EVS CURRICULUM PLANNING KOLLENGODE, TATTAMANGALAM, PALLAVUR (2023-2024)

CLASSI	SUBJECT:EVS RESOURCEMATERIAL/ TEXT:THE WORLD FOR YOU AND ME CHAPTER:13 TOTALNUMBEROF WORKINGDAYS: 193					
Month / No of Working days /No of periods per subject	**Unit / Chapter / Sub theme**	**KeyConcepts**	**Activities/ Practical's /Technology/ Art-Integration/Experiential learning/ Sports Integration**	**Learning Outcomes**	**Integrated values**	**No of period for each chapter**
June **21 Days**	EVS One week will be utilized for • Foundational literacy skill • Numeracy skill • General awareness **1. All About Myself** Sub. Integration G.K- About me Math-Data Handling	• Vocabulary • Numeracy • General awareness	**IT** *Video presentations to show the body part ,Good Habits, Daily exercises **(AIL)** *Draw the picture of your body using the various shapes learnt. * Create a book "All about me". * Recite a poem on body parts **EL** *Different Exercises, Games. *Good touch Bad touch. * Compare and contrast **MY FRIEND AND I!** **LAB ACTIVITY** To show the body parts using charts. Sense organs-Identification (models)	*To **introduce** themselves. *To **identify** different body parts. *To **Recognize** the five senses *To **understand** about senses and sense organs *To **evaluate** how they are same and also different from one another.	**Intellectual Development** *Observation *Critical thinking * Creative thinking *Logical thinking *Classification **Physical Development** *Each and every part of our body is very important so we have to take care of it. *Self-expression *Personal cleanliness	Bridge course 9 days 9 days Worksheet 2 Class Test-1

			Teachingaids: *Video presentations to show the body parts. * Charts, Models, Flash cards, Substances like sugar, salt, lemon. *Good Habits, Daily exercises.			
July **19 Days** **PT 1 (11th July – 16th July)**	**2. Others in my world** Sub. Integration Eng–Ria's family Math-Numbers up to 10	• Types of families • Family members and relationship • Having fun with family and neighbours • Pets	**IT** Video presentation on types of families. **(AIL)** *Role play on different types of families. * Make a family tree. **Sports Integration** *Games and aerobics with family members. **LAB ACTIVITY:-** * Types of families using charts. * Chart on pet animals **TeachingAids:** *Charts to show different types of families. *Video Presentation on types of families, celebrations with neighbours and leisure time with pets.	*To **understand** what a family is and name the family members verbally. *To **analyze** the roles of each member. ***Understand** the concept of family. *To **identify** and distinguish the types of families. *To **know** the idea of sharing and helping with family members. ***To appreciate** the need for neighbours and friends. ***Identify** pet animals and show concern and compassion for them.	**Intellectual Development** *Observation *Logical thinking *Making connections *Classification **Mental Development** *Togetherness *Sharing and caring. *Family bonding,emotions and feelings. *Helpfulness. **Physical Development** *Physical exercises *Health	8 days

	3. My school (Oral-No questions will be taken for the exam) Sub.Integration Math-Data handling	• Our class room • Our helpers • Rooms in the school. • Rules in the school	**IT** Tata class edge videos on school. **(AIL)** *Draw and colour pictures of things we use in the classroom. **EL** *Observing locations of different classrooms and other utility areas in the school. *Cleaning the classroom. *Data collection (No. of classrooms, labs etc in the school). **TeachingAids:** * School and classroom.	* **Understand** why they go to school every day. *__Identify__ different things in their classroom and know their use. *__Know__ about other places in the school and their purposes. *__Infer__ that there are different people who work at school and help it run.	**Intellectual Development** *Observation *Communication *Classification *Keep the surroundings clean. *To follow rules and regulations. *To implement the values in school and at home.	5 days Class test- 1 Worksheet-2 Revision -3
August **18 Days** **PT 2 (16th August – 23rd August)**	**4 . Food and clothes** Sub.Integration G.K-healthy food, junior chef Mal –poem on dosa Hin- Dirty turban VE-Cleanliness	• Healthy food and Food habits. • Importance of food. • Sources of food. Meals of a day • Different types of clothes for different seasons.	**IT** Tata class edge videos on food and clothes. **(AIL)** *Organizing Traditional Food Fest *Draw and design a dress for their own. *Conduct Fancy dress competition *Gratitude card	*To **recall** the importance of food and sources of food. *To **develop** the good food habits. *To **classify** food into common groups such as pulses and fruits. *To **realize** that we wear clothes according to the season.	**Physical Development** *Physical Grooming *Knowledge of health **Intellectual Development** *Each and every season has its own importance. *Environmental hygiene. Healthy living **Indian Culture** Indian food habits.	7 days

			using unwanted seeds , leaves etc. *Ek Bharth Shreshtra Barath Comparison of Food ,Clothes or Weather of two states **EI** *Fireless cooking- Using fruits, nuts, vegetables, sprouted seeds. **Teaching aids:** *Seeds, cereals, pulses *Different cloth materials.	*To **categorize** different clothes according to different seasons. *To **apply** what they have learnt in real life situation.		
	5. Our home Sub.Integration V.E - clean houseMath– Datahandling	• Different rooms in a house and their uses. • Different types of houses	**IT** *Videos on different types of houses. **(AIL)** Make a house using different 2D shapes and describe it.	***Understand** the importance of a house as a space for shelter and protection. * **Create** a model of house. ***Talk** about what kind of house they live in. * **Name** the different rooms and parts of a house.	**Intellectual Development** *Keep the house neat and clean. *To keep the things in the appropriate places. * critical thinking **Mental Development** *Safety and security provided by our home.	5 days Class test- 1 Worksheet-2 Revision-3

September **17 Days** Revision for term 1	**6. Air we breathe** Sub. Integration Hin -Patang	• Properties of Air. • Uses of air. • Need of clean air.	**(EL)** *Flying Kite **IT** Tata class edge video on properties of air and uses of air. **AIL** *Make a windmill and test it and make it turn. *Feel the presence of air by doing different activities like (flying kites, drying clothes, filling air in toys etc) * Video presentation (Awareness about different types of pollution)	*__Know__ the presence of air everywhere. *__Perform__ experiments to show that air exists. *__Infer__ that living things need fresh air to survive. *__Understand__ healthy ways of living.	**Intellectual Development** *Observation *Concentration *Do not pollute air **Universal outlook** * Environmental Education	4 days
	8.Good manners and healthy habits.(Oral-No questions will be taken for the exam) Sub.Integration G.K- good habits Skt-suddhi	• Good manners • Good habits	**(EL)** * Create real life situations and analyze how to behave in different situation in a polite manner *Make polite finger puppets and enact a favourite story using polite magic words. * Role play using polite and kind words or actions. **TEACHINGAIDS** *Toys filled with air.	*__Identify__ actions as polite or rude. *__Display__ good manners in a variety of settings.	**Physical Development** *Physical exercises *Health and Hygiene. **Mental Development** *Handling emotions. * Imbibing positive emotions. **Indian culture** * Cultural exposure *Yoga for integration	3 Class test- 1 Worksheet-2 Revision-7

October **19 Days** **Term 1** **(5th – 19th)**	**7. Water in our life** Sub. Integration G.K-Water	• Sources of Water. • Uses of water	**(AI)** *Make a poster on Save water. * Video presentation (Awareness about different types of pollution *Rain Water harvesting (Digital Model) **(EL)** * Identify the different types of water bodies we find in our neighbourhood. * Discussion on nearby water reservoirs and their experience after visiting them.	*__Understand__ the importance of water in our daily lives. *__Understand__ that all living things need water to stay alive. *__Describe__ the different ways in which water is used and explore how we use it at home. *__Recognise__ the sources of water. *Take __initiative__ to save water.	**Intellectual Development** *Observation *Critical thinking *Do not waste water. *Do not pollute water. * Take initiative to save water. * Creative and logical thinking.	6 days Revision Term 1 – 13
November **22 Days**	**7. Water in our life** **(contin……)** **9. Our Safety** Oral-No questions will be taken for the exam) Sub.Integration G.K – Stop and be careful,	• . Safety at home. • Safety on the road. • General safety rules. • Safe touch and Unsafe touch	**IT** *Video on safety Habits. **AIL)** *Make a model of traffic light. **EL** Identify and understand traffic sign boards on their way from home to school **LABACTIVITY:-**	*__Demonstrate__ Safety habits at home and on the road. *When around strangers **show** awareness of self protection. * **Differentiate**	**Physical Development** *Physical exercises *Health and Hygiene. **Mental Development** *Handling emotions. * Imbibing positive emotions. **Indian culture** * Cultural exposure *Yoga for integration	3 5

			*To show charts related to safety rules.	between safe and unsafe touch. ***Discussion** on safety habits with parents and elders.	**Intellectul Developmnt** *Observation * Reasoning * Critical thinking * Analysing visuals * Oral communication.	
	10. Our green friends Sub.Integration G.K- Flowers, fruits and vegetables ART–Parts of a plant	• Types of plants. • Parts of a plant. • Uses of plants. • Friends of a plant	**(AI)** ***Leaf Printing/Spray Painting. *Draw a plant and label its parts. * Leaf art **(EL)** *Sowing a seed or planting a sapling Hands –on experience- Maintain a garden. *Plant a seed in a pot and keep it in the classroom (Each group will take turns to take care of it). **TEACHING AIDS:-** *Original specimen of different types of plants.	* To **differentiate** the types of plants. *To **know** the parts of a plant. *To **understand** the stages of growth in a plant. ***To know** the importance of plants. ***Learn** that plants grow both on land and in water. ***Use** dry leaves to create their own special tree as a work of art.	**Intellectual Development** *Observing nature. *Attitude towards nature. *Comparison and Classification of different plants. **Universal outlook** *Environmental Education *Harmony in creation	10 days Worksheet -2 Class test-2

December **16 Days**	**11. Animals around us** Sub.Integration G.K- Animals, birds lifeundersea Eng – If you met a crocodile Open House(Poem) VE-Animal it's their worldtoo	• Living and non living things. • Different types of animals - wild , domestic, pets. • Food from animals	**IT** * Video Presentation (SOUNDS OF ANIMALS) **(AI)** *Draw animals using numbers. * Hand / finger print animal art. * Step by step drawing / origami – animals/ birds. * Make an animal mask. **(EL)** *Visit to a nearby farm	***Understand** that animals are living things. ***Distinguish** between domestic and wild animals. ***Appreciate** the usefulness of animals. ***Create** an art work of their favourite animal	**Integrated Development** Love towards nature . Intellectual development- Intellectual kindling. Imagination and creativity. **Universal outlook** *Environmental Education *Harmony in creation	14 days Class test 1 Worksheet 1
January **22 Days** (PT 3 – JAN 8-17)	**12 . Moving around.** Sub. Integration G.K- Means of transport Math-Pattern	• Ways to move our body- Directions. • Location of objects. • Means of Transport	**IT** * Tata class edge videos on means of transport and directions. **(AI)** *Origami – different means of transport. * Collect and paste pictures of different means of transport. **(EL)** *Observe the rising sun and identify the four main directions	***Distinguish** between directions. ***Give** and follow directions. ***Identify** different modes of transport. ***Differentiate** between the various kinds of transport used on land, water and air. ***Recall** the significance of traffic signals.	**IntellectualDevelopment** *Observation *Reasoning * Creative thinking * Visual literacy *To follow rules and regulations.	11days

	13. The Sky and weather Sub. Integration Math-Time English- The selfish tree. GK- Day sky Night sky, Three seasons	• The sun , the moon , weather, air	**(AI)** Make a beautiful night sky. **(EL)** *Observe the phases of moon and night sky.	*__Identify__ the sun , moon and stars. *__Discuss__ the sun, the moon and stars in their own words. *__Recognise__ sunny, cloudy, cold , hot and rainy days. *__Differentiate__ between different seasons.	**Intellectual Development** *Observation * Reasoning **Universal outlook** *Environmental Education	5 Class test- 1 Worksheet-2 Revision-3
February **21 Days**	**REVISION FOR TERM II**					
March **21 days**	**Term II Assessment**					

CLASS II	SUBJECT : EVS- RESOURCE MATERIAL / TEXT : The world – for you and me -CHAPTER :13(TOTAL WORKING DAYS:193)					
Month/No Working days/No of periods per subject	**Unit / Chapter /Sub theme**	**Key Concepts**	**Activities/Practical's / Technologyor Art Integration/Experiential learning**	**Learning Out comes**	**Integrated values**	**No of periodsfor each chapter**
June **21 Days**	**BRIDGE COURSE-RECALL THE READING SKILL AND SPELLINGS** **1. Me and my body.** Sub. Integration Mathematics – Numbers up to 99 Hindi – ootChala Sanskrit – Bodyparts **2.My family and my neighbours** Sub. Integration English – Happy deepawali, My first day at school, A burger's story Mal- Ponnonam vannu	Parts of our body. • Taking care of our body. • Types of Families. • How are membersof a family related • Fun with family and friends. • Differently abled persons • Festivals	(AIL) – Role play.(Body parts and their functions) Draw and label the parts of body. Draw a family tree. Collage on National Festivals. IT – Videos on body parts Videos on festivals, Indoor and outdoor games. (EL) Steps to wash hands. Self observation in a mirror and identify the body parts. Clean Room checklist. **LAB ACTIVITY** Human Skeleton **Teaching aids :-** **Charts to show different body parts.** **Mirror** **Charts related to Neighbourhood places and festivals.**	* **Identify** external body parts and locate them. * **Functions** of external body parts. * **Understand** and evaluate the dos and don'ts for a healthy body. * **Differentiate** between immediate family and extended family. * **Develop** a positive attitude and appreciation of diverse family setups. * **Sensitivity and concern** for elderly and people with disabilities.	**Intellectual Development** Observation, Comparison, Creativity Visual Literacy **Patriotism** We should respect our National flag and National anthem Customs and Rituals Indian culture **Mental Development** Imbibing positive emotions.	6 6 6 Worksheet 2 Class Test 1

Month/No Working days/No of periods per subject **July** **19 Days** **PT 1 (10th July – 17th July)**	**Unit / Chapter / Sub theme** **3. Food and clothes** Sub. Integration Mathematics – Patterns, Data handling Eng- Ch- 3 Food and health	**Key Concepts** • Sources of food. • Types of food. • Balanced diet • Different clothesfor different seasons. • How are clothes made. • Language we use for directions. • The four main directions.	**Activities/Practical's / Technologyor Art Integration/Experiential learning** (AIL) – Make a chart on Types of food/ Sources of food. Vegetable carving. Life cycle of asilk worm. (EL)- Analyse cloth samples. Culinary skills – salad making/ Favourite recipes. IT – Videos on Healthy foods and how clothes are made. **Teaching Aids** By showing original specimen of different types of food. **Lab activity:-** Charts to show different types of food. Charts to show different meals of a day	**Learning Out comes** *__Name__ the sources of food. * **Realise** the importance of balanced diet. * **Appreciate** the need to maintain healthy eating habits. * **Know** that they wear clothes according to the weather. * **Learn** about the ways how various types of clothes are made. *__Name__ the four main directions. * **Locate** an object/ place in their surroundings.	**Integrated values** **Intellectual Development** Observation, Comparison. Independent thinking Classification Self awareness, Discrimination, Concentration. Imagination. Differentiation **Physical Development** Nutrition in food. Do not eat junk food. **Universal outlook** Harmony in creation	**No of periods for each chapter** 8 Class test- 2 Worksheet-2 Revision-3

Month/No Working days/No of periods per subject.	**13. Directions** Sub. Integration Math – Measurement **(Activity lesson. No questions will be asked for the exam)**	**Key Concepts** • Language we use for directions. • The four main directions.	Life cycle of butterfly **Activities/Practical's / Technologyor Art Integration/Experiential learning** AIL) Drawing four main directions and sub directions. Describe the direction to reach the school canteen/ School office from the classroom. (EL)Describe the direction to reach the school canteen/ School office from the classroom.	**Learning Out comes** ***Identify** and describe the location of an object by asking for and giving simple directions. ***Name** the four main directions. ***Locate** an object or place in their surroundings using the four main directions.	Environmental education **Integrated values** **Intellectual Development** Observation, Comparison. Independent thinking Classification Self awareness, Discrimination, Concentration. Imagination. Differentiation	**No of periods for each chapter** 4
August **18 Days** **PT 2 (16th August – 23rd August)**	**4. Houses we live in .** Sub. Integration GK- Monuments, A well ordered day.	• Different types of houses • Materials used to build houses • Keeping our home neat and clean.	AIL) – Make a paper house. Picture Album on different types of houses/ Make a model of a house. (EL)- Keeping our house neat and clean. IT – Videos on different types of houses.	**Identify** various types of houses. **List** different kind of materials used for building different types of houses. **Discuss** reasons and ways for keeping their house clean.	**Intellectual development** Intellectual kindling Observation Discrimination Comparison Classification Imagination	13 CLASS TEST -1 Worksheet-1 Revision-3

