul> <li>Classify different types of cloth materials they wear</li> <li>Recognise that animals and plants provide materials for cloth making</li> <li>People living places wear different types of cloth</li> </ul>	➤ Group discussions ➤ Hands on training ➤ Video clips	<ul> <li>Interior         Decoration with         clay items</li> <li>Tailoring and         embroidery work         can be used for         profession</li> <li>Start ones own         set up of fabric         designing</li> </ul>	➤ Pen-paper test ➤ Science exhibitions ➤ Quiz
	➤ Celebrating festivals	<ul> <li>Classify the different festivals</li> <li>Understands the different national festivals</li> </ul>	➤ Video clips ➤ Group discussions	<ul> <li>Arouse patriotic feeling among the students</li> <li>Develop a feeling of unity among the students</li> </ul>	➤ Pen-paper test ➤ Oral test ➤ puzzle
JANUARY	➤ Locating places	<ul> <li>Understand the different sign language</li> <li>Recognise the different symbols during travelling.</li> </ul>	➤ Group discussions ➤ Science cards.	<ul> <li>To travel safely</li> <li>To make use of the different symbols during travelling</li> </ul>	➤ Pen-paper test ➤ Quiz

	➤ Means of transport	Classify the different vehicles according to their size	➤ Group discussion ➤ Video clip	Make the use of google map and compass  Make different use of vehicles for transport  Work in automobile companies	<ul> <li>▶ Pen-paper test</li> <li>▶ Quiz</li> <li>▶ puzzle</li> </ul>
FEBRUARY	➤ Means Of Communication	<ul> <li>Understands that         communication is very         essential in daily life</li> <li>Classify the different means of         communication</li> </ul>	➤ Group discussions ➤ Video clips	➤ Use different appliances for communication ➤ Open new social networking accounts	➤ Pen-paper test ➤ Quiz ➤ Puzzles
	➤ Special people	<ul> <li>Understand that all students are not equal in abilities</li> <li>There are different places for differently abled people</li> </ul>	➤ Group discussions ➤ Video clips	Students understand to treat the differently abled people with care and love	➤ Pen-paper test ➤ Quiz ➤ puzzles
MARCH		ANNUAL EXAMINATION			



Month	Topic	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	1. Large numbers	Read and write numbers upto 10000     Understand the placevalue and face value.     Compare and order numbersupto 9999     Form smallest and greatest numbers.     Round numbers to nearest 10 and 100.	Smart class     Discussion	Students will be able to  read and write greater numbers.  Write digits as per place value  Compare and order numbers  Form greater and smaller numbers.  Round numbers to nearest 10 and 100	Pen and paper test     Work sheet
July	2. Addition and Subtraction	Students will able to  Understand adding numbers without and with carrying  Properties of addition.  Understand subtracting numbers with and without borrowing  Properties of subtraction  Word problems  Estimation	Realia     Smart class     Pose questions	Students will be able to realise	Oral questions Pen and paper test Oral questions.
August	3.Multiplication	Students will be able to  Understand multiplication facts of 6,7,8 and 9 Properties of	Pose questions     Discussions     Smart class	Students will be able to realise  • Multiplication and its properties • Solve	<ul> <li>Oral questions</li> <li>Pen and paper test</li> </ul>

September	4.Division	multiplication  Multiplication without and with regrouping  More multiplication  Solve word problems  Students will be able to  Understand equal sharing and grouping	Smart class     Realia     Discussion	multiplication using different methods. • Solve word problems  Students will be able to realise • Concepts of	Pen and paper test     Quiz
	<ul> <li>Division as repeated subtraction</li> <li>Division on number line</li> <li>Division without and with remainder</li> <li>Divide and check</li> <li>Solve word problems</li> </ul>			division  Properties of division  Methods of dividing and checking  Solve word problems	Oral questions
October	•	HALF YEARLY EXAM AND	REVISION		
November	5.Fractions	Understand fractions     Unit fractions     Pair and share     Naming fractions	Smart class     Discussions     project	Students will be able to realise  Types of fractions Operations on fractions	Oral questions     Pen and paper test
	6.Shapes	Students will be able to  Understand about plane and solid shapes  Parts of a circle  Point, line ,line segment and ray  Making shapes in the dot grid	Smart class     Interactive lecture	Students will be able to realise  • about plane and solid shapes • lines and its measurement	<ul> <li>Pen and paper test</li> <li>Class edge activity</li> </ul>

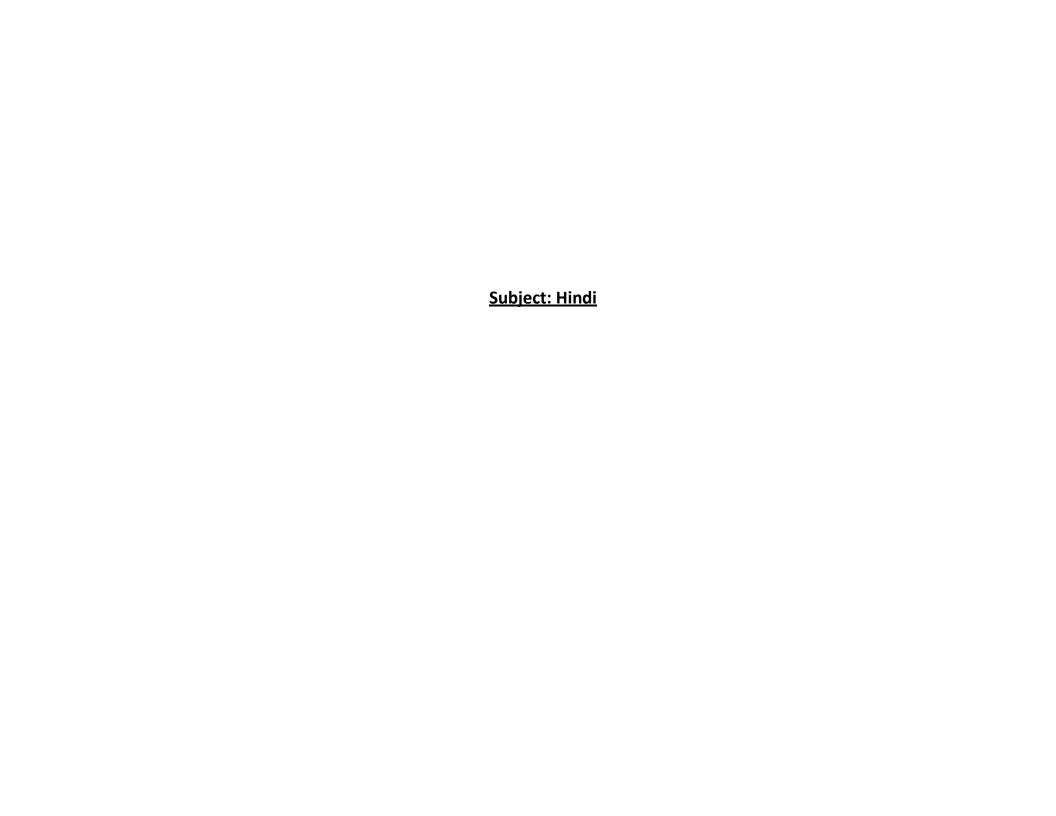
December	7. Measurement	Students will be able to  Understand measuring and converting length in metres and centimetres	Discussion     Smart class     Realia	circle and its parts  Students will be able to realise     the conversion of units	Oral questions     Quiz     Pen and paper test
		measuring and converting length in kilometres and metres     addition and subtraction of length     measuring and converting weight in kilograms and grams     addition and subtraction of weight     measuring and converting volume in litres and millilitres     addition and subtraction of capacity		Solve problems involving units of measurement     Understand relationship between various units of measurement	
January	8.Time	Understand telling time in hours, half hours and quarter hours     Telling time correct to 5 minutes     Calendar	Pose questions     Realia	Students will be able to realise  Time reading  Telling time correct to 5 minutes  Calendar	Oral questions     Pen and paper test
February	9.Money	Students will be able to  Understand the conversion of money  Addition and subtraction of money	Interactive lecture     Discussion	Students will be able to realise  The conversion of money Solving basic	Oral questions     Quiz

	10.Data Handling	Multiplication and division of money     Solve word problems  Students will be able to     Recording data using tally marks     Drawing and interpreting pictograph     Reading and interpreting bar graph	Pose questions     Discussion	mathematical operations of money • Solve word problems  Students will be able to realise • Data handling • Recording data using tally marks • Draw and interpret graphs	<ul> <li>Pen and paper test</li> <li>Oral questions</li> </ul>
March	11.Patterns and symmetry	Understand different types of patterns     Making patterns with shapes     Growing patterns     Symmetry	Project     Pose questions	Students will be able to realise  The types of patterns Symmetry	<ul> <li>Worksheet</li> <li>Class edge         activity</li> </ul>

**Revision and Exam** 

Subject: Malayalam

June 1.ഈശാര പ്രാർത്ഥന 2.അകമില്ലാത്തില	കവിപരിചയം വായന, കണ്ടെത്തൽ	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ,	മഹയാമറിയുന്നു ചിന്താശേഷി വർദ്ധിക്കുന്നു
പുറമില്ലാത്തില	d56161 ISC0100000	ശേഖരണം	
July ദതോറ്റോടിയ	പാരായണം,	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	അഹങ്കാരംആപത്ത് യുദ്ധംനാശത്തിന്
ം പട 4സ്വന്തംവടിയും	കവിപരിചയം വായന	പാഠാനൂബന്ധ	സഹജീവിസ്നേഹം
ഹാധ്രാമീസമ്പാ		പ്രവർത്തനങ്ങൾ	ഉണ്ടാകുന്നു
Aug 5ഏകനായ് നടന്നു നീ	പാരായണം, കവിപരിചയം	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ കുറിപ്പ്	ദേശസ്നേഹം വളർത്തുന്നു
Sep ഒേളിമ്പിക്സ് മത്സരങ്ങൾ	വായന, അറിയൽ	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	ഒളിമ്പിക്സ് മത്സരങ്ങളെ അറിയുന്നു
oct 7.പരുക്കേറ്റ	പാരായണം, കവിപരിചയം	പാഠാനുബന്ധ് പ്രവർത്തനങ്ങൾ	ഭാഷാശേഷിവളർത്തുന്നു മാതൃസ്നേഹം
Novs.കേരള സിംഹം	വായന	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	് ഉള്ളവരാകുന്നു ചരിത്രബോധം
Desகிண்வியி	വായന	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ, ശേഖരണം	സത്ഗുണങ്ങൾ തിരിച്ചറിയുന്നു
10.ബകവധം	വായന	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	പുരാണകഥകളിലെ നന്മ തിരിച്ചറിയുന്നു
Jan സഎന്റെതോണ	റി പാരായണം. കവിപരിചയ	.പാഠാനുബന്ധ പോർത്തനങ്ങൾ	ഭാവനാപുർണ്ണമായത്ത്യതയ- അൾ എഴുതുന്നു
Feb 12സ്വാർത്ഥനാൾ രാക്ഷസൻ	യ വായന	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	കഥാസ്വാദനം,സ്വാർത്ഥത വെടിയുന്നു
Marismല്ലസാപ്നം	വായന ലേഖകനെ അറിയുന്നു	പാഠാനുബന്ധ പ്രവര്ത്തനങ്ങൾ ശേഖരണം	പ്രായോഗികബുദ്ധി ഉള്ളവരാകുന്നു



MONTH	TOPIC	SHORT TERM GOALS	PEDAGOGICAL	LONG TERM	ASSESSMENT
			PRACTICES	GOALS	STRATEGY
				(LEARNING	
				OUTCOMES) STUDENTS WILL	
				BE ABLE TO;	
JUNE	punaravaRi%t	punaravat-na sao	pustk kl	nae Sabd	p`Sna
		puna:smarNa.	sahayata sao	banaanao kl	pUCnaa.
			pizt paz	jaanakarl p`aPt	
			daohranaa.	krnaa.	
JULY	punaravaRi%t	punaravat-na sao	pustk kl	nae Sabd	p`Sna
		puna:smarNa.	sahayata sao	banaanao kl	pUCnaa.
			pizt paz	jaanakarl p`aPt	
			daohranaa.	kmaa.	
AUGUST	maa~a pircaya	e, eo kl maa~ae^	ica∼ kl	nae Sabd	maa~a
		lagaakr nae Sabd	sahayata sao	banaanao kl	lagaakr
		banaanaa.	Alaga Alaga	jaanakarl p`aPt	ilaKnaa.
			Alaga	kmaa.	
			maa~aAaoM		
			kao		
			phcaananaa.		
SEPTEMBER	maa~a pircaya	Aao , AaO, AM kl	ica~ kl	nae Sabd	imalaana
		maa~ae^ lagaakrnae	sahayata sao	banaanao kl	kmaa.
		Sabd banaanaa.	Alaga Alaga	jaanakarl p`aPt	
			Alaga	krnaa.	

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OCTOBER	maa~a pircaya, punarava-tna	ivasaga- AaOr caMd`ibandu lagaakr nae Sabd banaanaa.	maa~aAaoM kao phcaananaa. ica~ kl sahayata sao Alaga Alaga Alaga maa~aAaoM kao phcaananaa.	nae Sabd banaanao kl jaanakarl p`aPt krnaa.	AMtr phcaananaa
NOVEMBER	caMd`ibandu , svar AaOr baarhKDI , saMyau@taxar, ijasanao saUrja caa^d banaayaa.	svar AaOr baarhKDI ka sahl ]ccaarNa , Aqa-, pyaa-yavaacal , ivalaaoma Sabd Aaid kl jaanakarl.	tala laya ko saaqa pZnao kao isaKanaa.	[-Svar pr Aasqaa rKkr Aagao baZnao kl takt p`aPt krnaa.Axar jaaoDkr vaacana krnao kl xamata p`aPt krnaa.	baarhKDI ilaKnaa.
DECEMBER	Saor AaOr caUha	Aqa-, ivalaaomaSabd, pyaa-yavaacal, p`Snaao%tr kI jaanakarl.	sahl]ccaarNa saiht vaacana krnao ko ilae isaKanaa.	praopkar kl Baavanaa ]%pnna krnaa.	vaacana krnaa.
JANUARY	KrgaaoSa ka [laaja, maurgal kl raoiTyaa^	sahl Aqa- ilaKnaa, pUra krnaa, vaa@ya banaanaa, imalaana krnaa Aaid kI jaanakarl.	hava Baava ko saaqa ]ccaarNa krnao kao isaKanaa.	sahyaaoga evaM ima~ta kI Baavanaa ]%pna krnaa.	laGau p`Sna pUCnaa.
FEBRUARY	zlk samaya pr , ?tuAaoM, idnaaoM evaM mahlnaaoM ka	Sabdaqa- , ?tuAaoM kl phcaana, idnaaoM evaM mahlnaaoM kl jaanakarl,	pustk kl sahayata sao pZanaa.namaU	samaya pr kama kmao kl xamata	bahuivaklpl p`Sna

	naama ,iganatl	iganaityaaoMkao AMkaoM AaOr SabdaoM maoM jaananaa	naa idKakr isaKanaa.	baZanaa.	
MARCH	punarava-tna				

Subject: English

Month	Topic	Learning objectives	Pedagogical Practices	Learning outcome
June	Max's words There isn't time(Poem)	(short term goal)  To recognise different hobbies  Comprehend a story Differentiate between countable and uncountable nouns  Understand different places in the world and each have unique environment Understand rhyming words	➤ Class discussion ➤ Nesting words ➤ Paragraph writing ➤ Worksheets	( Long term goal)  Inculcate hobbies  Identify countable and uncountable nouns  Able to write a paragraph about their hobbies  Unscramble and make meaningful words.  Able to find out rhyming words
July	➤ The apple dumpling  PT 1 EXAMINATION	<ul> <li>To understand the barter system</li> <li>Identify different pronouns</li> <li>Know the use of different punctuation in sentences</li> </ul>	➤ Role play ➤ Writing- Diary entry ➤ worksheets	<ul> <li>learn about barter         <ul> <li>as a means of trade</li> <li>use suitable</li></ul></li></ul>

August	➤ In-house garden ➤ The tree (poem)	➤ To understand how biodegradable waste can be reused as compost. This is the way to giving back to nature instead of piling them in dump yards. ➤ Understand simple tenses ➤ Understand homophones ➤ Enhance creativity ➤ Understand alliteration in rhymes	<ul> <li>Story telling</li> <li>Discussion</li> <li>Worksheets for grammar</li> <li>Writing a short paragraph</li> <li>Making a flower file</li> <li>recitation</li> </ul>	correct punctuations  Become aware of food wastage and how compost can be made from wasted food  Apply simple tenses in sentences appropriately Identify the correct word from a pair of homophones  Able to write a short paragraph on given topic  Create a flower file Identify alliterative words  Able to recite a poem with appropriate gestures
September	A life for others	<ul> <li>To understand how trees help to prevent natural disasters and fauna of a place</li> <li>Distinguish the difference between regular and irregular verbs</li> </ul>	<ul> <li>Group discussion</li> <li>Story telling</li> <li>Worksheets</li> <li>Smart class</li> </ul>	<ul> <li>To do something to keep the earth clean and habitable</li> <li>Understand the responsibility to keep a healthy environment to live</li> <li>Comprehend a story</li> </ul>

October	HALF YEARLY EXAMINATION  A born dreamer	<ul> <li>To understand how organisation such as ISRO and DRDO help further aerospace research</li> <li>Understand a biographical passage</li> <li>Identify adjectives of comparison</li> </ul>	Writing a profile Audio-visual aids Worksheets Paragraph writing	Identify between regular and irregular verbs Speak about their opinion  Learn about aerospace engineering and the work of organisations such as ISRO and DRDO Able to write a profile about an admired person Apply adjectives of comparison to sentences
November	➤ You can't be that(poem) ➤ A dream come true	➤ To recognize that there are several different professions that people pursue and they all touch our lives in different ways ➤ Understand the concept of repetition in a poem ➤ To understand the cause of illiteracy in our country	Completing a poem Recitation Role play Writing an informal letter	Learn about different professions and how they help us  Understand the use of rhyming words Identify the instances of repetition in a poem Aware about the role of each educated individual towards his/her less privileged countrymen

				Enhance speaking skills
December	➤ Tenali Rama and the three dolls	<ul> <li>Understand the importance of wit and wisdom in our life</li> <li>Identify suitable conjunctions to join sentences</li> <li>Differentiate between definite and indefinite article</li> </ul>	➤ Story telling ➤ Worksheets ➤ Writing a notice ➤ Smart class	<ul> <li>Able to use intelligence for problem solving</li> <li>Enhance speaking skills</li> <li>Prepared a notice</li> <li>Able to use definite and indefinite articles appropriately</li> </ul>
January	➤ Daddy's making dinner. (poem)  PT 2 EXAMINATION	<ul> <li>To recognise that the so called 'boy's task' and 'girl's task' can be performed by anyone</li> <li>Understand what linking words are and what purpose they serve in a paragraph</li> <li>Understand what onomatopoeia and why poets use it</li> </ul>	<ul> <li>Recite a poem</li> <li>Paragraph writing</li> <li>Work sheets</li> </ul>	<ul> <li>Gets know a little of, in order to manage one's life independently</li> <li>Identify instance of onomatopoeia in a poem</li> <li>Able to write a paragraph using linking words</li> </ul>
February	➤ Who is cleverer?	To understand what mythology is and what role it serves in modern lifes	<ul> <li>Crossword puzzle</li> <li>Writing an informal letter</li> <li>Write a picture story</li> </ul>	Understand every culture has its own body of myth.
	•		,	
		<ul> <li>Understand preposition of position and time</li> <li>Identify suitable punctuation to a paragraph</li> </ul>	>	<ul> <li>Learn about Greek mythology</li> <li>Able to apply preposition of position and time</li> <li>Able to mark correct punctuations.</li> </ul>
March	Revision and Annual Exam			

## Annual Pedagogical Plan 2020-2021

Class IV

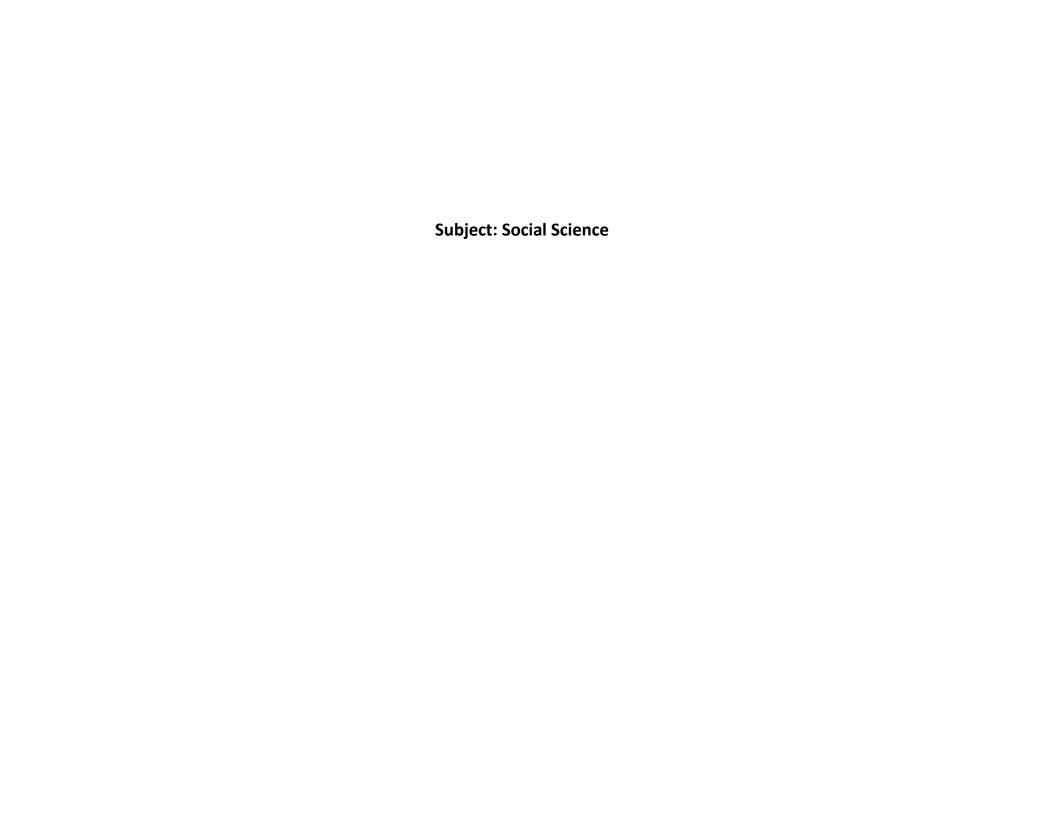
**Subject: Science** 

Month	Chapter	Short term learning outcomes	Pedagogical strategies	Assessment strategies	Long term learning outcomes
June	Plants - the food factories.	Students will be able to  Understand, how do plants make food?  Recognize, the plants that live on other plants.  Analyse, about the plants that eat animals.	➤ Discussion ➤ Smart class	➤ Pasting pictures ➤ Flow chart	Students will be able to realise  Plants prepare their own food by photosynthesis. Chlorophyll is the green substance in leaves.
	Plant adaptation.	Students will be able to  Understand, the terms habitat and adaptation.  Classify, the plants as terrestrial and aquatic.  Analyse, the adaptations in different habitats.	<ul> <li>Demonstration</li> <li>Individual activities</li> </ul>	➤ Assignment ➤ Scientific reasoning	Students will be able to realise  Plants grow in a particular habitat have adaptations to suit the habitat.  Concern for the environment.
July	3. Animal adaptations	Students will be able to  Recognise, adaptations of animals for habitat and climate.  Analyse, adaptation for feeding.  Identify, adaptations for protection.  REVISION  PT 1 EXAMINATION	➤ Smart class ➤ Concept map	Cross word puzzle. Paper test	Student will be able to realise  Animals can be grouped according to their habitat.  Birds have strong wings and hollow bones to fly.

August	Reproduction in animals      Food and	Students will be able to  Understand, the term reproduction.  Recognise, animals reproduce by giving birth or laying eggs.  Analyse, the life cycle of different animals.  Students will be able to	Pose questions     Interactive lectures.	➤ Labelling the diagram ➤ Oral test.	Students will be able to realise  Animals reproduce in different ways.  Life cycle of a butterfly.  Students will be able to
	nutrition	<ul> <li>Recognise, nutrients in food.</li> <li>Aware about the importance of balanced diet and exercise.</li> <li>Analyse, the need of cooking and preserving food.</li> </ul>	➤ Group discussion ➤ Smart class	<ul> <li>Classification.</li> <li>Quiz.</li> </ul>	realise  The importance of nutrition.  Sources of different nutrients.
September	6. Digestion and our teeth.	Students will be able to  Analyse, Digestive system in humans.  Recognise, the structure of a tooth.  Analyse, the types of teeth.  Aware about how to take care of the teeth.	➤ Observation ➤ Discussion.	➤ Labelling ➤ Identification.	Students will be able to realise  Food breaks down by digestion.  There are 32 permanent teeth in an adult.
October	7. Our clothes	Students will be able to  Recognise, the need for clothes.  Identify, the types of clothes.  Understand, about fibres.  REVISION  HALF YEARLY EXAMINATION	➤ Observation ➤ Smart class	➤ Flow chart ➤ Paper test	Students will be able to realise  Natural and synthetic fibres.  About wearing clothes depending on weather.

November	8. Safety and	Students will be able to			Students will be able to
	first aid.	<ul> <li>Understand, the rules to be</li> </ul>	Group discussion.	Model making.	realise
		followed in various places.	<ul> <li>Smart class.</li> </ul>	<ul> <li>Oral test.</li> </ul>	➤ The traffic rules to be
		<ul> <li>Recognise, about first aid.</li> </ul>	5 1110111 2110231	01011001	followed
		<ul> <li>Prepare, a first aid box.</li> </ul>			➤ How to carry out
		repare, a mot did box.			simple first aid.
	9. Matter and its	Students will be able to			Students will be able to
	states.	<ul> <li>Understand, the states of</li> </ul>	➤ Smart class	➤ Preparing	realise
	states.	matter.	Demonstration.	solutions	Matter is made up of
		<ul> <li>Analyse, change of state</li> </ul>	Demonstration.	> Quiz.	molecules.
				Quiz.	➤ Different states of
		<ul> <li>Recognise about mixture and solution.</li> </ul>			
		and solution.			matter.
					➤ How to make a
D	40.5	Condens will be able to			solution.
December	10. Force work	Students will be able to	> 1-4	<b>D</b>	Students will be able to
	and energy.	Understand, Force and its	Interactive	Paper test.	realise
		effects.	lectures.	List out some	Types of forces.
		Analyse, about work and	Observation	simple machines.	Simple machines
		simple machines.	Demonstration		<ul> <li>Different sources of</li> </ul>
		Recognise about the term			energy.
		energy related to work.			
January	11. The	Students will be able to			Students will be able to
	environment.	Understand, the term	Observation	Pasting pictures.	realise
		environment.	Smart class	Model making.	How to reduce
		<ul><li>Analyse, about</li></ul>			environmental
		environmental pollution.			pollution.
		<ul> <li>Aware, about waste</li> </ul>			4-R rule for waste
		management.			management.
	12. Air ,Water	Students will be able to			Students will be able to
	and Weather.	<ul> <li>Understand, about weather</li> </ul>	Smart class	Slogans-	realise
		and climate.	Interactive	conservation of	Role of the sun in
		<ul> <li>Analyse, about wind</li> </ul>	tutoring.	water.	weather and climate.
		movement.		Flow chart.	Land and sea breeze.
		<ul> <li>Recognise , about water and</li> </ul>			About water
		its importance.			conservation.
		REVISION & P T 2 EXAMINATION			

February	13. The universe	Students will be able to					Studen	ts will be able to
		Understand, solar system.	>	Smart class	>	Project.	realise	
		Identify , about big bang	>	Group discussion.	>	Oral test	>	Solar system.
		theory.	>	Interactive			>	Rotation and
		Aware about the layers of earth		lecturing.				revolution of earth.
		Recognise , the movement of earth.						
	14. Measuring	Students will be able to					Studen	ts will be able to
	time and	Analyse the need of	>	Discussion	>	Measuring time.	realise	
	temperature	measurement	>	Observation.	>	Paper test.	>	Measurement of time
		<ul> <li>Recognise , about estimation.</li> </ul>	>	Individual activities.			>	and temperature.  Different units of
		<ul> <li>Understand, about time and</li> </ul>						time.
		temperature.						
		Know about the units of time and temperature.						
March		REVISION						
		ANNUAL EXAMINATION						



Month	Lesson	Learning Objective	Pedagogical Practice	Learning Outcome
June	➤ Our India ➤ Northern Mountains	<ul> <li>➤ To understand the neighbouring countries</li> <li>➤ Physical division</li> <li>➤ States and Union Territories</li> <li>➤ North Mountains</li> <li>➤ Climate, life style, vegetations, wild life</li> <li>➤ Importance of Northern Mountains</li> </ul>	➤ Map ➤ Project ➤ Diary entry ➤ Poster	➤ Patriotism ➤ Love towards nature
July	➤ Northern Plain ➤ Western Desert	Learn location     Major rivers     States in this region     Life and Culture	➤ Group Discussion ➤ Diary Entry	<ul> <li>Protection of rivers or natural resources</li> <li>Exploration of different cultures</li> </ul>
August	➤ Southern Plateau ➤ Coastal Plains and Islands	<ul> <li>Location</li> <li>Life and Culture of these area</li> </ul>	➤ Scrap book ➤ Map ➤ Corel Corner ➤ Poster	➤ Conservation of minerals ➤ Protection of Western Ghat ➤ Think about climate changes
September	➤ Climate of India	<ul> <li>➢ Difference between climate and season</li> <li>➢ Climate of India</li> <li>➢ Main seasons</li> </ul>	<ul><li>Collage</li><li>Group discussion</li></ul>	Find out the type of climate of this city
October	<ul> <li>Natural resources of India</li> <li>Soil of India</li> <li>Soil Erosion</li> </ul>	<ul> <li>Different types of resources</li> <li>How soil is formed</li> </ul>	<ul> <li>Role play</li> <li>List making</li> <li>Group discussion</li> </ul>	Caring towards earth

		Types of soil		
November	<ul> <li>Our forest resources</li> <li>Our water resources</li> </ul>	<ul> <li>Types of forest</li> <li>Wild life</li> <li>Conserve forest and wild life</li> <li>Sources of water</li> <li>About drinking water</li> </ul>	➤ Map	<ul> <li>Conservation of forest</li> <li>Protection of water</li> </ul>
December	<ul> <li>Our mineral resources</li> </ul>	<ul> <li>Minerals and States</li> <li>rich in minerals</li> <li>Conserve minerals</li> </ul>	➤ Collage	Limit the use of minerals
January	➤ Our agriculture ➤ Our industry	<ul> <li>Importance of agriculture</li> <li>Crops grown in India</li> <li>Green revolution</li> <li>Types of industries</li> <li>Information technology</li> </ul>	➤ Field trip ➤ Map work ➤ Essay writing ➤ Project	<ul> <li>Afforestation</li> <li>Sustainable development</li> </ul>
February	<ul> <li>Our transport</li> <li>Local self Government</li> </ul>	<ul> <li>Types of transport</li> <li>system</li> <li>Levels of Government</li> <li>About the Courts</li> </ul>	<ul> <li>Collage</li> <li>Group discussion</li> <li>Conduct mock</li> <li>election</li> </ul>	<ul> <li>Car pooling</li> <li>Respect towards our Government</li> </ul>
March	<ul> <li>Our rights and duties</li> <li>Culture and people</li> </ul>	<ul> <li>Constitution of India</li> <li>Fundamental rights         <ul> <li>and duties</li> </ul> </li> <li>Directive principles</li> </ul>	<ul> <li>Project</li> <li>Make a Tirang</li> <li>(Tri colour)</li> </ul>	<ul> <li>Respect and obey our rights</li> <li>Love for our mother tongue</li> </ul>

**Subject: Maths** 

Month	Topic	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	1. Large Numbers	Read and write numbers upto     10 lakh     write the digits according to     place value     compare and order numbers     form greatest and smallest     numbers     Round numbers to the nearest     10,100,1000     read and write Roman Numbers	Realia     Smart class     discussion	Student will be able to realise  • greater numbers  • place value  • form greater and smaller numbers  • ascending and descending order  • Roman numbers	Oral questions     Pen - paper test
	14.Patterns and symmetry	Understand patterns in numbers     Symmetry	<ul><li>Project</li><li>Smart class</li><li>Group discussion</li></ul>	Students will be able to realise  The types of patterns  Symmetry	
July	2. Addition and Subtraction	Add with and without     regrouping     Understand Properties of addition     Subtract with and without	Realia     Smart class     Pose questions discussion	Student will be able to realise  • Addition subtraction properties • Add and subtract	<ul> <li>Oral questions</li> <li>Summarising</li> <li>Pen – paper test</li> </ul>

		regrouping  Understand properties of subtraction  Check subtraction with addition  Estimation PT1 EXAMINATION		large numbers • Solve word problems	
August	3. Multiplication	Students will be able to  Multiply by 10,100,1000  Smart multiply Grid multiplication Understand properties of multiplication, word problems related to same Estimate	Smart class     Discussion     Pose questions	Students will be able to  Solve multiplication using different methods Estimate Estimate	<ul> <li>Oral questions</li> <li>Summarising</li> <li>Pen – paper test</li> </ul>
	13. Data handling	Students will be able to  Read and interpret bar graphs  Draw bar graph  Tally mark  Read and interpret pie chart	<ul> <li>Project</li> <li>Discussion</li> <li>Smart class</li> <li>Realia</li> </ul>	Students will be able to realise  Bar graphs, pie charts Draw and interpret the graphs	Worksheet     Pen and paper     test     Oralquestions
September	4. Division	Students will be able to  Divide numbers by 10, 100, 1000  Know the properties of division  Solve word problems, divide and check	<ul><li>Realia</li><li>Discussion</li><li>Smartclass</li></ul>	Students will e able to realise  Concept od division Properties of division Methods of divding and checking	<ul> <li>Oral questions</li> <li>Pen and paper test</li> <li>Worksheet</li> </ul>

October	5. Factors and multiples	Students willbe able to  Understand factors and common factors  Prime and composite numbers  Multiples, common multiples  REVISION AND HALF YEARLY EXAMINATION	<ul> <li>Smart class</li> <li>Pose questions</li> <li>Discussions</li> </ul>	Students will be able to realise  • Factors ad multiples • Common factors and common multiples • Prime and composite numbers	<ul><li>Quiz</li><li>Oral questions</li><li>Worksheet</li></ul>
November	6. Fractions	Students will be able to Represent fractions Simplify fractions Understand equivalent fractions Compare and order fractions Add and subtract like fractions Convert improper fractions to mixed and viceversa	<ul> <li>Smart class</li> <li>Discussion</li> <li>Project</li> <li>Interactive</li> <li>lecture</li> </ul>	Students will be able to realise  Types of frations Operations on fractions Equivalent fractions	<ul> <li>Pen and paper test</li> <li>Worksheet</li> <li>Oralquestions</li> </ul>
December	7. Decimals	Students will be able to  represent fractions with denominators 10,100,1000  represent decimals as fractions understand the place value chart for decimals		Students will be able to realise  • The method to represent decimals	<ul> <li>Worksheet</li> </ul>

		draw pictorial representation of decimals	Smart class     Realia     Discussion	Place value of decimals     Represent decimals pictorially	Quiz     Pen and paper test
	11. Time	read time to the exact minute     express time in 12 hour clock     and 24 hour clock     find the time duration of an     event     count no of days in a month     understand the need for a leap     year	Smart class     Pose questions     group     discussion	Students will be ble to realise  Time reading Express time in 12 hour and 24 hour clock Find time duration of an event Concept of leap year	<ul> <li>Oral questions</li> <li>Class edge         activity</li> <li>Pen and paper         test</li> </ul>
January	9.Measurement	relate metre to centimetre, centimetre to millimetreand metre to kilometre     solve problems involving lengths and distances     understand the relationship between various units of weight and volume     convert units of lenth and volume from one unit to another     determine sum and differences of lengths weight and volumes  REVISION AND PT1 EXAMINATION	discuission     smart class     realia	Students will be able to realise  Relate the convetion of units  Solve problems involving lengths and distanes  Understand relationship between various units of weight and volume	<ul> <li>Pen and paper test</li> <li>Quiz</li> <li>Worksheet</li> </ul>

February	8. Shapes	Students will be able to	• smart class	Students will be able to	Oral questions
		distinguish between open and closed figure     identify polygons     measure and draw line segments     draw circle ,identify parts of a cirle     draw plan elevation and side view of simple objects	<ul> <li>group discuission</li> <li>project</li> <li>realia</li> </ul>	Open and closed figures     Different polygons     Lines and its measurement     Circle and parts of a circle     Plans and elevations of simple objects	Quiz     Pen and paper     test
	9. Perimeter and area	Define perimeter and area     Calculate perimeter of rectangle, square, triangle and closed figures     Find area of regular and irregular shapes	<ul> <li>smart class</li> <li>group discussion</li> <li>realia</li> </ul>	Students will be able to realise  Perimeter and area How to calculate perimeter of closed figures Methods to calculate area of regular and irregular shapes	Pen and paper test     Quiz
March	12. Money	Convert rupees into paise and vice versa     Addand subtract money     Multiply and divide money     Prepare bills  REVISION AND FINAL EXAMINATION	Smart class     Realia     Group     discuission	Students will be able to realise  Conversion of money, add and subtract money Prepare bills	<ul> <li>Pen and paper test</li> <li>Oralquestions</li> <li>quiz</li> </ul>