			Lab activity:- Models of different types of houses.		and creativity.	
September **17 Days** **TERM I REVISION**	**5 . People and places around us .(oral)** **No questions will be asked for the exam)** English – Myfirst day at school, A burger's story **11. Transport and communication** Sub. IntegrationEng – Ch 5 - Traffic	• Landmarks of a neighbourhood. • Places for an emergency. • People who help us. • Keeping the neighbourhood clean and green. • Modes of Transport. • Fuel for vehicles. • Connecting with people.	(AIL) Draw _" Dream Neighbourhood" (EL) Know the emergency service numbers. (IT) Tataclassedge videos games and activities on the topic, Our Neighbourhood. (AIL) • Enact as different vehicles along with their sounds . • Classification of toys as land water and air transport. (IT) – Interactive worksheets on traffic rules.//Videos on History of transport. (EL)- Identify the road signs and follow them for the safety on road.	• To **develop** the value of cleanliness in the neighbourhood places and the services rendered by it. • **Learn** why we need transport. • **Identify** the different modes of transport available in their immediate surroundings. • **Understand** why we need to connect with the world around us. • **Recognize** and relate to different ways of connecting.	**Intellectual development** Intellectual kindling Observation Discrimination Comparison Classification Imagination and creativity. **Intellectual development** Independent thinking Observation Comparison Classification Imagination and creativity.	4 7 Worksheet-1 Revision-5

October **19 Days** **Term 1 (5th – 19th)** **11DAYS**	**6. Plants our green friends** Sub. Integration Hin- Chapter 6, Kali Megha Pani GK- Clean and Green , Beautiful blooms, Farm to Fork	• Types of plants around us • Parts of a plant • How to care for plants	(AIL) • Drawing a plant and labeling its parts/ Collect different leaves & stick them in an interesting pattern/ Make useful things using old plastic bottles (EL) Planting a sapling and observing its growth. (IT) Tataclassedge videos games and activities on the topic, Our Neighbourhood. **Teaching aids:-** **Charts related to sources of food , Parts of plants etc.** **Specimen of different typesof plants.** **Lab activity** **Demonstration of edible plants.**	**To understand** the categorization of plants. **Name** different types of plants and give examples. **Identify** different parts of plants and recognize their functions. **List** the ways to take care and concern for plants.	**Intellectual Development** Independent thinking Self awareness, Discrimination , **Universal Outlook** Man's role in the system Environmental Education	REVISION 3 5 11 (TERM 1 ASSESSMENT)
November **22 Days**	***7. Animals around us*** *Sub. IntegrationHin – Oont chala, balu ne kheli football* *English – WB*	• Movement of Animals • Food Hadits • Habitat • Animal Homes • Animal and their young Ones.	AIL Make an animal mask of their favourite animal and enact as the same. (EL) Field visit to a nearby farm	• **Understand** and name the different movement of animals.	***Intellectual Development*** *Independent thinking* *Classification* *Kindness to animals.*	11

	–Tidy toys *GK – Animals and their home, Small creatures.* ***12. Time*** *Sub. Integration* *Math – Time* ***(ORAL)*** ***No questions will be asked for the exam)***	Read the clock and tell time. Days, weeks and months in a year. How to read a calendar.	(IT) Tata class edge videos, worksheet and games on the topic animal kingdom. **Teaching aids:-** **Charts related to animals and their babies. sources of food etc.** **Specimen of different typesof plants.** (EL)– Create and decorate your occasion table. AIL Recite the poem on days and months (IT)– Video on different land forms and water bodies	• **Categorize** the animals on the basis of their food habits. • **Identify** the home and young ones of different animals. **Distinguish** the different times in one full day. **Understand** the role that the sun plays in telling us the times of the day. **Realise t**he number of days in each month. **Understand** the concept of leap year.	*Self awareness, Discrimination,* ***Universal Outlook*** *Man's role in the system Environmental Education* ***Intellectual Development*** *Independent thinking* *Classification* *Self awareness, Discrimination, Comparison Intellectual Development Observation Concentration. Differentiation.* ***Universal Outlook*** *Harmony in creation.*	8 CLASS TEST 1 WORKSHEET - 2

December **16 Days**	**8. Air and water**	Air all around us. Uses of air. Importance of water. Sources of water. Prevention of air and water pollution.	(EL)– Field visit to a nearby pond. AIL Recite the poem on days and months (IT)– Video on different land forms and water bodies	**Learn and understand** the properties of air. **Recognise** the uses of air. **Understand** the importance of water. **Analyse** the sources of all water bodies. **Develop** sensitivity towards the importance of keeping the air and water bodies clean.	**Intellectual Development** Independent thinking Self awareness, Discrimination, Comparison Intellectual Development Observation Concentration. Imagination. Differentiation. **Universal Outlook** Environmental Education Harmony in creation	14 CLASS TEST -1 WORKSHEET - 1
January **22 Days** **PT 3- 8-16**	**9. Nature and land around us.** Sub. Integration Math –Time, Shapes VE. Yatri's Trip.	Our Earth Land on Earth Water on Earth Nature and Us	(EL) Plant more trees. Avoid plastic. Awareness posters – Proper waste disposal. (AIL)	**To know** about the shape of the Earth. **To understand** the components of Earth – land, water and air. **Realise** the importance of maintaining and nurturing nature.	**Intellectual Development** Independent	10

	GK. Water on the Earth. **10. The Sky and The Seasons.** **Sub . Integration Eng. Four Seasons.**	Changes in the sky. The Heavenly Bodies Seasons – The Air and The Sky.	Draw and colour landforms and waterbodies. (IT) Tataclassedge videos on the topic , Our Earth. **Teaching aids:-** **Globe.** **Charts related to Pollution,Natural Features, seasons calendar, clock.** **LAB ACTIVITY:-** **Demonstration of landforms using models** (EL) Observe the sky for one month, and draw the shape of the moon . (AIL) Draw and colour pictures on different seasons. Role Play the story Four Seasons. (IT) Tataclassedge videos on seasons and sky.	**Describe** the changes in the sky in different times of the day. **Understand** how the sky changes with seasons. **Understand** the names of seasons in the order as experienced in India. **Analyse** the heavenly bodies and tell how they are different from each other.	thinking Classification Self awareness, Discrimination, Comparison Intellectual Development Observation Concentration. Imagination. Differentiation. **Universal Outlook** Environmental Education Harmony in creation	8 REVISION 2 WORKSHEET 2

February **21 Days**	**REVISION FOR TERM II**					
March **21 Days**	**TERM – II Assessment**					

CURRICULUM PLANNING 2023-2024 (PALLAVUR, TATTAMANGALAM, KOLLENGODE)

CLASS: III SUBJECT: ENVIRONMENTAL STUDIES RESOURCE MATERIAL/TEXT: THE WORLD FOR YOU AND ME NO: OF CHAPTERS: 16

Month/No: of working days/No: of periods	Unit/Chapter/ Sub Theme	Key Concept	Activity/Practical/ Technological integration/Art Integration /Sports Integration	LAB ACTIVITIES	Learning Outcomes	Integrated values/CVP	No: of periods
June (21 days)	**BRIDGE COURSE (me and my body& my family and my neighbours)**	* Types of families *People in my family *Family tree	*(EL)Find out, to what type of family their friends belong *(AIL)Draw their family tree & introduce them *(IT)Using video to show types of family			*Universal outlook *Importance of sense organs. People with disabilities are special in their own way.	Bridge course -6 days
	UNIT-I (ABOUT ME) **1.MY BODY** (CLASS:III HINDI हमसेसब कहतेहे. मन कहता हे.) **2. YASHICA'S FAMILY** (CLASS: III HINDI. मन कहता .)	• Structure of human Body • Sense Organ • Special needs • Helping each other • In the park • Looking similar	**(AIL)**Draw human body **(IT)**Using video to show functions of sense organs **(AIL)**Role-play of two different families to show distribution of work **(EL)**Self explanation about your resemblance with your family Members	To show the chart of parts of body	*Able to describe the structure of human body, sense organs, sign language *Learn good Manners, good habits, our customs etc. Being responsible, helpful & polite Relationship between different family members	*Universal outlook *Love and affection for our family Members.	Work sheet 7 days 8 days

JULY (19 days)- **PERIODIC TEST 1 -(10th – 17 th)** **PORTIONS** **1.MY BODY** **2.ASHICA'S FAMILY**	**3.GAMES WE PLAY** (CLASS:III PT INDOOR AND OUTDOOR GAMES)	• Traditional outdoor games • Indoor games	(SI)Name the games and popular Professional players. (EL)-Compare and contrast different Games and classify it in to indoor and outdoor games. (AIL)-Making sports equipments.	Outdoor activity.	*Investigate games played by parents & grandparents. *Understand need to have fun in life. *Physical development	* Physical development *Decision making, resolving conflict ,showing empathy	6 days
	4. PEOPLE AT WORK (CLASS:IIISKT वृहतः)	*Different occupations *Missing childhood	(AIL)-Role play Different kinds of job. (IT) Using digital video to identify the people in different Occupation. (EL)- Data collection of different Organizations that fight against child labour in India.	1. To show the Chart of different kinds of jobs. 2.Field visit(visiting a hospital or bank/ Post office)	*Understand that all jobs are equally important, housekeeping is a Tedious & difficult job & should not be underestimated. * Identify the workers by looking at their uniforms.	*Dignity of labour * Universal outlook	6 days

	UNIT-II **(OUR NEEDS)** **5. FOOD FOR US** (CLASS:III ENGLISH REGGIE MOUSE SHRINKING CLOTHES)	*Why do we need food *Foods that can be eaten raw *Methods of cooking food. * Healthy eating habits.	(EL)-Data collection About food eaten raw and cooked. (IT) Video on cooking methods	1. Draw energy giving food, protective food, body building food. 2. Make fruit or vegetable salad.	*Explain why we eat food. * Categorizing food that can be eaten raw and or cooked.	* Physical development *Awareness of nutritional requirement for different Age group. *Awareness and practical Knowledge of cooking.	**7 days**
AUGUST **(18 DAYS)** **PORTIONS** ***PEOPLE AT WORK** ***FOOD FOR US** **PERIODIC TEST II(AUGUST 16th - 23rd)**	**6. WEAVE AND WEAR** **(CLASS :VI FIBRE TO FABRIC)** **(Questions will not be taken for any test)**	*Types of cloth * Process of making cloth * Taking care of clothes	(AIL) Make album- Different types of clothes. Embroider a piece of cloth.	1. Field visit.	*Identifies different types of fabrics. *Develop skill to create new designs *Correlate human needs with new invention and discoveries	*Protection of natural Resources. *Unity in diversity	**9 days**
	7. HOUSES AND HOMES (CLASS:I ENGLISH RIA'S FAMILY)	*Features of a good house. *Some Interesting houses. * Pests at home	(AIL)Make different types of houses using waste materials.	1. To show the models of Different types of houses.	*Understand the design of houses depending on the Climate and terrain. *Reflect upon various ways a house can be kept clean.	* Universal out look *Make houses suitable for our climate and terrain	**9 days**

SEPTEMBER (17 DAYS)	**UNIT-III (OUR SURROUNDINGS)** **8. MY PLANT FRIENDS** (CLASS:III HINDI सबसेअच्छा पेड़.)	• Types of plants • Some native plants of India • Parts of a plant • Uses of leaves • Uses of plants	**(EL)**Observation of different plants, compare & classify based on simple characters./Visiting a farm house/garden Collection of medicinal plants **(AIL)**Model making uses of plants.	1.To observe Different types of plants.	*Understand plant diversity and dependence on plants for everyday life. *Growing plants Anywhere *Uses of plants *Importance of leaves.	*Observation * Universal outlook *Harmony in creation *Appreciate & protect the environment *Intellectual development *Idea to create their own garden	**9 days**
	9. THE ANIMAL WORLD (CLASS:III SKT मृगा◌ा◌:)	*Different types of animals *Why do animals need *Body parts of animals *Insects-body parts, useful and harmful insects	**(AIL)**Narrate a story to introduce animals live in different habitat/Collect the pictures of different animals in different habitat **(IT)** Video presentation on different types of animals according to their living places	1. To show the specimens of Types of animals.	*Understand different animals live in Different habitats & eat different types of food. *Body parts of animals. *Useful and harmful insects.	*Universal outlook *Love towards animals.	8 days

OCTOBER(19 days) REVISION FOR TERM 1

TERM 1-(OCT 5th – OCT 16th).
PORTIONS-1.MY BODY 2. YASHICA'S FAMILY 3. GAMES WE PLAY 4. PEOPLE AT WORK 5. FOOD FOR US 6. HOUSE AND HOMES 7. MY PLANT FRIENDS

NOVEMBER (22 DAYS	**10. BIRD – OUR WINGED FRIENDS** (CLASS:III SKT पहिणा)	*Where do birds live *Body parts of birds *Feathers and flight *Beaks, claws and food. *Nest of birds *Sounds made by the birds	(AIL)-Album making - Feather collection Make a bird out of paper. (IT) Audio Presentation-sounds of birds.	1. To show the Chart of a bird to learn its parts.	*Enthusiasm to know various kinds of birds * compare & contrast the beaks &feets of Birds. * Recognize the Special features of flightless birds.	*harmony in creation *Love and care towards birds.	7 days
	UNIT IV (THE WORLD WE LIVE IN) **11.AIR AROUND US** **(CLASS : VI AIR AROUND US)**	*Properties of air *Forms of air- Wind, breeze and storms. *Composition of air	(EL)- Experimenting on bubbles forming inside the water using a bottle. (AIL)-Make a pinwheel	1. Lab activity	*Understand that air is everywhere. *Investigate the properties of air. *Record observations and deduce that air is mixture of gases.	*Physical development *Awareness & practical knowledge .*Creativity *analytical ability * Universal outlook.	7days

	12. TEEPOO, THE WATER DROP (CLASS:III HINDI टिहटिपवा)	*Uses of water *Water cycle *Sources of water *Storing water *Saving water *Water scarcity	(AIL)Poster making Writing slogans with a message of saving water. * Make a model of water cycle. (IT) show a Video of water cycle (EL)-Save Water (Activity at home)	1. To demonstrate an experiment to show evaporation and condensation.	*Recall the sources of water. *Understand the Water cycle. *how rain occurs. *Understand that like us, plants & animals also need water. *Recognize the importance of saving water	*Environmental development *Water is precious, we Must not waste it, and we must save it. *Importance of water conservation	8 days
DECEMBER (16 DAYS)-	**UNIT – V (TRANSPORT & COMMUNICATION)** **13. RISHAD ON THE TRAIN** (CLASS:III ENGLISH A VISIT TO JAIPUR)	*Reasons for travel *History of Transport	(AIL)-Logo designing Kochi metro (IT) Using digital video to show different means of transport		*Different modes of transport, history of transport. * Reason for transport	*Universal outlook *Being aware about various means of Transport practical Skills.	8 days
	14.SUDHA GOES TREKKING (CLASS VIII: COMPUTER NETWORS)	*Means of communication during earlier times and present times. *Mass communication	(AIL)Make models of means of communication. **Make a letter box.** (EL)-Play a game of telephone	1. Make a telephone using cups and thread.	*Compare and contrast different means of communication during earlier times and present times. * Journey of a letter. * Use of internet. * Design a logo of radio channel. .	* Universal out look *Being aware about various means of communication, practical Skills.	8 days

JANUARY (22 DAYS) PERIODIC TEST III : *The Animal World *Birds our winged friends JAN 8th-17th	**UNIT-VI** **(TIME, SPACE & DIRECTION)** **15.FINDING DIRECTIONS** (CLASS:II MATHS TIME) **(Questions will not be taken for any test)**	*Importance of direction *finding direction on a map * Using a compass * Landmark	(AIL)Draw a route map (from house to school) (EL)-By showing map and compass to explain the directions SI-Finding direction	1. Study map of India	*Acquire the skills to locate places in the map. *Understanding Directions.	*Map drawing & map reading are life skills that last a Lifetime.	
	16.THE STARS AND THE SOLAR SYSTEM **(Class VIII: The stars and the solar system)**	*Constellations *The sun and the solar system * Asteroids * Comets * Movement of planets	(AIL)Prepare a model of solar system. (IT) Video movement of planets (EL)- Lab Activity (Day & Night)	1. To demonstrate an experiment to prove rotation of the earth.	*Understanding terms universe, galaxy, stars and constellation. * Understanding about satellites, asteroids, comets	*Universal outlook * Analytical thinking * Observation *Comparison	8 days
FEBRUARY 21 days **REVISION**							

PORTIONS

1. THE ANIMAL WORLD 2. BIRDS – OUR WINGED FRIENDS 3. AIR AROUND US 4. TEEPOO THE WATER DROP 5. RISHAD ON THE TRAIN 6. SUDHA GOES TREKKING 7. THE STARS AND THE SOLAR SYSTEM

CURRICULUM PLANNING 2023-2024 (PALLAVUR, TATTAMANGALAM, KOLLENGODE)

Grade: IV Subject: ENVIRONMENTAL SCIENCE Resource material/text: The World-for You and Me No: of chapters: 16

Month/No: of working days/No: of periods	**Unit/Chapter / Sub Theme**	**Key Concept**	**Activity/ Practical/Art Integration/ Experiential learning/ Sports integration/ Technological integration**	**Skills**	**Learning Outcomes**	**Integrated values/CVP**	**No: of periods**
June 21 days Bridge course (Checking spelling and reading)	**Unit I** **About me** **Chapter 1** **Family** **English-** **(**Writing and reading Poem**)**	*Extended family *Pets *New arrivals- birth, marriage, adoption	**AIL-** ❖ Make a family using 7 pieces of **Tangram.** ❖ **Acrostic poem** based on FAMILY. ❖ Autobiography **EL- Discussion on** (i)Family relationships using **photo album**. (ii)How to take **care of pets**.	• Critical thinking • Communication • Experiential learning • Life skills- Social skills • Understanding • Applying • Cross curricular activities	***Describe** and **draw** what she/he enjoys with the family members. ***Classify** family into different types * **Talk** about different relationships amongst family members * **Read** a poem and answer a question. ***Understand** how additions of family members happen. ***Find out** about family get-togethers and relatives of parent.	*Universal outlook. *Intellectual development. *Children would realize the changes and its importance. * Emotional development- caring of pets	Bridge course- 10 Days (5+6)

	Chapter 2 Feelings	Five senses *Taking care of sense organs *Keeping safe *managing feelings	**EL**-Various activities based on **five sense organs** **AIL- Doodle drawing** **IT- Browse** *'My Earth songs' by Rickey Kej* *Chat show based on safe and unsafe touch 'Satyamev Jayate'* **LA** Ask the students to touch soft and hard objects	• Critical thinking • Communication • Experiential learning • ICT skills-research skills • ICT skills-browsing • Remembering	***Listen** to a song, hum it and **Doodle** ***List** the five sense organs ***State** the function of each sense organ ***Correlate** sounds with the messages they convey ***Learn** to take care of the sense organs ***Be aware** of safe touch and unsafe touch ***Manage** feelings	Universal Outlook *Emotional development *Intellectual development. *Physical development. *Care of sense organs *Special people needs special care	
July **19 Days** **Periodic Test – 1 (July 10 to 17)**	**Chapter 3 Games are fun**	*Why are rules important? *How do games and sports help us? *What do games and sports teach us	**SI –** *** Book cricket** ***Tic-tac-toe** ***Pictionary** **AIL**- Poster making **EL**- Share one's own experience in sports	• Critical thinking • Communication • Remembering	***Explain** the importance of rules in a game ***Follow** rules to play certain games ***Distinguish** between games and sports ***Analyse** how games and sports are beneficial ***Identify** different sportspersons and **Associate** them with the sports they play.	*Integrated development *Emotional development. *Physical development. *Games are important for children.	6 Days
	Chapter 4 Different Occupations (Questions will not be taken from this lesson)	*Different types of jobs *Requirements to do a job well *Tools required in different occupation	**EL**-Find your career goal and write the requirements to do that well and also mention how it benefits the society. **IT**- Browse and find out interesting jobs other than common one.	• Critical thinking • Communication • Remembering	***Find** words in a word maze to recollect the names of some jobs ***Discuss** different types of workers and the work they do ***Classify** different types of jobs	*Intellectual development. *Universal out look *Awareness of modern occupations.	6 Days

					*__Relate__ the tools of the trade with the workers *__Understand__ that all jobs can be done equally well by both boys and girls		
	Unit II **Our Needs** **Chapter 5** **Good food, healthy life!**	types of nutrients and balanced diet *need for healthy food and clean water *junk food *food and water borne diseases *community eating	LA-Collect food sample and detect food **adulteration** IT-Browse and find out the **methods to detect adulteration** EL-Discussion on benefits of **community eating**	• Critical thinking • Communication • Experiential learning • ICT skills-research skills • ICT skills-browsing • Remembering	*__List__ three things needed to remain healthy *__Explain__ the importance of healthy foods *__Define__ nutrients and __classify__ them into different types *__Justify__ the importance of a balanced diet *__Find out__ which nutrients should be consumed more by some people *__Talk about__ food and water borne diseases and their symptoms *__Discuss__ community eating *__Perform__ simple experiments to know if the food is adulterated		7 Days

August 18 Days Periodic Test 2(Aug 16 to 23)	**Chapter 6 How does food reach us?** **Geography** (Foods of different states) **Value education** (Community garden-team work)	*steps involved in growing sugarcane *the process of making sugar *the process of making bread MARK DISTRIBUTION FOR TERM 1 - (OCTOBER 25 th TO NOV 5 th)	**AIL-**Making a **compost in a bucket** **IV- Visit to sugar factory or bread making** **EL-** Identify different spices through **blindfold game activity**	• Critical thinking • Communication • Experiential learning • ICT skills-research skills • ICT skills-browsing • Remembering	***List** the ingredients of a dish ***Infer** that some foods travel long distances before reaching our table ***Analyze** the process of growing food ***Make** compost at home ***Understand** how sugar is made		9 Days
	Chapter 7 Then and Now **Engineering**-(Paper tower)	Houses built in earlier days *materials used to build houses *Apartment living *Changes in the materials used *Environment-friendly houses	**AIL**-Draw the **layout of a house** and label each one **EL-** Group work-**model of different houses** **IT**-Browse the **architecture of any historical monument** in India **LA**-Work in group to make the **tallest paper tower**	• Critical thinking • Communication • Experiential learning • ICT skills-research skills • ICT skills-browsing • Remembering • Cross curricular activity • Critical thinking	***Describe** how houses were built in earlier days * **Compare and contrast** with houses of today ***Summarise** the differences between houses of earlier days and nowadays ***Explore** recent developments in construction materials ***Construct** a model of a house	Universal out look *Protection and care of animals. *Cruelty towards animals should be avoided. *Integrated development	9 Days

September **17 Days**	**Unit III** **Our surroundings** **Chapter 8** **Plants-Our green friends**	roots that are eaten *special roots *flowers-diversity and uses *adaptions in coconut palms and cacti	**EL-**Make a **healthy salad** **AIL-**Make a **flower album** using old greeting cards **IT-** Browse and find out **varieties of flowers and fruits** **LA-**Observe around your house and find out the things that have designs of flowers on them. Create your own **floral design**	• Critical thinking • Communication • Understanding • Experiential learning • ICT skills-browsing	***List** the roots eaten as food ***Describe** roots that provide additional support ***Recognize** diversity in flowers ***explain** the uses of flowers ***Comprehend** adaptations in cactus and coconut palm ***Prepare** a flower album	*Universal outlook *Harmony in creation *Flowers make our world beautiful *Integrated values	8 Days
	Chapter 9 **Animals around us** **English-** (Comprehension) **Value Education** (Unity is strength)	*animals that live in groups *animals that live alone *animals that live with us *ears of animals	**AIL-**Find out about an animal and make an **identity card** for it **IT-**Browse about animal behavior –**red ant** **LA-**Observe **an animal** and **collect few details** about it	• Critical thinking • ICT skills-browsing • ICT skills-Research • Experiential learning • Remembering • Cross curricular activity	**Understand** that some animals live in groups ***Learn** the collective nouns used for groups of animals ***Rationalize** why animals live in groups ***List** the animals that live independently and those that live with us ***Describe** the shapes of ears of different animals ***Talk about** animals that do not have external ears ***Collect** information	Universal outlook *harmony in creation *Be kind towards animals. *Fight cruelty towards animals.	9 Days

					about an animal's behaviour and **Complete** a table ***Make** an identity card of an animal		
OCTOBER-REVISON AND TERM 1 ASSESSMENT-(Oct 5 to 19)							
November 22 Days	**Chapter 10 Animal Homes**	Animals that live in soil *Animals that live on trees *Animals that live on caves *Some unique animal homes	**IT-** Browse about any **one building** that has been modelled after **termite mounds**. Prepare a **slide show** **AIL-**Find out the **natural habitats** of various animals and mark it on an **India map.** **EL-** Collect information about our **National animal** and how to **conserve** them**.**	• Critical thinking • Experiential learning • ICT skills-Research • ICT skills-Browsing • Map skills • Remembering • Applying	**Explain** the meaning of habitat ***Discuss** the mounds of termites ***Talk about** the homes of bats ***Elaborate** on homes of monkeys ***Understand** that tigers, leopards and deer do not make their homes. ***Describe** some unique animal homes	Universal outlook *harmony in creation *Be kind towards animals. *Fight cruelty towards animals.	7 Days

	Unit IV **The World we live in** **Chapter 11** **Water-every drop counts** **Geography** (Study of map)	*Sources of water *How does water reach our homes *factors that affect the rate of evaporation *different forms of condensation *water pollution-causes and ways to reduce it	**EL**-Find out when **evaporation is faster** and give reasons. **IT**-*Observe and analyze why all places in **India do not receive equal rainfall** *Browse why early humans settled on river banks **AIL** – Make a **paper boat** **LA-** Experiment on **evaporation of water**	• Critical thinking • Experiential learning • ICT skills-Research • ICT skills-Browsing • Cross curricular activity • Remembering • Understanding	**Estimate** the amount of water present on earth ***List** the sources of water ***Understand** how water reaches our homes ***Explain** factors that affect the rate of evaporation ***Give** an account of different forms of condensation ***Identify** causes for water pollution ***Infer** how water pollution can be reduced	Integrated values *Protect our water Sources. *Water is necessary for life and thus important to conserve and maintain it. *Spiritual development *Water is precious love every drop. *Water is divine	7 DAYS
	Chapter 12 **Waste and waste management** **English** (Role play) **Value education** (Wealth out of waste)	*Types of waste-biodegradable and non-biodegradable *disposing biodegradable waste *the four R's of waste management	**AIL**- *Suggest the things which can **replace the plastic** at your home. *Make a **paper bag** **EL** – Justify that **Kabadiwalas** are the biggest saviour of environment **IT**- Browse and listen to the song '**The Plastic war' by Ricky Kej**	• Critical thinking • Experiential learning • Communication • Collaboration • ICT skills-Browsing • Cross curricular activity • Understanding •	***Identify** things that are termed as waste ***Define** biodegradable and non-biodegradable waste ***Discuss** ways of disposing biodegradable waste ***Explain** how compost and bio-gas are made ***Conclude** that bio-gas is an environment friendly fuel ***Appreciate** why non-biodegradable waste must be disposed of properly	*Universal out look *Physical development-Health and hygiene *Integrated values *Intellectual development.	8 Days

					***Summarize** the 4R's of waste management		
December **16 Days**	**Chapter 13 Constructing a building** **English (Story-telling and letter writing)** **Mathematics** (Shapes and Patterns) **History and civics** (Ancient history of cities in India	raw materials needed to build houses *making bricks *tools used in construction *people who work at a construction site *changes in construction	**IT**-Browse and research about **Le Corbusier designer of Chandigarh city** **AIL-Warli Painting** **EL-** Observe the designs of window grills of different houses **IV-** Visit to a **Brickyard**	• Critical thinking • Experiential learning • Communication • Creativity • ICT skills-Research • ICT skills-Browsing • Cross curricular activity • Analyzing	**Identify** the raw materials required in construction ***Learn** the steps to make bricks ***Talk** about tools used in construction ***Discuss** jobs and workers at construction site ***Compare** the traditional and modern methods of construction ***Know** about different types of bridges ***Elaborate** on eco-friendly construction done by Sonam Wangchuk	*Universal out look *Integrated values *Harmony in creation *Intellectual development *observation *classification	8 DAYS
	Unit –V Transport and Communication **Chapter 14 Camel Caravan** **Eng-** (idioms related to animals)	*animals used for transportation *life of camel herders	**IT**-Browse and find out the **adaptations of camel** **EL**- Share your experience about any **animal ride**	• Critical thinking • Experiential learning • Communication • ICT skills-Research • ICT skills-Browsing • Cross curricular activity • Remembering • Applying • Data collection	**Describe** some uses of draught animals ***Read** and **understand** the life of camel herders ***Explain** the nomadic life style of Unt Maldharis ***Discuss** about animal rides ***Find out** how a camel is well adapted to live in a desert	*Universal outlook *Love and concern for animals and birds *Environmental Education *Integrated Development	8 Days

				• Life skill			
January **22 Days** Periodic test 3 (Jan 8 to 17)	**Chapter 15 A Trip to remember** **Geography** (Study of flags and currencies of different countries) **Mathematics** (Value of currency)	*Preparation to be made for travel *the need to understand the culture ,food, language, clothes of a new place *Types of maps *Features of a map	**AI**- Draw anyone of **Nepali currency** and **Indian currency** **EL**- Write a **travelogue** to a place you visited. **LA-** Exhibit your **currency or coin collection**	• Critical thinking • Experiential learning • Communication • ICT skills- Research • Cross curricular activity • Analyzing • Life skill	**Recount** the arrangements to be made to travel outside India ***Compare** the food, clothes, language, culture and places of Nepal with that of India. ***Relate** to how memories can be saved and cherished by maintain a diary of events	Universal out look *Integrated development	11 Days
	Chapter 16 Zeeba makes a map (Project based lesson Questions will not be taken from this lesson)	Types of maps *features of a map	**AI**-Draw a map from your **home to a neighbourhood place** **IT**-**Working of GPS** and locate your school/home **EI** – In **olden days** how people **located the places.**	• Critical thinking • Evaluating • Communication • Computer Literacy • Analysing	***Differentiate** between different types of maps ***Classify** the symbols used on a map ***Distinguish** the colours used to denote landmarks on a map ***Explain** what is scale and the key on a map are	*Universal outlook *Integrated Development	11 Days
FEBRUARY - REVISION FOR TERM 2 ASSESSMENT							
MARCH – ANNUAL EXAM							

CURRICULUM PLANNING 2023-24(PALLAVUR, TATTAMANGALAM, KOLLENGODE)

GRADE: V SUB: EVS RESOURCE MATERIAL: THE WORLD-FOR YOU AND ME NO: OF CHAPTERS: 16

Month/ No .of working days/No of periods	**Unit/ Chapter**	**Key concepts**	**Class room activities/Experiential learning/Art integrated learning/Sports integrated learning/IT integration**	**Skills**	**Learning outcomes**	**Integrated values**	**No .of periods**
JUNE-21 days	**CHAPTER-1 ANUSHA'S FAMILY** Bridge course.(class 3&4 EVS chapter 1 family)	• Family tree • Family traditions • Traits, likes and dislikes • Migration • Reasons for migration	Talk about ones's family Discussion about the challenges in migration. Conduct an interview to know more about family traditions Art Integration -Role play to show the types of family. Draw a 'mandala' art on family	• Communication • Collaboration • Critical thinking • Life skills • Cross curricular activity • Remembering • Art integrated learning	➢ Understand the reason for moving from one place to another. ➢ Awareness about the difference in joint & nuclear family. ➢ Analyze the reasons for poverty & unemployment.	Mental Development. Emotional expansion. Universal outlook. One world one family	Bridge course - 10 Worksheet-1

	CHAPTER-2 **GAMES WE PLAY** **(Questions will not be asked for written examination)**	• Different games • Traditional games • Changes in leisure activities	Sports integrated learning/Art Integration- Organize a traditional game (eg: kabbadi, Kho-Kho…) Write a note about the importance of sports & games. Play volley rally Draw a tail while being blindfolded Enlist various games and the number of players.	• Sports-integrated learning • Communication • Collaboration • Understanding • Applying • ICT skills-browsing • Critical thinking	➢ Identify the different types of games and sports ➢ Recognize about the qualities of a captain ➢ Be informed about the different traditional games & its importance. ➢ Understand the importance of sports & games in physical & mental health ➢ Developing sportsman spirit	Integrated development. Physical fitness , Handling emotions , Physical self-expression	Class -8 Class test-1 Worksheet-1
JULY- 19 days PERIODIC TEST-1 (JULY 10-17)	**CHAPTER-3** **OUR WORK**	• Essential services • New 2ccupations • Gender equality • Dignity of labour	Experiential learning- Cleaning the school campus to understand dignity of labour. Art Integration-Fancy dress of different kinds of occupation. Class activity Discuss about the dignity of labour&labour Day. Illustrate the contribution of Gandhiji & Dr.B.R. Ambedker.	• Critical thinking • Communication • Applying • ICT skills-Browsing • Analysing	➢ .Awareness of different people who are domestic helpers ➢ Understand that no work is big or small. ➢ Show respect to all the workers ➢ Understand the importance of world labour day{May 1} ➢ Enlist the measures taken by the government to help the underprivileged	Universal outlook , Citizens of the world , One family one world , Dignity of labour, Civic responsibility	Class-6

			IT integration-(ppt) Pictures with the names of 10 different occupations				
	CHAPTER-4 **FROM THE FARM** **(PROJECT)**	• The story of agriculture • Requirements to grow a crop • Kharif and rabi crops • Avoiding food wastage • Preserving food	Class activity-Group discussion to prevent food wastage. Art integrated learning-Creating a flow chart of different agricultural practices. Picture album of traditional & modern agricultural implements. Experiential learning-A visit to a field to understand the ways to maintainsoil fertility. Activity-Sprout moong seeds Role play-steps in journey of food	• Critical thinking • Collaboration • Communication • Experiential learning • Remembering • Applying • Analysing • ICT skills-Research skills • Technology literacy • Data collection	➢ Explore the history of cultivation ➢ Understand the different steps of agriculture ➢ Identify the tools in cultivation. ➢ Avoid food wastage ➢ Explore the methods of preserving food ➢ Define crops and agriculture ➢ Describe how the early humans became farmers.	Physical development , Nutrition , Food & body , Eating habits Indian culture , Cultural exposure , Harmony in creation , Man's role in creation	Class-4