Subject: Malayalam

Topic	Short term outcome	Pedagogical Practice	Long term outcome
1.ഈശാരപ്രാർത്ഥന	കവിത ഈണത്തിൽ ചൊല്ലുന്നു ,കവിയെ പരിചയപ്പെടുന്നു	പാരായണം , പ്രാർത്ഥനയുടെ ആവശ്യകത അറിയൽ	പ്രാർത്ഥന
2. മൂക്തിവാതിൽ	കഥാസ്വാദനം , കഥാകൃത്തിനെ അറിയൽ	അക്ഷരസ് പുടതയോടെ വായിക്കൽ സത്യസന്ധതയുടെ മഹത്വം മനസിലാക്കുന്നു	സതൃസന്ധമായി ജീവിക്കുന്നു
3.ആനയുംഓടക്കുഴലും	കവിപരിചയം , കവിതാസ്വാദനം	പാരായണം , ദുർവാശി ആപത്ത ശിക്ഷണത്തി <del>ന്റെ</del> പ്രാധാന്യം	ദുർവാശിയിച്ഛാതെ ജീവിക്കുന്നു
4. നാറാണത്ത് ഭ്രാന്തൻ	നാറാണത്ത് ഭ്രാന്തനെ കുറിച്ച അറിയുന്നു	വായന , നാടകാവതരണം	പന്തിരുകുലത്തെ കുറിച്ച അറിയുന്നു
5. എങ്ക്ക വിദൃാലയം	കവിപരിചയം , ആസ്വാദനം , നിരിക്ഷണ പാടവം	പാരായണം ,കൂറിപ്പ്	ഓർമ്മകൾ , നിരീക്ഷണ പാടവം
6. വേഗശ്രുതി	ലേഖകനെപരിചയപ്പെടൽ, എടുത്ത്ചാട്ടം വരുത്തുന്ന വിന	വായന ,എടുത്ത് ചാട്ടവും അമിത വേഗവും ആപത്ത	ജീവിതത്തിൽ അമിതവേഗം വേഗം വരുത്തുന്ന അപകടങ്ങൾ തിരിച്ചറിയുന്നു
	<ol> <li>മൂക്തിവാതിൽ</li> <li>മുക്തിവാതിൽ</li> <li>ആനയുംഓടക്കുഴലും</li> <li>നാറാണത്ത് ഭ്രാന്തൻ</li> <li>എക്കെ വിദ്യാലയം</li> </ol>	മുക്തിവാതിൽ കവിത ഈണത്തിൽ ചൊല്ലുന്നു ,കവിയെ പരിചയപ്പെടുന്നു     മുക്തിവാതിൽ കഥാസ്വാദനം , കഥാകൃത്തിനെ അറിയൽ കഥാകൃത്തിനെ അറിയൽ	കവിത ഈണത്തിൽ പാരായണം , പ്രാർത്ഥനയുടെ ആവശ്യക്ത അറിയൽ  2. മൂക്തിവാതിൽ കഥാസാദനം , കഥാകൃത്തിനെ അറിയൽ വായിക്കൻ സത്യസന്ധതയുടെ മഹത്വം മനസിലാക്കുന്നു  3.ആനയുംഓടക്കുഴലും കവിപരിചയം , ലുർവാശി ആപത്ത ശിക്ഷണത്തിന്റെ പാധാന്യം  4. നാറാണത്ത് ഭ്രാന്തൻ നാറാണത്ത് ഭ്രാന്തനെ കുറിച്ച അറിയുന്നു  5. എഴ്ക്കറ വിദ്യാലയം കവിപരിചയം , ആസാദനം , നിരിക്ഷണ പാരായണം , കുറിപ്പ് പാദവം  6. വേഗശ്രുതി ലേഖകനെപരിചയപ്പെടൽ, വായന , എടുത്ത് ചാട്ടവം അമിത

October	7. കടമില്ലാക്കരം	പാരായണം ,ഈണം കണ്ടത്തൽ കവി പരിചയം	പൂതിയ പദങ്ങൾ പരിചയപ്പെടുന്നു. പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	മാതാപിതാക്കളോടുള്ള മക്കളുടെ സ്നേഹം എക്കാഖത്തും ഉണ്ടാകേണ്ടതാണെന്ന യാഥാർഥ്യം തിരിച്ചറിയുന്നു
November	8. കുഞ്ചൻനമ്പ്യാർ	കുഞ്ചൻ നമ്പ്യാരേക്കുറിച്ചും തുള്ളലിനേക്കുറിച്ചും അറിയുന്നു	പ്രാചിന കവിത്രയം അറിയുന്നു	തുള്ളൽ പ്രാചീന കവിത്രയം ഇവ കൂട്ടികൾ അറിയുന്നു ആക്ഷേപ ഹാസ്വം അറിയുന്നു
	9.കുന്നിൻപുറത്തെ സ്കൂൾ	വായന ,സ്കൂൾ അനുഭവങ്ങൾ	കത്ത് പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	പഴയകാല ഓർമ്മകൾ, സ്കൂൾ അനുഭവങ്ങളുടെ ഓർമ്മ , ആത്മകഥ
December	10. കപ്പ് നഷ്യപ്പെട്ട കഥ	മഹാന്മാരുടെ അനുഭവ കഥ അറിയുന്നു	കൂറിപ്പ് പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	ജ്ഞാനപീഠ പുരസ്കാരത്തെ കുറിച്ച് അറിയുന്നു ,മഹാന്മാരെകുറിച്ച് അറിയുന്നു
January	11. പഠിപ്പു തീർന്നാൽ	കവിത വായിച്ച ആശയം ഗ്രഹിച്ച് ഈണത്തിൽ ചൊല്ലിഅവതരിപ്പിക്കുന്നു	കവിത സംഭാഷണ രൂപത്തിൽ എഴുതുന്നു	സ്വന്തം ഭാവിയെക്കുറിച്ച് ചിന്തയുള്ളവരാവൂക
February	12.ഭൂമിയിലെ മാലാഖ	വായന , കഥാകൃത്തിനെ അറിയൽ	പുതിയ പദങ്ങൾ കണ്ടെത്തൽ	അമ്മയുടെ മഹത്വം തിരിച്ചറിയുന്നു
March	13.ഉയരുകധർമ്മപതാകേ	പാരായണം ,കവി പരിചയം , പ്രാർത്ഥനയുടെ ആവശ്യകത അറിയൽ	പുതിയ പദങ്ങൾ കണ്ടെത്തൽ	ദേശസ്നേഹം വളർത്തുന്നു

Subject: English

MONTH	TOPIC	LAERNING OBEJCTIVES (SHORT TERM GOALS)	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES (LONG TERM GOALS)
JUNE	Flying south     (picture story)	To enable them to understand that migration is behavioural evolution amongst birds that are exposed to harsh winters To generate kindness towards animals To make them to understand Collective nouns To learn them to frame words using Suffixes/Prefixes	Writing a     Paragraph and     making a     presentation     Smart class	<ul> <li>Could them to understand         <ul> <li>a story based on the</li> <li>theme of the animal</li> <li>kingdom</li> </ul> </li> <li>The students learned         <ul> <li>about the migratory</li> <li>behaviour of the birds</li> </ul> </li> <li>Could them to be more         <ul> <li>kind towards birds and</li> <li>animals</li> </ul> </li> <li>Could make them to         <ul> <li>understand collective</li> <li>nouns</li> </ul> </li> </ul>

				<ul> <li>Learn them to understand frame words using suffixes and prefixes</li> </ul>
JULY	1) The bird on the shore (poem) 2) A day in the jungle (story)  REVISION AND PT1 EXAMINATION	To build up compassion and responsibility To make them to understand that the pollution of the sea is a threat to the lives of the species To enable them to identify the role of wildlife sanctuaries in conserving animals To make them to distinguish Possessive adjective and Possessive pronouns	Writing a Notice     Giving more exercises      Composing a poem	<ul> <li>Could learn about the effects of pollution on marine ecology</li> <li>Could understand about wildlife sanctuaries and their importance</li> <li>Could make them to distinguish possessive adjectives and possessive pronouns</li> <li>Able to write a paragraph</li> </ul>
AUGUST	3) The dolphin and the shark (story)	To enable them to understand the variety of animals that live in the seas To make them to learn Continuous tenses: present, past and future	Writing a first person account Making an Alligator mask ( project) Smart class	<ul> <li>❖ The student could understand about marine animals</li> <li>❖ Could understand the continuous tenses: present, past and future</li> <li>❖ Could use appropriate grammatical form in communication</li> </ul>

SEPTEMBER	4) The land of counter pane  (poem)  5) The dragon Rock  (story)  REVISION FOR HALF  YEARLY EXAMINATION	To make them to understand about natural disaster such as floods and droughts     To enable to understand subject and predicate	Writing a     Paragraph using hints     Find out the rhyming words and rhyming scheme	<ul> <li>❖ Could make them to understand about natural disaster such as floods and droughts</li> <li>❖ Could identify subject/predicate</li> <li>❖ Develop communication skill</li> <li>❖ Able to write paragraph</li> </ul>
OCTOBER	HALF YEARLY EXAMINATION  6) The goat adventure ( story)	To enable them to understand the benefits of eating fruits To make them to understand Adverbs of degrees	Picture composition      Making a scrap book	<ul> <li>The students could learn about the benefits of eating fruits</li> <li>Could make them to understand the adverbs of degrees</li> </ul>
NOVEMBER	7) Adventures of Isabel (poem)  8) Uncle ken at the wheel (story)	To recognize some words are spelt differently in the two different English speaking countries  To recognize that it is important to follow road safely rules in order to be safe while travelling	Writing a story based on the given series of pictures	<ul> <li>The students learn         about the differences         in the spelling of         certain words in         British English and         American English</li> <li>Could understand         about road safety</li> </ul>

		To enable them to identify Phrasal verbs To make them to learn conjunctions	Writing a diary entry     Smart class	<ul> <li>Could make them to identify phrasal verbs</li> <li>Could able to use conjunctions</li> </ul>
DECEMBER	9) Siddhartha and the swan ( play)	To enable to understand Preposition of movement  To make them to understand that the religion Buddhism originated based on the teachings of Gautama Buddha	Conducting a role play     Writing a informal letter     Smart class	<ul> <li>❖ The student could learn about Gautama         Buddha's early life and the birth of Buddhism understood to write an informal letter</li> <li>❖ Could make them to understand prepositions of movement</li> </ul>
JANUARY	REVISION AND PT2 EXAMINATION 10) My Song ( poem)	To understand that India was under a foreign rule for 200 years before she gained independence on 15 th Aug 1947 To enable them to identify Personification	Composing a poem     Smart class	<ul> <li>Could enable them to understand about India's struggles for freedom from British rule</li> <li>Identify instances of personification in sentences</li> <li>Could develop reading and writing skills</li> </ul>
FEBRUARY	11) The Valiant Queen (story)	To enable them to understand women have shown exemplary courage in war, through the ages in different parts of the world To learn them to identify Types of sentences To enable the children to put proper Punctuation marks	Writing a paragraph about an Indian freedom fighter     Smart class     Writing a story using hints	<ul> <li>The student learned about women warriors in different parts of the world</li> <li>Could them to identify sentences as Declarative, Interrogative, Imperative or Exclamatory</li> <li>Could them to put proper punctuation marks</li> </ul>
MARCH	REVISION AND ANNUAL EXAMINATION			

Subject: Hindi

MONTH	TOPIC	SHORT TERM GOALS	PEDAGOGICAL PRACTICES	LONG TERM GOALS (LEARNING OUTCOMES) STUDENTS WILL BE ABLE TO;	ASSESSMENT STRATEGY
JUNE	puna:smarNa,jaagaao AaOr jagaaAao	svaraxar,vyaMjanaaxar AaOr maa~ae^, Sabdaqa-,pyaa- yavaacal, ivalaaoma Sabd, bahuvacana, p`Snaao%tr	kivata kao ica~ ko AaQaar pr ivaSlaoYaNa krko pZnaa.	Aalasa sao mau@t haonaa.	paz Baaga sao p`Sna pUCnaa.
JULY	balrbala kl bauidQamaanal, Aha ! fUla iktnao saundr hOM	Sabdaqa-,pyaa-yavaacal, ivalaaoma Sabd, bahuvacana, p`Snaao%tr	ivaiBanna ]ddoSyaaoM kao Qyaana maoM rKkr khanal pZnao ka Avasar.	baDI mauiSklaaoM	maaOiKk prlxaa
AUGUST	saibjayaaoM kl khanal	Sabdaqa-, pyaa- yavaacal, ivalaaoma	saibjayaaoM ka maaoDla idKakr	hrl saibjayaaoM	saibjayaaoM

		Sabd, bahuvacana,	paz pZanaa.	kl gauNa kl	kl ica~
		p`Snaao%tr, iksanao-		jaanakarl	icapkakr
		iksasao kha ilaKnaa.		p`aPt krnaa.	]naka
					naama
					ilaKnaa.
SEPTEMBER	raKI ka %yaaohar,	Aqa-,'ka ,ko ,kl'dvaara	ijandgal sao	ijandgal maoM	manapsaMd
	panal, punaravat-na	vaa@ya banaanaa, sava-	jaaoDkr ivaYaya	saBal	%yaaohar
		naama Ca^Tkr	kao samaJanao	caljaaoM ka	ko baaro
		ilaKnaa,p`Snaao%tr.	ka Avasar donaa.	sahl Anaupat	maoM
		1		maoM .	cacaa-
				]pyaaoga	krnaa.
				krnao kao	
				salKnaa.	
OCTOBER	saat rMgaaoM ka	iksanao-iksasao kha	balrbala kl Anya	naOitk	khanl ka
	gaulaaba	ilaKnaa, ikyaa	khainayaaoM kl	maUlyaaoM	naaTk \$p
		ivaSaoYaNa Sabd	cacaa- dvaara	ko AaQaar pr	maoM
		Ca^Tkr ilaKnaa,	Ca~aoM ka	jalvana	p`stutlkrNa.
		bahuvacana,	Qyaana paz kl	ibatanaa.	
		p`Snaao%tr.	Aaor lao jaanaa.		
NOVEMBER	kYNa	Sabdaqa-,pyaa-yavaacal,	kYNa saudamaa	vaO&ainak	bahuivaklpl
	saudamaa,baairSa	ivalaaoma Sabd,	kl baalya kala ka	dRiYTkaoNa	p`Sna
	kha^ sao Aa[-	bahuvacana,	vaNa-na krto hue	]%pnna krnaa.	
		p`Snaao%tr,iksanao-	paz kl Aaor lao		
		iksasa okha ilaKnaa,	jaanaa. prlxaNa		
		saM&a ko naama Ca^Tkr	ko dvaara		
		ilaKnaa.	baairSa		
			barsanaa		
			samaJaanaa		
DECEMBER	gaa^Qaljal ko baMdr	Sabdaqa-,pyaa-	ga^aQaljal ko	ga^aQaljal ko	pd p`Sna

	tlna	yavaacal, ivalaaoma	Anamaaaola	Anamaaaola	
		Sabd, bahuvacana,	t%vaaoM dvaara	t%vaaoM kao	
		p`Snaao%tr.	paz Baaga kl	jalvana maoM	
			jaanakari donaa.	Apnaanaa.	
JANUARY	[-maanadarl ka	Sabdaqa-,pyaa-yavaacal,	naOitk	[-maanadarl	saMyau@ta
	[naama	ivalaaoma Sabd,	kqaaAaoM kl	ka mah%va	xar vaalao
		bahuvacana,	cacaa- krko paz	samaJakr	Sabd
		p`Snaao%tr.	kl Aaor lao	jalnaa.	ZU^Zkr
			jaanaa.		ilaKnaa.
FEBRUARY	sardar pTola,baZo	Sabdaqa-,pyaa-yavaacal,	svatM~	ina:svaaqa-	svatM~ta
	calaao	ivalaaoma Sabd,	saonaainayaaoM	Baavanaa sao	saonaainay
		p`Snaao%tr, imalaana	ka ica∼ idKakr	jalnaa.	aaoM ka
		krnaa,samaanaaqa-k	cacaa- krnaa.	-	ica~
		Sabd ilaKnaa.			icapkanaa.
MARCH	punaravat-na				

## Annual Pedagogical Plan 2020-2021

Class V

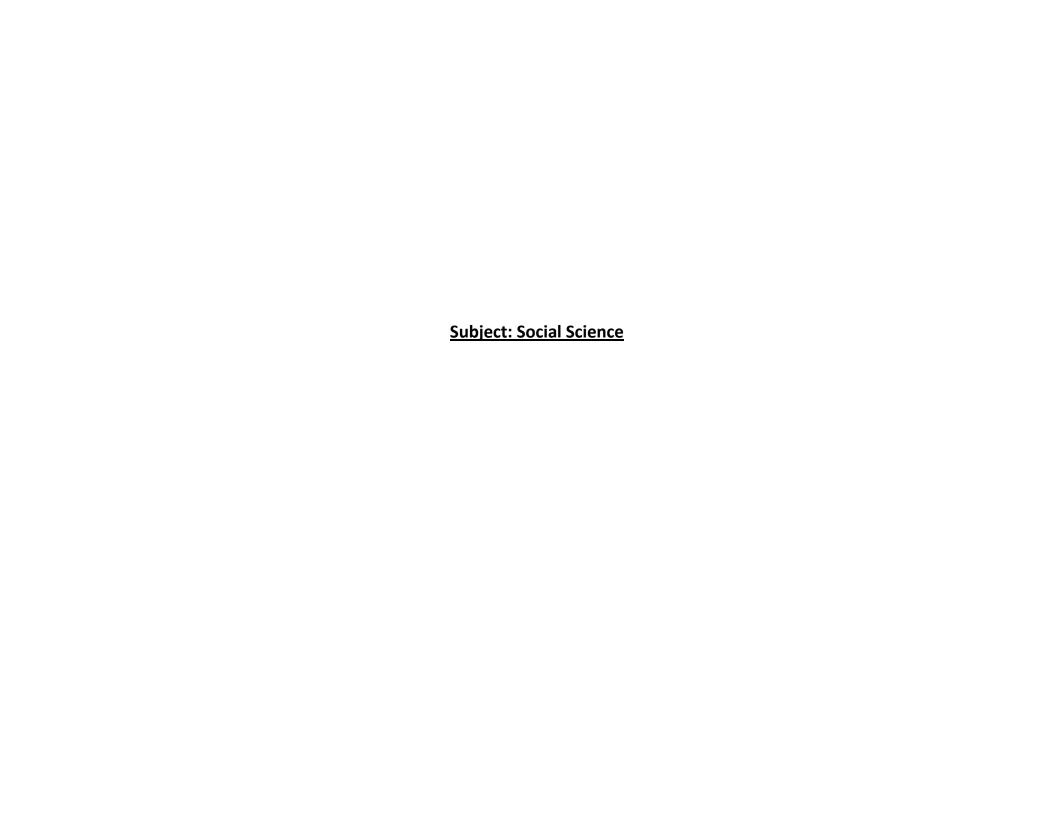
**Subject: Science** 

MONTH	CHAPTER	SHORT TERM LEARNING OUTCOMES	PEDAGOGICAL STRATEGIES	ASSESSMENT STRATEGIES	LONG TERM LEARNING OUTCOMES
JUNE	>Plant Reproduction	.Recognise,draw& name the parts of a seed .Define germination & list its conditions .List & explain the other methods of plant reproduction .Explain the methods of seed dispersal .Describe the different kinds of crops & farming practices	.Smart class .Interactive tutoring .Hands on learning .Individual activities	.OTA .Quiz	Students will be able to .Classify seasonal crops .Exibit value like concern for the environment
	>Animal Reproduction	.Describe the different body coverings of animals .Name the different breathing organs found in the animal world .Describe the diff ways in which move .Explain how & why animals migrateDescribe the feeding habits of Animals	.Observation .Discussion	.Puzzle solving .OTA	.Exibit values like Empathy,Love for animals
JULY	>Food, Health &Hygeine	.Describe a balanced diet & explain why it is necessary .Describe how food can be	.Observation .Discussion .Individual activities	.Pasting pictures .OTA	.Make efforts to increase Interpersonal relationships

		cooked .List the ways in which communicable diseases can be spread List the deficiency diseases & their causes .Explain the importance of exercise & rest	.Smart class	.Quiz	&effective communication in daily life .Exibit values like responsibility.care for others
AUGUST	>Bones & Muscles	.Name the different organ systems, their functions .Explain the importance of skeletal system .Describe the different types of joints .Talk about the different kinds of muscles & explain the functions	.Interactive tutoring .Structure drawing .Demonstration .Smart class	.Work sheet .Test paper	.understands the importance of parts of body .Inculcate values like Selfawareness, Helpfulness,Courage
	>Nervous System	.Name the different parts of nervous system .Describe the brain ,spinal cord & its functions .Describe the different kinds of nerves .Explain how messages travel through nervous system .Describe reflex actionsDescribe the functions of the sense organs	.Structure drawing .DemonstrationSmart class	.Puzzle solving .OTA .Test paper	.Able how to Manage emotions
SEPTEMBER	>Safety & First Aid	.Explain the causes of fire accidents & how to put out fires .Describe the first aid to be given for burns,cuts, wounds,fractures,sprains, animal bites & nose bleeds	.Demonstration .Individual activity .Smart class .Hands on learning	.Model making (First-Aid) kit .Quiz	.Apply learning concepts in day – to day life .Exibit values like decision making,Support,Care,

					Helpfulness
OCTOBER	>Rocks & Minerals	.Describe different kinds of	.Demonstration	.Pasting pictures	
		rocks	.Smart class	.OTA	
		.Explain how rocks are formed		.Paper –pen test	.Acquire ability of
		List some characteristics of			critical thinking,
		minerals			care for environment
		.Describe the uses of minerals			decision making
					.Able to solve
NOVEMBER	>Soil & Importance	.Explain how soil is formed	.Debate	.Assignment	environmental
		.List the components &layers of	.Smart class	.OTA	problems.
		soil .Discuss soil erosion			.Able to conduct
		.Discuss soil erosion .Describe how soil can be			awareness programme (peer
		conserved			programe)
					programo,
	>Air & Water				
		.Identify & describe the layers of	.Hands on learning	.Test paper	.Exibit the values like
		the atmosphere.	.Demonstration	.Puzzle	Care &concern .
		.Explain the properties of airDiscuss methods to purify water	.Smart class		
		.biscuss methods to purity water			
DECEMBER	>The Environment	.Define ecology		.Poster making	.Able to increase
		.List the effects of air & water		(nature	interpersonal
		pollution		conservation)	relationships
		. Explain how the use of		.OTA	
		pesticides leads of pollution .Describe how we must take care			
		of natural resources			
	>Nature Links	.Define the word 'biosphere'	.Observation		.Exibit the values like
		& list its biotic & abiotic	.Discussion	.Test paper	Courage,Consideratio
		components	.Narrative learning		n for others
		.Explain how living things	.Smart class		
		depend on non-living things & on			
		each other			
		.Trace the flow of food & energy			

		in food chains & food webs			
JANUARY	>Natural disasters	.Explain how natural disasters occur .Describe their effects .List out steps to be taken to minimize damage during natural disasters .Explain how to help people a affected by a natural disaster	.Collection of data .Debate .Smart class	.Chart making (natural disasters) .Quiz	.Able how to control stress in incidents happening in everyday life .Also inculculate values like decision making,Empathy Sharing,Team work, Kindness
	>The Moon & Eclipses	.Describe the moon and the conditions on the moon .Describe the phases of the moon .Explain how eclipses occur.	.Demonstration .Smart class	.Model making (phases of moon) .Test paper	.Get scientific outlook on environmental phenomenas
FEBRUARY	>Simple Machines	.Explain what machines are & how they make our work easier .Name & identify diff types of simple machines & their uses .Classify levers into three classes	.Demonstration .Smart class	.Quiz .Crossword puzzle	.Able to acquire critical thinking. .Also exibit values like presence of mind
	>Measurement : Speed & Density	.Define speed .Calculate the speed of things .Explain what density is .Explain why some things float on water .Predict when a thing will float on water	.Hands on learning .Tabulation .Demonstration .Smart class	.Test paper	.Able to correlate scientific terms with every day life
MARCH	>Revision >Annual Exam				



MONTH	TOPICS	LEARNING OBJECTIVE	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	1.Globes and maps	To identify the shape of the earth  To know the globes and maps  To understand how to read the map	Story telling  map work.  group discussion.  Smart class	Realising the shapes of earth  Differentiating globes and maps  Able to read map
	2.Latitude and longitude	To know about latitude and longitude  To understand how to locate a place on maps	Discussion assignment. Map Smart class	Acquiring spacial skill Improving drawing skill

JULY	3 . Rotation and revolution	To distinguish rotation and revolution and its effects	*discussion.  . role play  Experimental activity  Smart class	Differentiating rotation and revolution  Able to explain how day and night and seasons occur
	4.Weather and climate	*to understand weather and climate, factors that affecting the climate of a place and heat zones of the earth	map. discussion. project. Smart classs	Develop the observation skill
AUGUST	5.The Democratic Republic of Congo	*To understand about equatorial climate through the study of Congo	map. group discussion. Smart class	Identifying equatorial climate
SEPTEMBER	6.The deserts	To know about desert climate ,vegetation and life of people	Map Panel discussion Smart class	Understanding the features of desert region

OCTOBER	7.The grasslands	To know about temperate grasslands and tropical grasslands and its climate, vegetation and wild life.	Explanation  Map work	Able to locate major grasslands of the world.  Differentiating tropical grassland and temperate grassland.
	8.Environmental pollution	To understand types of pollution and steps to control pollution	Role play Group discussion Smart class	Identifying the causes of pollution and able to control pollution.
NOVEMBER	9. Conservation of resources	To understand about natural resources and how to conserve resources.	.survey. project. power point presentation.	able to manage their household wastes.
	10. Natural disasters	To know about natural disasters and precautions taken to reduce its effects.	Assignment Role play Smart class	Able to take precautions to reduce the effects of natural disasters.

DECEMBER	11.Communication	To understand the importance of communication and the means of communication.	role play group discussion smart class	Acquiring communicative skill
JANUARY	12. Medicine 13.Great Indians	To develop scientific skills of the students To know about some great Indians	Group discussion  Role play  Smart class	Acquiring experimental skill  Developing observation skill  Developing leadership quality
FEBRUARY	14.Coming of the British 15 .Towards freedom	To develop the awareness of British period	Explaining Smart class	Develop anti colonial feeling
MARCH	16 .The Indian govt  17 .TheUnited Nations	To understand about our constitution and govt  To maintain universal peace	Mock election  Smart class	Develop leadership quality Inculcating patriotic feeling Awareness of universal peace
			Discussion	-

**Subject: Maths** 

MONTH	TOPIC	LEARNING OBJECTIVE	PEDAGOGICAL STRATEGY	LEARNING OUTCOME	ASSESSMENT STATEGY
JUNE	1.More on large numbers	Students will be able to understand  Large numbers Indian and international system of numeration. Compare large numbers. Roman numerals	Smart     class     Discussion     Project	Read and write large numbers     Read and write numbers according to Indian and International system     Write numbers in Roman system	<ul> <li>Class edge activity</li> <li>Pen paper test</li> <li>Quiz</li> </ul>
	14.Patterns and Symmetry	Patterns in numbers.     Symmetric figures and their lines of symmetry.     Rotate figures to make quarter turn, half turn, a three-quarter turn, and a full turn.	Smart     class     Discussion	Identify Patterns in numbers.     Identify Symmetric figures and their lines of symmetry.     Complete a symmetric figure given a line of symmetry.	<ul> <li>Class edge activity</li> <li>Pen paper test</li> <li>Quiz</li> </ul>

JULY	2.Operations on large numbers.	Students will be able to understand  • Add and subtract large numbers.  • Multiply and divide large numbers.  • Properties of all operations.  • Average of given numbers.	Smart class     discussion	Students will be able to  Add and subtract large numbers.  Multiply and divide large numbers.  Solve word problems based on four operations.  Find average of given numbers.	Class edge activity Pen paper test Quiz
AUGUST	3.Factors and multiples.	understand tests of divisibility.     Find factors and multiples of given numbers     Find HCF and LCM by prime factorization method.	Smart     class     Discussion     Demonstr     ation	Divisibility of a number by a given number.     factors and multiples of given numbers     HCF and LCM by prime factorization method.	Pen paper test Class edge activity Quiz
	13.Data handling	Students will be able to  Understand tally marks.  Understand bar graph and pie graph Understand line graph	Smart class     Discussion     Demonstration.	Students will be able to  Read and interpret data from a bar graph ,pie graph and line graph.  Represent and interpret data using tally marks.	Pen paper test Class edge activity Oral questions
SEPTEMBER	4.Fractions.	Students will be able to understand  types of fractions. equivalent fractions. Addition and subtraction of fractions. Multiplication and division of fractions.	Smart     class     Discussion     Demonstr     ation	types of fractions.     Add and subtract fractions     Solve problems related to real life.	<ul> <li>Pen paper test</li> <li>Class edge activity</li> <li>quiz</li> </ul>

OCTOBER	6.Geometry.	Students will be able to  understand concept of angles.  Different types of angles.  Measure and construct angles using protractor.  Define parallel and perpendicular lines.  REVISION HALF YEARLY EXAMINATION	Smart     class     Discussion     Demonstr     ation	Students will be able to understand concept of angles. Different types of angles. Measure and construct angles using protractor. Define parallel and perpendicular lines.	Pen paper test Class edge activity quiz
NOVEMBER	5.Decimals	Students will be able to understand      decimals     conversion of decimals into fractions and vice versa.     Compare and order decimals.     Add and subtract decimals.	Smart     class     Discussion     Demonstr     ation	decimals     conversion of decimals into fractions and vice versa.     Compare and order decimals.     Add and subtract decimals	Pen paper test Class edge activity Quiz
	12. Scales and Directions	Students will be able to  Draw the reduced and magnified images of actual objects.  Identify the directions-north, south, east and west.  Find the angles (in degrees) between two directions.	Smart class     Pose     questions     Interactive lecture	students will be able to realise     reduced and magnified images of actual objects.     Identify the directions-north, south, east and west.     Find the angles (in degrees) between two directions	Pen paper test Class edge activity. Oral questions.

DECEMBER	7.Measurem ent	Convert bigger units of measurements to smaller units and vice versa.     Add, subtract multiply and divide the unit of length, weight and capacity.     Solve word problems on length, weight and capacity.	Smart     class     Pose     questions     Interactive     lecture	Students will be able to able  Convet unit of measurements.  Solve problems based on measurements  Solve problems based on measurements	Pen paper test Class edge activity. Oral questions.
JANUARY	8.Perimeter and Area	Students will be able to  Find the perimeter of squares and rectangles.  Find the area of squares and rectangles.  Find the area of triangles.  Find the area of irregular shapes.	Smart     class     Pose     questions     Interactive     lecture	Perimeter of polygons.     Area of polygons	Pen paper test Class edge activity. Oral questions.
FEBRUARY	9.Volume and Nets of Solids	Find the volume of cubes and cuboids.     Find the volume of solid figures made with unit cubes.     Draw nets of cubes, cuboids, cones and cylinders.     Draw cubes and cuboids on isometric	Smart class     Pose     questions     Interactive     questions.	Volume of cubes and cuboids.     Nets of solids.	<ul> <li>Pen paper test</li> <li>Class edge activity.</li> <li>Oral questions.</li> </ul>

		T		T	
		dot grids.			
	10. Time and Temperature	Students will be able to  Convert days into hours and vice versa.  Convert hours into minutes and vice versa.  Convert minutes into second and vice versa.  Find time duration.  Learn about temperature.  Convert temperature from Celsius scale to Fahrenheit scale and vice versa.	Smart class     Pose     questions     Interactive     questions	Students will be able to realise	Pen paper test Class edge activity. Oral questions.
MARCH	11. Life Mathematics	Students will be able to  Define the terms profit,loss, cost price and selling price. Find profit and loss. Apply unitary method in everyday calculations.  REVISION ANNUAL EXAMINATIONS	Smart class     Pose     questions     Interactive     questions	The terms profit ,loss     To find profit and loss in daily life.	Pen paper test Class edge activity. Oral questions.