	CHAPTER-5 **THE JOURNEY OF FOOD**	• The digestive system • The digestive organs • Good eating habits	Identify the taste of different food items Observe different types of teeth Practise proper brushing technique To prove that the process of digestion begins in the mouth Exhibition on the topic Food preservation methods Art integration- To draw the human digestive system Play the game 'Good eating habits'	• Experiential learning • Applying • Communication • Sports-integration • Critical thinking • Data collection • ICT skills-Browsing	➢ Explore the journey of food through the human digestive system ➢ Research to know how roti reaches our plate. ➢ Define nutrition and nutrients	Physical development , Health education ,	Class-8 Worksheet-1
.AUGUST-18 days **PERIODIC TEST-2** **(AUG 16-23)**	**CHAPTER-6** **BREATHING-IN AND OUT** **(ORAL)**	• Respiratory system (inhalation & exhalation) • Breathing • Why do we breath all the time? • How	Art integration- Model/ chart of respiratory system Model of stethoscope Experiential learning	• Experiential learning • Critical thinking • Communication • Applying	➢ Understand the process of breathing ➢ Gain knowledge about respiratory organs. ➢ Develop the skill of drawing &labeling the respiratory system	Physical development , Health education , Comparison , Observation	Class-9 Worksheet-1

		should we breath?	Calculate the rate of breathing for different activities (group activity) Class activity Cross word activity- parts of respiratory system	• Collaboration • Art integrate learning			
	CHAPTER-7 **SHELTER FOR ALL**	• Shelters of differed types • Materials used to build shelters • Neighbour hood • Social animsls	Art integrated learning- Make picture album/models of different types of houses. Collect amazing facts about social animals(ants, honeybee) IT integration-Video presentation on social animals. Experiential learning- Observation of Specimens.	• Critical thinking • Remembering • ICT skills- research skills • Applying • Remembering • Experiential learning	➢ Understanding importance of having shelter. ➢ Analyze different facts for making different types of shelters. ➢ Identify the way bees & ants express social behavior.	Intellectual development, Concentration, Observation, Comparison, Classification.	Class-8

SEPTEMBER-17 days	**CHAPTER-8 FOOD THAT PLANTS MAKE**	• Parts of a leaf • The process of photosynthesis • Parts of the plant thatb we eat • Parasitic plants • Insectivorous plants • Plants and animals are interdependent	. IT integration-(ppt) Animation on the raw materials & process of photosynthesis. Class activity-Collect picture of insectivorous plants. Enlist the different examples of parasitic,insectivorous plants. Lab activity- To prove that potato contains starch-Iodine test Art integrated learning-Design a food chain & food web – model/chart (group activity). Draw the diagram of the process of food making in plants.	. • Experiential learning • Critical thinking • Communication • Applying • Collaboration • Art integrate learning • Understanding	➢ Understands the process of photosynthesis. ➢ Gathers information about insectivorous plants. ➢ List the parts of a leaf. ➢ Explain the interdependence of plants and animals. ➢ Compare and contrast total parasites and partial parasites.	Universal outlook, harmony in creation, environment education, appreciates and protects the environment.	Class-8
	CHAPTER-9 SEED GERMINATION AND DISPERSAL.	• Structure of seed • Seed germination • Travelling seeds and	Art integrated learning-Draw a labeled diagram of a seed. Specimen collection – different types of seeds	• Communication • Creativity • Data collection	➢ Understand the parts of seed. ➢ Enlist the different plants originated in other countries ➢ Identify the different modes of reproduction	Universal outlook , Harmony in creation , Environment education	Class-8 Worksheet-1

OCTOBER-19 days **TERM-1** **REVISION** **(OCT 5-19)** **NOVEMBER-22 days**	**ACTIVITY** **CHAPTER 10 FOREST –GREEN LUNGS OF THE EARTH** **ORAL**	fruits • Forests-a story • Uses of forests • Conservation of forests	Experiential learning- Seed germination (group activity) Class activity - Demonstration: - reproduction by spores, roots, stem & leaves. (lab activity) Demonstration – condition essential for germination-air, water, and warmth Art integrated learning- Poster making – Go Green , save earth IT integration-Prepare a slide show on a biosphere reservation of our country Experiential learning- Planting of sapling in school campus	• Experiential learning • Collaboration • Understanding • Applying • Art integration • Critical thinking • Critical thinking • Remembering • ICT skills- research skills • Applying • Remembering • Experiential learning	in plants. Enlist the agents of seed dispersal . ➢ . ➢ Differentiate between national parks and wildlife sanctuaries ➢ Understand the different threats faced by the tribes. ➢ Awareness of conservation of forest (chipko movement, vanmahotsav	Universal outlook, harmony in creation, man's role in the system, environment education	Class-6

NOVEMBER	**CHAPTER - 11 PROTECTING ANIMALS**	• Hunter to protector- amazing story of Jim Corbett • Reasons for the depletion of the wildlife • Forests and tribal people	Art integration-Make a poster to spread awareness about saving trees. Collect the pictures of tribes of different states.	• Creativity • Communication • Remembering • Collaboration • Understanding • Applying • ICT skills- browsing • Critical thinking	➢ Understand the different tribal communities ➢ List the reasons for removal of forests ➢ Learn about the Chipko Movement	Universal outlook, harmony in creation,	Class -8
NOVEMBER	**CHAPTER-12-ANIMAL SENSES**	• Animals & their sense organs.	• IT integration-(ppt) Prepare ppt - picture collection of animals with super senses. • To demonstrate the sense organs using models. To sensitize the senses using different materials	• Critical thinking • Remembering • ICT skills- research skills • Applying • Remembering • Experiential learning	➢ Understand the functions of sense organs of animals. ➢ Understand that the animals have special ways of communication. ➢ Explore how the senses of smell and touch help animals.	Intellectual development , Observation , Concentration , Independent thinking	Class-7 Worksheet-1

DECEMBER-16 days	**CHAPTER-13** **WATER-OUR LIFELINE.**	• Community water sources • Different methods of irrigation • Aquatic plants and animals	Art integrated learning– Collect pictures or specimens of aquatic plants. Showing the specimens of aquatic plants and animals Perform an activity to know how insects floats on water Make a chart showing four different types of aquatic plants	• Experiential learning • Critical thinking • Communication • Applying • Collaboration • Art integrate learning • Understanding	➢ Discuss various community sources of water ➢ Explain adaptations in aquatic plants and animals ➢ Know more about multipurpose dams of India	Kindling the intellect, observation, comparison, classification.	Class -8
DECEMBER	**CHAPTER 14-NATURAL DISASTERS-TIMES OF EMERGENCY**	• . Consequences of natural calamities. Safety & first aids. • Coping with disaster	IT integration Videos showing different natural disasters. Experiential learning- Project on any one recent disaster that you have read about. To show the chart of Natural disasters	• Communication • Critical thinking • Remembering • ICT skills-research skills • Applying • Remembering • Experiential learning	➢ Understand the different disaster & its impacts. ➢ Classify disasters into natural and human made ➢ Analyze the different steps we can take in times of major calamities. ➢ Awareness about first aids & safety	Physical development,health education,safety measures,alternative medicines	Class-7 Worksheet-1

			To prepare a first-aid kit Class discussion on safety & first aid. Art Integration -Make a collage of natural disasters				

JANUARY-22 days **PERIODIC TEST-3** **(JAN 8-17)**	**CHAPTER-15** **TRAVEL IS FUN** **(Questions will not be asked for written examination)** **CHAPTER-16** **INDIA:OUR PRIDE** **PROJECT**	. • Fuels for motor vehicle • Saving fuels and alternative sources of energy • Other fuels • Adventure trips • Different monuments • Preservation of monuments	Art integrated learning- Survey on different fuels used in different types of automobiles. Design a poster to encourage people to join a mountaineering club Indians in space(chart work) IT integration-Video presentations on formation of fossil fuel. Sports integrated learning- Share a photo Visit a historical monument Art integrated learning-	• Communication • Collaboration • Critical thinking • Life skills • Cross curricular activity • Remembering Art integrated learning • Critical thinking • Collaboration • Communication • Experiential learning • Remembering • Applying • Analysing • ICT skills-Research	➢ Identify the different fuels used in different vehicles. ➢ Recognise the importance of saving fuels ➢ Understand the difficulties faced by the mountaineers. ➢ Know about Indians who have gone to space ➢ Explain space travel ➢ Understand the monuments of India. ➢ Study the different ways to preserve & maintain monuments. ➢ Explore India's major heritage monuments ➢ Name the historical personalities who built these monuments	. Intellectual development. Concentration, observation ,comparison, classification. Indian culture, culturalheritage, awareness .	Class-10 Class test-1 Class-11

			Collect information about famous monuments in India Field trip with pictures. Narration about the historical places Experiential learningA visit to a nearby place of historical importance.	skills • Technology literacy • Data collection			

TERM-1

PROJECT- CHAPTER-4- FROM THE FARM

ORAL- CHAPTER-6- BREATHING-IN AND OUT

ACTIVITY- CHAPTER-7 SHELTER FOR ALL

TERM-2

PROJECT- CHAPTER-16- INDIA- OUR PRIDE

ORAL-CHAPTER-10 FORESTS-GREEN LUNGS OF THE EARTH

ACTIVITY-CHAPTER-9-SEED GERMINATION AND DISPERSAL

CURRICULUM PLANNING (PALLAVUR, TATTAMANGALAM, KOLLENGODE) PALAKKAD CLUSTER 2023-2024

Class: VI Subject: **General Science** Resource material /text: NCERT No of units/chapter: 16

Month/ no of working days.	**Unit/Chapter/ Subtheme**	**Key concepts**	**Class activities/ Experiential learning/Art integrated learning/Sports integrated learning/IT integration**	**Lab activities**	**Learning outcomes**	**Integrated values**	**No.periods for each chapter**
June23/23	Food: Where does it comes from (class VI history chapter 2 From gathering to growing food) (Class VI chapter 2 ganapathyprathal.) (Class V EVS chapter 13-food for plants and animals)	Food variety Ingredients Sources of food Herbivore Carnivore Omnivore	Class discussion on food variety, ingredients and its sources. IT integration -Video presentation of preparing a food item and explaining its ingredients. Art integrated learning-Collection of pictures of animals and classifying them on the basis of food eaten by them. (note book activity)	Identification of ingredients (using food packets)	Students will be able to understand variety of food items,its ingredients and sources .To identify the chemicals present in the food items. Will be able to classify animals on the basis of food.	Physical development. Aesthetics' in food. Intellectual development Independent thinking. Health and hygiene Classification	TOTAL=11 (Bridge=2 Class=8 Class test=1)

	Components of food	Major nutrients in the food.(carbohydrates, fat and proteins) Balanced diet Deficiency diseases Worksheet-1	Experiential learning**BMI calculation** **Data collection and analyzing the data**for balanced diet. Art integrated learning-Chart showing deficiency diseases.	Demonstration to test the nutrients.(carbohydrate, fats, proteins)	Students will be able to identify the major components of food. To know whether they are in the normal BMI and following a balanced diet. Students will be able to understand about different types of deficiency diseases and its causes.	Intellectual development Independent thinking Observation Analytical ability Health and hygiene Classification	TOTAL=12 (Class-10 Worksheet 1 -1 CT-1)
July 22/22 **Portions for PT1;** 1. Food:	Getting to know plants (CLASS VI ENGLISH POETRY CHAPTER 1-ECHOING GREEN) (Class IV EVS chapter 7-Plants	Transpiration Parts of a flower	Experiential learningDemonstration to show transpiration in plants (Out door activity). .	Dissection of flower and observe the parts	Understands the process of transpiration in plants Students will be able to identify the parts of a flower and to draw it.	Intellectual development Independent thinking Observation Concentration. Creativity	TOTAL=12 (Class-11 CT-1)

Where does it come from? 2.Components of food (july 10th-17th)	our friends	Types of venation	Art integrated learning Collect monocot and dicot plants to identify the types of venation.(Class /out door/lab).		Students will be able to understand and classify the types of venation in leaves.	Classification Comparison	
	Motion and Measurement of distances. Class VI geography chapter 2- Motions of earth)	Modes of transport Types of motion **Worsheet-2**	Group discussion on different modes of transport(land, water, air). Experiential learningIdentify the different types of motion on your surroundings. Measuring the length ofyour classroom by using handspan/meter scale/foot span .	Demonstration for different types of motion.	Understand different modes of transport Will be able to understand about types of motion.(Rectilinear, circular, Periodic etc.)	Independent thinking Observation Comparison Classification	TOTAL=10 (Class-8 CT-1 WS 2-1)

August 20/20	Body movements (Class VI English chapter 7- Legends in sports)	Types of joints Cartilages and bones Skeleton and muscles Movement of animals.	Experiential learning- Demonstration of different types of joints. IT integration -Video showing different movements in animals	Observes the different types of bones and joints from human skeleton	Students will be able to understand the function of cartilages, bones, skeleton and muscles. Students will be able to understand the movement of animals like snake ,fish etc	Intellectual development, Independent thinking. Observation, Comparison Concentration Classification	TOTAL=11 (Class-10 CT-1
	Light shadows and reflections (Class VI Sanskrit chapter 8 Sookthisthapak)	Transparent, translucent and opaque objects Reflection of light Worksheet-3	Experiential learning- Activity to show light travels in a straight line. Art integrated learning Make pin hole camera /periscope to show reflection of light	Demonstration of different objects to show transparency .	Students will be able to understand and classify the given objects in to these three category and light travels in a straight line . Students will be able to understand the reflection of light.	Intellectual development Independent thinking Observation Classification Comparison Creativity	TOTAL=9 (Class-7 CT-1 WS 3-1)

September 19/19 Periodic test 2(Aug 16t^{h} to 23th) Portions:1.Getting to know plants 2. Motion and measurement of distances.	Water (Class vi sanskrit chapter 6 samudraha) Class iv evschater 15 water,watereverywhere)	Importance of water Droughts and floods Water cycle Conservation of water-rainwater harvesting	IT integration -Video presentation of water cycle. Art integrated learning Poster making/ placard making- water conservation methods	Making a model of Roof top rain water harvesting(group activity)	Students will be able to develop awareness on natural calamities. Students will be able to understand the necessity of saving water.	Universal outlook Harmony in creation Man's role in thesociety . Creativity	TOTAL=10 (Class-9 CT-1)
	Garbage in garbage out (Class IV EVS chapter 12-Our houses and waste disposal)	Vermi-composting Land fill Recycling of paper Plasticsetc. Worksheet-4	Experiential learningOut door activity /PPT IT integration -Video to show the hazards of garbage.	Wealth out of waste	Students will be able to understand the process of making compost at home. Awareness of clean and green environment	Intellectual development Independent thinking Creativity Imagination	TOTAL=9 (Class-7 CT-1 WS 4-1)

October 21/21 Revision TERM 1 Oct 5th -19th)	TERM 1 PORTIONS: 1.Food 2.components of food 3.Getting to know plants 4.Motion and measurements of distance 5.Body movements 6.Light ,shadows and reflections 7.Water (project)-Oral 8.Garbage in, garbage out (Activity)						
November 25/25	Fibre to fabric (Malayalam chapter 3- pathummaude aade)	Types of fibers- natural and artificial . Weaving, Knitting, Spinning and ginning.	Experiential learningCollecting different types of fabrics Field trip to cotton factory(KOODALLUR)		Students will be able to understand different types of fibres their properties Differentiate weaving,knitting,spinning and ginning.	Classification Observation	TOTAL=9 (Class-8 CT-1)

	Sorting materials into groups (Class 5 EVS chaper 18 Properties of water)	Properties of materials-soluble,insoluble, hard,soft,sink,float etc.	Experiential learning-Collect different types of materials in your home and identify whether it is soluble or not.	To identify different properties of materials	Identify the soluble and insoluble materials. Identify different types of materials.	Intellectual development Independent thinking Observation Classification Comparison	TOTAL=6 (Class-5 CT-1)
	Separation of substances (Class 5 EVS chapter 21 From the fields to the plate) (Malayalam – Ammakoyunnu)	Separation techniques-churning, threshing, winnowing, sieving, sedimentation, decantation& filtration Worksheet-5	IT integration -PPT-Separation techniques	Separation techniques are demonstrated.	Will be able to understand the separation techniques	Intellectual development Observation Classification Concentration	TOTAL=10 (Class-8 CT-1 WS 5-1
December 19/19	Electricity and circuits	Electric cell, bulb, Switch, circuits, conductors and insulators etc.	Experiential learningGroup activity to make an electric circuit with switch. Make a homemade torch/Switch.	Demonstration to show differences between conductors and insulators	To understand about electric circuit,conductors and insulators. Develops practicalskill.	Intellectual development Independent thinking Classification	TOTAL=9 (Class-7 CT-1 WS 1)

	Changes around us (Hindi – mitayivala)	Types of changes (physical and chemical Worksheet-6	Experiential learningCategorise different types of changes in your surroundings as reversible and irreversible or slow and fast changes.	Demonstration of different types of changes (reversible, irreversible, Slow, fast etc.)	Students will be able to Identify the type of changes understand and classify changes.	Intellectual development Classification Observation Concentration	TOTAL=10 (Class-8 CT-1 WS-1)
January24/24 PERIODIC TEST-3 JAN 8th -17th	Living organisms and their surroundings (Class VI geography chapter 8 Indian :Climate vegetation and wildlife)	Habitats Adaptation Components of nature- biotic and abiotic Characteristics of living things	IT integration -Video presentation/PPT: different habitats. Art integrated learning- Chart work: - Adaptation in animals and plants. Experiential learningOutdoor activity-Observe the characteristics of your	Collection of aquatic plants	Understands the types of habitat.(terrestrial ,aquatic and aerial..etc) To understand the adaptations of aquatic plants Understands the characteristics of living thing	Intellectual development Classification Observation Intellectual development Observation	TOTAL=9 (Class-8 CT-1

			pets .				
February 23/23	Fun with magnets (Class 4 EVS Chapter 14 Mapping places)	Type of magnets Magnetic and non – magnetic material Poles of magnet Alignment of a freely suspended magnet	Experiential learningDemonstration –types of magnets Identifying magnetic and nonmagnetic materials	Demonstration to show different shapes of magnet and their properties Activities to show the properties of poles	Understand the different type of magnets. Able to classify magnetic and non-magnetic materials. Students will be able to identify poles of a magnet and its properties	Classification Universal outlook.	TOTAL=5 (Class-4 CT-1)
	Air around us (Class VI Sanskrit chapter 5 varksha)	Wind Composition of air Interdependence of plants and animals Air- a mixture of many gases	Pie- chart model- composition of air. Discussion	Making of firkin and weather cock	Develops practical skill Understand the composition of air Able to understand the interdependence . Enlist the uses of air.	Creativity Analytical ability UNIVERSAL OUTLOOK	TOTAL=5 (Class-4 WS 7-1)

		Worksheet-7	Discussion REVISION				
TERM 2 EXAMINATION: MARCH 2024 PORTIONS: 1.FIBRE TO FABRIC 2.SORTING MATERIALS INTO GROUP 3.SEPARATION OF SUBSTANCES 4.ELECTRICITY AND CIRCUITS 5.CHANGES AROUND US 6.LIVING ORGANISMS-**Activity –Picture Album** 7.FUN WITH MAGNETS 8.AIR AROUND US –(project)-**Oral** 9.GETTING TO KNOW PLANTS							

CURRICULUM PLANNING-2023-24(PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Class:VII Subject: BIOLOGY Resource material/Text:NCERT No. of Units/ Chapter:6 Year:2023-2024

Month/No. ofWorking days/No. of Periods	**Unit/Chapter/ Subtheme**	**Key concepts**	**Activities/Practical's/Technology integration/Art integrated learning /Experiential learning/Sports integrated learning.**	**Learning outcome**	**CVP integration.**	**No. of period for each chapter**
June/ 23/8	Bridge Course Nutrition in Plants Geography-chapter –4 AIR-Class 7	Autotrophic and Heterotrophic nutrition. Parasites, Saprophytes Photosynthesis	LAB ACTIVITY • Viewing the prepared slide of stomata. • TECH-Starch test for photosynthesis • Art-photosynthesis(Role play) • EL:Nutrition in Bread mould,parasites.	• Recall the raw materials used for photosynthesis. • Identify different modes of nutrition in plants. • Understand saprotrophic nutrition • Acquires awareness about nutrient replenishment of soil.	Universal outlook. Judicious use of resources.	Bridge-1 Work Sheet Class Test 7

July/ 22/ 7 **PT-1**	Nutrition in Animals (till page 15) Chemistry-chapter-4-Acids, bases and salts. Class Class-7	Digestion& Absorption in Humans.	• EL-Children touch and experience -Types of teeth and sensitisizing the different taste (taste buds) • ART/TECH-Role play/Chart/Model of Human digestive system	• Identify different types of teeth • Understand the structure and functioning of Human Digestive System. • Acquire awareness on Dental hygiene.	Integrated Development .	Work Sheet 7
August/ 20/3 **PT-2**	Nutrition in Animals (Continued) Weather, Climate and Adaptations. (PROJECT & INTERNAL ASSESSMENT) Geography-Chapter-7Atmosphere-Class 6	Digestion& Absorption in Amoeba &Ruminants Weather, Climate and instruments used.	• LAB-Viewing the permanent slide of Amoeba. • EL-Collection of Weather Data of the Week. • LAB: Thermometer, Rain gauge.	• Acquire awareness on Digestive system of ruminants & amoeba • Compare and contrast climate of different places. • Observe and identify the property of instruments.	Universal Outlook.	Work sheet 3

		Polar Regions & Tropical Rain Forests.	• ART-Adaptations of animals in different regions(album making, concept map) • TECH-Adaptations of animals.	• Analyse and tabulate the effect of Weather and climate on living things. • Assess the role of climate in various living organisms. • Appreciates the creativity and diversity of nature. • Understands the adaptations of organisms around them.	Universal Outlook	2 Class test
September 19/5	Respiration in Organisms (Till page 110) Geography-Chapter-5 Domains of earth. Class-6	Introduction Types of Respiration. Mechanism of breathing-Respiratory system.	• SPORTS-Students doing heavy physical exercise and ,made to realize Anaerobic respiration in humans. • Tech-Human Respiratory system. • ART-Human respiratory system,(dia).	• Compares breathing &Respiration • Differentiates the Types of respiration. • Understands the Structure of function of human respiratory system.	. Universal Outlook.	Work Sheet 3

October. 21/8 **TERM-1**	**REVISION** **TERM I**					8
November/ 25/7	Respiration in Organisms (Continued) Transportation in organisms (plants).	Human Respiration. Breathing in other Animals. Transport in Plants	• EL-Calculation of Breathing rate of human beings. Lab activity . • Demonstration of the effect of exhaled air on lime water. • Breathing in other Animals.(SPECIMENS) LAB ACTIVITY • Viewing permanent slides of Xylem &Phloem. • Demonstartion of transpiration.	• Develops skill in Drawing diagrams. • Awareness to reduce environmental pollution. • Examine the role of plants in maintaining the balance of nature. • Recognize the Principle of transportation. • Identify the need of transpiration. • Compare the structure of xylem and phloem.	Physical development Universal Outlook.	Work Sheet Class Test 7
December/ **19/3**	Transportation in organisms (Animals). Geography-Chapter-8 Human Settlement,	Transport in Animals	• TECH-Human circulation and excretion. • EL-Examination of pulse and heart rate. LAB ACTIVITY	• Understands the Structure & functions of human circulatory and excretory system • Develops skill in drawing diagrams.	Universal Outlook. Physical development.	3 Work Sheet Class

	Transportation and Communication-Class-7		• With Stethoscope and identify the heartbeat. • Viewing permanent slides of blood cells ART • Schematic diagram of circulation. • Human excretory system-diagram.	• Develop awareness on Blood donation.	Universal outlook.	Test 7
January/ **24/7 PT-3**	Reproduction in plants (till page no 136)	Circulatory system. Excretion inanimals	EL-Planting different types of plants in their garden using vegetative parts.(Vegetative propagation.)	• Recognize the advantage of asexual reproduction. • Develop skill of drawing	Integrated development.	Work Sheet Class Test 7
February/ 23/6	Reproduction in plants. (continued) Seed dispersal-PROJECT &	Asexual reproduction-Types. Sexualreproduction in plants.	TECH-Pollination, seed dispersal. LAB ACTIVITY	• Recognize the advantage of asexual reproduction. • Develop skill of drawing • Identify the role of different floral parts.	Integrated development.	Work Sheet Class Test

REVISION.	ALBUM MAKING English-poem-Chapter 2 Daffodils. Class-7.	Pollination& seed Formation. Seed dispersal.	• Dissection & Display of various flowers to show the floral parts.	• Examine the role of insects in pollination and animals in seed dispersal. • Plan different ways to conserve plants. .	Universal outlook.	6
March/25.	**TERM-2 MARCH 2024** **Annual examination**					

CURRICULUM PLANNING(PALLAVUR, TATTAMANGALAM,KOLLENGODE)

Class: VII Subject:CHEMISTRY Resource material/text:NCERT No.ofUnitsChapter: 6 Year: 2023-2024

Month/No. of working days/No.of periods	Unit/Chapter/ Subtheme	Key concepts	Activities/ Practical's/ Technology integration/Art integration /Experiential learning	Learning Outcomes	Integrated Value	No.of Periods for each chapter
Bridge course **June 1/23**	Tasting substances like curd,raw fruits (mango, lemon,grapes etc.) Discussing the natural remedies for indigestion ant sting,bee sting etc..	Identifies the acids present in these substances	Tasting and group discussion -EL	Recall and conclude that these substances contain acids.	Intellectual and physical development	**1**

June 7/23	Acids,Bases & Salts (Class V-EVS Digesting food) Worksheet-1	Acids and Bases are useful in our daily life. Indicators. Neutralization. Neutralization in everyday life.	**Lab activity:1** Demonstration - Litmus test. **Group activity** - Preparation of greeting cards using soap solution and turmeric paste.- EL&AIL **Lab activity:2** **Demonstration –** Identification of acids & bases using china rose indicator. **Lab activity:3** Neutralization reaction	Students will be able to recognize different types of acids and bases in our everyday life. Studentswill able to distinguish acidic and basic solutions. Familiarizes different types of indicators and neutralizationreaction. Students understand the need of neutralization reaction and its applications in	Universal outlook Integrated development. Physical Development. Observation. Intellectualdevelopment. Comparison. Abstract thinking	**6**

	Class test			everyday life.		**1**
July **8/22** **PT-1 (July 10-17) Acids,bases and salts** **Aug 4/20**	Soil (Class-VII-Social science-Natural vegetataion) Soil(CONTINUATION)	Soil profile. Soil – types. Properties of soil. Moisture in soil. Absorption of water by soil.	**Chart work**: soil profile.-AIL **Group activity**-Collection of different types of soil. Soil testing ….Acidic or Basic-EL Making pots,toys&statues using soil. AIL **Lab activity:** EL To find the moisture content in the given soil sample **Demonstration -** Adding water to	Identifies the different layers of soil. Students acquire the knowledge about the different types of soil. Understands about different properties of soil. To solve the problems related to rate of absorption of water by	Intellectual Development. Independent thinking. Comparison. Creativity& self expression. Analysis &	**8** **4**

PT-2 **(Aug 16-23)** **Soil**		Soil and crops.	different types of soil to find out rate of absorption. **Digital slides-(IT)** showing the soil suitable for different crops.	soil. Familiarizes the different types of crop growing in different types of soil.	Interpretation . Universal Outlook.	
Sep 5/19	Worksheet -2 Class test Forests :Our Lifeline (Class V- Forest and people living in them)	Importance of forests Different layers of a forest Need for conservation. Forest as a "dynamic living entity"	Digital slides to show importance of forests. **-(IT)** Power point presentation-different layers of forest. Inter dependence of living beings in the forest.	Students understand the importance of forests Student will be able to recollect about the varieties of animals that can be seen in different forest. Students will able to understand	Intellectual Development. Independent thinking. Universal outlook Intellectual development. Universal outlook.	**5**

	Worksheet -3 Class test		Deforestation and its consequences Poster making.-AIL	about the need to conserve the forest.	Independent thinking Creativity	
October 3/21 TERM - 1(Oct 5th to Oct 19)	Revision					
November 8/25	Physical and Chemical Change. (Class VI- Science- Changes around Us)	Chemical change Rusting – conditions preventions Crystallization.	**Lab activity :5 Demonstration- Burning of magnesium ribbon.** **Lab activity :6 Reaction of iron in CuSO4 solution.** **Observes the rusted iron articles to**	Students will able to understand about Chemical change Students will able to differentiate physical and chemical	Intellectual Development. Observation & comparison. Scientific attitudes. Universal	**3** 8

	Worksheet -4		**know the factors responsible for rusting.. -EL** **Lab activity: 7** **Preparation of pure crystals of copper sulphate.**	change. Students will be able to identify the application of crystallization in everyday life.	outlook.	
December 5/19	Water- A Precious Resource (Class: VI, skt: Samudhrathadaha) Worksheet -5	Availability of water. Forms of water. Depletion of water table Water management	**Poster making** – Scarcity of water Water cycle- **Preparation of chart**.-AIL **Preparation of posters** – conservation of water (slogans)-AIL	Students will realize the importance of water Students will able to understand about availability of water. Ways of conservation of	Intellectual development. Creativity Universal outlook	5

	Class test			water		
January 6/24 **PT-3 (Jan 8-17) Physical and chemical changes** **February 7/23** **March**	Waste water story (Class-VI-Science-Garbage in and Garbage Out) Worksheet -6 Class test Revision Annual exam	Sewagewaste. Water treatment plant. Role of an active citizen in sanitation and disease. Better house keeping practices.	Digital slides to show WWTP. **-(IT)** Science quiz: water and air borne diseases.(relate it to Swach Bharat Abhiyan) AIL	Students will able to know about sewage and sewerage. Students will be able to get knowledge about diseases and precautionarym easures.	Intellectual development. Physical development. Universal out look.	**6** **7**

LIST OF LAB ACTIVITIES:

MONTH	EXPERIMENTS
JUNE	1. Demonstration - Litmus test. 2.Demonstration –Identification of acids & bases using china rose indicator 3.Neutralization reaction
JULY	4.Demonstration : to find moisture content of the soil.

NOVEMBER	5. Demonstration- Burning of magnesium ribbon. 6. Reaction of iron in $CuSO_4$ solution. 7. Preparation of pure crystals of copper sulphate. 8. Reaction of acetic acid with baking soda. 9. Standard test for co_2. 10. crystallization.

PLAN B

CLASS VII

SR NO	MONTH	CHAPTER NAME
1	JUNE	Acids bases and salts
2	JULY	Soil
3	AUGUST	Soil (cont)
4	SEPTEMBER	Physical and chemical changes (till rusting of iron)
5	OCTOBER	Revision and Term 1
6	NOVEMBER	Physical and chemical changes(cont)
7.	DECEMBER	Water a precious resource
8.	JANUARY	Waste water story
9.	FEBRUARY	Revision

DELETED CHAPTER: FOREST : OUR LIFELINE (SEMINAR)

CHINMAYA VIDYALAYA PALAKKAD CLUSTER
CURRICULUM (2023-24)

Class: VII Subject: Physics Resource material/ Text : NCERT No of chapters :6

Month/No. of working days/ No. of periods per subject	Unit/ Chapter/ Subtheme	Key concepts	Activities/ Practical /Technology integration(TI)/ Art Integration(AIL) Experiential Learning (EL)/ Sports Integration (SI)	Learning Outcomes	Integrated values	No of periods For each chapter
June/ **23/8**	**Bridge course** Fibre to fabrics Class 7 Social science Our Pasts-II (Towns traders and	Recaping the basic concepts necessary for class VII- measurements and units. Natural fibres and artificial fibres From fibres to wool Processing	Collect information of selective breeding in wool yielding--(**EL)** To show video about different types of hair present in animals.-- **TI** To show Life history of silkmoth(TATA CLASS EDGE)/Chart presentation using types of silk clothes.-- **(EL** Debate on whether it is	Differentiate natural and artificial fibres. Understand the process of converting fibre into wool. Understand life history of silk moth and importance of rearing silk worms.	Learning to see commonalties See the world as an integrated whole Cultural development Sensitivity to beauty Exploiting natural resources (positives and negatives)	3 5

	craft persons)	fibres into wool Life history of silkmoth Rearing silk worms	fair on the part of humans to rear sheep and then chop off their hair for getting wool. **AIL**			
July/ **22/6**	Motion & Time Class 7 Mathematics (Comparing quantities) Class 6 Science Motion and measurement of distances	Types of motion Speed , Time Pendulum Uniform & Non-Uniform motion Distance – Time graph Speedometer Odometer	Observing analyzing & Predicting the different types of motion in everyday life(TATA CLASS EDGE--**SI** GRAPH) Demonstration of a simple pendulum to measure time period(LAB ACTIVITY) (**EL** Measuring the distance covered & time taken by an object and calculating its speed experimentally(TATA CLASS EDGE-- **TI**	**Observe, analyze and predict types of motion** Students will be able to calculate speed, distance and time. Students will be able to analyze distance-time graphs. **Compares uniform and non-uniform** motion.	Analytical ability Observation, analytical ability ,and interpretation of graph Comparing & classifying Sensitivity to beauty Logical thinking	6

August **20/4**	Heat(Up to transfer of heat pg up to 40) Class 7 Social science Our Environment - Air	Heat Heat flow Temperature Thermometer	Plotting distance-time graph Individually using data.(Uniform & Non-Uniform motion) **EL** LAB ACTIVITY -To show Speedometer & Odometer. **SI** **PERIODIC TEST-I** **10TH JULY TO 17TH JULY** **PORTION: FIBRE TO FABRICS** To show Clinical thermometer & Laboratory thermometer(LAB ACTIVITY) **EL** Demonstration temperature measurement using thermometer (LAB ACTIVITY) **EL**	Understands the difference between hot and cold objects, clinical and laboratory thermometer.		4

September 17/4	Heat Class 7 Social science Our Environment - Air	Conduction Convection Radiation	Experiment to show conduction, convection and radiation LAB ACTIVITY TATA CLASS EDGE-- **TI**	Understand and appreciate the principle of conduction, convection and radiation Develop scientific attitude	Understand and appreciate the principle of conduction, convection and radiation Correlation with geography. Solar radiation seeing the world as an integrated whole "Vasudaivakudumbakam" Appreciates scientific effort. Comparing& classifying	4
PERIODIC TEST-II **AUGUST 16TH – 23RD** **PORTION: MOTION & TIME**						
TERM I : OCTOBER 5th – 19th **(1.FIBRE TO FABRIC, 2. MOTION & TIME 3. HEAT (upto transfer of heat including clinical thermometer)**						
October 8/2	Electric current and Its effect	Electric current Symbols of electrical components	Display various electrical components.Draw the conventional symbols for the same **AIL**	**Draws the circuit diagrams using**	Discrimination Observation Imagination	2

November 25/9	Class 6 Science Electricity and circuits	Heating effect Electric fuses Magnetic effect Electromagnet Electric bell	Experiment to show that a current carrying wire has an effect of heating and magnetism (LAB ACTIVITY-- **EL** Demonstration to show the use of safety fuse in electric circuits and appliances Identifying situations in daily life where electromagnets are used TATA CLASS EDGE-- **TI** To show the parts of an electric bell, radio(discarded)**EL**	**symbols** Students will be able to identify magnetic effects of electric current. Students will be able to apply the magnetic effects of electric current in daily life situation.	Creativity Learning to see commonalities Discrimination Observation Imagination& creativity.	9