**Subject: Malayalam** 

Month Topic	Short term outcome	Pedagogical practice	Longterm outcome
June വഎന്റെ ഗുരുനാ- ഥൻ	ഈണത്തിൽ ചൊല്ലു ന്നതിന്, കഠിനാധാന ത്തിന്റെ മഹത്വം	<ul> <li>അർത്ഥം കണ്ടെത്ത് കൊണ്ട് കവിതാ പാരായണം</li> </ul>	കൃഷിയുടെയും അധാനത്തിന്റെയും മഹതാം അറിയുന്നു
2രാജാവിനെ ബുദ്ധി	കഥാവായന ,ഗുണ പാഠം അറിയുന്നു	ആശയം വിശദമാ ക്കുന്നു ദൃശ്യ ആവിഷ്കാരം	അവസരങ്ങൾ ഉപയോഗിക്കുന്നു
July 3 അഹങ്കാരി യായകാക്ക പോക്കാലം	ഈണം കണ്ടെത്തി അവതരിപ്പിക്കുന്നു കവിതാപാരായണം, കവിപരിചയം	ഈണത്തിൽ ചൊല്ലുന്നു. പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	അരിതമായ ആരവ വിശ്ചാസംആപത്ത് നിരീക്ഷണപാടവം വളര്ത്തുന്നു
Aug 5.ഒരുപത്രത്തി- ന്റെവിലാപം	T I T T T T T T T T T T T T T T T T T T	പാഠാനുബന്ധപ്രവർ– അനങ്ങൾ,ശേഖരണം	പത്രവായനശീലമാ- ക്കുന്നു
Sep ഒജുലിയ-മര- ങ്ങൾക്കുവേ- ണ്ടിഒരു കുട്ടി		ാഠാനുബന്ധപ്രവർ– തനങ്ങൾ,ശേഖരണം, ഉപന്യാസ രചന	മരംഒരുവരമാകുന്നു അറിയുന്നു
oct 7.പൂത്തമാവി– നെപ്പറ്റി		പാഠാനുബന്ധ പവർത്തനങ്ങൾ	പ്രകൃതിഭാഗി ആസം ദിക്കുന്നു
Nova.ലിയനാർഡോ ഡാവിഞ്ചിപഠി പ്പിക്കുന്നപാഠ ങ്ങൾ	വായന,ചിത്രകാരനെ അറിയൽ	4.00 BB : 10	ഹാന്മാരുടെ ജീവിതാ മനസ്സിലാക്കുന്നു
9.പൂച്ചയും എലിയും	കവിപരിചയം കവിതയുടെആശയം മനസ്സിലാക്കുന്നു	കവിതാപാരായണം പാഠാനുബന്ധ ദ പ്രവർത്തനങ്ങൾ	ആപത്തുകൾതിരിച്ച റിഞ്ഞ് ജീവിക്കുന്നതിന്
Dec 10. ശൈഖ്മുഹ്– യുദ്ദീൻ അബ്ദുൾഖാദർ	വായന,ഗുണപാഠം വിശകലനംചെയ്യുന്നു		ടുസന്ധകായി ജിവി- ടുസന്ധകായി ജിവി-
Jan 11 കലാംഎന്ന മാഷ്ട്രപതി	വായന,കലാമിനെ അറിയൽ		ഹാന്മാരുടെജീവിതം നസ്സിലാക്കുന്നു
Feb 12.ഞങ്ങളുടെ മൂത്തശ്ശി		പാഠാനുബന്ധ പ	ഴമയെ നിലനിർത്തു— നതിന്
Maria.നടപ്പിന്റെചരി- ത്രവുംശാസ്ത്രവു			്യായാമശീലം ഉളവരാകുന്നു

**Subject: English** 

		SHORT TERM GOALS	PEDAGOGICAL PRACTICES	LONG TERM GOAL PEDAGOGICAL OUTCOME
JUNE	1. The Hot Rice Plate (Fiction)     2.Alexander The Great (Poem)	To enable the children to follow words of wisdom  To learn and understand types of nouns and compound words.	<ul> <li>Identifying different types of nouns from a given list.</li> <li>Paragraph Writing</li> <li>Reciting the poem</li> </ul>	<ul> <li>Enabled the children to follow words of wisdom</li> <li>Learned to identify nouns</li> <li>Learnt to recite a poem</li> </ul>
		<ul> <li>To identify Rhyming words</li> </ul>		
JULY	3. The One Straw Millionaire (Folk Tale) Revision &PT 1	To enable the children to follow advice To differentiate emphatic pronoun and reflexive pronoun	<ul> <li>Writing a different ending for a given story</li> <li>Make a small dictionary</li> </ul>	<ul> <li>Learned to follow advice</li> <li>Could feel and appreciate things great and small.</li> </ul>

AUGUST	4. Eating Healthy Food with Gundu Ram (Fiction)     5. Food Pyramid (poem)	To make the children understand the importance of having a healthy food habits Frame words adding prefixes and suffixes Differentiate adjectives of quantity and quality Learn to use to-infinites	Filling in the blanks with suitable prefixes/suffixes Choosing appropriate adjectives of quantity and quality from the box Filling in the blanks with suitable form of verbs Reciting a poem	Realise the importance of having a healthy food habit Learn to frame words with prefixes and suffixes Could identify adjectives of quantity and quality. Could use to infinites in sentences
SEPTEMBER	6. A Real Feast (Fiction)  Revision for Half Yearly Examination	<ul> <li>To make the children aware of the importance of a healthy food habit.</li> <li>To learn phrasal verbs, simple and continuous tenses( present, past and future)</li> </ul>	Conducting a debate:homely food vs fast food. Choosing suitable form of verbs from given brackets	Could understand the importance of having healthy food habit. Could understand phrasal verbs Could write sentencesin simple and continuous

				tenses
OCTOBER	Half Yearly Examination  7. The Unbreakable Mary Kom (prose)	To inculcate values of confidence and sportsmanship To make the children understand types of adverbs To enable the children to put proper punctuationmarks	Identify different types of adverbs     Writing a message     Giving exercises to put proper punctuationmarks	Could inculcate values of confidence and sportsmanship     Could understand types of adverbs     Could put proper punctuation marks in sentences wherever necessary.
NOVEMBER	8. Choose Your Sports(poem)     9. Unusual Indian Sports (Prose)	To Create an awareness of different Games To appreciate apoem  To make children aware of different outdoorsports To identify different types of sentences : imperative, interrogative, exclamatory and	Reciting the poem Circling any ten words related to sports and games from the word grid  Make the children talk on their favourite sports Notice Writing Identifying different types of sentences Filling in blanks	Could make an awareness of different Games Could appreciate and recite the poem. Could identify different outdoorsports Could distinguish different types of sentences: imperative, interrogative, exclamatory and
		assertive  To enable to learn definite and indefinite articles (the, a and an)	choosing suitable articles	assertive  Could use definite and indefinite articles (the, a and an) in sentences wherever necessary
DECEMBER	10. Brave Dogs(Prose)	To inculcate values of bravery and wit To make the children learn active and passive voices To make the children learn collocations and linkers.	Framing sentences in active and passive voices, changing sentences from active to passive     Writing a diary entry     Choosing suitable linkers from boxes	Could inculcate values of bravery and wit Could learn to use active and passive voices Could use collocations and linkers  Could inculcate and linkers
JANUARY	11. The Marrog (poem)  REVISION AND PT 2	To enhance the imagination of children To find out rhyming words	<ul> <li>Finding out rhyming words</li> <li>Reciting the poem</li> </ul>	Could enhance the imagination of children Could find out rhyming words

Subject: Hindi

## **Annual Pedagogical Plan 2020-2021**

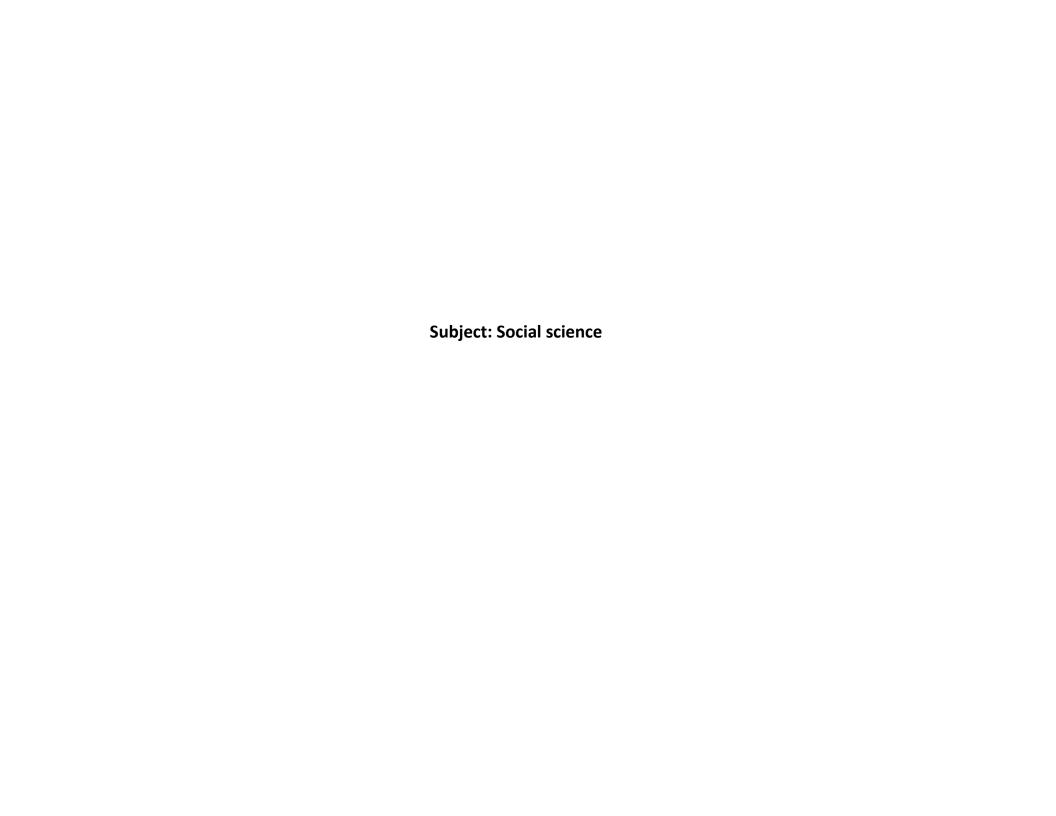
Class VI

**Subject: Science** 

Month	chapter	Learning Outcomes ( short term)	Learning outcomes (long term)	Pedagogical strategies	Assessment Strategy
June	1. Food where does it come from	Students will able to  . understand different types of food and their sources, plant parts and animal products as food	Students will be able to realise . ingredients of different food items . plants and animal sources of food . the value of food containing nutrients	. discussion . demonstration . pose question . smart class	<ul><li>Oral questions</li><li>Pen - paper test</li></ul>
	2. Components of food	. identify the ingredients present in different food items and their test, balanced diet	Recognise the presence of nutrients in different food items  Identify the different types of test (protein and fats in various food items)	.interactive lecturing .group discussion .food test .smart class	. Oral questions . Pen – paper test . quiz
July	3. Fibre to Fabric	. understand fibre and its varieties , spinning cotton yarn ,history of clothing materials	. differentiates materials such as fibre and yarn . Compares the characteristics of different plant fibres and their use . Identify the method of cloth making and their importance in different seasons	. Pose questions . Interactive lectures . smart class . project ( weaving)	. Oral questions . Summarising . Pen – paper test
	4. Sorting materials in to groups	. To know different types of objects in our surroundings , properties of material	. classifies the materials on the basis of their physical properties . Identifies materials as soluble and insoluble (PT1 EXAM)	experimental     activities     smart class     Interactive lecture	. memory matrix . class edge activities

August	5. Separation of	. understand methods of	. Identifies the different methods of	. visual clues	. oral questions
	substances	separation – hand picking	separation according to their states	. smart class	. pen and paper test
		'winnowing ,threshing	and their properties	. experimental	
		,sieving ,sedimentation,	. Appreciates the use of these	activities	
		decantation, filtration etc	methods in daily life such as	. Realia	
			filtration etc		
	10 .Motion and	. to know measurement	. Appreciates measuring the length	.class room	. Oral questions
	Measurement of		using body parts, string, metre	activities related to	
	Distances	. measuring the length of	scale etc	measure different	. pen – paper test
		curved line etc	. The ancient methods of	objects by students	
		. understand different types	measurement	. smart class	
		of motion		. Interactive	
				Lecturing	
September	11 . Light ,Shadows	. understand transparent	. Recognizes objects as transparent	. pose questions	. memory matrix
	and Reflection	,opaque ,and translucent	,translucent , and opaque .	. experimental works	. pen – paper test
		objects	. Identifies the type of objects	. smart class	
		.shadow formation ,pinhole	which cast shadows or not	. shadow formation	
		camera ,mirror and reflection	. analysing different types of mirrors		
			and their importance and uses		
	16 .Garbage in and	. to know how to deal with	. Distinguishes the bio and non bio	. Interactive	oral question
	Garbage out	garbage ,vermicomposting	degradable wastes	Lecturing	
			. understanding recycling processes	. smart class	. pen – paper test
October	9 .The living	. to understand habit and	classify things as biotic and abiotic	. smart class	. oral question
	organisms and their	adaptation of different	things	. quiz	. pen paper test
	surroundings	animals.	. Distinguishes the different habitat	.Interactive lecturing	
	-	.living organism and excretion	of plants and animals (HALF YEARLY	. pose question	
		method	EXAM)		
November	6 . Changes Around	. to know the differents of	. differentiate between physical and	. Experimental	. Summarising
	us	chemical and physical	chemical change such as reversible	activities	oral questions
		changes	and irreversible changes	. Discussion	
				. smart class	
				. Demonstration	

	7 .Getting to know plants	. to understand about herbs , shrubs ,and trees	. Identifies the different parts of a plants . understanding herbs, shrubs ,trees, climbers etc	. Demonstration . Realia . pose question . smart class	. pen paper test
December	12 . Electricity and circuits	. analyse electric cell ,circuits ,conductors and insulators . switch	. understanding to make circuits by using cell , switch , wire , and bulb . Identifies the objects as conductors and insulators	. Interactive lecturing . smart class . Demonstration	. Memory matrix . pen and paper test
	13 . Fun with magnets	. understand magnetic properties . poles of magnet . finding direction by using magnets	Explores the behaviour of magnets such as attraction and repulsion of magnets     understanding the application of magnetic properties in our day today life	. Interactive lecturing . smart class . demonstration	. oral question . pen and paper test
January	14 . Water	. understand about importance of water .water conservation . rainwater harvesting	(PT 2 EXAM) . Identifies the natural sources of water , water preservation . analysing the method of rain water harvesting	. smart class . project . discussion	. pen and paper test . flow chart . oral question
	15 . Air around us pure	. to know the idea about weather cock .air and its components . air pollution	. Recognizes the importance of air in our life and understanding how to reduce air pollution	. Smart class . discussion	Pen and paper test
February	8 . Body movements	. understand human body and its movements(joints)	. Differentiates the movement of different joints of our body . observes the movement of different animals such as snake, earthworm etc	. smart class . interactive lecturing . Stretching exercises	. oral question .memory matrix
March			REVISION AND ANNUAL EXAM		



MONTH	TOPICS	LEARNING OBJECTIVE	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	What where how and when     Understanding diversity     The earth in the solar system.	To find out about the past  To understand the term 'unity in diversity'  To know about solar system.	story telling     group discussion     role play     smart class .	Appreciating the subject history and archaeologist     Developing curiosity     Inculcating the feeling of unity
JULY	<ul> <li>From gathering to growing food</li> <li>Diversity and discrimination</li> <li>Globe: latitude and</li> </ul>	To understand more about Palaeolithic and Neolithic age.     To understand the importance of	<ul> <li>discussion.</li> <li>Explanation</li> <li>Story telling</li> <li>Role play</li> <li>Smart class</li> </ul>	Developing detective skill     Love towards agriculture     Self awareness

	longitude	equality  To know about latitude and longitude ,and heat zones		Self confidence     Locating place
AUGUST	In the earliest cities     What is government     Motions of he earth	To know about rich culture of Indian subcontinent through the study of the cities like Harappa, Mohan jodaroetc To differentiate types and levels of government To differentiate rotation and revolution.	<ul> <li>map.</li> <li>Story telling</li> <li>Project</li> <li>Discussion</li> <li>Roleplay</li> <li>Smart class</li> </ul>	Develop the observation skill     Finding out past of their own place     Identifying democratic government     Leadership quality     Love towards different seasons     Discipline
SEPTEMBER	.New questions and ideas     Key elements of democratic government.	To understand     about Buddha     ,Mahavira     ,Upanishads etc	<ul> <li>group discussion.</li> <li>Role play</li> <li>Explaining</li> <li>Smart class</li> </ul>	Able to think new ways     and live different ways     able to mature judgement on

	• maps	<ul> <li>To know more         about equality and         justice</li> <li>To understand         about types of maps         and components of         maps</li> </ul>		various social issues  • to travel smart
OCTOBER	Ashoka :The emperor who gave up war     Panchayathi raj     Major domains of the earth	To know about Emperor Ashoka and his teachings To differentiate gram sabha and gram panchayath Levels of panchayath To understand atmosphere ,lithosphere ,hydrosphere and biosphere.	<ul> <li>Story telling</li> <li>Explanation</li> <li>Role play</li> <li>Map</li> <li>Smart class</li> </ul>	Respecting others religion     Express opinion     Identifying major domains of the earth
NOVEMBER	Our country India	To understand more about their own country	Map activity     Explanation     Smart class	Developing patriotism
DECEMBER	Traders kings and pilgrims Rural administration	To understand how to find out trade and trade routs To understand the	explanation     Map work     Collecting     information	Kind and loyal to motherhood     Develop Intelligent democratic
		laws of rural area	Group discussion     Smart class	citizenship
JANUARY	Urban administration India: climate vegetation and wild life	To understand the laws of urban area To understand major seasons To know about forest and conservation of forest.	Discussion     Map     Explanation     Smart class	social competence     love towards nature     able to conserve     resources

**Subject: Maths** 

Month	Торіс	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	1. Knowing our numbers	Read and write numbers in Indianand International system     Compare numbers, use large numbers in practice     Estimate numbers     Read and write Roman numbers	<ul><li>Realia</li><li>Smartclass</li><li>discussion</li></ul>	Student will be able to realise  • greater numbers  • place value  • compare large numbers  • numbers in both systems  • Roman numbers	Oral questions     Pen - paper test
	2.Whole numbers	Students will be able to  Understand wholenumbers  The number line Add and subtract numbers	<ul> <li>Smartclass</li> <li>Group discussion</li> <li>Pose questions</li> </ul>	Students will be able to realise  The whole number system  Operations and properties of hole numbers	<ul> <li>Pen and paper test</li> <li>Oral questions</li> <li>quiz</li> </ul>
July	2. Playing with numbers	Understand concept of factors and multiples     Prime and composite	<ul><li>Realia</li><li>Smartclass</li><li>Pose questios</li></ul>	Student will be able to realise  The difference between factors	Oral questions    Summarising

		numbers  Test of divisibility for numbers  Common factors and common multiples  HCF and LCM REVISION AND PT1 EXAMINATION	discussion	and multiples  Properties ofprime and composite numbers Find HCF and LCM Solve word problems	Pen – paper test     project
August	3. Basic Geometrical ideas	Differentiate line ray line segment     Understand intersecting and parallelines     Undertand properties of curve, polygone, angles, triangles, quadrilaterals, circles	Smart class     Discussion     Pose questions     realia	Students will be able to  classify line ,ray,line segment  differentiate parallel and intersecting lines write properties of polygon,triangles ,circles	<ul> <li>Oral questions</li> <li>Summarising</li> <li>Pen – paper test</li> <li>puzzles</li> </ul>
	6. Integers	Students will be able to  Identify integers  Represent integers on number line  Orderintegers  Add and subtract integers	<ul> <li>Project</li> <li>Discussion</li> <li>Smart class</li> <li>Realia</li> </ul>	Students will be able to realise  the importance of integers represent integers on numberline add and subtract integers	Worksheet     Pen and paper test     Oralquestions
September	9.Data handling	Students will be able to Record data	Realia     Discussion	Students will be able to	Oral questions

		Organise data     Interpret and draw pictograph, bar graph ,	Smartclass	Realise  • to record and organise data  • Read , interpret and draw pictograph, bar graph	Pen and paper test Worksheet
October	5.Understanding elementary shapes	Students will be able to  • Measure line segment  • Measure and draw angles  • Draw perpendicular lines  • Classify tringles, polygons, three dimentional shapes  REVISION AND HALF YEARLY EXAMINATION	Smart class     Pose questions     Discussions	Students will be able to realise  • And draw line segment and angles • Tell the properties and names of triangles, polygons as per th given property • Three dimentional figures and its properties	Quiz     Oralquestions     Worksheet
November	7. Fractions	Represent fractions     Represent fractions on number line     Simplify fractions     Understand equivalent fractions	Smart class     Discussion     Project     Interactive lecture	Students will be able to realise  Types of frations Operations on fractions Represent fractions on	Pen and paper test Worksheet Oralquestions

	<del></del>	•		*	
		Compare and order fractions Add and subtract like fractions Convert improper fractions to mixed and viceversa		number line • Equivalent fractions • Solveword problems	
	8. Decimals	Understand conceptof tenth, hundredth, thousandth     Compare decimals     Use decimals in money, length, eight,     Add and subtract decimals	<ul> <li>Smart class</li> <li>Realia</li> <li>Discussion</li> </ul>	Students will be able to realise  The concept of tenth, hundredth, thousandth The importance ofdecimals in daily life And do operations like add, sub ondecimals	Worksheet     Quiz     Pen and paper     test
December	10. Mensuration	Understand the concept of perimeter and area     Solve sums related to perimeter and area	<ul> <li>Smart class</li> <li>Pose questions</li> <li>group discussion</li> </ul>	Students will be able to realise  The difference of perimeter and area of different figures And find perimeter and area of closed figures	Oral questions Class edge activity Pen and paper test

January					
Zandary		PT2 AND EXAMINATION			
	11. Algebra	Recognise variables and constants     Use of variables in common rule     Expression with variables     Using expression practically Understand equation	discuission     smart class     realia	Students will be able to realise  • The difference between variables, constants • The Use of variables • Use expressions • Solve sums related to it	<ul> <li>Pen and paper test</li> <li>Quiz</li> <li>Worksheet</li> </ul>
	12. Ratio and proportions	Understand concept of ratios and proportions     Unitaty method	<ul> <li>smart class</li> <li>group discuission</li> <li>project</li> <li>realia</li> </ul>	Students will be able to realise  • The concept of ratios and proportions • Solve sums related to unitary method	Oralquestions     Quiz     Pen and paper test

February	14.Practical geometry	Construct circle, line     segment, peroendicular     lines     Construct angles, bisector     of angles,     Construct special angles     using compass and ruler  Students will be able to	<ul> <li>smart class</li> <li>group discussion</li> <li>project</li> </ul>	Students will be able to realise  The method to construct circles, perpendicular lines To construt angles and its bisectors, special angles accurately by using compass and ruler	<ul> <li>Pen and paper test</li> <li>Worksheet</li> <li>Oral questions</li> </ul>
March	13. Symmetry	Understand the concept of symmetry     Draw symmetrical figures with the lines of symmetry     Understand reflection     patterns  REVISION AND FINAL EXAMINATION	<ul> <li>Smart class</li> <li>Realia</li> <li>Groupdiscuission</li> <li>Interactive lecture</li> </ul>	Students ill be able to realise  Symmetry, lines of symmetry  Draw symmetrical figure s  The concept of patterns and reflection	<ul> <li>Pen and paper test</li> <li>Worksheet</li> <li>quiz</li> </ul>

**Subject: Malayalam** 

Month Topic	Short term outcome	Pedagogical practice	Longterm outcome
June 1.ഒരുചിത്രം 2.ഓടയിൽ നിന്ന്	പാരായണം കവിപരിചയം വായന,നോവലിസ്റ്റ്വി നെ അറിയൽ	കുറിപ്പ്,പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	മാതൃസ്നേഹ- വാത്സല്യമറിയുന്നു സഹജീവികളെ സ്നേഹിക്കുന്നു
July 3 മയന്റെ മായാജാലം 4.പടയണി	പാരായണം, കവിപരിചയം വായന	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ നാടൻകലകളെ കുറിച്ചറിയുന്നതിന്	തുള്ളൽ പ്രസ്ഥാനത്തെ അറിയുന്നു പ്രകൃതിയും കലയും തമ്മിലുളള ബന്ധം
Aug ടഓണം അന്ന ഇന്നും	ും ( ഓണം-കലാനു ,സൂതമാറ്റം)വായന	ഐതീഹും-ഓണം പാഠാനുബന്ധപ്രവർ- ത്തനങ്ങൾ	ഐകൃത്തോടെ ജീവിക്കുക
Sep 6.ബാലലീല	പാരായണം,കവയി	- പാഠാനുബന്ധപ്രവർ	— ബാലുകാലസ്തരണ
	ത്രിയെഅറിയുന്നു	ത്തനങ്ങൾ,	കൾ
oct 7.അജയ്യതയു- ടെപ്രതീകം	ധാന്ധിജിയെ അറിയൂന്നതിന്	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ, വായന	കൂട്ടിയിൽദേശസ്'നേ- ഹം വളമുന്നതിന്
Novs.പത്ത്രമം	വായന,ആത്മകഥ-	집 집에 가면하다 가장하면 하게 하지 않는데 하다 하나 하나 하나 하나 하나 하나 하다 하다.	പരിശ്രമത്തിലൂടെ
എന്തിനേയു	ം യെക്കുറിച്ചറിയുന്നു		എന്തുംനേടാം
Dec9വിക്ടോറിയാ വെളളച്ചാട്ടം	B		നീരീക്ഷണപടവം
-	വായന,ഉപനൃാസ	<ul> <li>പാഠാനുബന്ധ</li></ul>	നദീസംരക്ഷണം
10 m &	മചന	പ്രവർത്തനങ്ങൾ <li>(ചർച്ച)</li>	
Jan 11 ഊഞ്ഞാൽ	പഠരായണം,	പാഠാനുബന്ധ	പിതൂസ്നേഹം
പാട്ട്	കവിപരിചയം	പ്രവർത്തനങ്ങൾ	
Feb 12.വേഗമുറങ്ങു	പാരായാണം	പാഠാനുബന്ധ	യി കാണുന്നു
	കവിപരിചയം	പ്രവർത്തനങ്ങൾ	യി കാണുന്നു
Marisജീവിതത്തി	ന്റ് ഉപ്പുകൂറ്റനെ		പന്തിരുകുലകഥ
ഉപ്പ്	അറിയുന്നു,വായന		അറിയുന്നു

## **Annual Pedagogical Plan 2020-2021**

Class VII

**Subject: Science** 

Month	Chapter	Short term learning outcomes	Pedagogical strategies	Assessment strategies	Long term learning outcomes
June	Nutrition in plants  Heat	Students will be able to  > Understand, how do plants make food? > Modes of nutrition in plants > Replenishment of nutrients in the soil  Students will be able to learn a )Measuring temperature b)Kinds of clothes c)Transfer of heat	➤ Discussion ➤ Smart class  Discussion Smart class	➤ Pasting pictures ➤ Pen-paper test ➤ Oral test  Oral question Summarising	Students will be able to know  Food making process in plants  Word equation for photosynthesi s  Leaves other than green also carry out photosynthesi s  Students will be able to know a)conductors and insulators of heat b)Modes of transfer of heat c)Calculate temperature

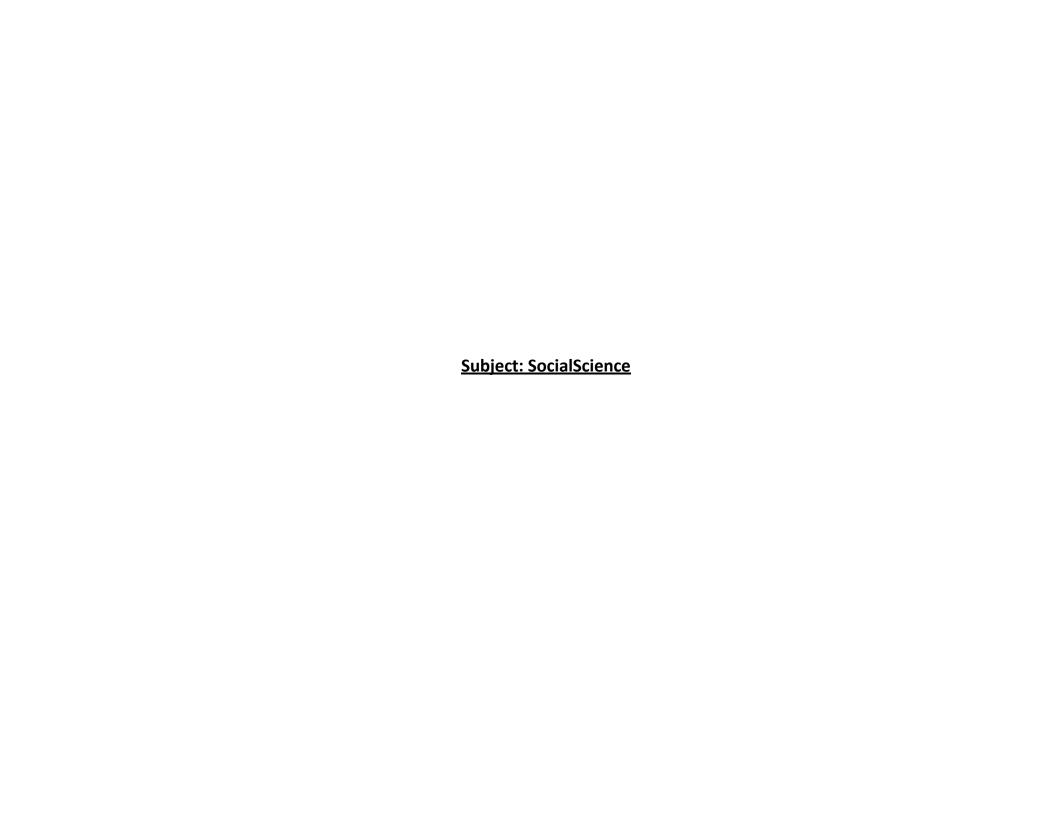
July	Nutrition in Animals	Students will be able to	Discussion	Oral questions	Students will be able to
		learn	Smart class	Pen-paper test	know
		a)Digestion in humans and			a)Draw labelled
		grass eating animals			diagram of human
		b)Feeding and digestion in			digestive system
		Amoeba			-
		Students will be able to			
	Acid, Bases, Salt	identify	Discussion	Oral test	Students will be able to
		a)Natural indicators	Flow-chart	Pen-paper test	know
		b)Neutralisation	Audio-visual aid		a)Acidic, basic, and
			Experiment		neutral substances
					b)Write word equation
					for acid-base reactions
		Students will be able to			
	Motion and Time	know	Discussion	Oral test	Students will be able to
		a)Speed	Audio-visual aid	Pen-paper test	know
		b)Units of time and speed			a)Relates processes
		c)Distance-time graph			and phenomena with
					causes- wind speed
					with air pressure
					b)Speed of moving
					objects
					c)Time period of a
		PERIODIC TEST-1			simple pendulum
					d)Distance-Time graph
August	Physical and chemical	Students will be able to	Demonstration	Oral test	Students will be able to
	changes	know	Discussion	Debate	know
		a)Physical and chemical	Smart class	Pen-paper test	a)Classifies materials
		changes			based on physical and
		b)Rusting and			chemical properties
		crystallisation			b)Applies learning of
					scientific concepts in

					day-to-day life c)Taking measures to prevent corrosion
	Respiration in organisms	Students will be able to understand a)Mechanism of breathing in humans b)Breathing in other animals-insects, earthworm,fish	Discussion Model of respiratory system	Labelling Oral test	Students will be able to know a)To write word equation for aerobic and anaerobic respiration b)Draw labelled diagrams
September	Fibre to fabric	Students will be able to learn a)Animal fibres b)Processing of silk and wool	Discussion Audio-visual aid	Oral question Pasting different pieces of fabrics	Students will be able to a)Classify animal and plant fibres based on properties b)Processing of animal fibres c)Life cycle of silk moth
October		HALF YEARLY EXAMINATION			
	Soil	Students will be able to know a)Soil profile b)Types of soil	Demonstration Discussion Audio-visual aid	Oral test Assignment	Students will be able to know a)Crops grown with types of soil

November	Winds, storms and cyclones	c)Percolation rate of water in soil d)soil and crops  Students will be able to know a)Air exerts pressure b) Air expands on heating c)High speed winds are reduced air pressure	Demonstration Audio-visual aid Discussion	Collection of paper cuttings Oral test	b)Working with soil c)Planting trees to avoid soil erosion  Students will be able to a)Relate processes and phenomena-wind speed with air pressure b)Model of Anemometer c)Taking measures during and after disasters
	Water-A precious Resource  Transportation in Plants and Animals	Students will be able to know a) How much water is an available form of water b) Depletion of water table c)Effect of water scarcity on plants  Students will be able to learn a) Circulatory system b) excretion in Animals c)Transport of substances in plants	Discussion Audio-visual aid  Discussion Model of Stethoscope	Poster making Oral test  Labelling Chart making	Students will be able to know a) Depletion of water table with human activities b) Methods for treatment of polluted water for reuse  Students will be able to know a) circulatory and excretory systems in
December	Forest- our life lines	Students will be able to	Discussion	Picture collection of	b)Measurement of pulse rate Students will be able to

		learn a) forest as a habitat b) Interrelationship of plant, soil and decomposers in a forest	Audio-visual aid	endangered species	a) make efforts to protect environment b) Sensitising others with the consequences of excessive consumption of natural resources
	Electric current and its effects	Students will be able to know a) symbols of electric components b) Magnetic effect of electric current c) Electric bell and electromagnet	Demonstration Discussion	Model making	Students will be able to know  a) diagram of electric circuit  b) Heating and magnetic effect of electric current  c) Constructs model using material from surroundings  d) Connecting two or more electric cells in proper in devices
January		PERIODIC TEST-II			
	Light	Students will be able to learn a)Reflection of light b) Travelling of light c) Playing with spherical	Demonstration Discussion Audio-visual aid	Students will be able to know  a) Mirrors and lenses b) Images formed	Construction of Newton"s colour disc

		mirrors		by mirrors and lenses	
	B 1	5	p		
	Reproduction in plants	Students will be able to	Discussion		
		know	Audio- visual aid	Students will be able to	
		a) Modes of reproduction		know	
		b) Vegetative propagation		a)unisexual and	
		c) Pollination		bisexual flowers	
		d) Fertilisation and agents		b)Cultivation by	
		of seed dispersal		vegetative propagation	
February	Weather, climate and	Students will be able know	Discussion	Students will be able to	Cross-word puzzle
	Adaptations to climate	a) Weather and	Audio-visual aid	a) Identify	Oral test
		climate		animals based	
		b) Climate and		on special	
		adaptation		features	
				b) Makes effort to	
				protect	
				environment	
		Students will be able to			
	Waste water story	know	Discussion		
		a)weather and climate	Audio-visual aid	Students will be able to	Oral test
		b)climate and adaptation		a)minimising	Pen-paper test
				generation of	
				pollutants	
				b)Following good	
				practices for sanitation	
				at public places	
				c)exhibits values of	
				honesty	
	<del> </del>	<del> </del>			
March	Revision	Annual examination			



MONTH	TOPIC	SHORT TERM LEARNING OUTCOME	PEDAGOGICAL PRACTICES	LONG TERM LEARNING OUTCOME
JUNE	Tracing changes through a thousand years.	To identify different sources of history available in books.	Assignment     Visual aid	Analyses factors that impact development of specific regions     Able to investigate changes in the society
	Environment	Understand the key concepts like natural environment, human made	Chart making:     Discussion	Acquire observation     skill     Develop drawing skill     Show respect towards
	On equality	environment, ecosystem etc.  • Learn about the significance of	Discussion	Show respect towards nature     Able to identify de     Different types of environment

		equality in democracy	Poster making	Interprets social,     political and     economic issue in     one's own region     with reference to right     to equality.
JULY	New kings and kingdoms	To familiarize with the emergence of new dynasties     To analyse socio- political and economic changes during the medieval period	Timeline	Relates key     historical     developments     during the medieval     period occurring in     one place with     another.      Develop     observation skill
	Inside our earth	To understand the major layers of the earth's interior  To understand the types of rocks	Visual aid Collection of different types of rocks Chart making	Identify different types of rocks     Acquire investigative thinking

AUGUST	Role of government in health      Our changing earth	To analyse the administrative measures and strategies for military control adopted by different kingdoms  Understand the two types of health care systems  Identify the role of health in the work of government  Understand the formation of land forms due to various factors	<ul> <li>Project work</li> <li>Newspaper collage</li> <li>Demos</li> <li>Mock drill</li> <li>Visual aid</li> </ul>	Draws comparison between policies of different rulers  Develop administrative power  Learners will begin to visualise the desired role of government  Acquire confidence to express their views on public issues  Develop a questioning attitude  Identity different land forms
SEPTEMBER	Mughal empire	Understand the administrative policies if Mughal rulers	Picture collection     Field visit     Project	To become an involved learner

	How the state government works?	Explain the composition and structure of the atmosphere      Understand the process of election to the legislative assembly      Understand the work of government	<ul> <li>Role play</li> <li>Chart making</li> <li>Map work</li> <li>Visual aid</li> <li>Mock election</li> </ul>	Analyses the factors contributing to pollution in their surrounding and list measures to prevent it.     Develop care towards atmosphere     To show respect to political leaders     Develop a curiosity to participate in elections     Eagerness to caste the vote
OCTOBER	• Water	Understand the process of water cycle     Identify the different types of movement in the ocean water	Diagrammatic presentation     Map work	Reflects on the factors leading to disasters and calamities     Understand the need for

NOVEMBER	Growing up as boys and girls     Towns, traders and craft's persons  Natural vegetation	Understand the discrimination on the basis of gender      Describe distinctive developments in style and technology used for construction of temples, tombs and mosques with examples      Understand different types of forests and wildlife	Debate Visual aid Story telling Discussion Picture collection  Picture aid Visual aid	Inculcate positive attitude towards gender equality     Inspired by the architectural splendour      Sensitivity, appreciation and respect for wildlife
DECEMBER	Tribes, nomads and settled communities	Understand the     relationship     between livelihood     patterns and the     geographical	Discussion     Assignment	Acquire comparison skill     Develop social efficiency

JANUARY	Human environment interaction, tropical and subtropical region      Devotional paths to the divine      Life in the Deserts	condition of the area inhabited  Identify similarities and differences in the life of people in different natural regions of the world.  Analyses factors which led to the emergence of new religious ideas and movements  Understand the life of people in the hot desert and cold desert	Quiz     Visual aid     Debate      Discussion     Field visit     Collection of bhajans      Map work     Visual aid	Able to make wise decisions about how the planets resources should be used      Draws inference from poetry of bhakti and Sufi saints about existing social order     Respect towards the religions     Draws interrelationship between climatic regions and life of people living in different climatic regions
FEBRUARY	Market around us	Differentiate     between different	Project     Visual aid	Develop     observation skill
		kinds of market  • Understand the benefits of market		Identify different kinds of market     Show respect to human labour
MARCH		ANNUAL EXAMI	NATION	



Month	Торіс	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	1- Integers	Students will be able to understand properties of addition, subtraction, multiplication & division of integers.	<ul> <li>Worksheet</li> <li>Realia</li> <li>Smartclass</li> <li>Problem solving</li> <li>Brainstorming questions</li> </ul>	Student will be able to realise • properties of integers • How to apply in real life	<ul> <li>Oral questions.</li> <li>Pen-paper test</li> <li>Puzzle</li> </ul>
	2- Fractions & Decimals	Students will be able to *Recall different types of fraction. *Add & subtract fraction *Multiply and to divide fraction *Understand equivalent fraction	Smart class     Realia     Discussion	Students will be able to realise  Different types of fraction  Operations on fraction.  Equivalent fraction.	*Worksheet *Quiz * Class edge * Puzzles

July	2- Decimals (cont'd)	Understand the place     value chart for decimals.     Represent decimals as fractions.     Multiplication & division of decimals.	<ul> <li>Smart class</li> <li>Pose questions</li> <li>Group discussion</li> <li>Realia</li> </ul>	Students will be able to realise  *the place value of decimal numbers.  *use of decimals in real life	<ul> <li>Oral questions</li> <li>Pen and paper test</li> <li>Class edge</li> <li>Puzzle</li> </ul>
	3- Data Handling	Students will be able to  *collect and organise data *understand the representative values – mean, mode, median & range.  * read and interpret bar graph with different purposes  * analyse chance and probability.	*Project *Discussion * Smart class *Realia	Students will be able to realise  • The importance of representative values in real life	<ul> <li>Worksheet</li> <li>Oral questions</li> <li>Pen-paper test.</li> </ul>
August	PT 1 4- Simple equations	REVISION & EXAM  Students will be able to  *set up an equation  * understand what is an equation  *solving equation  *application of simple equation to practical situation	Project Discussion Smart class Realia Pose questions	Students will be able to realise  *The importance of equation *how it plays in real life	<ul> <li>Oral questions</li> <li>Pen and paper test</li> <li>Worksheet</li> <li>Demonstration</li> </ul>

September	14 –Symmetry  5- Lines & Angles	Students will be able to *understand laws of symmetry for regular polygons  *how to draw line symmetry, rotational symmetry, etc.  Student will be able to:- *understand more about lines, line segments, rays, etc. *recognise related angles *to make the student aware about pairs of lines	*Learning from surroundings * Interactive method *Realia *Smart class *Drawing figures *project *flowchart *smart class *Pose questions	Student will be able to realise  The laws of symmetry How it plays in real life Students will be able to realise more about related angles about rules for drawing parallel lines.	Worksheet     Pen-paper test      Worksheet     puzzles     class edge     activity
	12- Algebraic expressions	*how to check whether the lines are parallel or not.  Students will be able to :- *understand how expressions are formed.  * recognise terms, factors and coefficients of an expression * identify like and unlike terms * classify monomials, binomials and trinomials. *add and subtract the expression. * how to find the value of an expression.	*concept map *smart class *flowchart *realia *problem solving	*its application in real life *how to give values in an expression.	Pen and paper test Quiz Puzzle worksheet