December **19/5**	Light Class 6 Science Light shadows and reflections	Rectilinear propagation of light Reflection Mirror Image formation by plane mirror	Demonstration of reflection in a medium of smoke using Laser. (LAB ACTIVITY)-- **EL** Class activity to show linear propagation of light using flexible lights or straws (PANCHATANTHRA STORIES)**AIL**Activity showing the formation of image by a concave mirror. (LAB ACTIVITY)-- **EL**	Students will be able to understand reflection of light. Students will be able to identify image formation by plane mirror	Specialization. Organisation. Sathwika,thamasikarajasikagunas of light (spiritual)	5
January **22/6**	Light	Lenses Real and virtual image White light and	Determine the focal length of a convex lens through an experiment (LAB ACTIVITY) Make a working model	Students will be able to identify image formation by	Great lives. .	6

		rainbow	of Newton's disc (HANDS ON ACTIVITY) **AIL** **PERIODIC TEST III** **JANUARY 8TH – 17TH 2023** **PORTION: ELECTRIC CURRENT AND ITS EFFECTS**	convex lens		
Febraury **21/6**	Wind, storms & cyclones Class 6 Our environment India climate and vegetation	Wind Anemometer Pressure, Thunderstorms, Cyclones, Tornadoes	To show video about effect of storms & possible safety measures TATA CLASS EDGE-- **TI** Project based on the a)Chennai floods b)"Major cyclones in India"-Causes, disaster & safety measures. Newspaper collection	Understand and analyses the cause and effects of storms and relate it to the possible safety measures to be taken	World issues Population Natural disaster Peace Responsibility Seeing the world as an integrated whole Environment education	6

			on tornadoes. **AIL** KERALA FLOODS AFTERMATH AND CAUSES Study on origin of cyclone TATA CLASS EDGE			
TERM II: MARCH 2024 **PORTIONS: 1. HEAT 2. ELECTRIC CURRENT AND ITS EFFECTS 3. LIGHT**						

CURRICULUM PLANNING (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Class: 8 Subject : Biology Resource material/Text : NCERT No : of units/Chapter :6 Year :2023-24

Month/No : of working days/No: of periods per each subject	**Unit/Chapter/Sub theme**	**Key concepts**	**Activities/practical/Technology integration/Art integrated learning/Sports integration/Experiential learning.**	**Learning outcomes**	**CVP Integration.**	**No: of periods per each chapter**
June/ 23/8	Bridge course Crop production &Management Geography-Agriculture(chapter-4)class VIII	Agricultural practices. Harvesting and storage of food grains.	EL-Practicing steps in Agricultural practices. ART-Album/chart/Diagram of agricultural tools. TECH-Irrigation, harvesting and storage techniques. LAB ACTIVITY • Specimen-fertilizers.	*Understand the basic agricultural practices & their related area. *Compare and contrast the uses of manure and fertilizers.*Distinguish winnowing and threshing. *Suggest ways for proper storageof food grains.	Universal outlook Indian culture. Citizen of the world	Bridge-1 Work Sheet Class Test 7
July/22/7 **PT-1**	Micro organisms Friend & Foe (till page no 22 & 27)	Useful and microorganism. N_2 cycle	LAB ACTIVITY To demonstrate fermentation of sugar solution by Yeast. To observe permanent slides of bacteria, plasmodium, *Entamoebahistolytica*.	*Cites examples of fermented food products. *Examine the role of microbes in our daily life.	Universal outlook Divinity in humanity {Work done by scientists for human welfare}. Integrated development .	Work Sheet 7

	Chemistry-Acids,bases and salts.(chapter -4)class 7		ART-Diagram –Types of Microorganisms/nitrogen cycle.			
August/ 20/3 **PT-2**	Micro organisms Friend & Foe (Contd) Conservation of plants and animals (INVESTIG ATORY PROJECT & ALBUM MAKING) Geography – Natural vegetation and wildlife Chapter-5(Class 8)	harmful microorganism. Food preservation. Deforestation, Conservation of Forest &Wild life Biosphere reserve Flora &Fauna Endemic species Wild life sanctuaries National Park Red Data Book Reforestation	EL-To preserve various foods using different methods of food preservation. ART- Locate the important protected areas on India Map. LAB ACTIVITY To study diverse life forms (Plants and animals with the help of specimens)	*Plan different ways to preserve various food items. *Get awareness regarding conservation of forest and wild life *Recognize the Govt. initiatives to conserve wild life and implementation of laws for the same *Develop love towards nature	Universal outlook Citizen of the world [Environment Education] Need for conservation of nature and natural resources Harmony in creation:Man's role in the eco system	Work Sheet Class Test 3

Septembe r/ 19/5	Cell Structure & Functions (Till page 93) History- Making of national movement.- Chapter- 8 (Class-8)	Discovery of the cell Cell shape&size	LAB ACTIVITY To study temporary mount of onion peel.	*Understand the structure &function of the basic unit of living organisms.	Harmony in creation : Seeing the world as an integrated whole.	
October/ 21/6 **TERM I**	**REVISION AND TERM I**					6
November / 25/7	Cell Structure and Functions [contd] Reproduction in Animals- asexual reproduction (Till page	Cell Structure and function Parts of the cell. Cell organelles Modes of reproduction	ART-Role play of cell organelles EL/LAB ACTIVITY To study temporary stained mount of cheek Cell. LAB ACTIVITY/EL Permanent slides-amoeba, hydra with bud and budding in yeast.	*Ableto differentiate plant cell and animal cell. *Able to understand about the cell organelles *Able to recognize the parts of male and female	Intellectual development : Analytical ability Discrimination and comparison	Work Sheet Class Test

	107) History-Human resources. Chapter 8-(Class 8)	Binary fission, Budding.	ART- Binary fission, Budding in hydra.(Diagram)	reproductive system *Able tounderstand the functions of parts of reproductive system of humans *Gain knowledge about embryonic development		7
December / 19/6	Reproduction in Animals[contd]	Human male and female reproductive system IVF Fertilization Development Viviparous & Oviparous animals Young one to adult Cloning	TECH-IVF, CLONNING. ART-Human reproductive system.(Diagram)	*Students will be able to recognize various methods of asexual reproduction. *Students will be able to understand the mechanism of cloning	Intellectual Development: Analytical ability comparison and discrimination	6

January/ 24/7 **PT 3**	Reaching the age of adolescence Reproductive health (PROJECT & ALBUM MAKING) Value education- Awareness against drugs and alcohol.	Adolescence &Puberty Changes at puberty Nutritional needs of the adolescence, hormones during adolescence Reproductive health	ART-Chart –Endocrine system. SPORTS- Role of physical exercise. in Reproductive health. EL-Sharing their experiences during puberty. TECH- Sex determination.	*Identifies various changes at puberty in boys & girls *Recognizes the nutritional needs and various hormones produced at that time. Plan different ways to maintain reproductive health..	Physical : Personal Cleanliness Mental development : Building awareness on positive emotions Intellectual Development: Intellectual conviction Counteracting peer pressure	Work Sheet Class Test 7
February 23/4	**REVISION** **& TERM II**					4

CURRICULUM PLANNING (PALLAVUR, TATTAMANGALAM, KOLLENGODE)

Class: VIII Subject: Chemistry Resource material/text Science VIII (NCERT) No: of units/Chapter: 6
Year: 2023-2024

Month /no of working days /no: of periods per subject	**Unit/Chapter/Sub theme**	**Key concepts**	**Activities/Practical/ Art integrated learning /Experiential learning**	**Learning outcomes**	**Integrated value**	**No: of periods for each chapter**
Bridge course **June 8/23**	**Fibres** **Synthetic fibres& plastics** (Class VII-Social Science Chapter-Industry)	Natural and synthetic fibres Fibres Plastics	Group discussion: Various natural and synthetic fibres Field trip-Steps involved in the making of fabric-EL **Group activity:** Collecting information about artificial and natural fibres. (Album making)-AIL	Students recalls various natural and synthetic fibres Students are able to understand about types of fibres. Based on the knowledge gained students are able to	Universal out look *Intellectual development *Independent thinking *Comparison *Classification *Observation	**1** **7**

	WORKSHEET - 1 CLASS TEST-1	Plastics and the environment.	**Group activity:** Collection of different plastic items (thermo and thermosetting plastics)and classify them- EL **Debate**: plastic a boon or curse.	classify thermo and thermosetting plastics. Need to follow 4 R principle(reduce, reuse, recover and recycle)	*Emotional expansion *Universal outlook	
July 8/22 PT1- Fibres and plastics (July 10th - 17th)	**Materials : Metals & Non metals (Class VI: Chapter 4 ,Sorting of materials)**	* Physical properties of metals and non metals * Chemical properties of metals and non metals: Reaction with Oxygen Reaction with Water	Identifying different metals and nonmetals. -EL **Lab activity:1** Demonstration *Reaction of Mg with oxygen. *Burning of sulphur powder.	Students are able to compare the physical properties of metals &non metals. Generalizes that metallic oxides are basic and nonmetallic oxides are acidic. Compare the reactivity of metals and nonmetals.	*Intellectual development. *Observation * Comparison * Independent thinking *Analytical ability *logic reasoning.	**8**

		Reaction with Acids and Bases.	Lab activity:2 *Reaction of metals with acids (Zn with HCl)	Recognizes the new substance formed. Investigates the physical and chemical properties of metals and nonmetals. Concludes the metals are usually lustrous, sonorous, malleable and ductile.	Observation and comparison. Scientific skill. Universal outlook.	

	WORKSHEET - 2 CLASS TEST -2 \	Displacement reactions * Uses of metals and non metals	**Lab activity:3** *Displacement reactions using Ferrous sulphate, Copper sulphate and zinc sulphate with Zn,Cu,Fe filings. Digital slides and discussion.**(IT)**	Compare the reactivity of metals and nonmetals with Acids and Bases Concludes the order of reactivity of metals and non metals in the reactivity series. Understands the application of metals and non metals in day to day life	Observation and comparison. Intellectual development Scientific skill. Universal outlook	
August 5/20 PT2 Aug 16th-22nd)	**Coal and Petroleum** **(Class VIII- Social Science- Minerals)**	Exhaustible Inexhaustible	*Formation of coal and coal mines using digital slides..**(IT)**	Understands that coal is an exhaustible natural resource.	Universal outlook *Man's role in the system *Environmental study	**5**

September 5/19	WORKSHEET - 3 CLASS TEST -3 Continuation of coal and petroleum	*Refining of petroleum *Natural gas	*Collecting information about coal products like coke ,coal tar, coal gas etc- EL Petroleum refining – **.(IT)** Digital slides. Digitally slide – fractional distillation and destructive distillation.	Finds out the location of coal deposits in India. Find the location of petroleum and natural gas deposits in India. Understands the various constituents of petroleum and its use		**5**
October 2/21	**TERM 1 (Oct 5th to 19th)**				.	**2**
November 8/25	**Combustion & Flame** **Class-VI-Science-**	Combustion Pre requisites of Combustion	**Lab activity:4** Demonstration Oxygen is needed for Combustion	Recognizes the importance of Oxygen in Combustion.	Observation and comparison. Intellectual	8

	Changes around us)	Combustible & non-combustible substances Types of Combustion How do we control fire ?	**Group Activity**: Make a model of a fire extinguisher-AIL Lab activity :6 **Demonstration** *Different zones of flame. **Home activity** EL *Compare the flames of kerosene lamp, Candle & gas stove	Develops the skill in making fire extinguisher. Understands about the chemical process /change involves in burning, and to compare luminous and non luminous objects Understands about different types of fuel, its efficiency. Awareness on the ways by which air gets polluted by burning of fuels.	development Independent thinking Creativity Scientific skill. Universal outlook . Comparison. Universal outlook.	
December	WORKSHEET -4 CLASS TEST -4	*Air pollution *Water	Power point presentation and	Knowledge about pollutants and types	Independent thinking	

4/19 **January 8/24** **PT3-(Jan 8th to 17th) Combustion and Flame**	**Pollution of air and water** **(Class-VI-Science-Air Around Us)** **Pollution of air and water(CONTINUATION)** WORKSHEET -5 CLASS TEST -5 **Stars and the solar system** **(Class VII-Science(Physics)-Motion and time)**	pollution *Purification of water *celestial objects-moon,stars ,constellations (pg no-215 to 224)-**project** * The solar system (pg no-224 to 232)	Group discussion on Air and Water Pollution -..**(IT)** Discussion on traditional methods of water purification. *digital slides showing phases of moon,constellation in the night sky *model of various constellations of the night sky AIL digital slides showing solar system-..**(IT)** making model of solar system EL	of pollution. Awareness on the ways by which air and water gets polluted, Green house effect, ways of purification of water Understands about various celestial objects Observe and analyse various constellations Understands differentplanets of the solar system	Self expression. Creativity Universal outlook. Universal outlook. creativity self expression	**4** **4** **4**

	WORKSHEET - 6 CLASS TEST -6		collecting information about various planets of the solar system			
February 3/23	**Revision Annual Exam**					**3**

LIST OF LAB ACTIVITIES

1.JULY	**Demonstration** ***Reaction of Mg with oxygen.** ***Burning of sulphur powder.** ***Reaction of sodium metal with water**
2.JULY	***Reaction of metals with acids (Zn with HCl)**
3.AUGUST	***Displacement reactions using Ferrous sulphate, Copper sulphate and zinc sulphate with Zn,Cu,Fe filings**
4.NOVEMBER	**Demonstration**

	Oxygen is needed for Combustion

PLAN B

CLASS VIII

SR NO	MONTH	CHAPTER NAME
1	JUNE	Synthetic fibres and plastics
2	JULY	Materials : metals and non metals
3	AUGUST	Materials : metals and non metals(cont)
4	SEPTEMBER	Coal and petroleum
5	OCTOBER	Revision
6	NOVEMBER	Combustion and flame
7.	DECEMBER	Pollution of air and water
8.	JANUARY	Pollution of air and water(cont)
9.	FEBRUARY	Revision

Deleted chapter :Stars and the solar system

CHINMAYA VIDYALAYA PALAKKAD CLUSTER

CURRICULUM (2023-24)

Class: VIII Subject: Physics Resource material/ Text : NCERT No of chapters : 6

Month/ No :of working days/ No :of periods	Unit/Chapter/ Sub theme	Key concepts	Activities/ Practical /Technology integration(TI)/ Art Integration(AIL) Experiential Learning (EL)/ Sports Integration (SI)	Learning outcomes	Integrated values	No: of periods for each Chapter
June / 23/6	**Bridge course(3 days)** Force and Pressure (Class 7 Science Winds storms and cyclones)	Recaping concepts of class VII – basics of motion Idea of force Push or pull; change in speed, direction of moving objects and shape of objects by applying force; contact and non-contact forces	Group discussion on daily life routines to identify physical changes, and games where force comes into play.--**SI** Observing and analyzing the relation between force and motion in a variety of daily life situations (illustrative examples from TATA CLASS EDGE-- **TI** Demonstrating change in speed of a moving object ,its direction of motion and shape by applying force TATA CLASS EDGE-- **TI** To show contact force (caroms,matchstick,spring balance) and non-contact force using balloons and straws..--**SI**	Classifies types of motion, recognizes effects of force Understands effects of force. Understands the state of an	Unbiased observation of things and situations Universal outlook. Imagination and	3 3

		Idea of pressure; Pressure exerted by air/liquid ; atmospheric pressure	Measuring the weight of an object ,as a force {pull} by the earth using a spring balance (LAB ACTIVITY) **EL** To show the dependence of pressure exerted by force on surface area of an object(TATA CLASS EDGE) **TI** Demonstrating that air exerts pressure in a variety of situations(LAB ACTIVITY) **EL** Demonstrating that liquid exerts pressure with the help of a working model of hydraulic lift using syringe .--**SI** (HANDS ON ACTIVITY) Cartesian Diver **EL** Collect different pictures of pressure measuring devices (old and new devices) **AIL**	object (rest and motion) Calculates pressure exerted by air and liquid. Compares the factors on which pressure depends	creativity Universal outlook. Analytical ability Integrated development. Imbibing universal love and compassion Universal outlook.(air pressure every where	
July/ 22/7	Friction (Class 7 Science Motion	* Factors affecting friction Sliding and rolling friction;	* Demonstrating friction between rough/smooth surfaces of moving objects in contact and wear and tear of moving objects by rubbing	Students will be able to understand factors	Integrated development.	7

	and Time)		-eraser on paper ,car board, sand paper(LAB ACTIVITY) **EL** * Activities on static, sliding and rolling friction(LAB ACTIVITY).--**SI** *Studying ball bearings(USING VIDEO) **TI** * Investigatory project on methods of reducing friction in different field. **EL**	affecting friction Advantages and disadvantages of friction in real life situations		
		Advantages and disadvantages of friction for the movement of automobiles ,airplanes and boats/ships; Increasing and reducing friction			Universal outlook.Seeing the world as an integrated whole	
			PERIODIC TEST I **10TH JULY TO 17TH JULY** **PORTIONS: FORCE & PRESSURE**			
August (20/4)	Sound	Various types of sound * Sources of sound and sound requires a medium for its	To demonstrate that sound can travel through liquids(LAB ACTIVITY) **EL** *To make a working model of any musical instrument (impoverished) **AIL** Cell phone activity	Understands types of sounds,that can be produced by different musical instruments	Art & Music chanting	4