October	6- Triangle and its properties	identify what is median and altitude of a triangle.     Understand exterior angle property and angle sum property of a triangle.     Understand the pythagorus theorem	<ul> <li>Smart class</li> <li>Realia</li> <li>Pose questions</li> <li>Group discussion</li> </ul>	Students will be able to realise:  Its application in real life  Different properties of triangles	Oral questions Worksheet Puzzle Class edge
	HALF YEARLY EXAM	REVISION & EXAM			
November	7- Congruence of triangles	Recognise congruence of plane figures     Understand congruency of angles and triangles.     Understand the crireria for congruence of triangles.	Smart class     Realia     Project     Seminar	Students will be able to realise:-  • its application in life • about congruency	Oral questions     Pen and paper test     Class edge
	8- Comparing Quantities	Students will be able to:- Recognise equivalent ratio Calculate percentage Understand about cost price and selling price Aware about simple interest	<ul> <li>Smart class</li> <li>Problem solving</li> <li>Interactive learning</li> <li>Pose questions</li> </ul>	Students will be able to realise:-	<ul> <li>pen and paper test</li> <li>Class edge activity</li> <li>Oral questions</li> <li>Problem solving</li> </ul>

December	10 – Practical geometry	Construct a parallel line to a given line.     Construct of triangles using SSS criterion, SAS criterion ASA criterion & RHS criterion.     Develop their drawing skills	<ul> <li>Smart class</li> <li>Demonstration</li> <li>Project</li> <li>Realia</li> </ul>	Students will be able to realise:-  The use of geometry in their lives  Develops his talent in civil engineering	<ul> <li>Oral questions</li> <li>Pen and paper test</li> <li>Quiz</li> <li>Worksheet</li> <li>Summarising</li> </ul>
January	PT 2 9- Rational Numbers	REVISION & EXAM  Students will be able to :-  Realise the need for rational numbers and more about rational numbers.  Compare rational numbers  Do operations on rational numbers.	Concept map Demonstration Interactive lecture method Project Pose questions	Students will be able to realise:-  • The need for rational numbers • How to do operations with rational numbers	Worksheet     Oral questions     Pen paper test     Quiz     Flow chart
February	11- Perimeter & Area	Students will be able to:  Identify different geometrical shapes  Understand the formula to calculate areas of each shapes  Convert units and how to apply it.	Realia     Pose questions     Interactive lecture     Mnemonics     Flowchart	Students will be able to realise:-  Different shapes skill in drawing learn from real life situations	Worksheet     Class edge     activity     Puzzles     Quiz

February	13- Exponents & powers	Analyse exponents     Understand laws of exponents     Develop examples using laws of exponents     Recognise decimal number system.	Smart class     Interactive     lecture method     Pose questions     Project	Students will be able to realise:  how to write large numbers using exponents.  The application of laws of exponents  To write decimal number system	Oral questions Memory matrix Mind mapping Pen-paper test
March	Annual Exam	REVISION & EXAM			

Subject: Malayalam

Month Topic	Short term outcom	ne Pedagogical practice	Longterm autcome
June 1.അളകനന്ദവ വെള്ളാരംക 2.പൂക്കാതിരിം നെനിക്കാവര	ല്ലുകൾ കന്നെങ്ങറിയ ക്കാ പാരായണം	ാൽ പ്രവർത്തനങ്ങ , പാഠാനുബന്ധ	ശീ തൃത്തെഅറിയുന്നു നിരീക്ഷണപാടവം
July ദഅശാതി 4.കൊച്ചനുജ	വായന,കഥ ത്തിനെഅറി പാരായണം, കവിപരിചയം	യൽ പ്രവർത്തനങ്ങ പാഠാനുബന്ധ	ൾ ജീവിക്കുക സഹോദരസ്നേഹം
Aug ടഒരുമനുഷ്യ	ൻ വായന,കഥാക ത്തിനെഅറിയ	(1) [[[[[] [] [] [] [] [] [] [] [] [] [] []	മനുഷ്യത്വമുള്ളവ രായി വരുന്നു
Sep ബീണപുവ്	പാരായണം, കവിപരിചയം	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	സൗന്ദര്യംസ്ഥായി- യല്ലെന്ന്അറിയുന്നു
oct 7.എനിക്ക്ഒരു സാപ്നമുണ്ട്	സ്ഫുടമായ വായന്	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ പ്രസംഗരചന	പ്രസംഗകലയെ അറിയുന്നു
Nova.cocnocas	പാരായണം, കവിപരിചയം	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	കൃഷ്ണഗാഥ- യെക്കുറിച്ചറിയുന്നു
Desവെള്ളപ്പൊക്കം 10.മീനുകളുടെ ആകാശവും പറവകളുടെ ദകമിയിം		പവർത്തനങ്ങൾ പാഠാനുബന്ധ	സാപ്നംകാണുവാനുള്ള പ്രേരണനൽകുന്നു നദീസംരക്ഷണം സൗഹൃദം
Jan 11 പ്രാതൽ	വായന,കഥാകൃ ത്തിനെഅറിയൽ	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	ഹാസുകഥാസാദനം
Feb12കതുവനുർ വീരൻ		പാഠാനുബന്ധ പവർത്തനങ്ങൾ,ശേഖ	തെയ്യത്തെ അറിയുന്നു രണം
Marisഞാറ്റുവേല പ്പൂക്കൾ		പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	അറിയുന്നു അറിയുന്നു

## **Annual Pedagogical Plan 2020-2021**

Class VIII

**Subject: Science** 

MONTH	TOPICS	SHORT TERM LEARNING OUTCOMES	PEDAGOGICA L PRACTICES	LONG TERM LEARNING OUTCOMES	ASSESSMENT STRATEGIES
	1.Crop production and Management.	Students will be able to:  Identify basic practices of crop production.  Understand manure and fertilizer.  Explain different process in farming.	Discussion. Smart class. Interaction. Peer group discussion	Students will be able to     Classify seasonal crops.     Apply learning concepts to increase crop production	Oral test Pen paper test.
JUNE	3. Synthetic fibres and plastics	Understand natural and synthetic fibres.     Characterises the synthetic fibres.	Smart class. Interactive learning. Discussion.	Able to differentiate materials as natural and synthetic.	Worksheets Oral test Pen paper test. Debate .
	11. Force and Pressure.	Define force Differentiate contact and non contact forces. Define pressure. Explain liquid and atmospheric	Interactive lecturing , hands on learning, smart class, individual	Exhibits creativity in designing and planning.     Conduct simpleinvestigations to seek answers to queries.	Puzzle solving Test paper Problem solving.

		pressure.	activities .		
	Synthetic fibres and plastics     ( continuation)	Explains advantages of plastics     Effects of plastics in the environment.	Debates Smart class	Able to apply the scientific concepts in day to day life.	Assignment
JULY	12. Friction	Defines friction.     Understands the factors affecting friction.     Identifies type of friction.  PERIODIC TEST I	Smart class Demonstrations Interactive learning	Able to apply the acquired concept to increase and decrease friction.	OTBA Test paper
AUGUST	2. Micro- organisms:friend or foe.	Classify useful and harmful microbes.     Explains methods of food preservation.	Discussion . Observations . Narrative technique.	Conduct investigation on causes and control of communicable diseases.     Applies learning concept in food preservation.	Quiz Listing Oral Questions
	Metals and non metals	Able to classify materials based on their properties.	Smart class. Hands on learning Demonstrations Smart class Discussion	Able to Write chemical equations for reactions.	Puzzle solving Paper pen test. OTBA
SEPTEMBER	13.Sound	Explains production and propagation of sound.     Identifies the parts of ear and voice	Discussion Smart class	Constructs model using materials from surroundings.	Model making.  Oral test

		box.     Identifies characteristics of sound.     Distinguish audible and inaudible sound.     Noise pollution.	Drawing diagrams.	Makes efforts to reduce noise pollution.	
	7. Conservation of plants and animals.	Analyse and interpret the causes and consequences of deforestation.     Differentiate flora and fauna	Collection of data. Group discussion Smart class.	Understands the importance of planting trees. Applies scientific knowledge to reduce consequences of deforestation.	Quiz Poster making. OTBA.
	7. Conservation of plants and animals (continuation)	<ul> <li>Defines the importance of wildlife sanctuaries, national parks, biosphere reserves.</li> </ul>	Group discussion		
October	5. Coal and petroleum	Understands natural resources     Classifies resources as renewable and non renewable.     Explains process of carbonisation.	Discussion Lecturing Hands on learning	Make efforts to protect the environment by making judicious use of resources.	Oral tests. Test paper.
	5. Coal and petroleum	Able to understand the refining of petroleum.     Explains natural gas and its limitations	Smart class.  Discussion.	Make efforts to conserve energy and make judicious use of limited resources.	Puzzles Drawing Test paper.

NOVEMBER	16. light  8. cell - structure	Explains laws of reflection.     Differentiates regular and irregular reflection.     Multiple reflection.     Understands the parts of eye.  Explains the parts of the cell.	Sharing real life experiences. Demonstrations. Experiments.	Inculcate self respect.     Love towards the needy people.     Understands the importance of care of eye.	Solving puzzles. Test paper.
	and functions	Comparing the plant and animal cell	Smart class. Discussion.	Prepares slides of cell.	Oral tests
DECEMBER	6. Combustion and flame.	Explains conditions required for combustion.     Understands methods to extinguish fire.     Able to draw the structure of flame and identifies the use of different zones.	Lecturing     Smart     class     Discussion	Acquires the ability to evaluate alternative explanation.      Able to think critically.	Assignmer     One senter     answer.
	9.Reproduction in animals.	<ul> <li>Explains modes of reproduction.</li> <li>Understands Male and female reproductive organs.</li> <li>Differentiates viviparous and oviparous animals.</li> </ul>	Drawing Identificati on Explanatio n.	Imbibe the values of concern for life ,gender equity.	Labelling t     Question c
JANUARY	14. Chemical effects of electric current	Classifies conductors and insulators     Explains chemical effect of electric current     Understands application of	Experiment. Observation Explanation.	Discusses and appreciates scientific discoveries.     Exhibits creativity in	Oral test

		electroplating.		designing.	
	15. Some Natural phenomena	<ul> <li>Explains working of electroplating.</li> <li>Describes lightning and its safety measures.</li> <li>Describes about earth quakes and list out its safety measures</li> </ul>	Sharing real life experience s.     Discussion     Interactive electuring.	<ul> <li>Exhibits value of freedom from fear and prejudices.</li> <li>Constructs models.</li> </ul>	Assignments Model making Test paper
	16. Reaching the age of adolescence	<ul> <li>Understands adolescence and puberty.</li> <li>Role of hormones in reproductive function.</li> <li>Sex determination.</li> </ul>	Smart class. Sharing real life experience s. Discussion Interactive lecturing. Smart class.	Applies learning of scientific concepts in challenging myths regarding adolescence.	Debate     oral test
FEBRUARY	17. Stars and solar system.  18. pollution of air and water.	<ul> <li>Understands celestial objects.</li> <li>Identifies cause of air pollution.</li> <li>Explains green house effect and</li> </ul>	Interactiv     e     lecturing.     Smart     class.     Seminar.	<ul> <li>Appreciates scientific discoveries.</li> </ul>	Chart mal     Quiz
		global warming.	Hands on learning	Make effort to protect environment	Oral test
	1	ı		T	'
			Seminar.		• Quiz
MARCH	Revision			l	
		And			
	Annual examination				

**Subject: History** 

MONTH	TOPICS	LEARNING OBJECTIVE	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	1.How, When and Where	*To understand the changing culture of the subcontinent. *To know the major development within the time frame.	* case study.  * map work.  *group discussion.	* Inculcate time value.  *Understood the importance of past.
JULY	2.From Trade to Territory	*To understand the story of a trading company becoming a political power. *To know the consolidation of British power.	* debates.  *assignment.  *map	*Inculcate defensive power. *Developed the feeling of nationalism.

		1	To see	T
AUGUST	3.Ruling the countryside	*To understand the changes in the society. *To know how the new government disrupted the	*discussion.  * criticism.  * time line.	*Inculcate defending nature against oppressive rule. *Able to observe the current system of revenue
		rhythm of peasants life.	* map.	collection.
SEPTEMBER	4.When people rebel	*To understand how revolts originate and spread. *Analyse the changes in colonial rule after 1857.	*map.  *debate.  *discussion.  *project.	* Inculcate patriotic feeling.  *Able to respect the national leaders.
OCTOBER	5.Weavers, iron smelters and factory owners	*To understand the impact of British rule in various sector. *To know the industrial expansion in India.	*report writing.  *group discussion.  *flow chart.	*Able to set up industries or factories. *Develop critical thinking.
NOVEMBER	6.Women caste and reform	*To understand why reformers focussed on women. *To know about the laws which affect women	*debates.  *survey.  *project.  *power point presentation.	*Able to react on social evils. *Inculcate respect towards women
DECEMBER	7.The making of the national movement	*Understand the major development in national movement.	*project *field trip	*Developed love towards our culture and tradition
FEBRUARY	8. India after independence	*To understand how our constitution is formed *To know about the formation of states	*role play	*Inculcate patriotic feeling

<u>Subject: Geography</u>

MONTH	TOPICS	LEARNING OBJECTIVE	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	1. Resources	*To know the meaning of resources and their variety. *To understand its location and distribution.	*poster making  *chart  *group discussion  *flow chart	*Understood the needs of conservation of natural resources.
JULY	2. Land ,soil, water natural vegetation and wildlife resources	*To understand the importance of resources in our life.  *To know about the conservation of resources.	*map  *model making  *role play  *debate	*Able to harvest the rain water. *Inculcate love and care towards nature.

AUGUST	3. Minerals	*to know about various types of minerals.	*map  *scrapbook  *poster making	*Able to save minerals for future.
SEPTEMBER	4. Power Resources	*To understand conventional and non- conventional resources	*debate  *field trip	*Understood the reason for power shortage *Understood the importance of solar energy
OCTOBER	5. Human Resources	*To understand the role of human resources in development of nation	*graph  *survey  *population pyramid	*Inculcate self-respect and self esteem
NOVEMBER	6. Agriculture	*To learn about various types of farming. *To understand the agriculture development.	*project  *presentation  *map	*Inculcate an interest to do farming.
JANUARY	7. Industry	* To understand the importance of industries.  *To identify the different types of industries.	*chart making  *map  *project	*Inculcate an interest to start pollution free industries.

**Subject: Politics** 

MONTH	TOPICS	LEARNING OBJECTIVE	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	Indian constitution	*To develop and understand the rule of law and our involvement. *To understand the Indian constitution.	*debate  *poster making  *role play	*Inculcate a respectful attitude towards our constitution
JULY	2. Understanding secularism	*To understand Indian secularism *To compare Indian and US secularism	*PowerPoint presentation  *chart making	*Inculcate an attitude to respect all religion
AUGUST	3. Why do we need a parliament	*To understand why India choose a parliamentary form of government *To analyse the role of	*map *album making	*Developed the leadership quality

		people in the government		
OCTOBER	4. Understanding laws	*To understand how new laws come about? *To know unpopular and controversial laws	*flow chart  *debate	*Inculcate an attitude to obey the rules
NOVEMBER	5. Judiciary	*To understand the role of judiciary *To understand the structure of courts in India	*mock court  Project  *interview	*Developed a skill to analyse an argument and to take an appropriate decision
DECEMBER	6. Understanding marginalisation	*To know about the life of Adivasi *To analyse the mining centres in Adivasi areas	*power point presentation *project	*Understood the life of different type of people living in India

**Subject: Maths** 

MONTH	TOPIC	LEARNING OBJECTIVE	PEDAGOGICAL STRATEGIES.	LEARNING OUTCOME	ASSESSMENT STRATEGY
JUNE	1.Rational numbers  12.Exponents	Students will be able to understand  Understand Rational numbers Properties of rational numbers The role of zero Role of 1 Negative of a number and reciprocals Representation of rational numbers on a number line. Rational numbers Rational numbers Students will be able to understand Exponents Powers with negative exponents. Laws of exponents. Use of exponents to express small numbers in standard form.	Smart class     Interactive lecture      Smart class     Pose questions discussion	Students will be able to realise  Rational numbers Reciprocals of rational numbers Representation of rational numbers Rational numbers between two rational numbers.  Students will be able to realise Exponents Use of exponents	Oral question Pen paper test summarising  Oral questions Pen paper test Summarising
JULY	2.Linear equation In one variable	Students will be able to	Interactive lecture	Students will be able	Oral questions     Pen paper test

3.Understanding Quadrilaterals.	Understand linear equation. Solving linear equation Solving questions related to real life.  Students will be able to Understand polygons Understand angle sum property of quadrilaterals. Understand exterior angle property of quadrilaterals Classify types of quadrilaterals. Understand special	Discussion     realia      Smart class     Discussion.     Pose questions	Solve questions in real life situations using linear equations.  Students will be able to realise     Kinds of quadrilaterals     Special parallelograms  Properties of parallelograms	• Class edge activity
	special paralellograms.			
AUGUST 5.Data handling	Students will be able to  Understand grouping data  Understand different types of graphs  Understand probability and chance.	Smart class     Realia     Demonstration	Students will be able to  realise Types of graphs  represent the given data in graphs.	Pen paper test     Class edge     activity.
15. Introduction to Graphs		Smart class		

		Students will be able to Understand  • bar graph  • Pie graph  • Histogram  • Line graph and linear graph	demonstration	Students will be able to realise  • Different types of graphs	Class edge activity Pen paper test
SEPTEMBER	6.Squares and square roots  7.Cubes and cube roots	Students will be able to understand  Square of a number  Properties of square number  Finding square roots Square roots of decimal numbers.	Interactive lecture     Pose questions.     Realia.  Interactive lecture     Pose questions     Discussion.	Students will be able to realise  Square of a number  Square root of numbers.	Oral questions.     Pen paper test      Oral questions     Pen paper test     Class edge
	10.Visualising solid shapes	Students will be able to Understand  • Cube of a number  • Cube root of a number	Seminar	Students will be able to  Find Cube of a number  Find cube root of a number  Solve problems related to real life.	activity
		Students will be able identify  • Shapes .  • Nets of different shapes		Students will be able to  Visualise 3- dimensional shapes.  Identify and draw different views of a solid Read and draw maps	

OCTOBER		REVISION AND HALF YEARLY EXAMINATION			
NOVEMBER	4. Practical geometry	Students will be able to  Construct quadrilaterals given any five of its elements	Smart class	Students will be able to  Construct quadrilaterals	Pen paper test
	8.Comparing Quantities.	Students will be able to  Understand increasing and decreasing percent  Profit and profit%  Loss and loss%  Sales tax, VAT  Compound interest.  Applications of compound interest	Interactive lecture     Smart class	Students will be able to  Define percentage Apply percentage to compare quantities Solve problems involving percentage change Calculate sales tax and value added tax Understand the difference between simple and compound interest.	Pen paper test Smart class Oral questions Puzzles
DECEMBER	9.Algebraic Expression and Identities  14.Factorisation	Students will be able to  Add and subtract polynomials  Multiply polynomials  Divide polynomials by monomial and binomial  Use identities to find products  Use identities to	Smart class     Pose questions     Interactive lecture     Discussion	Students will be able to  add , subtract , multiply and divide polynomials.  Use identities to find products	Oral questions     Class edge     activity     Pen paper test
		solve numerical problems	Smart class     Interactive lecture		Oral questions

		Students will be able to  Express an algebraic expression as a product of its factors  Factorise algebraic expression by taking common factors, by regrouping terms, by using identities.  Divide a polynomial by another	Discussion     Pose questions	Students will be able to realise  • Algebraic expression • Identities. • Factorisation of polynomials using identities.	Class edge activity Pen paper test
JANUARY	13. Direct and inverse propotion	polynomial  Students will be able to  Define propotions. Direct and inverse propotions. Its applications	Smart class     Interactive lecture     Discussion     Pose questions	Students will be able to realise  Inverse and direct variations.  Problems based on variations.  The relation between time and work: time and	Oral questions Class edge activity Pen paper test.
	11.Mensuration.	Students will be able to  Understand area of polygons  Understand the areas of regular and irregular polygons by dividing them into regular polygons.	Smart class     Interactive     lecture     Discussion     Pose questions	distance.  Students will be able to  Understand the concept of area of polygons  Find area of regular and irregular polygons.	Oral questions Class edge activity Pen paper test  .

FEBRUARY	16.Playing with numbers	Students will be able to  Understand games with numbers Understand the concept behind	Smart class     Interactive lecture     project	Students will be able to realise  Express two-and three digit numbers in generalised form	Oral questions     Class edge     activity     Puzzles.
		the tests of divisibility.  REVISION		The concept of working puzzles	
MARCH		ANNUAL EXAMINATION			

Subject: Malayalam

Month	Topic	Short term outcome	Pedagogical Practice	Long term outcome
une	1. സാന്ദ്ര സൗഹൃദം	പാരായണം കവിപരിചയം	പാരായണം , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	സത്യസന്ധമായ സൗഹൃദം നിലനിർത്തൽ :
	2. അമ്മമ്മ	കഥാസ്ഥാദനം , കഥാകൃത്തിനെ അറിയൽ	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	പ്രതിബന്ധങ്ങളെ ധൈര്യപൂർവം നേരിടണം
luly	3. എണ്ണ തിറച്ച കരണ്ടി	കഥാസ്വാദനം , കഥാകൃത്തിനെ അറിയൽ	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	പ്രത്യാശയാണ് ജീവിതത്തെ മൂന്നോട്ട് നയിക്കൂന്നത് എന്ന തിരിച്ചറിവ്
	4. എന്റെ ഗുരുനാഥൻ	കവിപരിചയം ,ഗാന്ധിജിയുടെ മഹത്വം അറിയൂന്നതിന്	വായന , മഹത് വചനങ്ങൾ കണ്ടെത്തുന്നു	ഗാന്ധിജിയോടുള്ള ബഹുമാനം വളരുന്നതിന്
August	5. ¢∩i6o	ആസ്ഥാദനം , നിരീക്ഷണ പാടവം , വൃാകരണം	പാരായണം , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	വിശപ്പി അന്റ് പ്രാധാന്വം അറിഞ്ഞ് ജീവിക്കുന്നതിന്
September	6. ഇലഞ്ഞിഞ്ഞറ മേളം	ലേഖനവായന , ആസ്വാദന ശേഷി വളർത്തുന്നതിന്	വായന , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	കലകളെക്കുറിച്ചുള്ള അവബോധം ഉണ്ടാകുന്നതിന്

March	Revision	Annual Exam	me of cases and	
Februarý	12. മൂക്തകങ്ങൾ	കവികളെ പരിചയപ്പെടുന്നു	വായന , മുക്തകങ്ങളെക്കുറിച്ച് അറിയൂന്നു	രചനാതാല്പര്യം വളർത്തുന്നതിന്
January	11. കുപ്പായം	കഥാസ്വാദനം , കഥാകൃത്തിനെ അറിയൽ	പാഠഭാഗ വായന പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	കുടുംബബന്ധങ്ങളുടെ ഈഷ്മളത മനസ്സിലാക്കുന്നതിന്
December	10. പെരുന്തച്ചൻ	കവിത ഈണത്തിൽ ചൊല്ലുന്നു . കവിയെ പരിചയപ്പെടുന്നു	പാരായണം പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	വാർധകൃത്തിലും ധൈര്യത്തോടെ ജീവിക്കുന്നതിന്
	9. ധർമിഷ്ഠനായ രാധേയൻ	കഥാവായന , പുരാണ കഥകൾ അറിയുന്നതിന്	പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ വായന	ധർമത്തിൽ അധിഷ്ഠിതമായി ജീവിക്കുന്നതിന്
November	8. കിട്ടും പണമെങ്കിലിപ്പോൾ	പാരായണം ,കവി പരിചയം ,	അനുയോജ്യമായ താളത്തിൽ അവതരിപ്പിക്കുന്നു	മൂല്യബോധത്തോടെ വളരാൻ കഴിയുന്നതിന്
october	7. കളിയച്ചൻ ജനിക്കുന്നു	കവിതയുടെ ആവിർഭാവത്തെക്കുറിച്ചു അറിയുന്നതിന് , ലേഖനവായന	വായന കവിപരിചയം	രചനകളിലുള്ള താല്പര്യം വളർത്തുന്നതിന്

## **Annual Pedagogical Plan 2020-2021**

Class: IX

**Subject: Science** 

Month	Chapter	Short term learning outcomes	Pedagogical strategies	Assessment strategies	Long term learning outcomes
June	Matter in our surroundings.	Students will be able to  Define matter  Differentiate between different states of matter based on the arrangement of molecules.  Recognise, the state of matter in terms of shape, volume and density.	<ul> <li>▶ Interactive lecturing.</li> <li>▶ Group discussion.</li> <li>▶ Smart class</li> </ul>	<ul> <li>Oral test</li> <li>Assignment</li> <li>Pen and paper test.</li> </ul>	Students will be able to realise  Different states of matter Shape, volume and density of matter.
	15) Improvement in food resources.	Students will be able to  Explore plants and animals as sources of food.  Discuss with peers not to waste food.  Classify, crops as kharif and rabi crops ,and its examples.	<ul> <li>Interactive lecturing</li> <li>Pose question</li> <li>Seminar</li> <li>Smart class</li> <li>Group discussion</li> <li>Project</li> </ul>	<ul> <li>→ Oral test</li> <li>→ Pen and paper test.</li> <li>→ Listing</li> <li>→ One minute</li> </ul>	Students will be able to realise  What are the sources of food  Facts about kharif and rabi crops

	8) Motion	Students will be able to  Compare the types of motion and list out examples for the same.  Plot and interpret graphs.  Derive equation of motion using graphical method.  Solve problems.	Team learning  Inquiry based learning  Demonstration  Narration	Oral test     Assignment     Pen and paper     test.	Students will be able to realise  Interpretations with the graphs.  Applicability of equations of motions.
July	2) Is matter around us pure.	Students will be able to  Differentiate materials as elements, compounds and mixtures based on their properties.  Establish the relation and bring out the differences between heterogenous and homogenous mixtures, colloids and suspensions.	Lecture cum     discussion.     Demonstration of     experiments.	<ul> <li>Oral test</li> <li>Assessment based on question cards.</li> </ul>	Students will be able to realise  Differentiate elements, compounds and mixtures. How to classify heterogenous and homogenous mixture according to their properties.
	5) The fundamental unit of life.	Students will be able to  Prepare slides of plant cell and describe the microscopic features.  Distinguish between plant cell and animal cell.  Appreciate the role of each organelle in different life processes.	<ul> <li>Realia</li> <li>Demonstration</li> <li>Interactive         lecturing</li> <li>Concept map</li> <li>Narrative         technique.</li> <li>Smart class.</li> <li>Pose question</li> </ul>	<ul> <li>Oral test</li> <li>Mind mapping</li> <li>Memory matrix</li> <li>Pen and paper test.</li> </ul>	Students will be able to realise  Difference between plant and animal cells. How to compare different cells

	9) Force and laws of motion.	<ul> <li>➤ Compare the size of different cells such as ostrich's egg, nerve cell, bacteria etc.</li> <li>Students will be able to</li> <li>➤ Differentiate between balanced and unbalanced force.</li> <li>➤ Derive Newton's first law of motion.</li> <li>➤ Understand the concept of mass and inertia.</li> <li>➤ Formulate equation for second law of motion</li> <li>➤ Analyse third law of motion and its examples.</li> </ul>	<ul> <li>Lecture cum discussion</li> <li>Narrative technique</li> <li>Smart class</li> <li>Factual approach</li> <li>Brain storming questions.</li> </ul>	<ul> <li>Oral test</li> <li>Assignment</li> <li>Pen and paper test.</li> </ul>	Students will be able to realise  About balanced and unbalanced forces around us.  The application of Newton's laws in our day to day life.
August	2)Is matter around us pure(continuation)	Students will be able to  Apply the acquired knowledge of different methods of separating the components of mixtures in daily life situations.  Analyse, the implication of physical and chemical changes.	<ul> <li>Demonstration.</li> <li>Interactive lectures.</li> </ul>	➤ Peer evaluation ➤ Oral test.	Students will be able to realise  How to prepare mixtures, solution, suspension  To correlate separation techniques.
	6)Tissues	Students will be able to  Explore different kinds of plant and animal tissues.	<ul> <li>Realia</li> <li>Demonstration</li> <li>Interactive lecturing</li> </ul>	<ul> <li>Flow chart</li> <li>Quiz.</li> <li>Memory matrix</li> <li>Pen and paper test.</li> </ul>	Students will be able to realise  Parenchyma, collenchyma and sclerenchyma

		<ul> <li>Classify tissues         <ul> <li>according to their                 structure and function.</li> </ul> </li> <li>Develop the skill of                 observation and                 drawing.</li> </ul>	➤ Concept map	<ul> <li>➤ Oral test</li> <li>➤ Summarisation</li> <li>➤ Assignment</li> </ul>	tissues in plants  To improve their drawing skills
	9) Force and laws of motion. (continuation)  10) Gravitation	Students will be able to  Identify the term momentum.  Derive mathematical expression for conservation of momentum.  Students will be able to  Identify the presence of centripetal force in nature.  Explore the universal law of gravitation  Formulate an equation for gravitational force.	<ul> <li>Interactive lecturing</li> <li>Study buddy groups</li> <li>Demonstration.</li> <li>Visualisation</li> <li>Study buddy groups</li> <li>Interactive lecturing</li> <li>Narration</li> <li>Historical method.</li> </ul>	<ul> <li>Random questioning</li> <li>Quiz</li> <li>Pen and paper test.</li> </ul>	Students will be able to realise  About momentum and its effects.  That momentum is conserved.  Students will be able to realise  The importance of gravitational law.  The equation for gravitational force.
September	10)Gravitation (continuation)	Students will be able to  > Understand the importance of gravitational law. > Formulate an expression for free fall. > Compare between mass and weight. > Collect more ideas about pressure.	<ul> <li>Interactive lecturing</li> <li>Demonstration of experiments.</li> </ul>	<ul> <li>Oral test</li> <li>Pen and paper test</li> <li>Individualised laboratory method</li> </ul>	Students will be able to realise  The difference between mass and weight.  The idea behind Archimedes' principle

		<ul> <li>Explain Archimedes'         principle with its         applications</li> <li>Understand the relation         between density and         relative density.</li> </ul>			➤ The relation b/w density & relative density.
	3)Atoms and molecules	Students will be able to  Understand the law of chemical combination.  Verify the laws through experiments.  Establish the relationship and bring out the differences between molecules of elements.	<ul> <li>Interactive lecturing</li> <li>Demonstration of experiments.</li> </ul>	<ul> <li>➢ Oral test</li> <li>➢ Pen and paper test</li> <li>➢ Peer evaluation</li> <li>➢ Assignment</li> </ul>	
	6)Tissues (continuation)	Students will be able to  Distinguish between different plant and animal tissues.	➤ Concept map ➤ Pose question ➤ Classification	Pen and paper test	Students will be able to realise  How to prepare slides.  Develop an awareness about complex plant and animal body.
October	3) Atoms and molecules. (continuation)	Students will be able to  Understand law to write chemical formulae.  Ideas of molecular mass and mole concepts.	<ul> <li>Interactive lecturing</li> <li>Narrative techniques</li> </ul>	➤ Quiz ➤ Preparing model ➤ worksheet	Students will be able to realise  .

	7) Diversity in living organisms.	Students will be able to  Explore the diversity of living things.  Describe how and why organisms are hierarchically classified based on the evolutionary relationships.  Compare the features of different kingdoms.	➤ Realia ➤ Flow chart ➤ Concept map ➤ Smart class	<ul> <li>Oral test</li> <li>Mind mapping</li> <li>Worksheet</li> <li>Pen and paper test</li> </ul>	Students will be able to realise  Biological diversity.  Hierarchy of categories  Classify salient features of animals
November	4) Structure of atom.	Students will be able to  Comprehend the different models of atom.  Appreciate the ideas of different models of atom put forth by various scientists.  Reason out why an atom is neutral.	<ul> <li>Interactive lecturing</li> <li>Peer group discussion</li> <li>Activity based learning.</li> </ul>	<ul> <li>➤ Assignment.</li> <li>➤ Oral test.</li> <li>➤ Activity</li> <li>➤ Pen and paper test</li> <li>➤ Flow chart</li> </ul>	Students will be able to realise  Different models of atoms. To compare atoms, molecules, elements and ions.
	11) Work and energy	Students will be able to  List out examples for work done.  Derive expression for work done.  Explore the different types of energy present in nature.  Sort out examples for the same.	<ul> <li>Smart class.</li> <li>Problem solving based learning.</li> <li>Lab activities</li> <li>Discussions</li> </ul>	<ul> <li>Random questions</li> <li>Pen and paper test</li> <li>Laboratory         method</li> <li>Project.</li> </ul>	Students will be able to realise  The examples for work done in our daily life.  About different types of energy sources in nature.

	13) Why do we fall ill ?	Students will be able to  Classify diseases as acute and chronic diseases.  Describe diseases as infectious and noninfectious diseases.  Explore different types of transmission of diseases.	➤ Smart class. ➤ Pose questions ➤ Interactive learning ➤ Group discussions	<ul> <li>Oral questions</li> <li>Pen paper test</li> <li>Puzzles</li> </ul>	Students will be able to realise  About health and diseases. How to prevent diseases About immunisation programmes
December	11) Work and energy (continuation)	Students will be able to  Formulate expression for potential energy and kinetic energy.  Describe the law of conservation of energy.	<ul> <li>Problem solving</li> <li>Lab activities</li> <li>Assignment</li> </ul>	<ul><li>Oral test.</li><li>Pen paper test</li></ul>	Students will be able to realise  Potential and kinetic energy.  That energy is conserved.
	4) Structure of atom (continuation)	Students will be able to  Vinderstand the distribution of electron in various shells or orbits.  Analyse the implication of electronic configuration.  Establish the relationship in forming different types of bonds.  Distinguish between atomic number and mass number  Analyse the implication of atomic number and	➤ Problem solving ➤ Smart class	➤ Oral test ➤ Pen paper test ➤ puzzles	Students will be able to realise  About electronic configuration.  How to make a chart of periodic table.  To use periodic table in the field of chemistry.

lanua	12)Cound	mass number in isotopes and isobars.  Correlate the application of isotopes and isobars in life situations.			Students will be able to
January	12)Sound	Students will be able to  Collect more information regarding sound.  Discuss the characteristics of sound.  Understand the laws of reflection of sound.  Differentiate between transverse wave and longitudinal waves.	<ul> <li>Interactive learning.</li> <li>Team learning.</li> <li>Activity based learning.</li> </ul>	<ul> <li>Oral question.</li> <li>Assignment</li> <li>Activity</li> <li>Pen paper test.</li> </ul>	realise  The characteristics of sound.  About transverse and longitudinal waves.
	14)Natural resources	Students will be able to  Appreciate different factors of earth which supports life on earth.  Develop sensitivity for the natural resources in the environment.  Point out the issues related to the depletion pollution of the natural resources.	➤ Seminar ➤ Interactive learning ➤ Smart class ➤ Charts	➤ Flow chart ➤ Oral test ➤ Pen paper test	Students will be able to realise  More about earth and its natural resources.  Importance of natural resources in their lives and to love our mother earth.

February	12)Sound	Students will be able to	Smart class	Puzzle	Students will be able to
	(continuation)	<ul> <li>Explore the application of ultra sound</li> <li>Understand the sound transmission through human ear.</li> <li>Solve problem.</li> </ul>	<ul> <li>Concept map</li> <li>Problem solving</li> <li>Lab activities</li> </ul>	➤ Pen paper test ➤ Oral test.	realise  Applications of ultra sound waves.  Transmission of sound in human ear.
	(continuation)	Students will be able to  Explore the minerals that are rich in soil.  Understand more about biochemical changes.  More about ozone layer.	➤ Smart class ➤ Chart ➤ Seminar	➤ Oral test. ➤ Pen paper test. ➤ Quiz	Students will be able to realise  About different types of pollution  About holes in ozone layer and its damages.  How to save our mother earth.
March		Revision and Annual examination			

**Subject: Social Science** 

MONTH	LESSON	LEARNING OBJECTIVES	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES
JUNE	French Revolution	Familiarize 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 to recover the history of revolution.	Visual aid  Pictures related To French revolution Timeline preparation	Students will be able to  Identify the characters . Analyze the factors conducive for the revolution. Admire and appreciate the role of philosophers. Highlight the role of women. Glorify the legacy of revolution.
	India Size and location	Identify the location of India in the Indian sub continent.	Map work – Location of India. Socio-Cultural exchanges with other countries- visual aids.	Locate latitudes and longitudes. Socio-cultural exchanges with other countries. Inquire why there is a time lag of 2h from Gujarath to Arunachal Pradesh.

	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.	Discussion-benefits of democracy Chart preparation Features of democracy.	Develop conceptual skills of defining democracy. Compare democratic and non-democratic forms of Govt.
JULY	Physical features of India.	Understand the major land form features and the underlying geological structure, their association with various rocks and minerals as well as nature of soil types.	Map work, chart work, assignment.	Familiarize with the major land forms of India. Comprehend the concept of different relief features and their formation. Identify relief features from their local environment.
	The story of village Palampure	Familiarize with basic economic concepts through an imaginary story of village.	Picture collection- modern techniques of farming. Assignment- non- farming activites.	Elaborate basic concepts of Factors of production yield, surplus etc through an imaginary village. Find out the importance of modern means of farming. Analyse the importance of non-farming activities in

				the village.
AUGUST	Socialism in Europe and Russian Revolution	Explore the history of socialism through the study of Russian revolution .  Familiarize with different types of ideas that inspired the revolution.	Time line – social movement between 1905 – 1917 Assignment- 1 <sup>st</sup> world war Visual aid.	Explore the need for modernization of Russia like Britain and France. Admire and Appreciate the efforts made by the Russian in modernizing their empire by ending old regime. Compare the socio—economic and political system of old regime of 1789 France that of Russia in 1917. Collect the names and ideas of the people involved in revolution. Comprehend the impact of socialism on Russia and on other countries. Highlight legacy of the Russian revolution.
	Constitutional design	Understand the process of constitution making.  Develop respect for the constitution and appreciation for constitutional values.  Recognize constitution as a dynamic and living document.	Quiz Chart making- preamble of Indian constitution	Identify the process of establishment of Indian democracy and constitution making.

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SEPTEMBER	People as a resource.	Understand the demographic concepts. Understand how population can be an asset or a liability for the nation.	Assignment – measures taken by the Govt, to reduce unemployment.	Find out the basic concepts of human capital formation. Classify market and non-market activities. Assess the importance of health and education in human capital formation. Classify market and non-market activities. Asses the importance of health and education in human capital formation. Associate quality of population to literacy rate and life expectancy. Find out different types of unemployment and measures taken by the Govt. to reduce it.
	Drainage	Identify the river systems of the country and explain the role of rivers in the human society.	Map work	Find out river system of the country. Differentiate

				between Himalayan and Peninsular rivers. Appreciate the presence of rich alluvial planes formed by these rivers. Asses the significance of rivers and appreciate its contribution to the mankind.
OCTOBER	Climate	Identify various factors influencing the climate and explain climatic variations of our country and its impact on the life of the people.  Explain the importance and unifying role of monsoons.	Project –impact of flood on people.	Identify the factors influencing climate of India. Unfold meaning and mechanisms of monsoons. Co-relate effect of seasonal variations
	Electoral politics	Understand representative democracy . Familiarize with Indian electoral system.  Reason out for adoption of present Indian electoral system.  Develop an appreciation of citizens increased participation in electoral politics.  Recognize significance of election commission.	Mock election in the class.	Analyse the idea of representative democracy. Familiar with our electoral system and reasons for choosing it. Develop an appreciation of citizens , increased political participation in

				electoral politics . To recognize the significance of election.
NOVEMBER	Nazism and Rise of Hitler	Discuss the critical significance of Nazism in shaping the politics of modern world.  Get familiarized with the speeches and writings of Nazi leaders.	Comparative study of Nazism with the present day politics.	Familiarize with the names of people involved and different types of ideas that inspired the revolution. Explore the factors highlighting the Germany as an anarchist and dictatorial regime. Comprehend the life of Hitler as a dictator. Review and have a comparative study of the Nazi outlook with the present day political scenario.
	Natural vegetation and wild life	Explain the nature of diverse flora and fauna as well as their distribution.  Develop concern about the need to protect the biodiversity of our country.	Collect the pictures and details of endangered and extinct species.	Identify the factors that influence the plant growth. Interpret corelation between climate and vegetation. Comprehend how changes in climate affect natural

				vegetation. Collect the information about migratory birds, Suggest measures for conservation of flora and fauna.
DECEMBER	Poverty as a challenge facing India	Understand poverty as a challenge. Identify vulnerable group and interstate disparities. Appreciate the initiatives of the govt. to alleviate poverty.	Assignment-poverty alleviation programmes.	Recognize the poverty is a multidimensional concept. List that indicators of poverty and explain the meaning of poverty line. Compare poverty estimates across the countries in the world. Find out measures taken by the Govt, to reduce poverty.
	Working of institutions	Get an overview of Central Govt. structures. Identify the role of Parliament. Distinguish between permanent and political executive. Understand the parliamentary of executive accountability to the legislature. Understanding working of Judiciary.	Seminar-role of President, Prime minister and council of ministers.	Develop and overview of central Govt. structure. Distinguish between nominal and real executive.
JANUARY	Forest society and colonialism	Discuss the social and cultural world of cultural world of forest communities through the study of specific revolts.	Assignment-harmful effect of deforestation	Make a list of direct and indirect benefits of forests.

	Understand how oral traditions can be used to	Poster making-	Analyze the
	explorerevolt .	afforestation.	harmful effect of
	explorer er er er	and estation.	deforestation and
			find out the need
			for afforestation.
			Explain policies of
			the British related
			to exploitation of
			the Indian forest.
			Forest people and
			products to their
			advantage.
			Explain the causes
			and results of the
			Bastar rebellion.
			Similarities
			between Java and
			Bastar (colonial
			management of the
			forest.
Population	Analyze the uneven nature of population and	Make a population	Develop an
	distribution.	pyramid.	overview of
	Show concern about the large size of population.	Poster making –	country's
	Identify the different occupations of people and	measures of control	population and
	explain various factors of population change.	population	their uneven
	Explain various dimensions of population policy to		distribution.
	understand the needs of adolescents group.		Reasons for
			variations in
			population
			distribution.
			Comprehend
			population
			composition based
			on age, sex,
			occupational

				structure and literacy. Recognize and discuss social issues. Be sensitive towards growing imbalances of the sex ratio.
FEBRUARY	Democratic rights	Recognize the need for rights in one's life. Understand the availability of rights in a democratic Govt. Identify and be able to comprehend the fundamental rights given by the Indian constitution to its citizens. Create awareness regarding the process of safe guards rights.	Debate- fundamental rights are protected by the constitution agree or disagree.	To develop citizens awareness to their rights. Analyze and appreciate the fundamental rights. Recognize the ways in which these rights are exercised and protected by the constitution. Visualize the function of judicial courts and Human Rights Commission.
	Food Security in India	Understand the concepts of food security.  Appreciate and analyze the role of Govt. in ensuring food security.	Visual aid -PDS	Interpret the terms availability, accessibility and affordability. Discuss the circumstances in which Govt, decided to move self-sufficiency in food security.

MARCH	Disaster management	Project and Assignment only REVISION AND EXAM		Assess the role of Govt, in ensuring food supply. Analyze the PDS and role of co- operatives.	
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**Subject: Maths** 

Month	Topic	Learning Objectives	Pedagogical practices	Learning outcomes	Assessment strategies
June	1. Number system  2. Polynomials	Students will be able to understand  Irrational Numbers Real Numbers Decimal Expansion Operations on Real Numbers Laws of Exponents for real numbers Students will be able to develop Polynomials in one variable Zeroes of a polynomial Remainder Theorem Factorisation of polynomials Algebraic Identities		_	
	4. Co-ordinate geometry	Students will be able to identify  Cartecian System Plotting a point in the plane if its coordinates are given	Realia Group discussion	Students will be able to realise Cartesian system and plotting a point in the plane if its co-ordinates are given	<ul> <li>Oral questions</li> <li>Mind mapping</li> </ul>

July	3. Linear equations in two variables	Students will be able to recognise  Linear equations  Solution of linear equations  Graph of linear in two variables  Equation of line parallel to x- axis and y- axis	Smart class Concept map Project	Students will be able to realise linear equation and their solutions and graph of linear equations in two variables	Mind mapping     Quiz     Pen paper test
	5.Introduction to Euclid's geometry  12. Heron's Formula	Students will be able to understand  Euclid's definition  Axiom s and postulates  Equivalent versions of Euclid's fifth postulates  To make the students to aware about  Rea of triangle using Heron's formula  Applications of Heron's formula in finding areas of Quadrilateral	Smart class Mnemonics  Interactive lecture Smart class	Students will be able to realise Euclid's definition, axioms and postulates and equivalent versions of Euclid's fifth postulates  Students will be able to realise area of triangle using Heron's formula and its applications	<ul> <li>Classedge activity</li> <li>worksheet</li> <li>Puzzles</li> <li>Pen paper test</li> </ul>
August	6. Lines and Angles	To make the students to understand about  Basic terms and definitions Parallel lines and transversal lines Angle sum	Smart class Concept map Realia	Students will be able to realise basic terms and definitions of triangles and parallel and nonparallel lines and angle sum property of	Mind mapping     Quiz     Sum

property of

triangle

	7. Triangles	triangles  Students will be able to analyse  Congruence of triangles Properties of triangles Some criteria for congruence of triangles Inequalities in a triangle	Smart class discussion	Students will be able to realise congruence, criteria for congruence, properties of triangle and inequalities in a triangle	<ul> <li>Classedge activity</li> <li>Quiz</li> <li>puzzles</li> </ul>
September	11. Constructions  15. Probability	Students will be able to develop  • basic constructions • constructions of triangles  Students will be able	Smart class concept map	Students will be able to realise the basic construction and construction of triangles	<ul> <li>Quiz</li> <li>Mind mapping</li> </ul>
	13. Probability	to understand	questions discussion	Students will be able to realise the experimental approach of probability	• Pen paper test
		1			·
October	9 Quadrilatorals	Students will be able			

October	8. Quadrilaterals	Students will be able to analyse  • Angle sum property of a quadrilateral  • Types of quadrilaterals  • Properties of parallelogram  • Mid- point theorem	Smart class Concept map discussion	Students will be able to realise the angle sum property of quadrilateral, types of quadrilateral and the mid-point theorem	Oral questions     Pen papa test

9. Areas of	Students will be able		Students will be	
parallelogram and	to classify		able to realise	
triangles	<ul> <li>Figures on</li> </ul>		the figures on the	
	the same		same base and	
	base and		between the	<ul> <li>Oral</li> </ul>
	between the		same parallels,	questions
	same	Smart class	parallelogram on	<ul> <li>Quiz</li> </ul>
November	parallels	Discussion	the same base	<ul> <li>Mind</li> </ul>
	<ul> <li>Parallelogram</li> </ul>	Concept map	and between the	mapping
	s on the same		same parallels	
	base and		and triangles on	
	between the		the same base	
	same		and between the	
	parallels		same parallels	
	<ul> <li>Triangles on</li> </ul>			
	the same			
	base and			
	between the			
	same			
	parallels			
				<ul> <li>Oral</li> </ul>
13. Surface area and	Students will be able		Construction (III Is	questions
volumes	to understand		Students will be	<ul> <li>Quiz</li> </ul>
	<ul> <li>Surface area</li> </ul>		able to realise	<ul> <li>Work</li> </ul>
	of a cube and	Smart class	surface area of	sheet
	a cuboid	Interactive	cube , cuboid ,	
	<ul> <li>Surface area</li> </ul>	lecture	cylinder , cone	
	of a right		sphere and	
	circular		volume of cube ,	
	cylinder,		cuboid , cylinder ,	
	cone and		cone and sphere	
	sphere			
	<ul> <li>Volume of</li> </ul>			
	right circular			
	cylinder,			
	cone and			
	sphere			
1	I	l	I	ı

December	10. Circles	Students will be able to recognise  Terms related to circles Angle subtended by a chord at a point Perpendicul ar from the centre to a chord Circle through three points Equal chords and their distances from the centre Cyclic quadrilateral	Smart class Concept map	Students will be able to realise the terms related to circles, angle subtended by a chord at a point, perpendicular from the centre to a chord, circle through three points, equal chords and their distances from the centre, angle subtended by the arc of a circle and cyclic quadrilaterals	Oral questions Quiz Classed ge activity
	14. Statistics	Students will be able to understand  Collection 9 of data Presentation of data Graphical representation of data Measures of central tendency	Pose questions Interactive lecture	Students will be able to realise collection of data , presentation of data , graphical representation of data and measures of central tendency	• Puzzles • quiz
January		REVISION AND PT- 3 EXAMINATION MODEL EXAMINATION			
MARCH		ANNUAL EXAMINATION			

Subject: Malayalam

Month	Topic	Short term outcome	Pedagogical Practice	Long term outcome
une	1.വിശ്വം ദീപമയം	പാരായണം,ആധുനിക്ട് കവിത്രയത്തെക്കുറിച്ച് അറിയുന്നു	കൂറിപ്പ് തയ്യാറാക്കൽ പാരായണം , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	നമ്പയുള്ളവരാവാൻ കഴിയുന്നു :
	2. കടത്തുകാർ	നോവലിസ്റ്റിനെ പരിചയപ്പെടുന്നു അക്ഷരസ്ഫുടതയോടെ വായിക്കുന്നു	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു.	പ്രകൃതിയെ നിരീക്ഷിക്കാനും പഠിക്കാനും പ്രാപ്തരാകുന്നു
luly	3. കാളകൾ	കവിതാപാരായണം കവിപരിചയം	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു.	അധാനത്തി. <b>അൻ</b> മഹത്വത്തെക്കുറിച്ച് മനസ്സിലാക്കുന്നു
-	4. കൂപ്പിവളകൾ	കഥാസ്വാദനം ,കഥാകൃത്തിനെ പരിചയപ്പെടൽ	പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	വൈകല്യമുള്ളവരെ പരിഗണിക്കാൻ കഴിയുന്നു
August	ട.അമ്പാടിയിലേക്ക്	പ്രാചിനകവിത്രയത്തെക്കുറിച്ച് അറിയുന്നു	പാരായണം പാരാനുബന്ധപ്രവർത്തങ്ങൾ	ഭക്തിപ്രസ്ഥാനത്തെക്കുറിച്ചും കൃഷ്ണഗാഥയേക്കുറിച്ചും അറിവുള്ളവരാകുന്നു.
September	6. കൊടിയേറ്റം	വായന ,അടൂർ സിനിമകളെ അറിയൽ	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു.	സിനിമയുടെ സാഹിത്യമായ തിരക്കഥയെക്കുറിച്ച് അറിയുന്നു

January	10. സഫഖമിയാത്ര	കവിത ഈണത്തിൽ ചൊല്ലുന്നു . കവിയെ പരിചയപ്പെടുന്നു	പാരായണം, പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	ശുഭാപ്തി വിശ്വാസമുള്ളവരായിത്തിരുന്ന -
December	9. തേൻ വരിക്ക	വായ ന കഥാകൃത്തിനെ അറിയൽ	നിരിക്ഷണക്കൂറിപ്പ് തയ്യാറാക്കൽ	പ്രകൃതിസ്നേഹം വളരുന്നു
November	8.നാലിതൽപ്പൂവ്	കവിതാപാരായണം കവിപരിചയം	അനുയോജ്യമായ താളത്തിൽ അവതരിപ്പിക്കുന്നു	ഇതിഹാസങ്ങളെക്കുറിച്ച് അറിയുന്നു
October	7. ആശാൻ എന്ന മാനി	വായന ,ലേഖകനെ അറിയൽ	പാഠാനുബന്ധപ്രവർത്തനങ്ങൾ	ആശാനെക്കുറിച്ച് അറിയുന്നു

## **Annual Pedagogical Plan 2020-2021**

Class X

**Subject: Science** 

IUNE		outcomes	i		
IUNE		outcomes			outcomes
	Electricity	Students will be able to a) Understands electric current and circuit potential and potential difference b) Ohms Law c) Factors affecting resistance d) Combination of resistors	Experiment Problem solving Smart class	Assignment Redrawing the electric circuit Oral test	Students will be able to  a) Interprets the circuit diagrams and correct the fault in circuits b) Develop scientific thinking
	Chemical reactions and equations	Students will be able to  a) Understand chemical equations b) Types of chemical reaction c) Oxidation and reduction	Observation Identification Discussion	Oral test Problem solving Writing chemical reaction	Students will be able to  a) Write chemical equation with the help of symbols and formula of compounds  b) Understand observation in

Life processes	Students will be able to a) Identify basic concept of nutrition, respiration, transportation, and excretion in animals and	Discussion	Chart making	carried out and draw conclusion based on the types of chemical reaction c) Identify reducing and oxidising agent  Students will be able to a) Identify vital life processes b) Describe the different modes of
	animals and plants	Role play	Chart making Oral test	modes of nutrition
	piants	Audio-visual aid	Pen-paper test	nation
	Students will be able to			
	learn			
	a) Control and co-			
Control and co-	ordination in			Students will be able to
ordination	animals and			<ul> <li>a) Recognize the</li> </ul>

July		plants b) Describe neural co-ordination and physiology of reflex action c) Illustrate conduction of nerve impulse with a diagram d) Hormones and their effects	Discussion Audio-visual aid	Cross word puzzle Oral test Pen-paper test	need for control and co- ordination in the body of various organisms
	Magnetic effects of electric current	Students will be able to  a) Describes magnetic field and field lines b) Magnetic field due to various conductors and field patterns c) Discuss principle and working of electric motor  Students will be able to learn	Lecturing Drawing figures Hands on learning Problem solving Smart class	Pen-paper test Mapping magnetic field lines	Students will be able to a) Conduct simple investigation to seek answers to queries

		a) Acid , base properties			
	Acids, bases and salts	- "			Students will be able to a) Improve
			Discussion	Puzzle solving	scientific
			Observation	Oral test	attitudes
			Smart class	Assignment	<ul><li>b) Define acids,</li></ul>
					band bases
					with examples
					c) Classify them
					as strong and
					weak
					d) Identify pH
					importance in
					our day to-day life and
					different salts
					importance also
					also
	PERIODIC TEST -I	Students will able to			
		a) Defines			
		electromagnetic			
		induction			Students will be able to
		b) Discuss working			a) Appreciates the
August	Continuation of	of electric	Interactive lecturing	Drawing and labelling	scientific
	Magnetic effect	generator	Group discussion	MCQ	discoveries
		c) Discuss domestic	Smart class	Oral test	b) Construct
		house hold			models

Metals and Non-	Students will able to  a) Define metals, non-metals and metalloids b) Understand physical and chemical properties of metals and non- metals	Interactive lecturing Discussion Smart class	Oral test Problem solving	Students will be able to a) Analyse the properties of metals and non-metals and their uses in our daily life
Our environment	Students will able to learn  a) Ecosystem, environmental problems, ozone depletion, waste production and their solution  Students will able to	Discussion Demonstration	Chart making Pen-paper test	b)Scientific observation  Students will be able to a) Analyse reasons for ozone depletion b)Interpret management of garbage c) Classify the various components and their inter-relationships in an

		a) Differentiate			ecosystem
		conventional and			
		non-conventional			
		sources of energy			
		b) Understand the			
		advantages and			
		dis-advantages of			Students will be able to
		-			
September	Sources of energy	various energy			a) Makes effort to
					protect energy
		Students will able to		Drawing	resources and
		a) Understand the	Discussion	Concept maps	applies their
		properties of	Seminar	Oral test	scientific
		ionic compounds	Smartclass		knowledge to
		b) Explain the			reduce
		process of			wastages of
		corrosion and			energy
		conditions with			
		preventive			
		measures			
		Students will able to			Students will be able to
	Continuation of Metals	a) Characterize the			a) Make
	and non-metals	human			preventive
		reproductive	Smart class	Problem solving	measures of
		organs	Discussion	MCQ	corrosion
		b) Types of	Lecturing		b) Analyse the
		fertilisation in			uses of ionic
		animals			compounds
		dililiais			compounds
					Students will be able to
					a) Learn about
					functioning of
		1			ranctioning of

	How do organisms reproduce	Students will able to a) Understands- reflectionof light,	Group discussion Smart class	Labelling Pen-paper test	the various organs in the male and female reproductive systems
		laws of reflection, Mirror formula			b) Understand the process of fertilisation
		b) Image formation by spherical mirrors c) Sign conventions d) PERIODIC TEST-II			c) Various contraceptive methods
					Students will be able to
October	Light-Reflection	d)Refraction of light e)Determine refractive index of medium f) Image formation by lenses g) Lens formula and sign conventions	Experiment Discussion Drawing figures	Oral test Assignment Pen-paper test	a) Applies the scientific concept in problem solving b) Able tothink critically
		Students will able to			
		a) Understand carbon and its alloys b) Covalent	Interactive lecturing,	Practical based MCQ	Students will be able to a) Applies the scientific concept in
	Refraction	compounds	drawing figures	Assignment	problem

		roblem solving Pen-paper test	solving b) Able to think critically
Carbon and its compounds	Q H	Problem solving Oral test Quiz Problem solving Hands of learning Smart class	Students will be able to a) Analyse the importance of carbon compounds in our life b) Improve scientific observation
Management of natural resources	, ,	Discussion  Smart class Oral test Assignment Chart making	Students will be able to a) Know to take steps to conserve natural resources b) Awareness about population c) Need of conservation of fossil fuels

		Studen	ts will able to			Studen	ıts will be able
			Learn Laws of			know	and the same of th
		-1	inheritance of				Working
November	Continuation of Carbon		traits			-,	principle of the
	and its compounds	ь)	Sex				soap and
		-,	determination	Observation	Oral test		detergents
		c)	Evolution and	Discussion	Problem solving	ы	Aware
		-1	classification	Lecturing	- Toolean Solving		reactions of
		d)	Fossils and	Smart class			hydro carbons
		۵,	human evolution	ornar class			nyaro carbons
			naman evolution				
		Studen	ts will able to				
			Realise the				
		,	structure of eye				
			and its defects of			Studen	its will be able to
			vision			know	
		ь)	Refraction of			a)	Mendel's Law
			light through				of inheritance
	Heredity and Evolution		prism			b)	Aware of their
	-	c)	Dispersion and			_	predecessors
			scattering of light	Demonstration			and successors
				Discussion	Oral test		
				Smart class	Cross word puzzle		
					Pen-paper test		
		a)	Explain different				
			laws related to			a)	Exhibits value
			periodic table				of co-operation
		b)	Know			b)	Acquires the
			Mendeleev's				knowledge of
	Human eye and		Periodic Table				importance of
December	colourful world		and Modern	Drawing figures,			eye
			Periodic Table	experiment,hands on	Quiz		

	Periodic classification of elements	difference c) Understand the arrangements and their properties of different elements	Demonstration Smart class Lecturing Observation	Assignment Puzzle solving  Cross word puzzle Pen-paper test Listing	a) Understand periodic table and elements arrangements
		I	I	I	
January	PERIODIC TEST III				
February	Revision- Model exam				
March	Annual Examination				

**Subject: Social Science** 

Month	Topic	Learning objective	Pedagogical Practices	Learning Outcome
June	The French     Revolution     Napoleonic Code     Liberal Nationalism     The age of     Revolution(1830- 1845)     The making of     Germany     Unification of Italy     The strange case of     Britain     Visualizing Nations	Understand the way the idea of nationalism emerged.     To identify the functions of nation states.	Deductive method     Demonstration	Analyze the impact of the French Revolution on other European nations     Learn about the unification of Germany and Italy
	2. The story of development      What development     promises      Income and other     goals      How to compare     different	Understand the importance of quality of life and sustainable development	Discussion method     Activity method	Compare the levels of development of different countries     Examine the criteria to assess the development of regions

July	Countries     Public facilities     Sustainability of development  1. Power Sharing     Case studies of Belgium and Sri Lanka     Why power sharing is desirable?	Familiarize with Centrality of Power sharing in a Democracy	Explanation technique     Questioning technique	Elaborate the meaning and advantages of power sharing     Know about the ethnic composition of Sri Lanka and Belgium
	2. Resource and Development  Development of resources  Resource planning Land utilization Land degradation Conservation Soil as a resource	Understand the value of resources and need for their judicious utilization and conservation	Discussion method     Demonstration     method	Examine the Land use pattern of India     Define a resource
	What is Federalism     What makes India a     Federal Country?     Decentralization of India	Analyze Federal provisions and institutions     Explain decentralization in rural and urban areas	Inductive method     Discovery method	Mention 3 tiers of Local Government     Explain key features of Federalism
August	Nationalism in India     First world war     Khilafat and non cooperation     Towards civil	<ul> <li>Analyze the nature of the diverse social movements of the time</li> <li>Appreciate ideas</li> </ul>	Lecture method     Inductive method	Trace the origin and growth of Nationalism in India Recognize the causes for the sense of

	disobedience  Sense of collective belonging  Forest and wild life  Bio-diversity Flora and Fauna of India	promoting pan India belonging	Open Text book method	collective belonging
	3. Water resources  Multipurpose river project and integrated water resource management			
	4. Sectors of Indian economy  Comparing the 3 sectors  Primary, Secondary and Tertiary Sectors in India  Sectors in terms of ownership (public and private)	Identifying the major employment generating sectors      Reason out the Government investment in different sectors of economy	Lecture method     Deductive method	Identify the differences between different sectors of our economy     Understand the rising importance of the tertiary sector     Examine the objective NREGA
September	Money and Credit     Money as a medium of exchange     Loan activities of banks     Terms of Credit     Formal and informal sector credit in India	Understanding money as economic concept     Analyze the role of financial institutions from the point of view of day to day life	Interactive method     Group discussion	Limitations of Barter system     Recognize the modern forms of money
	Democracy and     Diversity     Difference,     similarities and	Analyze the relationship between social division and political competition with reference to Indian	Lecturing method	Know the origin of social differences     Differentiate between overlapping

	<ul> <li>divisions</li> <li>Politics of social division</li> </ul>	situation		and cross cutting differences
October	Types of farming     Cropping pattern     Technological and institutional reform     Impact of Globalization on Agriculture	Explain the importance of agriculture in national economy     Identify various types of cropping patterns in India	Inductive method     Smart Class	List the cropping seasons in India     Describe types of farming practiced in India
	Gender, Religion and Caste     Gender and politics     Caste and politics     Religion,     communalism and piolitics	Develop a gender perspective on politics     Recognize the enabling and disabling effects of caste in politics	Role play     Group discussion	Learn about women's representation in Indian politics     Appreciate the term secular state
	3. Popular struggle and movement Popular struggle in Nepal and Bolivia	Understand the vital role of people struggle in the expansion of Democracy	Project method	Analyze the movement of Democracy in Nepal     Recognize pressure groups
November	Print Culture and the modern world     First printed book     The print revolution and its impact     India and the world of print     Print and censorship	Identify the link     between print culture     and the circulation of     ideas     Familiarize with news     paper debates on     important events and     issues in the past	Questioning technique     Activity method     Discussion method	Establish the link between print culture and circulation of ideas examining the impact of print revolution in India

	What is mineral?     Ferrous and non-ferrous mineral     Conservation of mineral     Energy resource	Explain the importance of mineral and energy resource in India     Feel the need for their judicious utilization	Experimentation Deductive method Map study	Know about the different modes of occurrences of minerals     Distinguish between metallic and metallic mineral     Express ideas for conserving energy
	3. Political parties Why do we need political parties? How many parties should we have? National parties and state parties	<ul> <li>Analyze party system in Democracy</li> <li>Introduction to major political parties</li> </ul>	<ul> <li>Explanation on functions of political parties</li> <li>Group discussion</li> </ul>	Understand the meaning of political parties     Know functions of political party     Compare the different party system in India
December	1. The age of industrialization  Before the industrial revolution  Hand labour and steam power  Industrialization in the colonies  Factories coming up	Familiarize with proto-industrial phase and early factory system     Enable them to understand industrialization in the colonies with reference to textile industry	Discovery method     Experimental method	<ul> <li>Assess the situation in England before the industrial revolution</li> <li>Understand pace of industrial change in Britain</li> <li>Understand the peculiarity of industrial growth</li> </ul>
	Outcomes of     Democracy     How do we assess     Democracy's     outcome?     Economic growth and     development	Evaluate the functioning of Democracies in comparison to alternative forms of Government     Distinguish between	Activity method     Smart Class	Expect Democracy to be accountable, responsive and legitimate     Analyze the role of Democracy in the economic growth and

	<ul> <li>Accommodation of social diversity</li> <li>Dignity and freedom of citizen</li> </ul>	sources of strength and weakness of Democracy		development
	3. Manufacturing industries  Importance of manufacturing  Contribution of industry to national economy  Classification of Industries  Control of environmental degradation	Bring out the importance of industries in national economy     Discuss the need for a planned industrial development	Discussion     Debate     Lecturing	List the factors contributing into the location of industries     Understand the classification of industries-agro based and mineral based     Relate between industrial development and increase in pollution
January	1. Globalization and Indian economy  Interlinking production across countries  Foreign trade and investment  What is Globalization?  World Trade Organization	Explain the working of Global economic phenomenon	Problem solving method     Inductive method	Describe the integration of market by foreign trade     Assess the impact of globalization on India     Discuss the impact of liberalization
	2. Challenges to Democracy Foundational challenge Challenge of Expansion Challenge of	Thinking about challenges Promote an active and participatory citizen	Project method	Identified the challenges faced by democratic countries     Express your ideas in redefining democracy

deepening			
3. Consumer rights Consumer movemen India RTI Act COPRA Right to seek redress	as a consumer  • Legal measures available to protect	Project method	Enhance awareness of consumer rights Understand legal provisions for redressal
4. Life lines of Nation economy  Transport-Railw Roadways, Pipe and waterways  Communication International train	importance of ay, ines communication in the ever shrinking world Understand the role	Group discussion Activity method Map study	List the different means of communication-personal and mass     Understand the importance of transport, communication and trade for the country's economical growth     Appreciate the tourism industry in India

**Subject: Maths** 

Month	Topic	Learning Objectives	Pedagogical practices	Learning outcomes	Assessment strategies
			process		J. L.
June	1.Real Numbers.	Students will be able to understand  Euclid's Division lemma, Fundamental Theorem of Arithmetic Revisiting Irrational Numbers Rational Numbers Rational Expansion etc.  Students will be able to recognise Geometrical meaning of the	Smart class, interactive lecture ,pose questions	Students will be able to realise Euclid's Division Lemma and fundamental theorem of arithmetic and Irrational n Numbers	Oralque stions     Pen paper test  Pen
		zeroes of a polynomial Relations between zeroes and coefficient of a polynomial Division Algorithm for polynomials	Assignment, smart class	Students will be able to realise geometrical meaning of the zeroes of a polynomial and division algorithm for polynomials	paper test • Quiz • Worksh eet
	3. Pair of linear Equations in two variables	Students will be able to develop  Pair of linear equation in two variables Graphical method of solution of a pair of linear equations Algebraic	Concept map , smart class	Students will be able to understand graphical and algebraic methods of solving a pair of	Pen     paper     test     Classed     ge     activity

	•	•	•	T	
		method of solving a pair of linear equations • Equations reducible to a pair of linear equations in two variables		linear equations in two variables	
July	4. Quadratic Equations	Students will be able to understand  • Quadratic equations by factorisation • Solution of a quadratic equation by completing the square • Nature of roots	smart class,realia	Students will be able to realise the factorisation and solution of quadratic equations and nature of roots of a quadratic equation	<ul> <li>Pen paper test</li> <li>Mind mappin g</li> </ul>
	5. Arithmetic Progression	Students will be able to realise  • Arithmetic progression • Nth term of an AP • Sum of n terms of an AP  REVISION AND PT- 1 EXAM	Smartclass, concept map	Students will be able to realise nth term and sum of n terms of an AP	Pen paper test Mind mappin g
August	6. Triangles	Students will be able to recognise  Similar triangles Similarity of figures Criteria for similarity of triangles Areas of similar triangles Pythagoras theorem	Smart class, interactive lecture	Students will be able to realise similarity of triangles, criteria for similarity of triangles, areas of similar triangles and Pythagoras theorem	Puzzles     Pen     paper     test

	7. Co-ordinate Geometry	Students will be able to classify  Distance Formula Section Formula Area of Triangles	Classedge activity, Assignment	Students will be able to realise distance formula, section formula and area of triangles	Penpap er test Oral questio ns
September	8. Introduction to Trigonometry	Students will be able to recognise  Trigonometric Ratios  Trigonometric ratios of some specific Angles  Trigonometric ratios of complementar y angles  Trigonometric Identities	Smart class,discussi on,classedge activities	Students will be able to realise trigonometric ratios, trigonometric ratios of some specific angles, complementary angles and trigonometric identities	<ul> <li>Pen paper test</li> <li>Quiz</li> <li>Group activity</li> </ul>
	9. Some Applications of Trigonometry	Students will be able to analyse  Introduction Heights and distances	Smart class, group discusssion	Students will be able to realise the heights and distances using trigonometric ratios	<ul> <li>ork sheet</li> <li>Group discussi on</li> </ul>

October	10. Circles	To make the students to aware about  Tangent to a circle Number of Tangents from a point on a circle  REVISION AND PT- 2 EXAM	Smart Class, Discussion	Students will be able to realise tangent to a circle and number of tangents from a point on a acircle	Oral questio ns     Pen paper test
	11. Constructions	Students will be able to develop  Division of a line segment Construction of Tangents to a circle	Smart class Concept map	Students will be able to realise the division of a line segment and construction of tangent	<ul> <li>Mind mappin g</li> <li>Pen paper test</li> </ul>
November	12.Areas related to circles	Students will be able to understand  Perimeter and area of a circle Areas of sector and segment of a circle Areas of combination of plane figures Students will be able to understand	Smart class Discussion	Students will be able to realise the perimeter and area of a circle ,areas of sector and segment of a circle and areas of combination of plane figures	<ul> <li>Classed ge activity</li> <li>Summar ising</li> </ul>
		Probability—A     theoretical     approach	Interactive lecture, realia		• Quiz

December	13. Surface	To make the students			
	areas and	aware about		Students will be	
	14. Statistics	Surface areas of a combination of solids     Volume of combination of solids     Conversion of solid from one shape to another     Frustum of a cone Students will be able to develop     Mean of grouped data     Mode of grouped data     Median of grouped data     Median of grouped data     Graphical representation of cumulative frequency distribution	Smart class ,realiaconceo t map  Smart class, discussion	able to realise the surface areas and volume of a combination of solids, conversion of solid from one shape to another and frustum of a cone  Students will be able to realise the mean, median and mode of a grouped data and representation of cumulative frequency distribution	<ul> <li>Oral questions</li> <li>Puzzles classedge activity</li> <li>Oral questions</li> <li>summer ising</li> </ul>
January		REVISION AND PT- 3 EXAMINATION			
February		MODEL			
		EXAMINATION			
MARCH		ANNUAL			
		EXAMINATION			

**Subject: Malayalam** 

Month	Topic	Short term outcome	Pedagogical Practice	Long term outcome
June	1. ലക്ഷ്മണ സാന്ത്വനം	പാരായണം പ്രാചിനകവിത്രയത്തെക്കുറിച്ച് അറിയുന്നു	പാരായണം , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	കോധം പരിതൃജിക്കണം എന്ന് മനസ്സിലാക്കുന്നു
	2. കടൽത്തിരത്ത്	കഥാസ്ഥാദനം , കഥാകൃത്തിനെ അറിയൽ	നാകേവാതരണം പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	പിതൃസ്നേഹം തിരിച്ചറിയുന്നു
July	3. പ്രിയദർശനം	കവിത ചൊല്ലുന്നു , സ്നേഹത്തെക്കുറിച്ച് അറിയുന്നു ,	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	ആധ്യാത്മിക പ്ര ദർശനത്തെക്കുറിച്ചു അറിയുന്നു
1+	4. യുദ്ധത്തി <i>മറ</i> റ്റ് പരിണാമം	വായന , നിരൂപണത്തെക്കുറിച്ച് അറിയുന്നു	സംവാദം	യുദ്ധം സർവ്വനാശകാരിണി ആണെന്ന് അറിയുന്നു
August	5. ഓണമുറ്റത്ത് 🤝	ആസ്ഥാണം , നിരീക്ഷണ പാടവം , വ്യാകരണം വൈലോപ്പിള്ളിയെക്കുറിച്ച് അറിയൂന്നു	നിരീക്ഷണക്കൂറിപ്പ് തയ്യാറാക്കൽ	ഒരുമയുടെ മഹത്വം മനസ്സിലാക്കുന്നു

September	6. ആമോവി <b>ൗ എ</b> വെളിപാടുകൾ	വായന ,മനുഷ്യജീവിതത്തിലെ അവസ്ഥകളെക്കുറിച്ച് അറിയുന്നതിന്	അന്യഭാഷാ കൃതികളുടെ വായന , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു.	പ്രത്യാശയാണ് ജീവിതത്തെ മൂന്നോട്ട് നയിക്കുന്നത് എന്ന തിരിച്ചറിവ്
October	7. പണയം	ദാരിദ്ര്യം ,മനുഷ്യരുടെ കഷൂപ്പാട് എന്നിവയെക്കുറിച്ച് അറിയുന്നതിന്	പാഠാനുബന്ധപ്രവർത്തനങ്ങൾ	പ്രിയപ്പെട്ട വസ്തുക്കളോടുള്ള ആത്മബന്ധത്തെ തിരിച്ചറിയുന്നു
November	8. അവാമധം	മനുഷ്യ <b>റ്റെൻ</b> സർഗ്ഗശേഷിയുടെ വിജയത്തെക്കുറിച്ച അറിയുന്നതിന് പാരായണം ,കവി പരിചയം	താരതമു പഠനം അനുയോജ്യമായ താളത്തിൽ അവതരിപ്പിക്കുന്നു	സ്വന്തം സർഗ്ഗശേഷി തിരിച്ചറിയുന്നതിന്
	9. കൊച്ചുചക്കരച്ചി	ലേഖനവായന , ആസ്ഥാദന ശേഷി വളർത്തുന്നതിന്	നിരീക്ഷണക്കൂറിപ്പ് തയ്യാറാക്കൽ	പ്രകൃതിസ്നേഹി ആവുന്നതിന്
December	10. അമ്മയുടെ എഴുത്തുകൾ	ഭാഷാസ്നേഹം കവിത ഈണത്തിൽ ചൊല്ലുന്നു . കവിയെ പരിചയപ്പെടുന്നു	പാരായണം പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	മാതാവി <i>ന്റെ</i> യും മാത്യഭാഷയുടെയും മഹത്വം മനസ്സിലാക്കുന്നു
January	11. ചട്ടമ്പി സ്വാമികൾ	ചട്ടമ്പിസ്ഥാമികളെക്കുറിച്ചും അദ്ദേഹത്തി <b>കന്റെ</b> പ്രവർത്തനങ്ങളെക്കുറിച്ചും അറിയുന്നതിന്	പാഠഭാഗ വായന പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	സാമൂഹ്യപ്രവർത്തനങ്ങളിൽ ഏർപ്പെടുന്നതിന്
February	പുനരാവർത്തരം			
March	വാർഷികപ്പരിക്ഷ			