	Class 8 Chemistry Metals and Non-metals	propagation	Assignment on music therapy **AIL** * To make a Jaltarangwhich produces sound of different frequencies(HANDS ON ACTIVITY) **AIL** Numerical approach(2 periods) * To show videos on noise pollution(USING dependence of frequency of sound on length of air column) **AIL** **PERIODIC TEST II: AUGUST 16TH- 23RD 2022** **PORTIONS: FRICTION**	recognizes that sound requires a material medium for propagation Differentiate noise and music and its effects on human body.	Cultural motivation(Indian culture) Om chanting to communicate with GOD(Spiritual development)	
September/ 17/4	Sound	* Vibration as a cause of sound *Frequency ,amplitude ,wavelength, time period *medium for propagation of sound * Loudness & pitch * Idea of noise as unpleasant and unwanted sound and need to minimize noise	* To demonstrate use a compass needle to make a tester(LAB ACTIVITY) **EL** *Play way method to identify chemical effects using indicators {games}fun pen.--**SI** To show videos on electroplating(USINGTATA CLASS EDGE) **TI** *To demonstrate conductivity of water and the use of LED{Light Emitting Diode} To make the tester(LAB ACTIVITY) **EL**	Observation Involvement	Art and Music Concentration	4

			TERM I : OCTOBER 5th – 19th **PORTIONS: 1. FORCE & PRESSURE 2. FRICTION** **3. SOUND (till page 161 Sound needs a medium for propagation(including)**			
November 25/9	Chemical effects of electric current (Class 7 science Physical and chemical changes)	*water conducts electricity depending on presence /absence of salt in it. Other liquids may or may not conduct electricity * Chemical and magnetic effects of current Identify &Applies The idea of electroplating.	* To show videos on sparks(TATA CLASS EDGE)* Experiment with comb and paper(HANDS ON ACTIVITY) TI	Understands water conducts electricity	Universal outlook	9

December 19/6	Light (Class 7 Light)	* Laws of reflection *Characteristics of image formed with a plane mirror *Regular and diffused reflection * Reflection of light form an object to the eye *Multiple reflection *Structure of the eye *dispersion of light *Lens become opaque ,light not reaching the eye ,Visually challenged use other senses to make senses of the world around	* LAB ACTIVITY :**EI** Aim : To prove the laws of reflection by using a plane mirror(pins ,plane mirror, geometry box) * HANDS ON ACTIVITY To make a model of kaleidoscope. Activity to show dispersion of light **EI** To show positive and negative charges(TATA CLASS EDGE) TI	State Laws of reflection. **Identify and calculate angle of incidence and reflection. Differentiate between diffused and regular reflection.** Identify multiple reflection & dispersion of light. **Compare and contrast between Blind spot and Field of View.**	Ancient subjects with modern relevance Incorporated with chemistry. Integrated development Exploding myths and superstitions	6

January 24/7	Some natural phenomenon (Class 7 Science Electric current and its effects)	***Clouds carrying electric charged ion** *** Positive and negative charges ,attraction and repulsion** *** Principle of lightning conductor** ***Phenomena related to earthquakes**	**PERIODIC TEST –III** **JANUVARY 8th – 17th** **PORTION:** **CHEMICAL EFFECTS OF ELECTRIC CURRENT** * To show video about on lightning conductors * Techniques to withstand or survive in natural disaster(write ups /picture gallery)	Students will be able to identify positive & negative charges. **Constructs models for using materials from surroundings** Understands the principle of lightning conductors	Explaining customs and traditions. Any forms (lamp dance) Universal outlook Integrated Development	7

			TERM II ASSESSMENT : **FEBRUARY 15TH – 26TH 2024** **PORTIONS:** **CHEMICAL EFFECTS OF ELECTRIC CURRENT** **LIGHT** **SOUND**			

CURRICULUM PLANNING (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Class:9 Subject: Biology Resource material/Text: NCERT No: of units/Chapters: 5 Year: 2023-24

Month/No: of working days/No: of periods per each subject	**Unit/Chapter/Sub theme**	**Key concepts**	**Activities/practical/Technology integration/Art integration/ experiential learning/ sports integrated learning**	**Learning outcomes**	**CVP integration**	**No: of periods per each chapter**
June-23/10 **UNIT TEST (7-13)**	The Fundamental Unit Of Life Class:8 Science Chapter Cell Structure and Functions.	Cell, Structural Organization of Cell, Cell Envelopes and Cell Organelles	LAB ACTIVITY/EL 1.Principle of working of microscope 2.Preparation of temporary mount of Onion Peel. 3.Preparation of temporary mount of Cheek Cell. TECH-CELL ORGANELLE-structure and function. . .ART-Diagram-Microscope, prokaryotic and eukaryotic,Nucleus and cell organelles.	* Students will be able to recognize the cell organelles *Students will be able to understand the functions of cell organelles. *Students develop drawing skills. *compare and contrast thefunctions of cell organelles.	Universal Outlook Micro body and Macro body Seeing the world as an integrated whole Cell is the dynamic unit of life in all living organisms.	10 Class test Work sheet
July/23/8 **PT-1 (10-17)**	Tissues – Plant tissues Class: 9 Chemistry-Chapter 1 – Matter in our Surroundings	Tissues in plants – meristematic, simple and complex tissues	LAB ACTIVITY/EL To study simple permanent tissues with permanent slides. TECH-Types of meristematic tissues. ART-Diagram of plant tissues.	Will be able to recognize plant and animal tissues *Compare the features of different tissues	Universal Outlook Intellectual development Seeing the world as an integrated whole.	Class test 8

August/20/8 PT-2 (16-23)	Animal tissues-	Animal tissues- epithelial, connective,	LAB ACTIVITY/EL To study animal tissues with permanent slides. SPORTS-Role of muscles in movements and sharing their experience of having sprain /fracture during their physical activity. ART-Diagram of animal tissues.	*Understand the functions of animal tissues in human body. *To develop drawing skill of different tissues	Universal Outlook Intellectual development Seeing the world as an integrated whole.	Class test Work sheet 8
September/19/6	Animal tissues- muscular and nervous	Animal tissues-	LAB ACTIVITY/EL To study animal tissues with permanent slides. SPORTS-Role of muscles in movements and sharing their experience of having sprain	*Understand the functions of animal tissues in human body. *To develop drawing skill of different tissues	Universal Outlook Intellectual development	6

			/fracture during their physical activity. ART-Diagram of animal tissues.		Seeing the world as an integrated whole.	
October/ 21 TERM1 (OCT 5-19)	Why do we fall ill? (till page no: 179) **DELETED AS PER CBSE** Class:6 VI- Science- Chapter 2- Components of food REVISION/ TERM-1	Cause of diseases, Infectious and Non infectious diseases.	EL-Preparation of news reports about various local and regional diseases. ART-Infectious agents and diseases.(collage)	*Able to compare and contrast healthy and disease free condition. *Differentiate acute and chronic diseases *Awareness on personal and community hygiene *Students will be able to cite examples of Infectious and Non Infectious diseases	Indian Culture:Home remedies for treatment of diseases.[Ayurveda]	

November/25/12	Improvement in Food Resources IX- Economics – chapter 4- Food Security Why do we fall ill? (contd) Diversity in Living Organisms (Page no 87) **DELETED AS PER CBSE** Geography – Natural vegetation and wildlife Chapter-5(Class 8)	Cropping Patterns, Crop Protection Management, Storage of Grains Means of spread,Organ specific and tissue specific manifestation, Principles of Treatment. Basis of Classification, Kingdom plantae	EL-Practising steps in Agricultural practices. TECH-Fisheries, poultry, bee keeping, cropping patterns. ART-Food resources.(Picture album) * EL-Analysis of immunization chart . LAB ACTIVITY Specimens of infectious agents. TECH-Means of spread. LAB ACTIVITY ➢ To study the characteristics of Spirogyra,Agaricus,Moss,Fern,Pinus and an Angiospermic plant. ➢ Observe and study the various parts of monocot and dicot plant	*Students will be able to recognize the cropping patterns *Students will be able to interpret the previous knowledge of farming systems . • Students will be • able to identify and understand the preventive and treatment measures for various common diseases. *Students will be able to categorise the organisms into various phylum/division on the basis of their salient features	Integrated Development: Physical Development: Knowledge of Health. Integrated Development: Physical Development: Awareness about Vaccination. Universal Outlook: environmental education: knowing the diversity of plants around us.	12 Class test Work sheet

	Diversity in Living Organisms(contd) Class: IX Geography-Chapter 5-Natural vegetation and wildlife	Salient features of Porifera,Coelenterata, Platyhelminthes ,Nematoda Annelida,Arthropoda, Mollusca, Echinodermata,Protochordata, Vertebrata, Five Classes of Vertebrata-Pisces, Amphibia,Reptiles Aves and Mammalia	LAB ACTIVITY .Practicals: To observe and draw the given specimens-Earthworm, Cockroach,Frog, Fish and Bird.Write one specific feature of its phylum and adaptive feature with reference to its habitat.	*Students will be able to recognize the salient features of organisms belonging each phylum and class. *Students will be able to relate the evolutionary significance of each group.	Mental Development: Sensitizing the beauty of nature.	
December/19/6	Improvement in food resources	Animal Husbandry-Diary Farming, Poultry Farming,Pisciculture, Apiculture.	TECH-Fisheries, poultry, bee keeping, cropping patterns.	*Able to know the management of animals	Integrated Development: Physical Development:	6

					Knowledge of Health.	
JANUARY 24/9 REVISION PT-3(CLASS TEST)(8-17) /TERM-II						

CURRICULUM PLANNING(PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Class; IX Subject :Chemistry Resource material/Text:NCERTNo: of Units/Chapter: 5 Year:2023-2024

Month/No of working days/No of periods per subject	Unit/Chapter	Key Concepts	Activity/ Practical's/Technology Integration/Art integrated Learning /Experiential learning/Sports integrated Learning	Learning Outcomes	Integrated value	No of periods for each chapter
June 10/23 **UT 1 (7 th JUNE TO 13 th JUNE)**	Matter in our surroundings (Class : VII, Politics-Law and social justice) Deleted as per CBSE 2021-22	Physical nature of matter. Characteristics of particles of matter Effect of change of temperature	**Lab activity:1** Dissolving (EL) $KMnO_4$ in Water. And $CuSO_4$ in water. **Demonstration**- Burning incense stick. Syringes (3nos), Chalk powder ,water and empty syringe- Shows the compressibility **Lab activity 2:** (EL)	Students will be able to understand that the particles of matter are very small beyond our imagination. Understands that rate of diffusion is directly proportional to temperature. Compare the compressibility of three states of matter	Intellectual development. Independent Thinking. Observation and comparison.	10

		and pressure on states of matter. Evaporation	Sublimation of ammonium chloride. <u>Demonstrates evaporation by taking acetone in palm</u> **<u>Practical:</u>** 1.To familiarize the common apparatus used in the chemistry laboratory. 2. To determine the melting point of ice and boiling point of water Making 3 D shapes **(AIL)**	Analyses the reason for difference in compressibility of matter. Applying pressure and reducing temperature can liquefy gases Experiences the cooling effect of evaporation and apply the knowledge in real life situations. Evaporation causes cooling Handle tools and laboratory apparatus properly.	Universal outlook	

July 8/23 **PT 1 (1O th July TO 17th JULY)**	Is matter around us pure (Class: VIII ,History- Minerals)	Mixture- Types of Mixture. Solution, Suspension and Colloids	**Practical (EL)** 3. To prepare solution ,suspension and colloid and compare the properties of mixture in terms of appearance ,transparency and filterability	Differentiates and compare the properties of solution, suspension & colloids Analyses the reason for the difference in the properties of solutions.	Intellectual development. Observation. Abstract thinking. Universal outlook	8

		Separating the components of a mixture . (DELETED AS PER CBSE) Physical and chemical changes	**Lab activity3** Separation of two miscible liquids and two immiscible liquids **Lab activity 4** Centrifugation to separate cream from milk **Practical:** 4.Separating the mixture of sand salt and ammonium chloride **Practical** To classify reactions as physical and chemical changes Pictorial Respresentation of separating devices.**(AI)**	Acquires the knowledge of separating different types of mixtures Apply the same principle in the diagnosis of blood and urine tests. Recognizes and compares physical and chemical changes Identifies elements and compounds Recognizes the symbols of elements from the periodic table	Independent thinking Comparison Independent thinking Abstract thinking	

August/ 6/20 **PT-2 (16 th AUGUST TO 23rd AUGUST)**	Is matter around us pure (cont.) Atoms and molecules (Class: IX, Biology- Fundamental units of life)	Types of Pure substances – Elements and compounds Laws of chemical combination Atoms Molecules Symbols valency (first	**Practical:** To prepare a mixture and a compound using sulphur powder and iron filings Lab Activity/**EL** Law of conservation of mass To demonstrate the atomicity of a molecule (both elements and compounds) using ball and stick model Preparing a chart Making a model of	Differentiates mixtures and compounds Recognizes and comprehends the laws of chemical combination. Observes the changes and deduces the concept that mass remains constant during a chemical reaction Recognizes that atoms may not have an	Intellectual development Observation Abstract thinking	6

		twenty elements) Table 3.6	molecules.**(AIL)**	independent existence but molecules have. To learn symbols and valencies of ions and poly atomic ions.	Independent thinking	
September 6/19	Atoms and molecules	Chemical Formula	Role play:-.**(AIL)** To understand the formation of a compound.(Class divided into group of 3 or 4 and assigned a role of a metal or nonmetal and asked to group with other elements to form a compound.)	Familiarizes with the method of writing chemical formulae of compounds and valency. to derive formula using symbols. draws conclusion that elements combines in a fixed ratio to form compounds.	Creativity Abstract thinking Problem solving ability	6

October 9/21 TERM -1 (5th OCTOBER TO 19th OCTOBER)	Atoms and molecules (cont) Revision Term - I	Molecular mass Mole concept (DELETED AS PER CBSE)	Work sheet:- Numerical based Work sheet:- Numerical based	. Ability to solve problems related to molecular mass and formula unit mass. Students learn about Avogadro constant and solve problems related to it Ability to solve problems related to molecular mass and formula unit mass.		3 6
November 13/25	Structure of atom (Class: IX, Biology- Fundamental units of life)	Charged particle in matter Structure of an atom	Rubbing a glass rod with silk cloth and observes that the glass rod attracts small pieces of paper .**(EL)** Digital slide –**(IT)** Different models of atom	Understands and recognizes the existence of charged particles Identifies, familiarizes and evaluates with different model of atoms :	Intellectual development Universal outlook Independent thinking	13

		Bohr and Bury rule to fill electrons in different orbits Atomic number. Isotopes	Work sheet : To write the electronic configuration of first 20 elements . Digital slides- application of isotopes Understands the importance of natural resources. Atomic model making..**(AIL)**	Thomson's model Rutherford's model. Bohr's model Students are able to arrange electrons in different shells Understands about valency , atomic number , mass number , isotopes , isobars etc	Universal outlook Intellectual development Independent thinking	
December 6/19	Natural resources (Class:IX , History-Forest , society andcolonialism)	Digital slides : rain water source: air pollution, soil pollution	Digital slides to help the child to understand pollution.–**(IT)**	Analyses the factors which causes pollution which help the student to take preventive measures to protect the nature.	Universal Outlook	6

	Deleted as per CBSE 2023-24					
January 10/24 **PT-3 (8th JAN to 17th JAN)**	Bio geo chemical cycles. Deleted as per CBSE 2023-24 Revision PT III	Water cycle, nitrogen cycle, carbon cycle and oxygen cycle	Explains using charts and videos..**(EL)**	Describe the cycles using the diagrams.	Universal Out look	3 7
February-23						
March TERM -2						

PRACTICALS - CHEMISTRY

MONTH	PRACTICAL	Date of submission	Date of correction
June	1. To familiarize the common apparatus used in the chemistry laboratory 2.To determine the melting point of ice and	25-06-2023	30-06-2023

	boiling point of water Deleted as per CBSE 2022-23		
July	3 .To prepare a true solution, a suspension and a colloidal solution and classify them on the basis of i. Appearance ii. transparency iii. filtration criterion 4.To separate the components of a mixture of salt , sand and ammonium chloride	26-07-2023	30-07-2023
August	5.To classify reactions as physical and chemical changes 6. To prepare a mixture and a compound	25-08-2023	31-08-2023
September	To verify the law of conservation of mass in a chemical reaction	18-09-2023	28-09-2023
October	Revision		
November			
Jan	**Revision**		

CHINMAYA VIDYALAYA PALAKKAD CLUSTER

CURRICULUM (2023-24)

Class: IX Subject: Physics Resource material/ Text: NCERT No of chapters: 5

Month/No. of working days/No.of periods per subject	Unit	Key concepts	Activities/Practical's Technology integration/Art Integration/Experiential Learning/Sports Integration	Learning Outcomes	Integrated values	No of periods for each chapter
June 23/9	Motion Class 7 Physics Motion and Time	Basic terms- Distance and Displacement Speed/velocity/Acceleration Graph- Uniform and Nonuniform motion Distance – velocity- time graph v-t for equation of graphics	Mix and match the given graphs (distance- time, velocity-time) with situations Tabulate data of distance covered by your bicycle and represent graphically Determine velocity from the distance –time graph.--- **Technology integration** Prepare a graph to show the RUN RATE /BOWLING SPEED of IPL/ WORLD CUP) **---- Sports Integration**	Students will be able to distinguish Velocity: acceleration,distance and displacement Deduce the equations of motion and develops numerical problem solving ability. Collects data and interprets the graph Shares their knowledge about uniform and non-uniform motion **Plans** and **conducts investigations** on how does	Integrated Development Numerical ability Imaginative Deductive approach Logical thinking Analytical ability Sharing of knowledge	9