MONTH	TOPIC	SHORT TERM	PEDAGOGICAL	LONG - TERM GOALS
		GOALS	PRACTICES	LEARNING OUTCOME
	1. A letter to God	Enable to	Letter writing, Story	At the end of the lesson students learned how to respect
	2. Dust of Snow	understand Faith in God	writing	and protect nature.
		The importance of		
	3. Fire & Ice	nature in our life.	Speaking & listening Writing-formal letter	Developed, kindness and love
		The importance of		
JUNE	1. A long walk to freedom	human emotions.	Letter writing, Story writing	Students glorify the value of freedom.
	The definite article –	Value of freedom		
	Homophones			Recognize and developed good qualities among teenagers
	1. A triumph of surgery			
	2. The thief 's story			
		Proper dealing		
		How goodness		
		corrects a teenager		
	A tiger in the Zoo	Value of Freedom	Article writing Story writing,	Understand the value of freedom
	Stories about flying	The necessity of	letter writing,	
	1. His first flight	basic values	paragraph writing	Realised the necessity of basic values.
	2. Black aeroplane			
JULY	The midnight visitor	Value of true	Collage work based on	
		professionalism	freedom	Identified the value of true professionalism

	A question of trust	Value of trust in human relationship.	Speaking & Listening	Developed the quality of respect and trust in human relationship.
	Footprints without feet	The negative effect		Students understood the negative impact of science.
AUGUST	How to tell wild animals	of Science Humour of animals.	Writing articles. Letter writing.	The poem educates the students about wild animals.
	The ball	Pain of loss		Through the poem the students understood the grief and pain of a boy who has lost his ball.
	From the dlary of Anne Frank	Teacher student	Diary entry	Students appreciate and recognise the good and healthy
		relationship		understanding between teachers and pupils.
SEPTEMBER	Amende	How to cope up with the children's	Letter writing	
SEPTEMBER		growing up	Story writing	Highlights the struggle faced by the child and how to cope with it.
	The making of a Scientist	Values that ensure	Story Williams	WALL IN
		human progress		Making of a scientist depicts the certain values that ensure
				human progress and contentment.
	The hundred dresses Pert-I	Value of character	Letter writing, Article	Children understood the moral lesson of what a man
	The hundred dresses Part -II	treits	writing Story writing	should be and they can display great character traits.
			Story writing	
OCTOBER	Animals	Value of being		Animals should also be respected and loved.
		happy and	Book review	
		contented		
	The necklace	Value of Honesty		One should be content with what life gives us.
	Rearranging the words			
	Reported Speech.			
	Glimpses of India	Incredible India	Group discussion,	Children glorify the unity in diversity and this gives a sense

	1. A baker form Goa		collecting information	of pride and strengthens national integration.
	2. Coorg		about Coorg.	
	3. Tee from Assem		Letter writing	
	The trees	The Importance of	Ustening	How we can protect the trees and forest since it slowly
NOVEMBER		trees		disappearing from the earth.
	The hack driver	How to make life a		We should first judge everything before we start accepting
		sweet experience		them.
		on earth		
	Milbil the Otter	Preventing cruelty		Animals are an integral part of human life.
		to animais		
	For			
	Madam rides the Bus	Mystery of life and	Writing travelogue	Good manners - key to make life happy.
		death	Writing a nametive	
	The tale of custard the	All that elitters is	poem	The poem carries a simple meaning that all that gitters is
DECEMBER	dragon	not gold	poem	not gold or never judges a thing by its appearance.
DECEMBER	Gragon	not gold	Debate	not gold or never judges a tring by its appearance.
	The sermon at Banaras	Value of peace	Debate	Children realised the true nature of humans who measure
	For Anne Gregory	Love and		love through the outer beauty only. But this outer beauty
		spirituality		is transient.
	Gap filling/Error correction			
	The proposal	Humour and fun	Dialogue writing	Humour and fun are essential for making life less stressful.
			Article writing	
	Bholl	The value of	Letter writing, Story	Understood the value of education.
		education	writing	
	The book that saved the	Save planet earth		Values make life a sweet experience for all living beings,
	earth			together with the value of books.
JANUARY	Grammar and writing			
FEBRUARY		•	•	

MARCH

## **Annual Pedagogical Plan 2020-2021**

Class XI

**Subject: Biology** 

MONTH	TOPICS	SHORT -TERM LEARNING OUTCOMES	PEDAGOGICAL STRATEGIES	RESOURCES	PRACTICALS	ASSESSMENT STRATEGY
JUNE	(8) Cell: The unit of life Cell theory; Cell structure- Eukaryotic and prokaryotic cell- cell all, cell membrane; Cell organelles- ER, Golgi bodies, lysosomes, vacuoles, mitochondria, plastids, microbodies, cytoskeleton, cilia, flagella, ribosome, centrioles (Ultra structure and function), nucleus.	➤ Recognise the different parts of the cell ➤ Compare between the plant and animal cell	➤ Concept map ➤ Discussion	➤ AV aids ➤ Text book ➤ Class edge	➤ Visualise the models of cells and its organelles	➤ Pen- paper test ➤ Oral test
	(10)Cell cycle and cell division Cell cycle, mitosis, meiosis –significance	<ul> <li>Classify the different types of cell division</li> <li>Understands about the growth and reproduction</li> </ul>	➤ Interactive lecture method ➤ Content focussing ➤ Hands on training	➤ Textboo k ➤ Black board ➤ AV aids	Study of mitosis in onion root tip cell	➤ Oral test ➤ Quiz

	(15)Plant growth and development Seed germination; conditions of growth rate; conditions of growth, differentiation, dedifferentiation, dedifferentiation; sequence of developmental processes; growth regulators- auxin, gibberellin, cytokinin, ethylene, ABA; Seed dormancy; vernalisation; photoperiodism	in living organisms  > Understands the concept of unlimited growth in plants > Analyse the different parts of plants	➤ Teacher centered ➤ Observation method	> PPT > Black board > Class edge		➤ Pen- paper test ➤ Oral test ➤ projec t
JULY	(5)Morphology of flowering plant Internal Morphology of flowering plants	➤ understands about the different parts of flowering plants ➤ classify the different types of leaves, flowers and ➤ families	➤ field study ➤ demonstratio n	➤ AV aids ➤ Black board	➤ Dissection and display of floral whorls of each of the families of flowering plants	➤ Pen-paper test ➤ Oral test

	(6) Anatomy of flowering plants Anatomy and functions of different tissues	identify the difference between dicot and monocot plant  understands the importance of vascular bundles in plants	> observation method > students oriented	➤ Text book ➤ Black board ➤ Class edge	➤ Mind mapping ➤ Flow chart
	(7)Structural organisation in animals Animal tissues; Morphology and functions of different systems( digestive, circulatory, respiratory, nervous, reproductive), Insect(cockroach)	classify the different types of tissues in animals understand the importance of each tissues Revision- 1st PT exam	> project > concept mapping	> AV- aids > Science cards	➤ Pen-paper test ➤ Oral test
AUGUST	(11)Transport in plants Movement of water; gases and nutrients, cell to cell	<ul> <li>Understand the importance of conducting tissues in plants</li> </ul>	➤ Interactive learning method ➤ Concept map	➤ Textbook ➤ Blackboard ➤ Class edge	➤ Pen- paper test ➤ Oral test

	transport, diffusion, facilitated diffusion, active transport, plant water relations, imbibition, osmosis, water potential, Plasmolysis; long distance transport of water, Uptake and translocation of mineral nutrients	Analyse the different environmental factors needed for translocation				
	(4) Mineral nutrition Essential minerals, micro and macro nutrients; deficiency symptoms, mineral toxicity, study of hydroponics, metabolism, nitrogen cycle, biological nitrogen fixation	<ul> <li>Students         understand         about the         absorption         mechanism of         elements in         plants</li> <li>Understand how         nitrogen is         recycled back to         the atmosphere</li> </ul>	➤ Teacher centered ➤ Project ➤ Discussion method	➤ Blackboard ➤ Class edge		➤ Oral test ➤ Pen-paper test
SEPTEMBE R	(9)Biomolecules Chemical constituents of living cell: biomolecules, structure And function of proteins, carbohydrates, lipids, nucleic acids; Enzymes- types, properties, enzyme action.	➤ Student identify the different types of metabolic reactions taking place in organisms	➤ Content focussing ➤ student oriented	➤ black board  ➤ textboo k ➤ audio visual aids	➤ test for detection of sugar,starch,protei ns and fats	<ul> <li>▶ pen-paper test</li> <li>▶ oral test</li> </ul>

(13)Photosynthesis Photosynthesis, site of photosynthesis, pigments involved, photochemical and biosynthetic phases, cyclic and non cyclic photophosphorylation, chemiosmotic hypothesis, photorespiration; C3 and C4 pathways.	<ul> <li>Students         <ul> <li>analyse the</li> <li>different</li> <li>parts of</li> <li>photosyntheti</li> <li>c apparatus</li> </ul> </li> <li>They         <ul> <li>understand</li> <li>the different</li> <li>types of</li> <li>photosynthes</li> <li>is</li> </ul> </li> </ul>	> flow chart > observation method	➤ textbook  ➤ class edge  ➤ PPT	> chart making > pen-paper test > model making
(14) Respiration in plants Exchange of gases; cellular respirationglycolysis, fermentation, TCA cycle, electron transport system, amphibolic pathways; respiratory quotient.	<ul> <li>Students         <ul> <li>analyse the</li> <li>different</li> <li>organelles</li> <li>involved in</li> <li>respiration</li> <li>process</li> </ul> </li> <li>They classify         <ul> <li>the different</li> <li>aerobic and</li> <li>anaerobic</li> <li>respiration</li> </ul> </li> <li>Revision- 1st</li> <li>mid term</li> <li>exam</li> </ul>	<ul> <li>discussion method</li> <li>observation method</li> <li>teacher centered</li> </ul>	book class edge black board	<ul> <li>pen-paper test</li> <li>chart making</li> </ul>

OCTOBER	(18) Body fluids and circulation Composition of blood, blood groups, coagulation of blood, composition of lymph, human circulatory system; Disorders of circulatory system.	>	Students analyse the structure of circulatory system They classify the different types of blood groups and cells	A A	Observation method Interactive lecture method	* * *	Class edge Textbook Blackboard	* * *	Pen- paper test Oral test Label the parts of circulator y system
	(17) Breathing and exchange of gases Respiratory organs in Humans, mechanism of breathing and regulation in humans-exchange of gases, transport of gases, regulation of respiration, respiratory volume; disorders related to respiration	>	Students identify the different organs involved in breathing They understand the mechanism of breathing	* *	Discussion method Observation method	** *	Class edge Black board textbook	>	Label the parts of human respirator y system Oral test
	(16) Digestion and absorption Alimentary canal, digestive glands, digestive enzymes, gastrointestinal hormones, peristalsis, absorption and assimilation-proteins, carbohydrates and fats; calorific values; egestion;	*	Analyse the different parts of alimentary canal Understand the mechanism of the enzymatic function in digestion		Learner centered Concept map		textbook class edge	>	Pen-paper test Oral test

	nutritional and digestive disorders-PEM, Constipation, vomiting, jaundice, diarrhoea					
NOVEMBE R	(19)Excretory products and their elimination Modes of excretion, human excretory system; Regulation of kidney functions; role of other organs in excretion; disorders.	<ul> <li>Students will be able to recognise the different parts involved in the excretory product</li> <li>They understand the process of urine formation and osmoregulation</li> </ul>	➤ Project ➤ Observation method ➤ Discussion method	➤ Textbook ➤ Class edge ➤ Blackboard		➤ Chart making ➤ Pen- paper test
	(20) Locomotion and movement Types of movement; skeletal muscles; skeletal systems; joints; disorders of muscular and skeletal system	<ul> <li>Students classify the different types of muscles involved in locomotion</li> <li>They understand the mechanism of muscle contraction</li> </ul>	➤ Group discussion ➤ Interactive lecture method	➤ Class edge ➤ textbook	Study of human skeletal system and different types of joints with models and av aids	➤ Pen- paper test ➤ Oral test
	(21) Neural control and coordination Neurons and nerves; Nervous system in	<ul> <li>Students         recognise the         different parts of</li> </ul>	> Observation method	➤ textbook ➤ black board		➤ Label the parts of

	humans; generation and conduction of nerve impulse; reflex action; sensory perceptions; sense organs; Elementary structure and function of eye and ear	human nervous system They understand the generation and conduction of nerve impulse  Content focussing	human brain > Pen-paper test
DECEMBER	(22) Chemical coordination and integration Endocrine glands and hormones; Human endocrine system; role of hormones as messengers and regulators; mechanism of hormones; dwarfism.	➤ Students classify the different growth hormones They understand the mechanism of different hormones  ➤ Interactive Lecture method board  ➤ Text book  ➤ Text book  ➤ Text book  ➤ Text book	➤ Pen- paper test ➤ Oral test
	(1) The living world Biodiversity, domains of classification, taxonomy, binomial nomenclature, tools for taxonomy, zoological parks, herbaria, botanical gardens.  (2) Biological classification	➤ Students classify the different taxonomical groups  ➤ Discussion method ➤ Concept map  ➤ Text book ➤ Class edge	➤ Oral test ➤ Pen- paper test

	Five kingdom classification, features and classification of Monera, protista, fungi- Lichens, viruses, viriods	>	classify the five kingdom classification		<ul> <li>Discussion method</li> <li>Interactive lecture method</li> </ul>	* * *	Class edge Text book Black board	>	Pen-paper test Oral test
JANUARY	(3) Plant kingdom Features and classification of plants- Algae, Bryophyta, Pteridophyta,Gymnosperm s, Angiosperms; Angiosperms	A A	Students classify the different divisions of plant kingdom They develop positive attitude towards the plants species	A A	Field visit Observation method	* *	Class edge Text book	>	Pen- paper test Oral test
	(4) Animal kingdom Features and classification of animals( non- chordates and chordates)	>	Student understand the different characteristic s features of phylum	> >	Observation method Interactive lecture method	* *	Text book Class edge	>	Chart making Flow chart

	Revision- 2 <sup>nd</sup> Mid term exam		
FEBRUARY	Revision		
MARCH	Annual Examination		

**Subject: Chemistry** 

MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL STARATEGY	RESOURCES	ACTIVITY
JUNE	Basic concepts of chemistry >General introduction > its importance >Nature of matter, > laws of chemical combination >Dalton's atomic theory >concept of elements, atoms & molecules. >Atomic & molecular masses, mole concept, & molar mass, % composition, chemical reactions, stoichiometry & calculations based on it.	>Understanding >Analysing	>Learner centered >Content focused	>Reference book >Library	>Numerical solving
	States of matter >Three states of matter, >intermolecular interactions > gas laws, its derivation >deviation from ideal gas behaviour >Liquefaction of gases > K .E, molecular speeds >vapour pressure, viscosity surface tension	>Evaluation >Understanding	>Lecture method	>Visuals >Peer view writing task	>Test paper >Numerical solving

	>Discovery of electron, proton ,neutron, atomic number >thomson's model >Bohr's model >Heisenberg uncertainty principle >Concept of orbitals				
JULY	Classification of elements & periodicity in properties: >Significance of classification > modern periodic law & the present form of periodic table > trends in properties of elements	>Analysing >Understanding	>Learner centered >Participative strategy	>PPT >Library	>MCQ
	Chemical bonding & molecular structure:  >ionic bond > covalent bond > bond parameters >lewis structure > VB T > VSEPR theory >Concept of hybridization > MO theory > hydrogen bond	>Creativity >Evaluation	>Learner centered >Content focused	>Visuals >Reference book	>Drawing structure >Test paper

August	Equilibrium:  >Equilibrium in physical & chemical processes  > law of mass action, equilibrium constant, factors affecting it  >lonic equilibrium  >ionisation of acids & bases, strong & weak electrolytes degree of ionization  > concept of PH  >buffer solution  > solubility product  > common ion effect	>Understanding >Analysing	>Learner centered >Lecture method	>Reference book >Peer view writing task	>Practicals >Test paper
	Organic chemistry:  >General introduction >tetravalence of carbon, >classification of organic compounds, >its nomenclature > isomerism > organic reaction mechnasim, >purification techniques, qualitative analysis	>Understanding	>Learner centered	>Reference book >Visuals	>Practicals >Test paper
September	Hydrocarbons: .Classification, alkanes, alkenes, alkynes >aromatichydrocarbon >carcinogenicity& toxicity	>Evaluation	>Discussion method >Application	>Interactive panel	>Peer review writing task

	Hydrogen: >Dihydrogen > its preparation & properties, >hydrides > water > hydrogen peroxide > heavy water >dihydrogen as a fuel.	>Analysing	>Lecture method	>Visuals	>Practicals
October	Redox reactions: >Classical idea >Oxidation – reduction reaction >Oxidation number >Redox reactions & electrode processes	>Creativity	>Content Focused	>Peer view writing task	>Practicals >Test paper
	The s-block elements: >General characteristics > anomalous properties > some important compounds >its biological importance of group 1 & 2 elements	>understanding	>Lecture method	>Visuals >Reference book	>Test paper
November	The p – block elements:  >General characteristics  >Anomalous properties  >Some important compounds  >Important trends of group 13,14 elements	>understanding	>Lecture method	>Visuals >Reference book	>Test paper

December	The thermodynamics:  >The basic concepts  >Zeroth law of thermodynamics  >First law of thermodynamics  >Enthalpy  >Exothermic & endothermic  reactions  >Thermodynamical equations  >Enthalpy change  >Hess,s law  >Lattice energy  >Spontaneous & Non —  spontaneous processes  >Gibb <s energy="" environmental="" pollution:="">Envirinmental pollution  &gt;Atmospheric pollution  &gt;Water pollution  &gt;Soil pollution  &gt;Strategies to control pollution  &gt;Green chemistry  REVISION</s>	>Understanding >Understanding	>Lecture method  >Demonstration	>Library >Visuals >Library	>Numerical Solving >Test paper >Seminar
February	Revision,Exam				

**Subject: Physics** 

MONTH	TOPICS / SUBTOPICS	PEDAGOGICAL STRATEGIES	ACTIVITY/	ASSESSMENT STRATEGIES	LEARNING OUTCOME
			PRACTICALS		
JUNE	I. Physical World  1: Physical World  Physics - scope and excitement; nature of physical laws; Physics, technology and society.  2: Units and Measurements  Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures. Dimensions of physical quantities; dimensional analysis and its applications.	Seminar  Smart class  Interactive learning, discussion, problemsolving. Plotting graphs. Deriving mathematical relations.	1.Vernier Callipers	Oral test Test paper. MCQ. Solving problems	<ul> <li>Understands what is physics.</li> <li>Identifies the importance of Physics.</li> <li>Understands the different system of units.</li> <li>Able to use their knowledge in solving numerical problems</li> <li>Understands dimensional Analysis.</li> </ul>

JULY	II. Kinematics  3: Motion in a Straight Line  Frame of reference, Motion in a straight line: Position-time graph, speed and velocity Elementary concepts of differentiation and integration for describing motion. Uniform and non-uniform motion, average speed and instantaneous velocity, uniformly accelerated motion, velocity - time and position - time graphs. Relations for uniformly accelerated motion	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	2. Screw Gauge To find the thickness	Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems.     Understands one dimensional motion.
	4: Motion in a Plane  Scalar and vector quantities; Position and displacement vectors; general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors; relative velocity; Unit vector; resolution of a vector in a plane - rectangular components. Scalar and Vector product of vectors.Projectile motion, circular motion.	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	3. Screw Gauge To find the diameter of wire	Oral test Test paper. MCQ. Solving problems	<ul> <li>Able to use their knowledge in solving numerical problems.</li> <li>Understands motion in a plane.</li> <li>Differentiates Vector and scalar quantities.</li> <li>Acquires the knowledge of vector analysis</li> </ul>

AUGUST	III Laws of Motion.  5. Laws of Motion.  Intuitive concept of force; Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion.Law of conservation of linear momentum and its applications.Equilibrium of concurrent forces; Dynamics of uniform circular motion: centripetal force, examples of circular motion	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	4.Beam Balance	Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems.     Understands the laws of motion.     Applies their knowledge in day to day life.
SEPTEMB ER	IV Work Energy Power  6.Work Energy Power  Work done by a constant force and a variable force; kinetic energy; work-energy theorem; power.Notion of potential energy; potential energy of a spring; conservative forces: conservation of mechanical energy (kinetic and potential	interactive	5. Parallalogram law of vectors	Oral test MCQ. Solving problems	<ul> <li>Able to use their knowledge in solving numerical problems</li> <li>Applies their knowledge in day to day life.</li> <li>Understands the scientific meaning of work.</li> <li>Explains different forms of energy.</li> </ul>

energies); non-conservative forces: motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.  V Motion of System of Particles and Rigid Body.  7.System of Particles and Rotational Motion.  Centre of mass of a two-particle system; momentum conservation and centre of mass motion. Centre of mass of a rigid body; centre of mass of a rigid body; centre of mass of a uniform rod.Moment of a force; torque; angular momentum; laws of conservation of angular momentum and its applications.	Interactive learning, discussion, problem solving. Deriving mathematical relations. Smart class.		Oral test Test paper. MCQ. Solving problems	
7. Continuation  Equilibrium of rigid bodies; rigid body rotation and equations of rotational motion; comparison of linear and rotational motions.Moment of inertia; radius of gyration; values of	proofem sorving.	6. Spherometer	Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.     Understands rigid body.

	moments of inertia for simple			
	geometrical objects Statement of			
	parallel and perpendicular axes			
	theorems and their applications.			
	VI Gravitation			
	Gravitation			Able to use their knowledge in solving numerical problems
OCTOBER	Keplar's laws of planetary			Applies their knowledge in day to day
OCTOBER	motion, universal law of			life.
	gravitation.Acceleration due to	Discussion,		Understands Kepler's law .
	gravity and its variation with	problem solving. Plotting graphs.		
	altitude and depth.Gravitational	Deriving	Oral test	
	potential energy and	mathematical relations.	Test paper. MCQ.	
	gravitational potential; escape	Smart class.	Solving problems	
	velocity; orbital velocity of	onia cuiso.		
	a satellite;Geo-stationary			
	satellites.			
	VII. Properties of Bulk Matter	Interactive		
	9. Mechanical Properties of	learning,		
	Solids	discussion,	Oral test	Able to use their knowledge in solving
	Elastic behaviour; Stress-strain	problem solving. Plotting graphs.	Test paper.	numerical problems
	relationship; Hooke's law;	Deriving	MCQ.	<ul> <li>Applies their knowledge in day to day life.</li> </ul>
	Young's modulus; bulk modulus;	mathematical	Solving problems	• Explains Hooke's law
	shear modulus of rigidity;	relations. Smart class.		Plots graph to show the variation of
	Poisson's ratio; elastic energy.	Samu Cinos.		interrelated physical quantities.
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NOVEMB ER	VII Mechanical Properties of Fluids  10: Mechanical Properties of Fluids  Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes); effect of gravity on fluid pressure.Viscosity; Stokes' law; terminal velocity; streamline and turbulent flow; critical velocity; Bernoulli's theorem and its applications.Surface energy and surface tension; angle of contact; excess of pressure across a curved surface; application of surface tension ideas to drops, bubbles	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	7) coefficient of viscosity	Oral test Test paper. MCQ. Solving problems	Understands properties of fluids.     Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.
	and capillary rise.  11.Thermal properties of Matter  Heat; temperature; thermal expansion; thermal expansion of solids, liquids and gases; anomalous expansion of water;	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	8. helical Spring	Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.     Understands thermal properties of matter.

	specific heat capacity; calorimetry; change of state - latent heat capacity.Heat transfer-conduction, convection and radiation, thermal conductivity, Qualitative ideas of Blackbody radiation; Wein'sdisplacement Law, Stefan's law, Greenhouse effect.				
DECEMBE R	VIII Thermodynamics  12. Thermodynamics  Thermal equilibrium and definition of temperature (zeroth law of thermodynamics). Heat, work and internal energy. First law of thermodynamics. Isothermal and adiabatic processes. Second law of thermodynamics: reversible and	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class	9. Simple pendulum I	Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.
	irreversible processes; Heat engine and refrigerator.  IX Behaviour of Perfect gases and Kinetic Theory of Gases  13.Kinetic Theory  Equation of state of a perfect	Interactive learning,	10. Sonometer		

	gas, work done in compressing a gas.  Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.	discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class		Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.
JANUARY	X Mechanical Waves  14.Oscillations  Periodic motion -time period, frequency, displacement as a function of time, periodic functions.Simple harmonic motion(S.H.M) and its equation; phase; oscillations of a loaded springrestoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class	11) Sonometer II  12) Resonance Tube  13. Simple pendulum II	Oral test Test paper. MCQ. Solving problems	Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.     Able to integrate different ideas

EEDDIAD	expression for its time period. Free, forced and damped oscillations (qualitative ideas only), resonance.  15.Waves  Transverse and longitudinal waves, speed of wave motion, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect.	icuing,	14. Young's modulus	Able to use their knowledge in solving numerical problems     Applies their knowledge in day to day life.     Acquires the value of critical thinking.
FEBRUAR Y				REVISION
MARCH				ANNUAL EXAMS

**Subject: Economics** 

MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL STARATEGY	RESOURCES	ACTIVITY
JUNE	Introduction to microeconomics  Scope of economics  Meaning of micro economics  Economy and economic problem  Central problems of an economy  Concept of Production Possibility Frontier and Opportunity Cost	Understanding the meaning of microeconomics     Recognize the role of ethical values in economics (normative and positive economics)     Use economic thinking to explain choice in a world of scarcity     Familiarizing with the central problems of an economy     Evaluating the PP curve of an economy	Concept mapping     Interactive lecture     method     Observation method	Black board     Smart class     PPT	Assignment on meaning scope and importance of economics     Chart making on difference between micro and macro economics     Problem solving on opportunity cost

	Introduction to statistics     Meaning     Scope     Functions     Importance of statistics in economics	Recognizing the importance of statistics in economics     Understanding the functions of statistics	Teacher centered     Concept based	NCERT textbook     Reference books     Smart class	Assignment on functions of statistics     Seminar on role of statistics in economics
JULY	Consumer's equilibrium and demand Consumer's equilibrium through utility analysis Consumer's equilibrium through indifference curve analysis	Understanding how consumer behavior shapes the demand curve with respect to utility and loss     Familiarizing with concepts of utility, indifference curve and budget line     Acquire economic efficiency	Demonstration     method     Interactive/participat     ive strategy     Discussion method     Lecture method     Application method	Smart     class     Referenc     e books     PPT      Black     board      Text     book	Assignment on theories of consumer equilibrium     Role play on law of diminishing marginal utility
	Collection, Organization and Presentation of data Collection of data Primary data and secondary data	Able to conduct     economic surveys     Understanding types     of sampling     Recognizing the     agencies which     collects statistical data      Able to extract     information     intelligently	Interactive lecture method     Application method     Observation method	Smart     class     Referenc     e books     Concept     mapping	Questionnaire preparation     Assignment on methods of data collection

	<ul> <li>Methods of data collection</li> <li>Concept of sampling</li> <li>Census of India and NSSO</li> </ul>				
AUGUST	➤ Consumer's equilibrium and demand ➤ Demand ➤ Determinants of demand ➤ Movement along and shift in demand curve ➤ Price elasticity of demand	Able to investigate changes in the society     Measures how changes in price and income affect the behavior buyers     Apply it in the real life	Concept mapping     Explanation     technique     Discussion method     Demonstration     method	Smart     class     Referenc     e books     NCERT     books	Assignment on demand and determinants of demand     Problem solving on price elasticity of demand
	<ul> <li>Collection,         Organization         and         Presentation         of data</li> <li>Organization         of data</li> <li>Frequency         distribution</li> <li>Presentation         of data</li> </ul>	Able to conduct economic analysis using graphs     Able to explain a table     Interpreting different types of diagrams.	Discovery method     Concept mapping     Project method     Application based	Smart class Text book PPT	Draw a table on a topic and explain it     Draw different types of diagrams

SEPTEMBER	➤ Tabular presentation ➤ Diagrammatic presentation • Producer behavior and supply ➤ Production function ➤ Cost ➤ Revenue  • Statistical tools and interpretation ➤ Measures of central tendency	Critical thinking     Reasoning     Analyze the relationship between inputs used in production and the resulting outputs and costs      Able to conduct economic analysis using equations     Present an economic argument in quantitative terms	Concept based     Observation method     Teacher centered      Demonstration method     Participative strategy	Smart class PPT Black board NCERT Textboo ks Reference books Smart class Text books Black board	Assignment on average and marginal relationships in terms of cost and revenue     Problem solving on cost and revenue     Conduct a survey and interpret the results using the measures of central tendency     Problem solving on
OCTOBER	➤ Producer behavior and supply	Measures how change in price and income affect the behavior of sellers	Interactive lecture method     Demonstration method	PPT E- resource s	measures of central tendency      Assignment on supply and its determinants

➤ Producer's equilibrium ➤ Supply ➤ Determinants of supply ➤ Movement along and shift in supply curve ➤ Price elasticity	Apply it in the real life     Develop economic way of thinking	Explanation     technique     Teacher centered	Smart     class     Black     board	Problem     solving on     price elasticity     of supply     Problem     solving on     producer     equilibrium
of supply  Statistical tools and interpretation  Measures of dispersion  Absolute and relative measures of dispersion  Lorenz curve	Effectively conduct research     Understanding the application of Lorenz curve in economics	Teacher centered     Demonstration     method     Explanation     technique	Smart     class     Text     books     Black     board	Assignment on     Lorenz curve     and its     applications     Problem     solving on     measures of     dispersion

NOVEMBER	<ul> <li>Forms of market and price determination</li> <li>Perfect competition</li> <li>Determination of market equilibrium</li> <li>Effects of shift in demand and supply</li> <li>Statistical tools and interpretation</li> <li>Correlation</li> <li>Measures of correlation</li> </ul>	Analyze a firm's profit maximizing decision under condition of Perfect Competition     Able to Apply demand and supply tools     Knowledge for making decisions in everyday life      Able to evaluate the likely outcome of economic policies     Present an economic argument in quantitative terms     Understanding the various methods of measuring correlation	Observation method     Interactive lecture method     Inductive method     Demonstration method     Observation method     Participative strategy     Questioning technique	Smart class NCERT Text book E-resource s PPT  Text book Referenc e books Smart class	Assignment on Features of different types of markets     Seminar on effect of shift in demand and supply      Application of measures of correlation     Chart making on scatter diagram
DECEMBER	<ul> <li>Forms of market and price determination</li> <li>Monopoly</li> <li>Monopolistic competition</li> <li>oligopoly</li> </ul>	Economic efficiency     Identifying different types of markets     Understanding the process of price determination under different market forms	Demonstration     method     Discovery method     Project method	Smart     class     PPT     Referenc     e books     Concept     mapping	Seminar on price determination under different market forms     Chart making on forms of market

FEBRUARY REVISION	JANUARY	Statistical tools and interpretation Index numbers Types Construction uses	Evaluate the trends in economy     Logical thinking     Efficient and precise in describing real world phenomena     Higher level of thinking	<ul> <li>Learner centered</li> <li>Discovery method</li> <li>Participative strategy</li> </ul>	<ul> <li>Smart         class</li> <li>Black         board</li> <li>Referenc         e books</li> </ul>	Construct daily price index of a local vegetable market     Problem solving on index numbers
	MARCH		ANNUAL EXAMINATION			

Subject: Malayalam

ബരേ സന്ദർശനം ഓർമ്മയുടെ രമ്പ്	ചുള്ളിക്കാടി <b>റ്റിന്റെ</b> കൃതികൾ പരിചയപ്പെടുന്നു നോവലിസ്റ്റിനെ പരിചയപ്പെടുന്നു	കുറിപ്പ് തയ്യാറാക്കൽ പാരായണം , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു. പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു. വിവർത്തനം തയ്യാറാക്കുന്നു	പ്രണയത്തിത് പ്രഹർ ഒുവർത്തമാനങ്ങളുടെ ന നിറഭേദങ്ങൾ അറിയൂന്നതിന് അടിച്ചമർത്തപ്പെടുന്ന സ്ത്രീകളുടെ വ്യധ
	നോവലിസ്റ്റിനെ പരിചയപ്പെടുന്നു	പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു.	അടിച്ചമർത്തപ്പെടുന്ന സ്ത്രീകളുടെ വൃധ
വേരുകൾ പ്പുപ്പെടുത്തുന്നവർ	ക <i>ഥാക്വത്തിനെ</i> പരിചയപ്പെടുന്നു	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	പ്രകൃതിസ്നേഹം വളരുന്നു
മൽസൃം	മനുഷ്യ ? സ്ഥാതന്ത്ര്യത്തെ ഹനിക്കുന്ന ഘടക ങ്ങളെക്കുറിച്ച മനസ്സിലാക്കുന്നതിനു	പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	മനുഷ്യന്റെ സ്ഥാതന്ത്ര്യത്തെ ഹനിക്കുന്ന ഘടക ങ്ങളെക്കൂറിച്ച മനസ്സിലാക്കുന്നു
കായലരികത്ത	പഴയകാല സിനിമകളുടെ സവിശേഷതകൾ മനസ്സിലാക്കുന്നതി	പാരായണം പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	പഴയകാല സിനിമകളുടെ സവിശേഷതകൾ അറിയുന്നു
9	പ്പപ്പെടുത്തുന്നവർ മൽസും	പരിചയപ്പെടുന്നു മനുഷ്യ ് സ്ഥാതന്ത്ര്യത്തെ ഹനിക്കുന്ന ഘടക ഒടളെക്കുറിച്ച മനസ്സിലാക്കുന്നതിനു കായലരികത്ത സവിശേഷതകൾ	പരിചയപ്പെടുന്നു  മനുഷ്യ ് സ്ഥാരന്ത്ര്യത്തെ പാഠാനുബന്ധപ്രവർത്തങ്ങൾ  മനസ്സിലാക്കുന്നതിനു  പഴയകാല സിനിമകളുടെ പാരായണം സവിശേഷതകൾ പാഠാനുബന്ധപ്രവർത്തങ്ങൾ

തഞ്ഞാലിൽ നേർഘ നിമിഷം	വൈലോപ്പിള്ളിയുടെ കവിത ചിരിക്ക് പിന്നിലുള്ള ദുഃഖം തിരിച്ചറിയുന്നതിന്	പാഠാനുബന്ധപ്രവർത്തനങ്ങൾ പാഠാനുബന്ധപ്രവർത്തനങ്ങൾ	ദാമ്പത്യ ബന്ധത്തി ഉറു ഹൃദ്യമായ ആവിഷ്ക്കാരം ചിരിക്ക് പിന്നിലുള്ള ദു:ഖം
നേർഘ നിമിഷം	ചിരിക്ക് പിന്നിലുള്ള ദുഃഖം തിരിച്ചറിയുന്നതിന്	പാഠാനുബന്ധപ്രവർത്തനങ്ങൾ	ചിരിക്ക് പിന്നിലുള്ള ദു:ഖം
			തിരിച്ചറിയുന്നു
<b>ിലിക്കണ്ണുകൾ</b>	കവിതയിലെ അവരരണ സാദ്ധ്യതകൾ കണ്ടെത്തി അവതരിപ്പിക്കുന്നതിന്	കവിപരിചയം	കൃഷ്ണ:60% ബാല്യ കാല ലീലകൾ അറിയുന്നു
സംക്രമണം	സ്ത്രിശാക്തികരണത്തിത് <b>ന്റ</b> ചരിത്രം അറിയുന്നതിന്	സമാന കൃതികൾ കണ്ടെത്തി വായിക്കുന്നു പാരായണം പാരാസബന്ധ പ്രവർത്തങ്ങൾ	സ്ത്രീശാക്കികരണത്തിത്വന്ത് ചരിത്രം അറിയൂന്നു
		സാദ്ധ്യതകൾ കണ്ടെത്തി അവതരിപ്പിക്കുന്നതിന് സ്ത്രിശാക്തികരണത്തിത്ര ആ	സാദ്ധ്യതകൾ കണ്ടെത്തി കവിപരിചയം അവതരിപ്പിക്കുന്നതിന് കവിപരിചയം സ്ത്രിശാക്തികരണത്തിരുന്നു സംക്രമണം ചരിത്രം അറിയുന്നതിന് വായിക്കുന്നു

February	പൂനരാവർത്തനം		
March	പുനരാവർത്തനം Annual Exam		28



Month	Topic	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	5.Complex numbers and quadratic equations	Students will be able to  Identify sets, its representation, types of sets  Understand subsets, power set, Universal sets, venn diagrams  Analyse operations on sets and practical problems on union and intersection of sets.  Student will be able to Identify complex numbers Understand algebra of complex numbers, modulus and conjugate of complex numbers Recognise argand plane and polar representation Analyse quadratic equations	➤ Realia ➤ Discussion ➤ Flowchart  ➤ Pose questions ➤ Interactive lecture ➤ discussion	Student will be able to realise  > sets and its representation  > Types of sets > Subsets power set > universal set > Venn diagram > Operations on sets  Student will be able to realise  > Complex numbers > Algebra of complex numbers > Modulus and conjugate of complex numbers > Argand plane and polar representation > Quadratic equations	> Oral questions > Flow chart > Pen - paper test  > Oral question > Pen paper test
July	2. Relations and functions	Students will be able to  Understand Cartesian product of sets  Classify relations and function	> Realia > Smart class > Flow chart	Student will be able to realise  Cartesian Product of set  Relations Functions	<ul> <li>➤ Oral questions</li> <li>➤ Summarising</li> <li>➤ Pen – paper test</li> </ul>

A	3. Trigonometric Functions	Students will be able to  Classify the angles  Understand the trigonometric functions  Recognise sum and difference of trigonometric functions  Identify trigonometric equations	➤ Pose questions ➤ Interactive lectures	Students will be able to realise  Angles Trigonometric functions Sum and difference of trigonometric functions Trigonometric equations	> Oral questions > Summarising > Pen – paper test > Lab work
August	4. Principles of mathematical Induction	Students will be able to  > Understand and analyse the principles of mathematical Induction	➤ Interactive lecture ➤ Discussion	Students will be able to realise  the principles of mathematical induction	> pen paper test
	1. Linear Inequalities.	Students will be able to  > Understand inequalities  > Identify algebraic solutions of linear inequalities on one variable and its graph  > Develop skill in graphical solution of linear inequalities in two variable  > Understand the solutions of system of linear inequalities in two variables	Smart class     Discussion     Interactive     lecture	Students will be able to realise  inequalities  algebraic solutions of linear inequalities in one variable  graphical solutions of linear inequalities in two variable  solutions of linear inequalities in equalities in two variable	> pen paper test > lab work
September	Permutations and combinations      Binomial	Students will be able to  > Understand the fundamental principles of counting > Identify and recognise permutations and combination	➤ Pose questions ➤ Realia	Students will be able to realise  Fundamental principles of counting  Permutations  Combinations	<ul> <li>Class edge         activity</li> <li>Pen paper test</li> <li>Lab work</li> </ul>

	Theorem	Students will be able to			
		Understand binomial	Discussion	Students will be able to	Pen paper test
		theorem for positive	Interactive	realise	Class edge
		integral indices	lecture	Binomial theorem	activity
		Identify the middle term		for positive integral	
		and general term		indices	
				Middle and general	
				terms	
October	4. Sequences and	Students will be able to		Students will be able to	
	series	Understand sequences and		realise	
		series		Sequence and series	
		Identify A.P and G.P	Realia	A.P and G.P	
		Recognise the relationship	Pose	Relationship	Pen paper test
		between A.M and G.M	questions	between A.M and	Lab work
		Identify the sum to n terms	Interactive	G.M	
		of special series	lecture	Sum to n terms of	
				special series	
	12. Introduction to	Students will be able to			
	three	Identify coordinate axes			
	dimensional	and coordinate planes in 3		Students will be able to	
	geometry	–D space	Smart class	realise	
		Understand the	Interactive	Coordinate axes and	
		coordinates of a point in a	lecture	coordinate planes in	Class edge
		space		3-D space	activity
		Understand the distance		Coordinate of a	Pen paper test
		between two points and		point in a space	
		section formula		Distance between	
				two points	
				Section formula	
November	<ol><li>Straight lines</li></ol>	Students will be able to		Students will be able to	
		Understand slope of a line		realise	
		and various forms of	Smart class	Slope of a line	
		equations of a line	Discussion	Various forms of	Summarising
		Identify general equations	Pose	equations of a line	Pen paper test
		of a line	questions	General equations	Lab work
		Recognise distance of a		of a line	
		point from a line		Distance of a point	

	15. Statistics	Students will be able to  > Understand measures of dispersion, range and mean deviation  > Identify variance and standard deviation  > Recognise the analysis of frequency distributions	<ul> <li>Discussion</li> <li>Interactive lecture</li> </ul>	from a line  Students will be able to realise  Measures of dispersion  Range  Mean deviation  Variance and standard deviation	➤ Work sheet ➤ Summarising ➤ Pen paper test
December	6. Conic sections	Students will be able to	➤ Smart class	<ul> <li>Analysis of frequency distributions</li> <li>Students will be able to</li> </ul>	
December	6. Conic sections	Understand sections of a cone     Identify and classify circles parabola ,ellipse and hyperbola	> Realia > Discussion	realise  > sections of a cone > circle > parabola > ellipse > hyperbola	> work sheet > summarising > pen paper test
	16. probability	Students will be able to  > Understand random experiment > Identify events and exiomatic approach to probability	> Realia > discussion	Students will be able to realise  random variable  events  axiomatic approach to probability	> pen paper test > lab work
January	13. limits and derivatives	Students will be able to  > understand intuitive idea of derivatives  > identify limits and limits of trigonometric functions  > understand derivatives	> smart class > interactive lecture	Students will be able to realise  intuitive ideas of derivatives  limits  limits of trigonometric functions  derivatives	➤ Pen paper test ➤ Lab work
February		REVISION			
March		ANNUAL EXAMINATION			



MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL STRATEGY	RESOURCES	ACTIVITY
JUNE	Introduction to computer and computing     Evolution     Components and interconnections     Input/Output devices     Computer memory     Units of memory     Primary and Secondary memory     Data deletion, recovery and related security	➤ Evaluation  ➤ Understanding	<ul> <li>Discussion method</li> <li>Learner centered</li> </ul>	> Reference books > PPT	➤ Peer review writing task.
JULY	Software     Purpose     System and Application software     Generic and Special purpose software     Familiarization with Python programming basics     Interactive and Script modes     Structure of a program     Indentation     Identifiers     Keywords, Constants     Variables     Operators and their precedence     Datatypes and mutability	➤ Understanding ➤ Analysing	➤ Learner centred ➤ Content focused	> PPT	➤ Lab work.
AUGUST	<ul> <li>Statements and Expressions</li> <li>Evaluation and Comments</li> <li>Input and Output statements</li> <li>Data type conversion</li> <li>Debugging</li> <li>Control statements</li> <li>if-else for loop</li> </ul>	➤ Analysing	➤ Interactive/Parti cipative strategy ➤ Flowcharts	➤ Reference books	➤ Lab work ➤ Misconcept ion check

SEPTEMBER	Lists     Creation     Initialization     Manipulation     List methods     Built-in functions	<ul> <li>Logical thinking.</li> </ul>	➤ Content focused	> Reference books	➤ Lab work
OCTOBER	<ul> <li>Dictionary</li> <li>Key-value pair concept</li> <li>Creation</li> <li>Initialisation</li> <li>Traversal</li> <li>Updating and Deleting elements</li> <li>Dictionary methods</li> <li>Built-in functions</li> </ul>	➤ Logical thinking ➤ Creativity	<ul> <li>Content focused learning</li> <li>Optimised coding</li> </ul>	➤ Reference books	➤ Lab work ➤ Resolving Queries
NOVEMBER	<ul> <li>Database concepts</li> <li>Relational Data model</li> <li>Domain</li> <li>Tuple</li> <li>Relation</li> <li>Candidate Key</li> <li>Primary key</li> <li>Alternate key</li> <li>SQL Advantages</li> </ul>	➤ Relational thinking ➤ Understanding	<ul> <li>Discussion method</li> <li>Demonstrative method</li> </ul>	➤ Interactive panel PPT	➤ Peer review writing task
DECEMBER	<ul> <li>Creating a database using MySQL</li> <li>Data Types</li> <li>Data Definition</li> <li>Data Query</li> <li>Data Manipulation</li> </ul>	➤ Analysing ➤ Reasoning	> Content focused	➤ Visuals	➤ Lab work
JANUARY	<ul> <li>Introduction to emerging trends</li> <li>Artificial Intelligence</li> <li>Machine Learning</li> <li>Natural Language Processing</li> </ul>	➤ Understanding	➤ Participative/Int eractive strategy	➤ Educative visuals	> Seminar
	Immersive experience (AR, VR) Robotics Big data and its characteristics Internet of Things (IoT) Sensors Smart cities Cloud Computing and Cloud Services Grid Computing Block chain technology				
FEBRUARY		Revision			



MONTH	UNIT	TOPIC	SUBTOPIC	LEARNING OUTCOME	ACTIVITY	PEDAGOGICAL STRATEGY
JUNE	1	Theoretical framework	Introduction to accounting, Basic accounting terms,	Knowledge and understanding of basics of accounting.	Assignment: Basic accounting terms	Lecture method
JULY	Continuat ion of l	22	Theory base of accounting, fundamental accounting assumptions, systems of accounting and accounting standards, Goods and Services Tax	Application of accounting in everyday life.	Group Discussion	Lecture method
AUGUST	2	Accounting process	Recording of business transactions, Voucher and transactions, Recording of transactions: Ledger, Journal, Posting from journal to ledger.	Creative thinking and problem solving Developing Analysing	Problem solving on accounting Assignment	Interactive Content focused Lecture method
SEPTEMBER	Continuat ion of 2	22	Bank reconciliation statement, Need and preparation, BRS with adjusted cashbook. Depreciation, provisions and reserve, Methods of depreciation, Accounting treatment of depreciation,	Accuracy	Discussion	Problem solving method

OCTOBER	Continuat	72	Accounting for bill of exchange,	Observation	Discussion	Problem solving method
	ion of 2		Bill of exchange and promissory			
			note, Terms in bill of exchange,			
			Accounting treatment.			
			Trial balance and rectification of			
			errors: objectives and preparation			
			with balance method only, Errors:			
			Detection and rectification			
NOVEMBER	3	Financial statement of sole	Financial statements, Receipts and	Critical thinking	Assignment	Application skill
		proprietorship from complete	expenditure, Objectives and	_		
		and incomplete records	importance, Trading and profit and			
		-	loss account and balance sheet,			
			Preparation with adjustment			
DECEMBER	Continuat	22	Incomplete records, Ascertainment	Analytic thinking	Assignment	Lecture method
	ion of 3		of profit and loss by statement of	Creativity		Problem solving method
			affairs method.	-		
JANUARY	4	Computers in accounting	Introduction to computer and	Application skill	Assignment	Lecture method
			accounting information system,	Understanding		
			Introduction to operating software,	Analysing		
			utility software and application			
			software, Automation and stages in			
			automation.			
FEBRUARY			PROJECT V	VORK		
			REVISIO REVISIO	ON		
MARCH			ANNUAL EXAM	INATION		

Subject: Business Studies

MONTH	TOPIC	LEARNING	PEDAGOGICAL	RESOURCES	ACTIVITY
		OUTCOME	STRATEGY		
JUNE	Nature and purpose of business  Evolution and fundamentals of business, history of commerce in India Business –concept Business profession and employment Classification business and business risk	Developing and understanding basic of business studies		Reference book Text book Smart class	Assignment History of commerce in India
JULY	Forms of business organization  Sole proprietorship, partnership, Hindu undivided family, co- operative societies, company Formation of company, choice of form of business organization  Public and private and global enterprises	Identification Understanding	Interactive	Smart class Text book Reference book	Debate Seminar

	Public and private sector enterprises, forms of public sector enterprises, global enterprises	Analyzing and creativity	Lecture method	Smart class Text book Reference book	Seminar
AUGUST	Business services  Business services and types, launching, types of bank accounts, banking services Insurances, types of insurance, principles of insurance Postal services	Understanding Improving living standard	Questioning techniques	Smart class Text book Reference book	Assignment
SEPT	Emerging modes of business  E-business, concept, scope and benefits BPO and KPO  Social responsibility of business and business	Understanding Application skill	Interactive and participative	Smart class Text book Reference book	Assignments Seminar
	ethics  Concept of social responsibility, case for social responsibility Responsibility towards interested groups Environmental protection and business ethics	Students will be able to identify and understanding of environment	demonstration Interactive learning	Smart class Text book Reference book	Assignments Seminar

OCT	Sources of business finance  Concepts of business finance Owners fund and borrowed fund and their division	Analyzing and creativity	Lecture method	Smart class Text book Reference book	Assignments
NOV	Small business enterprises  Entrepreneurship development, concept, characteristics and need Small scale enterprises as defined by MSMED Act 2006 Role of small business in India, Government schemes and agencies for small scale industries	Analyzing and creativity	interactive	Smart class Text book Reference book	Seminar Debate
DEC	Internal trade  Meaning and types of internal trade, GST Types of retail trade, large scale retailer Concept of automatic vending machine, main documents used in internal trade, terms of trade	Understanding and analyzing	Interactive and participative	Smart class Text book Reference book	Assignments Seminar
JAN	International trade  Concept of international trade Export procedure Import procedure	Understanding for foreign trade	Discussion method	Smart class Text book Reference book	Assignments Seminar
FEB		PROJE	CT WORK,REVISIO	N	



MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL STRATEGY	RESOURCES	ACTIVITY
JUNE	<ul> <li>Introduction to computer and computing.</li> <li>Basic components</li> <li>Input/output devices</li> <li>Computer Memory</li> <li>Units of Memory</li> <li>Primary and Secondary memory</li> <li>Units of memory</li> <li>Communication Bus</li> <li>Mobile System Organization</li> <li>Mobile processor</li> <li>Memory unit</li> <li>Power Management</li> </ul>	<ul><li>Evaluation</li><li>Understanding</li></ul>	<ul> <li>Discussion method</li> <li>Learner centered</li> </ul>	<ul><li>Reference books</li><li>PPT</li></ul>	> Peer review writing task.
JULY	<ul> <li>Software Concepts         <ul> <li>System Software</li> <li>Application Software</li> <li>Utility Software</li> </ul> </li> <li>Concept of operating system</li> <li>Program Execution</li> <li>Libraries</li> <li>Cloud Computing</li> <li>Parallel Computing</li> <li>Data representation and Boolean Logic         <ul> <li>Number System</li> </ul> </li> <li>Arithmetic Operators in Binary System</li> <li>Encoding of characters         <ul> <li>ASCII(American standard code for Information Interchange)</li> <li>ISCII(Indian standard code for information</li></ul></li></ul>	<ul> <li>Understanding</li> <li>Analysing</li> </ul>	> Learner centred > Content focused	> PPT	➤ Lab work. ➤ Misconcepti on check

AUGUST	<ul> <li>NOT operator</li> <li>Truth Table</li> <li>Logic Gates</li> <li>De Morgan's Theorems</li> <li>Familiarization with python programming.</li> <li>Interactive and Script Mode</li> <li>Structure of a program</li> <li>Variables and types</li> <li>Keywords, Expressions</li> <li>Operators</li> <li>Tokens</li> <li>Indentation</li> </ul>	> Analysing	➤ Interactive/Pa rticipative strategy	> Reference books	> Labwork
SEPTEMB ER	<ul> <li>Conditional and Looping constructs</li> <li>Flow charts</li> <li>Pseudo-code</li> <li>Decision tree</li> <li>Program control</li> <li>Decision making <ul> <li>If statement</li> </ul> </li> <li>Iteration <ul> <li>For loop</li> <li>While Loop</li> </ul> </li> <li>Jump statements <ul> <li>Break statement</li> <li>Continue statement</li> <li>Pass statement</li> </ul> </li> </ul>	> Logical thinking.	> Content focused	> Reference books	> Lab work > Misconcepti on check >
OCTOBER	<ul> <li>Strings</li> <li>Creation</li> <li>Traversal</li> <li>Operators</li> <li>Methods and Built in functions</li> <li>State and Transition</li> </ul>	<ul><li>Logical thinking</li><li>Creativity</li></ul>	<ul> <li>Content         focused         learning</li> <li>Optimised         coding</li> </ul>	> Reference books	> Lab work
NOVEMBE R	<ul> <li>Lists</li> <li>Creation</li> <li>Comparison</li> <li>Operations on list</li> <li>Built-in functions</li> </ul>	<ul><li>Relational thinking</li><li>Understan ding</li></ul>	<ul> <li>Discussion method</li> <li>Demonstrativ e method</li> </ul>	➤ Interactive panel PPT	<ul><li>Peer review writing task</li><li>Lab Work</li></ul>

	<ul> <li>Deletion</li> <li>Sorting</li> <li>Bubble sort</li> <li>Insertion sort</li> </ul>				
DECEMBE R	<ul> <li>Tuples and Dictionary</li> <li>Creation</li> <li>Operations on tuple</li> <li>Key-value pair concept</li> <li>Traversal</li> <li>Updation and Deletion</li> <li>Built-in functions</li> </ul>	<ul><li>Analysing</li><li>Reasoning</li></ul>	Content focused	> Visuals	> Lab work
JANUARY	<ul> <li>Cyber Safety</li> <li>Internet</li> <li>Cyber crime</li> <li>Cyber forensics</li> <li>IT ACT 2000</li> <li>Network security Threats</li> <li>DoS Attacks</li> <li>Malware</li> <li>Viruses</li> <li>Worms</li> <li>Trojans</li> <li>Identity verification</li> </ul>	> Understan ding	Participative/ Interactive strategy	> Educative visuals	> Seminar
FEBRUAR Y	Revision				

Subject : English

MONTH	TOPIC	LEARNING OBJECTIVES SHORT TERM	PEDAGOGICAL PRACTICES	LEARNING OUTCOMES LONG TERM
JUNE	The Portrait of a Lady	-make the students identify the genre to which the story belongs to understand the techniques used by the author - to enhance vocabulary -to strengthen family bonds - to enable them to comprehend the cultural background of the storyto facilitate making connections between similar situations in different storylines/life experiences	Group Discussion on The Portrait Of A Lady is a reminder about a growing distance between the young and the older generation. Group activity comprising all range of learners. One group comprising 6 learners-	They would develop their optimistic attitude towards life amidst many struggles.  Will be able to develop an attitude to become more independent in thought and action, responsible and cooperative, understanding and tolerance, improved working relations respect for identities in relation to other people.
	A photograph	to encourage the students to appreciate poetry and read aloud with proper intonation  -to prepare the students for poetic forms and adept them with the figures of speech, rhyme and rhythm  -to read and recognize the purpose of economy of words and the	A comparative study of the prose The Portrait of a Lady and the poem A Photograph. The learners would discuss in their groups and draw a comparative analysis and present the synopsis of the discussion in the class. Group Activity	the students would be able to grasp the theme and meaning of the poem. They would be able to read the poem with proper tone and rhyme and develop an interest in poetry. Their vocabulary would be strengthened. They would be able to draw a comparative study between human life and nature.

	Note making	hidden pathos and nuances of the lines, correlating them with author's background and personal experiences- to build up didactics, empathy and sympathy with the loss of the speaker  To summarize information from different written text, reconstructing arguments and accounts in a coherent presentation.  -To express spontaneously, concisely and precisely, differentiating finer shades of significance even in the most complex situations  -To express ideas with extra information and complexity, fluently and without difficulty in sentence construction	For all range of learners comprising three students in one team- Group comprehension comprising all range of learners(  PPT demonstrating the technique and art of note making	They would be able to study a photograph  They would be able to use the note taking suggestions to develop good notes based on classroom discussions
JULY	Advertisement  Discovering Tut	to enable the students to do public announcements to use the content in very brief manner to know the format to learn to write different types of advertisement.  To enhance familiarizing with specific background information of author / book excerpt / history of Tutankhamun.	group activity shows the tips of writing an advertisement ppT  Pair Activity (for all range of learners  Activity: research with	They would be able to write the different kinds of advertisement for the classified columns.  The students would be able to grasp the theme and meaning of the prose. Their critical and creative thinking skills would be enhanced.

	to guide the students to relate the characteristics of literature to larger cultural and human values -identify the techniques used by the writer.	pictures and present it in the form of an article. PPT	They would be able to derive the moral values.  They will be ready to accept the reality of life.  Their vocabulary would be enriched. They would enhance their writing, s
The Laburnum Top	to read an comprehend the poem to know about the poet and his other works	Audio Visual Lesson Discussion about the poem Summarizing the poem	The learners would be able to differentiate between annotation, outline notes, column notes, mind maps and summary notes from a text.
The Summer of the Beautiful Whit Horse	To enhance familiarizing with specific background information of author / book excerpt / history - To facilitate an attitude to become honest and trustworthy in thought and action, responsible cooperative, understanding and tolerance, respect for national identities in relation to other people - democratic citizenship. [global aim] . Recognize Marginalization.	Group Discussion Smart lesson Group work Pair work for Vocabulary Enrichment.	The learner would be able to read and comprehend would read and enjoy a fiction would recognize the techniques and the style used by the narrator

	Postermaking	to learn To express ideas aesthetically and relevantly with definition in purpose, expressions, grammar usage, format usage,		would be learned to make a poster
		relevant vocabulary to announce a cultural show to create awareness among the public	Group discussion shows the newspaper clippings group Activity	Poster Making for all range of learners. Visual aid
		to warn against some danger. to advertise some project, to learn to write invitations formal and informal to know the format.	writing posters	would write the different types of posters.
		to know the format .	Group Activity	would know the format
	Formal Invitation Informal Invitation	to know the purpose of writing invitations to learn the format of both formal and informal invitations	Collect invitations of different types on different occasions	would write invitaions Formal and informal.
	Grammar-Tenses	To know about tenses and its usages	Recapitulation Group activity hand outs.	would complete the grammar exercises based on tenses
AUGUST	We're not afraid to die	-To allow a problem solving: identifying the problem; considering the options; weighing the pros and cons of each option; reaching a decision To facilitate making connections between similar situations in different storylines/life experiences	Class Reading with suitable expression, pronunciation and intonation. (Individual Activity) (For all range of learners)	The learners would be able to enhance their problem solving skills. They would be able to inculcate the values of determination and will power

	The Voice of the rain	to recognize the purpose of economy of words and the nuances of the lines that highlights the cyclic nature of rain and appreciates the diligence and divine quality of the speaker	Recitation and self study (group work of 3 on poetry writing on the wind, sun, moon or snow-highlighting the pride in their narration for all range of learners comprising-	The students would be able to grasp the theme and meaning of the poem. They would be able to read the poem with proper tone and rhyme and develop an interest in poetry. Their vocabulary would be strengthened. They would be able to draw a comparative study between human life and nature.
	The Address	To help learners distinguish different perspectives; analyzing them; drawing conclusion/s -To encourage the uncovering of motives absorbing didactics	Pre Reading Activity Open discussion Debate Smart lesson	Their Reading skills would be developed
	Reply to the Invitation  Speaking and Listening Grammar: Clauses	to write a reply to the formal and informal invitation	Group activity Pair work	Would write a reply to the invitaion
SEPTEMBER	Landscape of the Soul	To read and Comprehend To know about various types of paintings to learn about the European and the Chinese Painting. To enrich the Vocabulary	Smart lesson Interactive session Group activity Vocabulary Enrichment and the Comprehension	Would understand what is real painting. would learn the value of Appreciation.

<u> </u>			
Childhood	To read and Enjoy the Poem To make a comparison with the childhood and the adulthood to know about the poet and the central theme	Audio visual Lesson Paraphrasing Dicussion Recitation	Would learn about the qualities of being a child would understand the difference between the adult and child perspective.
The Ailing Planet.	To facilitate making connections between similar situations in different storylines/life experiences To read and recognize the purpose of human loss and the hidden pathos and nuances of the lines, correlating them with personal experiences- to build up didactics, empathy and sympathy with the loss of the speaker and the final resigned acceptance and optimism To sensitize learners to the imminent issues of declining health of planet Earth	slogan Writing on Go Green  For all range of learners.  PPT Newspaper search on various articles on environment	The Learners would be able to sensitize themselves towards the earth and environment.  They would inculcate the values of Leadership and contribute to make our Earth green
Article Writing	to write an article effectively to enable the learner to write an article both for the school magazine and the newspaper,	Open discussion gather information organize the ideas use CODER	would write an article

	Report Writing  Formal Letter  Grammar:Modals	to write a Report to know the Format To write a formal Letter Letter to the Editor. to thorough with the format.	PPT for tips group discussion Use the CODER Recalls the fomat.	W ould write a Report  Would write a Letter
OCTOBER	Ranga's marriage	-to guide the students to relate the characteristics of literature to larger cultural and human valuesTo facilitate making connections between similar situations in different storylines/life experiencesTo appreciate the timeless significance of the issue of marriage institution, role of English and gender stereotyping	Listening Activity for all range of Learners to note their progress and as training ground for -PPT presenting the synopsis of the story  PPT on gender sensitivity their ASL.  Activity: Listen to an Article about the issue of marriage and gender stereotyping and complete the worksheet	The students would be able to effectively provide a synopsis of the story. They will be able to analyze the values and thought process of the story. Positive values and attitudes would be inculcated in the students. They would be able to appreciate the language, content and style of the prose. Vocabulary would be enriched. Their Listening skills would be enhanced.
	The Browning Version	To facilitate making connections between similar situations in different storylines/life experiences through the genre of drama. Understanding the universal theme of teacher-student relationship and the sanctity of it.	Theatrical presentation by a group of three students comprising –	The learners will be able to stimulate language development and increase the students' ability to write spontaneously.  They would be able to respond to a personal dilemma.  Their vocabulary would be enriched.  The analytical skills would be

				enhanced
	The Adventure	to read and comprehend to know more about the adventure	Smartlesson	The reading skills would be enhanced
	Letter writing	to write a letter of complaint to write a letter of enquiry to write a letter of order	Recapitulaion	Would write letters
NOVEMBER	Mother's Day	To facilitate making connections between similar situations in different storylines/life experiences through the genre of theatre/drama that is more credible and realistic to comprehend the mother's stereotype and understand her significant role in family bonding-to empathize with her problems and seek resolution.	Write a Script and present a Role Play on Mother's Day. For all range of learners in a group of six comprising-	The learners would be able to develop their basic skills of language. They would develop their reading skills and listening skills They would be able to comprehend the role of a mother and inculcate
	Father to Son	To read and recognize the purpose of economy of words and the hidden pathos and nuances of a precious father-child relationships that is crumbling, correlating with personal experiences- to build up didactics, empathy and sympathy with the loss of the father	An analysis of the poem Father to Son through a Power Point presentation. For all range of learners in one group comprising six students-	To facilitate making connections between similar situations in different storylines/life experiences. To help learners distinguish different perspectives; analyzing them; drawing conclusion/s. The learners would unfold their logical thinking skills values of respect and obedience.

			demonstration of the poem.	
	Job Application and C.V Factual description	to learn to write a job application to Prepare a good C.V	work sheets picture study audio visual lessons	Would write a job application and prepare a C.V
	Grammar:Dterminers	-to establish a clear understanding of determiners -to enable the learners to identify the types of determiners and use them	Recapitulation group activity hand outs	The learners would be able to identify the determiners and use the appropriately.
DECEMBER	Albert Einstein at School	-To enhance familiarizing with specific background information of author / book excerpt / history -To facilitate making connections between similar situations in different storylines/life experiences.	Write the contents of short story in the form of note making. (Individual Activity) For all range of learners to note progress	The students would be able to express their understanding through discussions.  They would skim and scan the words according to their meaning.  They would enhance their reading as well as writing skills
	The Silk Road GrammarExercises	to read and comprehend to enrich the vocabulary	audio visual class discussion and summarizing the lesson	Reading skills as well as writing skills enhanced.
JANUARY	The Ghat of the only World	to read and comprehend to enrich the vocabulary. Poster Making for all range of learners. Visual aid	Smart lesson	Reading and comprehension skills would be enhanced.

			presentation.	
			B2-B1 – 2 students Audio- visual	establishing inner as well as outer peace and sensitize themselves .
			C2-C1 – 2 students	They would raise their concept of
			six students-	
			comprising all range of learners in a group of	poem with proper tone and rhyme and develop an interest in poetry.
		democracy in a state	Group activity	They would be able to read the
	-,	build up didactics on the role of	one of his other poems.	
	Speaking and listening	irony and pun in the nuances - to	and relate the poem to	poem.
FEBRUARY	The Tale of the Melon City.	To read and recognize the purpose of economy and the hidden satire.	Research on the literary Jaureate Vikram Seth	The students would be able to grasp the theme and meaning of the
		motives; absorbing didactics		
		-To encourage the uncovering of		
		different perspectives; analyzing them: drawing conclusion/s		
		-To help learners distinguish	PPT	_
		different storylines/life experiences		would be developed
		between similar situations in		Reading and Comprehension skills
		protagonist -To facilitate making connections		
		empathetic decision with the	poem.	
		cons of each option; reaching an	demonstration of the	would be enhanced
		the options; weighing the pros and	Audio-visual	Reading and comprehension skills
	Birth	To allow a problem solving: identifying the problem; considering		

## **Annual Pedagogical Plan 2020-2021**

Class XII

**Subject: Biology** 

MONTH	TOPICS / SUBTOPICS	PEDAGOGICAL	ACTIVITY/	ASSESSME	LEARNING OUTCOME
		STRATEGIES	PRACTICALS	NT STRATEGI	
	7.5			ES	
	I. Electrostatics 1. Electric charges and fields, Electric charges, Coulomb's law, Superposition principle and continuous charge distribution electric field –due to point charge, electric field lines, dipole ,its electric field, torque on a dipole in uniform electric field, electric flux ,Gauss's theorem and its applications.	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	1.To prove Ohm's law	Oral test Test paper. MCQ. Solving problems	<ul> <li>States and formulates the Coulomb's law and solves numerical problems related to it.</li> <li>Explains electric field, intensity and its physical significance.</li> <li>Formulates the electric field due to a system of charges and solves numerical problems related to it.</li> <li>Explains the properties of electric field lines.</li> <li>Understanding electric flux, electric dipole, torque.etc.</li> <li>Acquires the knowledge of solving problem using the given information.</li> </ul>
JUNE	2.Electrostatic potential and capacitance Electric potential-due to point charge, a dipole and system of charges, potential difference, equipotential surfaces. FIRST MID-TERM EXAMINATION Electric potential energy of- a system of two point charges, dipole in an electrostatic fields,	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.		Oral test Test paper. MCQ. Solving problems	<ul> <li>Differentiate between electrostatic potential and potential difference.</li> <li>Understands equipotential surfaces.</li> </ul>

	conductors and insulators, dielectrics and electric polarisation,capacitors,itscombina tion,capacitance of parallelplatecapacitor, energy stored in a capacitor.  II. Current Electricity 3.Electric current Electric current, drift velocity,mobility, Ohm's law,electrical energy and power.	Interactive learning, discussion, problem solving. Deriving mathematical relations. Smart class.			<ul> <li>Understands energy stored in a capacitor.</li> <li>Plots graph showing the variations of interrelated quantities.</li> <li>Acquires the knowledge of solving problem using the given information.</li> </ul>
JULY	3. Electric current(continuation) Resistivity, carbon resistors, its combination, its temperature dependence, internal resistance of a cell, potential difference, emf of a cell, combination of cells,Kirchoff,s law and applications, Wheatstones bridge ,metre bridge, potentiometer and its uses  III. Magnetic Effects of current & Magnetism	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	2.Metre bridge- resistivity of wire  3.Metre bridge- Series combination	Oral test Test paper. MCQ. Solving problems	<ul> <li>Understands more about electric current.</li> <li>Explains resistivity and factors affecting it.</li> <li>Able to conduct experiments to prove ohm's law.</li> <li>Applies the knowledge of Kirchoff's law to solve complex circuits.</li> <li>Able to draw labelled diagrams.</li> <li>Plots graph showing the variations of interrelated quantities.</li> <li>Acquires the knowledge of solving problem using the given information.</li> </ul>
	4.Moving charges and magnetism Concept of magnetic field,Oerstedexperiment,Biot-Savart law,its application, Ampere's law-its applications,force on a moving			Oral test	<ul> <li>Undestands more about magnetism.</li> <li>Understands Biot Savart's law and Ampere's law and can apply it to solve problems.</li> <li>Compares the fields due to electric and magnetic dipoles</li> <li>Explains the construction and the working of</li> </ul>

	charge in a uniform magnetic and electric fields. cyclotron, force on a current carrying conductor, force between two parallel current carrying conductors, torque experienced by a current loop in uniform magnetic field ,moving coil galvanometer and its conversion .  FIRST TERMINAL EXAMINATION	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	4.Metre bridge- parallel combination	Test paper. MCQ. Solving problems	moving coil galvanometer and defines current and voltage sensitivities.  Explains the conversion of ammeter and galvanometer to voltmeter and solves problems related to it.  Plots graph showing the variations of interrelated quantities.  Acquires the knowledge of solving problem using the given information.
AUGUST	5. Magnetism and matter Current loop as a magnetic dipole,its dipole moment, magnetic dipole moment of a revolving electron,magnetic field intensity due to a magnetic dipole, torque on a dipole, Bar magnet as an equivalent solenoid, magnetic field lines, earth's magnetic field, Para, dia and ferro-magnetic substances, electromagnets, permanent magnets.	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	5. Potentiometer to compare emf of two cells.	Oral test Test paper. MCQ. Solving problems	States Gauss's law in magnetism.     Distinguishes the types of magnetic substances.     Explains the properties of magnetic substances.     Understands Curie's law.
	IV.Electromagnetic Induction & Alternating Current 6.Electromagnetic induction . Electromagnetic induction, Faraday's law, induced emf and current, Lenz'slaw, eddycurrents, self and mutual induction.	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	6. Potentiometer- internal resistance of a cell.	Oral test Test paper. MCQ. Solving problems	<ul> <li>Defines magnetic flux and its unit.</li> <li>States and explains Faraday's law of electromagnetic induction and solves problems related to it.</li> <li>Explains eddy current and its applications, cites examples in various devices.</li> <li>Gains the concept of sinusoidal variation of emf induced in it and solves numerical problems related to it.</li> </ul>

	7. Alternating Current Alternating Currents, peak and rms value, reactance ,Impedance,LCoscillations,LCR series circuit ,resonance , power in ac circuits ,wattles current	Discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.		Oral test Test paper. MCQ. Solving problems	<ul> <li>Understands alternating currents and emf.</li> <li>Understands the Q factor and applies the knowledge in day to day life.</li> <li>Plots graph showing the variations of interrelated quantities.</li> <li>Acquires the knowledge of solving problem using the given information.</li> </ul>
SEPTEMBE R	SECOND MID-TERM EXAMINATION V.Electromagnetic Waves. 8.Electromagnetic waves Displacement current, EM waves and their characteristics, electromagnetic spectrum and its uses VI.Optics	Interactive learning, discussion, problem solving. Deriving mathematical relations. Smart class.	7.Galvanometer - half deflection method	Oral test MCQ. Solving problems	Understands about electromagnetic waves.     Identifies the uses of electromagnetic waves.
	9. Ray optics Reflection,spherical mirrors, mirror formula,refraction,TIR,itsapplicati ons,refraction at spherical surfaces, lens formula,power ,combination of lenses,refraction and dispersion through a prism, scattering of light and	Discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	-conversion to voltmeter	Oral test Test paper. MCQ. Solving problems	<ul> <li>Undestands and recognise the difference between reflection and refraction.</li> <li>Apply the concepts related to optics.</li> <li>Design a telescope.</li> <li>Acquires the knowledge of solving problem using the given information.</li> </ul>
	applications,microscopes and astronomical telescopes and their magnifying powers.  10. Wave Optics Wavefront, Huygens's principle-reflection	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	mirror  10.Convex lens		

	10. Wave Optics (continuation) Interference –coherent and incoherent addition, Young's double slit experiment, diffraction, resolving power of microscopes and telescopes. Polarisation.	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	11.Concave lens	Oral test Test paper. MCQ. Solving problems	<ul> <li>Differentiates between diffraction and interference.</li> <li>Undestands the wave nature of light.</li> <li>Undestands polarisation etc.</li> <li>Acquires the knowledge of solving problem using the given information.</li> </ul>
OCTOBER	VII.Dual nature of Matter 11. Dual nature of matter Dual nature of radiation ,photoelectriceffect,Hertz and Lenard's observations,Einstein's equation-particle nature of light,matterwaves,wave nature of light,deBroblie relation ,Davisson- Germer experiment.	Discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	12.Concave lens 13. prism	Oral test Test paper. MCQ. Solving problems	<ul> <li>Defines photoelectric effect and cites examples.</li> <li>Explains the photo electric effect and wave theory of light.</li> <li>Understands the Einstein's photo electric equation.</li> <li>Explains the wave nature of matter.</li> <li>Acquires the knowledge of solving problem.</li> </ul>
	VIII. Atoms and Nuclei 12. Atoms  Alpha particle scattering experiment, Rutherford model of atom, Bo Bohr model, energy levels, hydrogen spectrum  SECOND-TERMINAL EXAMINATION	Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	14. Travelling microscope	Oral test Test paper. MCQ. Solving problems	<ul> <li>Differentiates the Emission and Absorption atomic spectra of Hydrogen atom.</li> <li>Identifies various lines of Hydrogen spectrum</li> <li>Understands Bohr atom model.</li> </ul>
	13. Nuclei Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Radioactivity ,alpha,	Interactive learning, discussion, problem solving.		Oral test Test paper. MCQ. Solving	<ul> <li>Distinguishes isotopes, isobars and isotones in terms of nuclear constituents and cites examples.</li> <li>Understands Alpha, Beta and Gamma</li> </ul>

NOVEMBER	beta and gamma particles/rays and their properties; radioactive decay law. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.  IX. Electronic Devices  14. Semiconductors Energy bands in conductors, semiconductors and insulators, Semiconductor diode  - I-V characteristics in forward and reverse bias, diode as a rectifier; Special purpose p-n junction diodes: LED, photodiode, solar cell and Zener diode and their characteristics, zener diode as a voltage regulator.	Plotting graphs. Deriving mathematical relations. Smart class.  Interactive learning, discussion, problem solving. Plotting graphs. Deriving mathematical relations. Smart class.	15. PN junction diode	Oral test Test paper. MCQ. Solving problems	Understands the concepts of mass defect and nuclear binding-energy using Einstein's mass-energy relation and solves numerical problems.      Understands the semiconductor devices.     Plot VI characteristics.     Acquires the knowledge to perform experiments using semiconductor devices.
DECEMBER					REVISION And MODEL EXAMS
JANUARY					REVISION And Practical EXAMS
FEBRUARY					REVISION And MODEL EXAMS
MARCH					BOARD EXAMS

**Subject: Chemistry** 

MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL	RESOURCES	ACTIVITY
JUNE	SOLUTIONS:	Understanding	STRATEGY >Learner centered	>Reference book	>Lab work
	>Binary solution		>Formulae chart	>Visuals	
	>Concentration terms				
	>Solubility				
	>Vapour pressure of liquid				
	solutions				
	>Ideal & non-ideal solutions				
	>Colligative properties				
	>Abnormality in molar mass				
	ELECTROCHEMISTRY				
	>Metallic/electrolytic	>Analysing	>Interactive strategy	>Peer view writing	>Lab work
	conductors	>Evaluation	>Application	task	
	>Equivalent conducticity	>Creativity		>Visuals	
	>Molar conductivity			>Reference books	
	>Variation of molar conductivity			>PPT	
	with concentration				
	>Kohlrausch's law				
	>Electrochemical cell				
	>Commercial cells				
	>Corrosion of metals			>PPT	>Test paper
JULY		>Understanding	>Lecture method	>Reference book	>Seminar
	>CHEMICAL KINETICS	>Analsysing	>Formulae chart		
	>Rate of reaction				
	>Integrated rate equations				

	- BI				
	>Pseudo order reaction				
	>Effect of temp on reaction rate				
	>Collision theory				
	>Effect of catalyst				
		>Evaluation	>Content focused	>Library	>Numerical solving
	>SURFACE CHEMISTRY	>Understanding	>Demonstration method	>Visuals	>Lab work
	>Adsorption				
	>Catalysis				
	>Adsorption theory				
	>Shape selective catalysis				
	>Enzyme catalysis				
	>Colloids-its classification				
	>Preparation of colloidal				
	solution				
	>Properties of colloidal solution				
	>Emulsions	>Understanding	>Discussion method	>Reference book	>Seminar
	2.114.315.13	>Analysing	>Learner centered	>PPT	>Test paper
	GENERAL PRINCIPLES &	- Analysing	- Eddiner delitered		rest paper
	PROCESSES OF ISOLATION OF				
	ELEMENTS				
	>Occurence of metals				
	>Extraction of metals				
	>Thermodynamical principles of				
	metallurgy				
	>Ellingham diagram	. Understanding			
ALICUST	>Electrochemical principles of	>Understanding	al astronomath ad	a latera ethic accord	- Dana and accordation
AUGUST	metallurgy	>Evaluation	>Lecture method	>Interactive panel	>Peer review writing
	>Refining			>Library	task
	THE p-BLOCK ELEMENTS				>Test paper
	GROUP 16 ELEMENTS				
	>Diooxygen				
	>Simple Oxides				
	>Ozone				
	>Allotropes of Sulphur				

	>Sulphur Dioxide >Oxoacids of Sulphur >Sulphuric acid GROUP 17 ELEMENTS >Chlorine >HCl >Oxoacids of Halogens >Interhalogen Compounds GROUP 18 ELEMENTS	>Understanding >Evaluation	>Lecture method	>Library >PPT	>Test paper
	THE d AND f – BLOCK ELEMENTS >Position in the Periodic Table >Electronic configurations of d – block elements >General properties of Transition Elements >The Inner Transition Elements >The Lanthanoids >The Actinoids > Some Applications of d and f	>Analysing	>Interactive/Participative	>Reference book	>Numerical solving
SEPTEMBER	block elements  CO ORDINATION COMPOUNDS  Important terms pertaining to cocordination compounds  Classification of Ligands  Werner's Theory  Nomenclature  isomerism  Bonding  Stabillity	>Analysing	method	>keterence book	>Test paper

	>Coordination compounds in daily life	>Analysing	>Participative strategy	>Reference book	>Test paper >Lab work
OCTOBER	HALOALKANES AND HALOARENES Haloalkanes >Nomenclature >Nature of C-X bond >Physical and Chemical Properties >Mechanism of Substitution Reaction >Optical Rotation Haloarenes > Nature of C-X bond >Substitution Reactions >Uses and Environmental Effects of Polyhalogen compounds	>Analysing	>Participative strategy	>Reference book	>Test paper >Lab work
	ALCOHOLS, PHENOLS AND ETHERS Alcohols >Nomenclature >Preparation >Physical and Chemical Properties >Identification >Mechanism of Dehydration >Uses with Special Reference to Methanol and Ethanol Phenols				

>Nomenclature >Preparation >Physical and Chemical Properties >Acidic nature >Electrophilic Substitution Reactions >Uses of Phenols Ethers >Nomenclature >Preparation >Physical and Chemical Properties >Uses	>Analysing	>Participative strategy	>Reference book >Interactive panel	>Lab work >Numerical solving >Test paper
ALDEHYDES, KETONES AND CARBOXYLIC ACIDS Aldehydes and Ketones >Nomenclature >Nature of CO group >Preparation >Properties >Mechanism of Nucleophilic Addition >Uses Carboxylic Acids >Nomenclature >Acidic Nature >Preparation >Properties >uses	>Analysing	>Participative strategy	>Interactive panel	>Numerical solving >Lab work >Test paper

NOVEMBER	ORGANIC COMPOUND CONTAINING NITROGEN Amines >Nomenclature >Classification >Structure >preparation methods >Properties >Identification of Primary, Secondary and Tertiary Amines  Cyanides and Isocyanides  Diazonium Salts >Preparation >Chemical Reactions >Importance in Synthetic Organic Chemistry	>Understanding	>Lecture method	>Visuals	>Lab work
	BIOMOLECULES Carbohydrates >Classification >Monosaccharides >D-L configurations >Polysaccharides >Importance of Carbohydrates Proteins >Amino acids >Peptide Bond >Proteins >Structutres >Denaturation of Proteins >Enzymes	>Analysing	>Demonstration method	>PPT >Reference book	>Test paper

	>Hormones Vitamins >Classification and Functions				
	Nuclic Acids				
	DNA and RNA	>Analysing	>Discussion method	>Interactive panel	>Seminar
	Die alla lite	Milalysing	PDISCUSSION MEGNOU	Finteractive parier	> Jennina
	POLYMERS				
	>Copolymerization				
	>Important Polymers				
	>Natural and Synthetic				
	Polymers				
	>Biodegradable and Non-				
	biodegradable Polymers				
	CHEMISTRY IN EVERYDAY LIFE				
	Chemicals in Medicines				
	>Analgesics				
	>Tranquilizers				
DECEMBER	>Antiseptics				
	>Disinfectants				
JANUARY	>Antibiotics				
	>Antacids				
	>Antihistamines				
FEBRUARY	>Antifertility Drugs				
	Chemicals in Food				
	>Preservatives				
MARCH	>Artificial Sweetening Agents				
	>Antioxidants				
	Cleansing Agents				
	>Soaps				
	>Detergents				
	>Cleansing Action				

REVISION AND FIRST MODEL EXAM		
REVISION AND SECOND MODEL EXAM		
REVISION AND THIRD MODEL EXAM		
BOARD EXAM		

**Subject: Economics** 

MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL STARATEGY	RESOURCES	ACTIVITY
JUNE	National income and related aggregates     National Income aggregates     Circular flow of income     Methods of calculating National Income     GDP and Welfare	Understanding the basic concepts of macroeconomics     Familiarizing the methods of calculating national income     Examine the concept of GDP and welfare	Concept mapping     Questioning     technique     Deductive method	Reference books     Blackeboard     Smarteclass	Assignment:     basic concepts     of national     income     Problem     solving on     national     income
	Development experience (1947-90) and economic	Understanding the development process in India after independence	Discussion method     Interactive lecture     method	<ul> <li>Smart class</li> <li>Reference books</li> <li>PPT</li> </ul>	Assignment:     New     Economic     Reforms 1991

	reforms since 1991  State of Indian economy on the eve of Independence  Common goals of five year plans  Main features, problems and policies of agriculture, industry and foreign trade.	Analyzing the problems of various sectors under British rule     evaluating the five year plans			Seminar on globalization
JULY	development     experience     (1947-90) and     economic     reforms since     1991     economic     reforms since     1991     demonetizatio     n and GST	Critical thinking     Examining the impact of GST and Demonetization	Discussion method     Interactive/participat ive strategy	Smart     class     Referenc     e books     Newspap     er     clippings     E-     Resource     s	Assignment on demonetization     Seminar on GST
	Money and banking	Recognize the process of credit creation by commercial banks	Explanation technique     Flow chart     Discovery method	Smart class	<ul> <li>Field visit on nearby commercial banks</li> </ul>

	<ul> <li>meaning and supply of money</li> <li>Money creation by commercial banks</li> <li>Money multiplier</li> <li>Central bank and its functions</li> </ul>	Analyzing the role of financial markets in an economy	Interactive lecture method     Laboratory method	Magazin es     PPT     Black board     Text book	Assignment on credit control measures by Central Bank.
AUGUST	Current challenges facing Indian economy Poverty Rural development Human capital formation	Identify and analyses current issues     Sensitive to economic issues	Discussion method     Observation method     Concept mapping     Field study method	Smart     class     Internet     Referenc     e books     NCERT     books	Assignment on poverty alleviation programmes     Chart making on nonfarming activities     Discussion on growth of education sector in India     Role play on rural credit

SEPTEMBER	Determination of income and employment     Income and employment concepts     Investment multiplier     AD =AS Approach     S=I Approach     Problem of excess demand and deficient demand	Critical thinking     Reasoning     Logical thinking     Understand the working of investment multiplier     Understanding the Keynesian theory of income and employment     Identifying the measures to correct excess demand and deficient demand	Concept based     Observation method	<ul> <li>Smart class</li> <li>PPT</li> <li>Black board</li> <li>NCERT Textbooks</li> </ul>	Assignment on Keynesian theory of income and employment     Seminar on excess demand and deficient demand     Problem solving on multiplier and income determination
OCTOBER	Current challenges facing Indian economy Employment Infrastructure	Evaluating the problem of unemployment     Familiarizing the types of infrastructure     Understanding the problems in energy and health infrastructure	Interactive lecture method     Discussion method     Concept mapping	PPT Newspap er clippings E- resource s Smart class	Assignment on employment     Seminar on types of infrastructure     Debate on contemporary unemployment situation in India
	Government budget and the economy     Meaning     Components     objectives	Identifying the components of government budget     Classifying receipts and expenditure	Concept mapping     Interactive lecture     method	<ul> <li>Smart     class</li> <li>Newspap     er     clippings</li> </ul>	Assignment on meaning and objectives of government budget

	➤ Measures of government deficit	Familiarizing with the objectives of government budget      Assess the measures taken by the government to reduce deficit		E-     resource     s     Black     board	Chart making on components of government budget     Problem solving on government budget deficit
NOVEMBER	Balance of payments     Meaning and components     BOP deficit     Foreign exchange rate     Types of foreign exchange rates     Determination of exchange rate	Familiarizing the components of BOP     Differentiate between fixed and flexible exchange rate of currency     Identify the price of currency in forex     Able to investigate changes in the society	Observation method    Interactive lecture    method    Learner centered	Smart class NCERT Text book Newspap er clippings E- resource s PPT	Assignment on balance of payment     Find out exchange rates of different currencies
	<ul> <li>Development experience of India with neighboring countries</li> <li>India and Pakistan</li> </ul>	Understand the problems and measures in their contextual perspective     Able to present view points on economic issues	Student centered     Discussion method	Smart     class     Referenc     e books     magazin     es	Assignment on comparative look on India and its neighbors     Debate on population growth in

	➤ India and China ➤ Issues Sectoral development	Comparing the     development     experience of India     with other countries			India and China
DECEMBER	PROJECT SUBMISSION REVISION & FIRST MODEL EXAMINATION				
JANUARY	REVISION &PRACTICAL EXAMINATION				
FEBRUARY	REVISION AND SECOND MODEL EXAMINATION				
MARCH	ANNUAL EXAMINATION				

**Subject: Maths** 

Month	Торіс	Learning Objectives	Pedagogical strategies	Learning outcomes	Assessment Strategy
June	1. Relations and functions	Students will be able to  Understand types of relations and functions  Understand composition of functions and invertible functions	➤ Concept map ➤ Interactive lecture ➤ Smart class	Students will be able to recognise  Types of relations Types of functions Composition of functions Invertible function	➤ Oral questions ➤ Pen paper test
	2. Inverse Trigonometric functions	Student will be able to  > Understand the basic concepts and properties of inverse trigonometric functions	➤ Interactive lecture	Student will be able to recognise  Inverse trigonometry and its properties	➤ Pen paper test
	3. Matrices	Student will be able to  Understand matrix, types of matrices Recognise operations	Interactive lecture	Student will be able to recognise  Matrix  Types of matrix  Operations on	

	4. Determinants	on matrices and transpose of matrices  Identify symmetric and skew symmetric matrices  Understand elementary operations and invertible functions  Students will be able to  Understand Determinants and its properties  Develop the skill to find the area of the triangle using matrix  Understand minor cofactor adjoint and inverse of a matrix  Apply determinants and matrices in solving problems	➤ Interactive lecture ➤ Discussion	matrices  Transpose, symmetric and skew symmetric matrices  Elementary operations invertible matrices  Student will be able to realise determinants its properties Area of triangle Minor, cofactor Adjoint and inverse	➤ Pen paper test ➤ Lab work ➤ Pen paper test ➤ Lab work
July	5. Continuity and differentiation	Student will be able to  > Understand continuity and differentiation  > Identify the differentiation of different types of functions > Identify second order derivatives > Understand mean value theorem	➤ Interactive lecture	Student will be able to recognise  Continuity Differentiation Solve different types of functions Second order derivatives Mean value theorem	➤ Lab work ➤ Pen paper test

	6. Applications of derivatives	Students will be able to  > Understand rate of		Students will be able to realise	
		change of quantities  Develop skill to solve increasing and decreasing functions  Classify tangents and normal  Understand approximations  Identify maxima and minima	> Realia > Interactive lecture	<ul> <li>Rate of change of quantities</li> <li>Increasing and decreasing functions</li> <li>Tangents and normal</li> <li>Approximations</li> <li>Maxima and minima</li> </ul>	➤ Lab work ➤ Pen paper test
August	10. Vector Algebra	Student will be able to  Understand basic concepts of vector  Identify types of vectors  Recognise addition of vectors , product of vectors	➤ Smart class ➤ Discussion	Student will be able to realise  basic concept of vectors  Types of vectors  Product of vectors	<ul> <li>Class edge activity</li> <li>Pen paper test</li> </ul>
	11. Three dimensional Geometry	Student will be able to  > Understand direction cosines and direction ratio  > Identify different types of equations of line  > Identify different equations of planes  > Angle between line, between planes and between line and a plane  > Recognise the distance between a point from a plane	➤ Smart class ➤ Discussion	Students will be able to realise  Direction cosines and direction ratio Equation of line in a space Equation of plane Angles between line and plane Distance from a point to a plane	➤ Pen paper test

September	12. Linear Programming	Student will be able to  Understand different types of L.P.P.	> Interactive lecture	Student will be able to recognise  Different types of L.P.P	
	13. Probability	Students will be able to understand  Conditional probability Multiplication theorem on probability Independent events Bayes theorem Random variable and its probability	> Interactive lecture > discussion	Students will be able to realise Conditional probability Multiplication theorem on probability Independent events Bayes theorem Random variable and its probability distribution	➤ Pen Paper test ➤ Lab work
October	7. Integrals	Students will be able to understand  Integration  Methods of integration  Integration by parts and partial functions  Definite integrals  Fundamental theorem of calculus	➤ Interactive lecture    ➤ Smart class    ➤ discussion	Students will be able to recognise  Integration  Methods of integration  Integration by parts and partial functions  Definite integrals  Fundamental theorem of calculus	> Pen paper test > Lab work
November	Application of integrals      Differential equations	Students will be able to  > Understand area under simple curves  > Recognise area between two curves  Students will be able to understand	➤ Interactive lecture ➤ Smart class	Students will be able to realise  Area under simple curves  Area between two curves	<ul><li>Pen paper test</li><li>Lab work</li></ul>
		➤ Basic concepts of D.E ➤ General and particular solutions ➤ Formation of D.E	> Discussion > Interactive lecture	Students will be able to realise  Basic concepts of D.E  General and particular	

	Methods of solving first order first degree equations	solutions  Formation of D.E  Methods of solving first order first degree equations
December	REVISION AND FIRST MODEL EXAMINATION	
January	REVISION	
February	REVISION AND MODEL	
	EXAMINATION	
March	ANNUAL EXAMINATION	

**Subject: Malayalam** 

Month	Topic	Short term outcome	Pedagogical Practice	Long term outcome
June	1. കണ്ണാടി കാണ്മോളവും	മലയാളത്തിലെ ക്ലാസിക് കൃതികൾ പരിചയപ്പെടുന്നു	കുറിപ്പ് തയ്യാറാക്കൽ പാരായണം , പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	ധവരം കഴിവിൽ വിശാസം ഉണ്ടാവുന്നു
	2. പ്രകാശം ജലം പോലെയാണ്	നോവലിസ്റ്റിനെ പരിചയപ്പെടുന്നു	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു, വിവർത്തനം തയ്യാറാക്കുന്നു	പ്രകൃതിയെ നിരീക്ഷിക്കാനും പഠിക്കാനും പ്രാപ്തരാകുന്നു
July	3. കിരാതവൃത്തം	കവിതകളിലെ അവതരണ സാദ്ധ്യതകൾ കണ്ടെത്തുന്നു	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	പ്രകൃതിസ്നേഹം വളരുന്നു
	4. അവകാശങ്ങളുടെ പ്രശ്നം	കഥാസ്വാദനം ,കഥാകൃത്തിനെ പരിചയപ്പെടൽ കഥാരചന സങ്കേരങ്ങൾ മനസ്സിലാക്കി കുറിപ്പുകൾ തയ്യാറാക്കുന്നു	പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	ബന്ധങ്ങളുടെ വില മനസ്സിലാക്കുന്നു
August	5. അഗ്നിവർണന്റെ കാലൂകൾ	നാടകം അവതരിപ്പിക്കുന്നതിന്	പാരായണം പാഠാനുബന്ധ പ്രവർത്തങ്ങൾ	ഉത്തരവാദിത്വബോധം ഉള്ളവരാകുന്നു

September	്. 6. കേശിനിമൊഴി	വായന , കല മാതൃകകളുടെ സവിശേഷതകൾ അറിയുന്നു	പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ ചെയ്യുന്നു,	ശുഭാപ്തി വിശ്വാസം ഉണ്ടാവുന്നു
October	7. പദത്തിന്റെ പഥത്തിൽ	കലാരംഗത്തെ ആളുകളുമായി അഭിമുഖം നടത്തുന്നതിന്	പാഠാനുബന്ധപ്രവർത്തനങ്ങൾ	കലകളെക്കൂറിച്ച് അറിയുന്നു
November	8 മാപ്പിളപ്പാട്ടിലെ കേരളിയത	മാപ്പിളപ്പാട്ടു കലാകാരന്മാരെക്കൂറിച്ച അറിയുന്നതിന്	പ്ാഠാനുബന്ധപ്രവർത്തനങ്ങൾ	കലാകാരന്മാരെക്കുറിച്ച് അറിയുന്നു
December	9. മോഷണം 10. ഗൗളിജന്മം	കവിതയിലെ അവതരണ സാദ്ധ്യതകൾ കണ്ടെത്തി അവതരിപ്പിക്കുന്നതിനു സ്ത്രീപക്ഷ കഥകളിലെ സാമൂഹിക വിമർശനതലം അപഗ്രഥിച്ചു കൂറിപ്പുകൾ തയ്യാറാക്കുന്നു	കവിപരിചയം കഥാകൃത്തിനെ പരിചയപ്പെടുന്നു	സതൃസന്ധരായി ജിവിക്കണം എന്ന ആഗ്രഹം ഉണ്ടാവുന്നു സ്ത്രീ ശാക്തികരണത്തെ കുറിച്ച് മനസ്സിലാക്കുന്നു
January	11. ബദരിയും പരിസമങ്ങളും 12. നവമാധ്യമങ്ങൾ ശക്തിയുംസാധ്യതയും	യാത്രാവിവണങ്ങൾ എഴുതുന്നതിനു നവമാധ്യമങ്ങളുടെ സാദ്ധ്യതകൾ കണ്ടെത്തുന്നതിന്	സമാന കൃതികൾ കണ്ടെത്തി വായിക്കുന്നു പാരായണം പാരാസ്ബന്ധ പ്രവർത്തങ്ങൾ	രാജ്യസ്നേഹം ഉണ്ടാവുന്നു മാധ്യമങ്ങളൂടെ സാദ്ധ്യതകൾ മനസ്സിലാക്കുന്നു

February	അമ്മയ്ക്ക്	എം.ടി .വാസുദേവൻ നായരേക്കുറിച്ചും അദ്ദേഹത്തിന്റെ കൃതികളെക്കുറിച്ചും അറിയുന്നതിന്	വായന, പാഠാനുബന്ധ പ്രവർത്തനങ്ങൾ	സാഹിത്യാഭിരുചി വളരുന്നതിന്
March	പുനരാവർത്തനം Annual Exam			



MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL STRATEGY	RESOURCES	ACTIVITY
JUNE	Purpose of plotting  Drawing and saving the following types of plots using Matplotlib  Line plot Bar plot Histogram  Customizing plots Adding label Title Legend  Series Creation of Series from – ndarray, dictionary, scalar value mathematical operations Head and Tail functions Selection, Indexing and Slicing	<ul> <li>Evaluation</li> <li>Understanding</li> <li>Logical thinking</li> <li>Creativity</li> </ul>	<ul> <li>Discussion method</li> <li>Learner centered</li> </ul>	➤ Reference books ➤ PPT	➤ Peer review writing task.
JULY	Data Frames     Creation - from dictionary of Series, list of dictionaries, Text/CSV files     Display     Iteration     Operations on rows and columns: add, select, delete, rename     Head and Tail functions     Indexing using labels     Boolean Indexing     Importing or exporting data between CSV files and DataFrames	<ul> <li>➤ Understanding</li> <li>➤ Analysing</li> <li>➤ Logical thinking.</li> </ul>	➤ Learner centred ➤ Content focused	> PPT	➤ Lab work.

AUGUST	<ul> <li>Math functions: POWER (), ROUND (), MOD ().</li> <li>Text functions: UCASE ()/UPPER (), LCASE ()/LOWER(), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().</li> <li>Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAY</li> <li>Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*).</li> <li>Querying and manipulating data using Group by, Having, Order by.</li> </ul>	> Analysing	➤ Interactive/Parti cipative strategy ➤ Flowcharts	➤ Reference books	➤ Lab work ➤ Misconcept ion check
SEPTEMBER	Network Types LAN MAN WAN  Network Devices Modem Hub Switch Repeater Gateway  Network Topologies Star Bus Tree Mesh Introduction to Internet, URL, WWW, and its applications- Web, email, Chat, VoIP  Website Difference between website and webpage.	➤ Understanding ➤ Relational thinking	➤ Content focused	> Reference books	> Lab work
OCTOBER	Web Pages     Static web pages     Dynamic web pages     Web Server     Web Hosting	➤ Understanding	<ul> <li>Content focused learning</li> <li>Optimised coding</li> </ul>	➤ Reference books	<ul> <li>Lab work</li> <li>Resolving Queries</li> </ul>

NOVEMBER	Web Browsers     commonly used browsers     browser settings     add-ons     plug-ins     cookies  Societal Impacts of Technology:     Digital Footprints     Active digital footprint     Passive digital footprint     Net and Communication Etiquettes.     Data Protection     Intellectual Property Rights     Plagiarism     Licensing and copyright     Free and open source software (FOSS)     Cybercrime and cyber laws     Hacking     Phishing     Cyber Bullying     Overview of Indian IT Act      Data Protection     Intellectual Property Rights     Plagiarism     Cyber Bullying     Overview of Indian IT Act					
DECEMBER	Revision and Record work					
JANUARY	Model Examination and Project work					
FEBRUARY	Revision and Model Examination					
MARCH	Revision					



MONTH	TOPIC	LEARNING OUTCOME	PEDAGOGICAL	RESOURCES	ACTIVITY
JUNE	Nature and significance	OUTCOME	STRATEGY		
JUNE	of management	Students will be able to understand and	Interactive/	Reference book Text book	Seminar is
	Meaning and features Management as science, art and profession Levels of management Functions of management Co- ordination  Principles of management	identify	participative	Smart class	continued
	Concepts and significance of management Fayal's principles of management Tayolor's scientific management	Comprehension and understanding	Questioning Techniques		Debate
	Business Environment  Concepts and importance Dimension of business environment	Understanding	Discussion method Application	Reference book Text book Smart class	Assignment

	D. C. C.				
	Demonetization				
	Impact of Government				
	policy changes on				
	business with special				
	reference to LPG				
JULY	Financial management				
	Concept, role and objectives of financial management Financial decision Financial planning, capital structure, fixed and working capital	Analyzing and creativity	Demonetization method	Smart class Text book Reference book	Seminar
	Financial markets				
	Functions and types of financial markets Money market and its instruments Capital market and its type Stock-exchange: - Functions and trading procedure, Securities and exchange board of India. Objectives and functions	Understanding and analyzing	Interactive/participat ive	Smart class Text book Reference book	Assignment and seminar
AUGUST	Marketing				
	<u>management</u>				
	M. 1. C C C				A
	Marketing functions,				Assignment
	marketing management				

	Marketing mix-concept elements, product branding, labelling and packaging- concept, price, physical distribution, promotion	Understanding Creativity comprehensive	Learning centered	Smart class Text book Reference book	Seminar
SEPT	Concepts and importance of consumer protection Rights and responsibilities Remedies available, consumer awareness Role of consumer organization	Analyzing and creativity	Interactive and participative		Assignments
	Planning Planning, planning process, types of plans	Awareness understanding	Interactive and participative	Smart class Text book Reference book	Assignments Seminar
OCT	Organizing  Concepts and importance of organizing Organizing procedures and organizing structure, delegation, decentralization	Understanding			
	Staffing				

	Concepts and importance of staffing HRM Staffing process Recruitment process Training and development	Understanding And analyzing	Discussion method	Smart class Text book Reference book	Assignments Mark scoring points	
NOV	Directing  Concepts and importance of directing, elements of directing Supervision, motivation, leadership, communication  Controlling	Understanding and evaluation	Discussion method	Smart class Text book Reference book	Assignments  Discuss about caring short questions	
	Concepts and importance Relation between planning and controlling Steps in the process of control	Understanding And analyzing	Demonstration method	Smart class Text book Reference book		
DEC	PROJ	ECT SUBMISSION, R	EVISION, FIRST M	ODEL EXAMINATION	v,	
JAN			PRACTICAL EXAMI			
FEB	REVISION, SECOND MODEL EXAMINATION					



MONTH	TOPIC	LEARNING	PEDAGOGICAL	RESOURCES	ACTIVITY
		OUTCOME	STRATEGY		
JUNE	Financial Statement of Not-for -profit organization  State the meaning of Receipts and Payments  Preparation of receipt and payment account and Income and expenditure account and balance	Develop the understanding and skill of preparing accounts	Problem solving method and lecture method	Reference book Text book	Assignment
JULY	Accounting for fundamentals of partnership. Partnership features, deed Preparation of capital a/c and Profit & Loss appropriation Past adjustment  Calculation of goodwill Interest on partners loan	Developing and analyzing preparation of problem	Interaction Content for used Lecture method	Smart class Reference book	Seminar
JULY	is to be charge or appropriation of profit				

	Goodwill to be adjusted through partners' capital/ current or by raising and written off Admission of a partner	Discussion of scoring marks	Problem solving method	NCERT Text book Reference book Smart class	Assignment
	and retirements and death and dissolution Treatment revaluation of assets and reassessment liabilities Adjustment of capital a/c	Developing the skill of calculation  Analyzing the creativity	Problem solving method	Smart class Text book Reference book Sample questions	Discussion method
AUGUST	Dissolution of partnership firm Meaning of dissolution partnership firm and partnership, types of dissolution Settlement od accounts Preparation of realization a/c, Capital a/c and cash a/c	Students will be able to understand the method of preparing a/cs	Problem solving method	Smart class Text book Reference book Sample questions	Assignment
SEPT	Accounting for companies Accounting for share capital: issue and allotment of equity and preference shares-over subscription, under subscription of shares, issued at par and at premium, calls in solvance, arrears. Issue	Students will be able to understand the method of recording and solving problem	Problem solving method	Smart class Text book Reference book	Seminars Assignments

	of shares for consideration other than cash Concept of private placement and employees stock option Accounting treatment for failure and reissue of shares				
	Accounting for debentures				
OCT	Analysis of financial statement Financial statement of company Financial statement analysis Tools of financial statement analysis Accounting ratios	Understanding	Problem solving	Smart class Text book Reference book	Assignments of problems
NOV	Cash flow statement Meaning ,objectives and preparation	Analyzing creativity	Application skill	Smart class Text book Reference book	Seminars Assignments
DEC	PROJECT SUBMISSION, REVISION, FIRST MODEL EXAMINATION,				
JAN	REVISION, PRACTICAL EXAMINATION				
FEB	REVISION, SECOND MODEL EXAMINATION				

**Subject: Computer Science** 

MONTH TOPIC	LEARNING OUTCOME	PEDAGOGICAL STRATEGY	RESOURCES	ACTIVITY
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JUNE	<ul> <li>Revision of python basics</li> <li>Functions</li> <li>File handling in python</li> <li>Types of file <ul> <li>Text file</li> <li>Binary File</li> <li>CSV File</li> </ul> </li> <li>Operations <ul> <li>Writing</li> <li>Reading</li> <li>Traversal</li> </ul> </li> <li>Libraries</li> </ul>	<ul> <li>Evaluation</li> <li>Understanding</li> <li>Logical thinking</li> <li>Creativity</li> </ul>	<ul> <li>Discussion method</li> <li>Learner centered</li> </ul>	<ul><li>Reference books</li><li>PPT</li></ul>	<ul> <li>Peer review writing task</li> <li>Lab work.</li> </ul>
JULY	<ul> <li>Data Communications</li> <li>Evolution <ul> <li>ARPANET</li> <li>NSFNET</li> <li>INTERNET</li> </ul> </li> <li>Communication terminologies <ul> <li>Measuring Capacity</li> </ul> </li> <li>Switching Techniques <ul> <li>Circuit Switching</li> <li>Packet switching</li> </ul> </li> <li>Transmission Media <ul> <li>Wired communication</li> <li>Twisted pair</li> <li>Co-axial</li> <li>Fiber-optic</li> </ul> </li> <li>Wireless communication <ul> <li>Radio waves</li> <li>Micro waves</li> <li>Infrared waves</li> </ul> </li> </ul>	<ul> <li>Understanding</li> <li>Analysing</li> <li>Logical thinking.</li> </ul>	> Content focused	> PPT	> Peer review writing task .
AUGUST	<ul> <li>Network topologies</li> <li>Star</li> <li>Bus</li> <li>Tree</li> <li>Mesh</li> <li>Network protocol</li> <li>LAN</li> </ul>	➤ Analysing	➤ Interactive/Parti cipative strategy	> Reference books	<ul> <li>Labwor</li> <li>k</li> <li>Misconc</li> <li>eption</li> <li>check</li> </ul>

	<ul> <li>MAN</li> <li>WAN</li> <li>Network Devices</li> <li>Modem</li> <li>Hub</li> <li>Switch</li> <li>Repeater</li> <li>Gateway</li> <li>Network Topologies</li> <li>Star</li> <li>Bus</li> <li>Tree</li> <li>Mesh</li> <li>Mobile telecommunication</li> <li>Web services</li> </ul>				
SEPTEMB ER	<ul> <li>Data base concepts</li> <li>Relational data model :Attribute ,Tuple ,Domain,degree,cardinality,Keys</li> <li>SQL(Structured Query Language)         <ul> <li>Data types and constrains</li> </ul> </li> <li>SQL data manipulation</li> <li>SQL Data Definition</li> <li>SQL Data Query</li> <li>Text functions: UCASE ()/UPPER (), LCASE ()/LOWER(), MID ()/SUBSTRING ()/SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM ().</li> <li>Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*).</li> <li>Querying and manipulating data using Group by, Having, Order by.</li> <li>Joins</li> </ul>	<ul> <li>Understanding</li> <li>Relational thinking</li> </ul>	> Content focused	> Reference books	<ul> <li>▶ Lab work</li> <li>▶ Resolvin g Queries</li> </ul>

OCTOBE R	<ul> <li>Data structure</li> <li>Stack</li> <li>Queue <ul> <li>Operations on stack: Push(),Pop()</li> <li>Implementation of stack using list</li> <li>Operations on</li></ul></li></ul>	➤ Understanding	<ul> <li>Content focused learning</li> <li>Optimised coding</li> </ul>	> Reference books	> Lab work
NOVEMB ER	<ul> <li>Interface of python with an SQL database</li> <li>Connecting SQL with python         <ul> <li>Import module</li> <li>Connect(),cursor(),execute()</li> </ul> </li> <li>Performing SQL Queries: Insert, update ,delete</li> <li>Display data: fetchone(), fetchall(), rowcount()</li> <li>Commit and Rollback</li> <li>Creating database connectivity applications</li> </ul>	➤ Understanding	<ul> <li>Discussion method</li> <li>Demonstrative method</li> </ul>	➤ Interactive panel PPT	<ul> <li>Peer review writing task</li> <li>Lab work</li> </ul>
DECEMB ER	Revision and Record work				
JANUAR Y	Model Examination and Project work				
FEBRUA RY	Revision and Model Examination				
MARCH	Revision				

**Subject: English** 

MONTH	TOPIC	SHORT TERM GOALS	PEDAGOGICAL PRACTICES	LONG-TERM GOALS LEARNING OUTCOME
JUNE	The Last Lesson	Value of Freedom and Patriotism.	Group Discussion	At the end of the lesson students will be able to : Understand the value of freedom and patriotism
	My Mother At Sloty Six	Value of hope in everyone's life	Debate	Captures the subtlety of human relationship
			Listening	Listen to a review and gather facts and answer questions about heard facts
			Note Making	questions about neard facts
	The Tiger King		Speaking	
	The third level			
JULY	Lost Spring	Fighting against social evils.	Designing Posters	Millions of children in India waste their childhood in most hazardous conditions
	An Elementary School Classroom	Social injustice and equality	Drafting Notices	Children should be allowed to have full mental as
	in a Slum	South Injustice and expansy	Advertisements	well as physical development
	The Enemy	Value of peace, love and toleration		A Dr. Gives up priority to save the life of a dying man
	Journey to the end of the Earth	To know more about the planets		Understood more about planets
AUGUST	Deep Water	Confidence in self and an ardent desire bring success in life.	Invitations Formal	All terrors and fears are psychological. We can conquer them

			Invitations Informal	Stillness and silence will help man in creating a
	Keeping Quiet(poem)	Value of silence		feeling of mutual understanding among human
			Report Writing	beings.
	Poets and the pancakes	Influence of movies		Using gentle humour to point out human weakness and absurdities.
	Roadside stand(poem)	Sympathy and humanity		Understand the plight of the rural poor
SEPTEMBER	The Rattrap	The essential goodness in a	Writing Letters-	Able to learn the universal message that this
		human being can be awakened		world is a big rattrap .Riches and wealth only
		through love and understanding.	enquiries,	tempt and trap us in.
	Should Wizard Hit Mommy?	The bond of love	complaints,	Realize the basic moral issue of radial segregation.
			asking information	
	On The Face of It	Love and Sympathy can bring a		The need to develop positive attitude towards
		great change in the attitude	Placing Orders	Ife and people. Chapter shows right way of
				Judging man matters and life of young
			Sending Replies	generation.
OCTOBER	Indigo	Importance of keeping mental	Job Application,	The champaran episode was a turning point in
		as well as physical strength.		the participation of ordinary people of India.
			Articles for	
	A thing of Beauty	A thing of beauty is a joy forever.	Megazines,	Understood that beauty never fades nor is it devalued.
	Evans Tries a O-Level	Lapses on the part of the police	Articles for	Describes how all attempts of the prison officers
		and prison	Newspapers	and the governor falled to stop Evans from escaping.
	Interview part I and II	Importance of Interview		Understood, despite of the draw backs, there are many positive views on interviews.
NOVEMBER	Going Places	How to face the adolescent	Writing Speeches	Understand about an Incurable day – dreamer
		challenges.		and escapist.

	Aunt Jennifer's Tiger	Value of Strength beauty and Certainty	Reading comprehension	Bitter experiences of an unhappy married life.
	Memories of Childhood	The need for Fighting against discrimination and untouchability.		Understood how Indian society is ridden with the evil of untouchability and also in human attitude of the people belonging to the higher caste towards lower caste.
DECEMBER	REVISION AND MODEL EXAMINATION			
JANUARY	REVISION AND MODEL EXAMINATION			
FEBRUARY	REVISION AND MODEL EXAMINATION			
MARCH	BOARD EXAMINATION			