		Circular motion	Bring out some daily life examples for uniform and non-uniform acceleration. Work sheet: Graph based Demonstration to show circular motion .	the speed of an object changes? **Calculates using the data given such as speed,velocity etc** Observes the path /direction of motion of water droplets from rotating umbrella(mixer/grinder/circus)	Acquisition of knowledge	
UNIT TEST 1 (7th – 13th June) **Portions: Motion (Page no. 98 to 103)**						
July 23/9	Force and laws of motion Class 7 Physics Motion and Time	Balanced and Unbalanced Force. Newton's Law of Motion Law of inertia Second law Action and reaction	Video presentation Graph cum numerical based work sheet. Role play to show inertia of motion rest, and direction-- **Art Integration** Cartoon presentation /illustration of Newton's law of motion.-- **Technology integration** Numerical based work sheet	Students will be able understand Newton's third law and its application. Analyses the picture presentation and interprets the reason Develops their conversational skills & understands the concept Draws creative picture. Correlate action & reaction pair with life Collects information, finds the application of laws in playground.	Great lives Seeing world as an integrated whole Learning the commonalities Interactive positively Imaginative Physical development	6
PERIODIC TEST 1 (10th July to 17th July) **CHAPTER: MOTION**						

August 20/8	Gravitation Class 9 English Albert Einstein truly beautiful mind	Universal Law of gravitation Free fall Mass and Weight Thrust and pressure	Data collection - influence of gravitational force in space (assignment). **Technology integration** Shows the picture of "GRAVITY PILLAR" (another marvel in Chennakesava temple in Belur). Shows graduated scale of spring balance.-- ---**Experiential Learning**	Students will be able to state universal law of gravitation. Comparative study on GRAVITY PILLAR in India & LEANING TOWER of PISA in Italy. Students will be able to calculate mass and weight. Compares acceleration due to gravity on earth and moon. Distinguish the differences between mass and weight	Great lives Learning to see commonalities Universal outlook	8
September 19/4	Gravitation Class 9 English Albert Einstein truly beautiful mind	Buoyancy Archimedes principle Relative	Activity to determine the magnitude of thrust and pressure using cuboids and sand. PRACTICALS: 1.To determine the density of a solid (denser than water) by using a spring balance and a	**Derivation of universal law of gravitation** Students will be able to calculate pressure.	Indian history {Discovery of gravitation} Countries and glories	4

		density	measuring cylinder. Demonstration to show upward thrust (press empty closed bottle into water).--- ---**Experiential Learning** PRACTICALS 2.To establish the relation between the loss in weight of a solid when fully immersed in (i)tap water (ii) strongly salty water, with the weight of water displaced by it, by taking at least two different solids.--- ---	Students will be able to understand Buoyancy & States Archimedes principle. Understands density and relative density.		
PERIODIC TEST II (16th to 23rd AUGUST) **CHAPTER: FORCE AND LAWS OF MOTION**						
October 21/8	Work, Energy And Power Class 7 Social Science Inside our earth	Definitions of terms Work and Energy Different forms of energy- Potential and Kinetic Energy' Laws of conservation of energy Power Rate of	**Experiential Learning** Activities to show conversion of Potential energy to Kinetic energy (simple pendulum)--- **Technology integration** Assignment To estimate Electricity Bill {bimonthly} of consumption of energy in their house and select five more house in their locality and compare it with Electricity Board Bill.---- **Experiential Learning**	Students will be able to distinguish and calculate potential energy and kinetic energy. Students will be able to state laws of conservation of energy.	Understanding Secularism at individual level and government level Responsibilities Service mindedness Intellectual Development	8

		doing work.				
TERM I : 5th to 19th OCTOBER **PORTIONS: 1. MOTION 2. FORCE & LAWS OF MOTION 3. GRAVITATION (up to 10.2 free-fall excluded)**						
November 25/9	Sound Class 8 Chemistry Metals and Nonmetals	Medium Wave Transverse wave Longitudinal wave Compression Rarefaction	Demonstration to show relationship between air column and pitch.(Using Straw)--- **Art Integration** Demonstration to show sound requires a material medium for its propagation	Demonstration to show relationship between air column and pitch.(Using Straw) Demonstration to show sound requires a material medium for its propagation	Integrated development [Music Therapy]	9
					Universal	

				Understands the working principle of SONAR.	outlook(Noise pollution)	
December 19/6	Sound Class 8 Chemistry Metals and Nonmetals	Characteristics of sound waves. Reflection of sound Uses of multiple reflection of sound Echo Reverberation	Numerical based work sheet Demonstration to show longitudinal and transverse waves using DNA structure and slinky. Study on acoustics of buildings.(measures to minimize reverberation in auditorium, concert hall) **PERIODIC TEST –III** **8th to 17th January** **PORTIONS: WORK AND ENERGY**	Application of radar in road safety.	Universal outlook	6

January 22/4		Range of hearing Application of ultra sound Sonar Structure of human ear Audible range Infrasonic waves Ultrasonic waves	PRACTICALS: 3.To verify the laws of reflection of sound.--- **Sports Integration—Physical fitness**	Students will be able to analyse and verify the laws of reflection of sound.	Universal outlook	4
TERM II: 12th to 21st FEBRUARY **PORTIONS:** **1. MOTION** **2. FORCE & LAWS OF MOTION** **3. GRAVITATION** **4. WORK & ENERGY** **5. SOUND**						

LIST OF EXPERIMENTS - PHYSICS PRACTICALS 2023-24

Class: IX

MONTH	NAME OF EXPERIMENT /AIM OF EXPERIMENT
September	1. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.
October	2. Establishing the relation between the loss in weight of a solid when fully immersed in a) Tap water b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.
December	3. Verification of the Laws of reflection of sound. 4. Determination of the speed of a pulse propagated through a stretched string/slinky (helical spring).

CURRICULUM PLANNING [PALLAVUR/ TATTAMANGALAM/KOLLENGODE]

CLASS: X SUB: CHEMISTRY RESOURCE MATERIAL: NCERT NO. OF UNITS/CHAPTERS: 4

YEAR: 2023-2024

Month/No. of working days/No. of periods per subject	**Unit/chapter**	**Key concept**	**Activity/Art integration / Experiential learning /Sport integration /Practical/ Technology integration**	**Learning out comes**	**Integrated values**	**No. of periods per each chapter**
June 11/23	Chemical reactions and equations (Class: X, Chapter-6 Biology- Life process)	Chemical reaction Chemical equation Balancing chemical equations Types of chemical reactions	**Lab activity(EI)** 1.Burning of Magnesium ribbon 2. Action of dilute sulphuric acid on Zinc granules. Providing work sheets to balance the chemical equations **Practical** 1(**AI).**To perform and observe the following reactions and classify them into i.Combination	Understand the reactions taking place. Identify the reactants and products in a reaction. Uses scientific conventions to represent symbols,formula and equations . Need for balancing chemical equation	Intellectual development Observation Safety Independent thinking Concentration	11

		Effects of oxidation reaction in everyday life	ii.Decomposition iii.Displacement iv.Double displacement. Observes the phenomena like corrosion,rancidity etc **(IT)Digital slides** to show oxidation reactions in everyday life.	Differentiate between combination, decomposition, displacement& double decomposition reactions	Universal Outlook	10
JULY 10/23	Acids, bases& salts (Class VII-Science-Acids bases and salts)	Acids,bases &indicators	**Lab activity:3(AI)** Identification of acidic & basic solutions using indicators	Recognizes the methods to prevent corrosion & rancidity	Intellectual development.	
				Effect of indicators on acidic and basic solutions		
		Chemical properties of acids and bases	**Practical:2** To study the properties of acids and bases(EL)		Emotional expansion.	
				Understand the products formed by the reaction of acids with metals, sodium bicarbonate & bases	Physical and health development	
		Importance of pH in everyday	**Practical: 3(EI)** To find the pH of the given samples by using	Realizes that pickles cannot be stored in metal containers	Universal outlook.	

		life Salts	pH paper **Lab activity:4** heating copper sulphate crystals Finding the pH of Common salt	Analyse the pH of different substances used in everyday life Understand water of crystallization Applies scientific concepts in daily life. (Realises that common salt is neutral and is used as an ingredient in food, reaction of baking soda to make spongy cakes etc.	Intellectual development. Observation. Independent thinking. Intellectual development	
August 06/20	Metals and non metals (Class VIII- Social Science- Minerals)	Physical properties of metals and non metals Chemical properties of metals	To identify the properties such as malleability, ductility, conductivity, sonorous and metallic lustre. **Lab activity:5(EL)** Reaction between zinc and hydrochloric acid **Lab activity:6** Reaction of sodium with	Compare the physical properties of metals and non metals	Independent thinking Abstract thinking Universal outlook	06

		Formation and properties of ionic compounds	water **Lab activity:7** Reaction of Hydrochloric acid with sodium hydroxide **Practical:4** To observe the action of zinc, iron, copper and aluminum on their salt solutions Drawing the electron dot structures of some ionic compounds**(AI)** **(IT)Digital slides** to show the properties of ionic compounds	Distinguish between metals and non metals based on the chemical properties Arranging the metals in the descending order of reactivity Correlate the properties of ionic compounds with its structure	Universal outlook Scientific skill and values. Independent thinking Self expression Intellectual development Independent thinking. Intellectual development	
September 7/19	Metals and non metals (CONT.) Periodic	Basic metallurgical processes. Corrosion and its prevention	Making a flow chart to show the metallurgical processes	Understand the processes involved in metallurgy Understand the ways to prevent corrosion	Universal outlook. Creativity	7

	classification of elements (DELETED as per CBSE) .	Need for classification Mendeleev's periodic table Modern periodic table Gradation in properties Valency Atomic number Metallic and non-metallic properties	**Lab activity:8** To carry out an activity to show the Factors affecting rustingof iron. Group activity to make a periodic table of elements. To locate different elements and predict their nature in the given outline image of the periodic table .(EL) Comparing the atomic radius of first 20 elements to explain the metallic and non-metallic properties Writing the electronic configuration of first 20 elements to predict the position and valency	Understand the necessity of classification of elements Understand metallic property increases down the group and decreases across the period Able to predict the group and period to which the element belong	Independent thinking. Universal outlook Intellectual development	

October 6/21	Carbon and its compounds SCIENCE -VI COMPONENTS OF FOOD	Homologous series Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes alkanes, alkenes and alkynes)	Group activity Preparation of model for methane, ethane, ethene and ethyne Drawing electron dot structures of the above compounds**(AI)** Providing worksheet to write the homologous series of halogens, alcohols, aldehydes,ketonesetc and naming the above according to IUPAC nomenclature	Understand the versatile nature of carbon due to catenation and tetra valency Recognizes the functional groups present in each homologous series and represent it using a general formula	Physical development Self-thinking Scientific skill Independent thinking Intellectual development	6
November 10/25	Carbon and its compounds (CONT.)	Ethanol and Ethanoic acid Soaps and detergent Covalent bonding in carbon compounds	lab activity:9 Burning ethanol in a spatula Digital slides to show the reactions of carbon compounds**(IT)** Practical:5 To study the properties	Understand combustion, oxidation, substitution and addition reactions Realizes hy carbon and its compounds are used as fuels		5

December 8/19 **January 10/24** **February 9/23** **March**	Revision for Term 1 REVISION Board examination	Chemical properties of carbon compounds (combustion oxidation, addition and substitution reaction)	of acetic acid**(EL)** Assignment:- ethanol consumption and consequences Practical:6**(EL)** To study the comparative cleaning capacity of a sample of soap in soft and hard water	Understand the properties of acetic acid The necessity to denature alcohol Recognizes that cleansing capacity of soap is due to emulsification Differentiates hard and soft water.		5

LIST OF EXPERIMENTS

CLASS: X CHEMISTRY

Month	Name of the experiment	Date of submission	Date of correction
JUNE	1. To perform the reactions and classify them into i.combination ii. Decomposition iii. Displacement iv. Double displacement	19-6-2023	30-6-2023
JULY	2.To study the properties of acids and bases 3.To find the pH of the given solution using pH paper	24-7-2023	31-7-2023
AUGUST	4. To observe the action of Zinc,Iron,Copper and Aluminium in their salt solution.	25.8.2023	31.8.2023
SEPTEMBER	5. To study the properties of acetic acid. 6.Saponification	5-10-2023	15-10-2023
OCTOBER	----------		

NOVEMBER DECEMBER JANUARY FEBRUARY	7.To Study comparative cleaning capacity of a sample of soap in soft and hard water Revision	8-11-23	15-11-23

CURRICULUM PLANNING (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Grade: X Subject: BIOLOGY Resource material/text: NCERT No: of chapters:6 Year: 2023-24

Month/No. of working days/No. of Periods	Unit/Chapter / Subtheme	Key concepts	Activities/ Art integration/ Experiential learning Practicals / Technology integration/Sports integration	Learning Outcomes	Integrated Value	No. of Periods for each chapter
June/23/10 **UNIT TEST June (First week)**	Life-processes Class X Chemistry Chapter 1- Chemical reactions and equations	Life processes ,nutrition, Autotrophic nutrition, Respiration, Transportation in human beings ,Transportation in plants & Excretion in human beings and Plants	Laboratory activities: 1.To prepare temporary mount of leaf peel to study stomata. 2.To show experimentally that co_2 is given out during respiration	Recognizes the raw materials required for photosynthesis Recognize the organs of respiration, transportation, and excretion in plants,human beings and other animals	Universal out look Integrated development Food and Mind Yoga and physical activity	**10**
July 23/10 **PT 1 (10-17)**	Control and coordination Class 8 Physics- Chapter 14 - Chemical effects of electric	Nervous system, Reflex action, Human brain, Control and Coordination in plants, Stimulus , Movements due to growth , Hormones in animals and plants	ART/TI: Model/Digital collage making of human organ systems.	Recognizes the parts of nervous system. Understands the working of human nervous system; Applies the knowledge	Integrated development Independent thinking Imagination and creativity Discrimination Analytical	**10**

	current			of plant hormones in horticulture.	ability	
August/20/8 **PT 2 (16-23)**	How do organism reproduce	Reproduction, importance of variation, fission, fragmentation, regeneration, budding, Vegetative propagation,	3.To study binary fission in amoeba and budding in yeast 4.To identify the different parts of an embryo of a dicot seed Experiental learning: Seed germination in plants and fungal growth in bread.	Recognises the parts of human reproductive system	Universal Outlook: Harmony in creation.	**8**
September/19/ 6	How do organism reproduce-contd	Sexual reproduction ,Human Reproduction, Reproductive health	5.To study structure of sperm and ova through permanent slides.	Understands the functions of organs	Universal Outlook: Harmony in creation.	**3**

	Heredity and evolution (Evolution deleted as per CBSE 2021) Class IX-Mathematics-Probability	Accumulation of variation In sexual reproduction heredity , inherited traits, Mendels laws of inheritance, sex determination Evolution , acquired & inherited traits,fossils,homologous and analogous organs,origin of life on Earth, speciation, evolution, and classification,evolution by stages, human evolution	*Studying the inheritance of characters with help of Punnet square [Inheritance of height in Pea plant, inheritance of colour and shape of the seed in Pea plant, Inheritance of blood group in man. Art: Chart work of Monohybrid and Human sex determination cross. OR Model making of DNA structure.	Understand the importance of variation work of Gregor John Mendel on garden pea and contribution to genetics Compare and contrast acquired and inherited traits. Understand the process of speciation and mechanism of evolution.	Universal outlook: Harmony in creation: Seeing the world as integrated whole	**3**

	Management of Natural resources (Internal Assessment: Assignment chapter as per CBSE 2023-24) Class VII- Chemistry- Chapter 9- Soil Class VII - Chapter 16- Water as precious resource	Management of resources, forest and wildlife, dams, water shed management, coal and petroleum	*Assignment on rain water harvesting techniques and its advantages. Art/TI: Power Point presentation about Natural resources and conservation OR Drama presentation of Chipko movement	Recognize the need of judicious use of resources.	Universal outlook: Harmony in creation: Seeing the world as integrated whole	
October/21/7 TERM 1 (Oct 5th – 19th)	**REVISION** **TERM I**					**7**

November 25/12	Our Environment Class VII- Chemistry- Chapter 14- Forest, Our lifeline	Bio degradable and non- biodegradable materials, food chain , food web, ozone depletion, managing the garbage, bio magnification	*Construct food chains and food web with the help of pictures Art/TI: Seminar and Power Point presentation about Environment issues.	Able to distinguish biodegradable &non biodegradable materials , Cites examples of grazing and aquatic food chains. Analyze the Reasons for environmental changes	Environment education Universal outlook: Citizen of the world: Population and its impact.	**12**
December/ January/ February	**REVISION Model examination**					

CHINMAYA VIDYALAYA PALAKKAD CLUSTER CURRICULUM (2023-24)

Class: X Subject: Physics Resource material/ Text: NCERT No of chapters: 5

Month/ No.of working days/No.of periods per subject	Unit	Key concepts	Activities/Practical's Technology integration(TI)/Art Integrated Learning(AIL)/Sports Integration(SI)/Experiential Learning(EL)	Learning Outcomes	Integrated values	No of periods for each chapter
June 23/9	Electricity Class 8 Chemistry Metals and non-metals	Electric current and circuit Electric potential &circuit diagram Ohm's law Factors on which the resistance of a conductor depends Resistance of a system of resistors Resistors	1. To determine the resistance of given wire by plotting current versus potential difference graph.--**(EL)** Making a working model of a pencil rheostat-- **AIL** 2. Lab activity to find the effective resistance in series and parallel combination--**(EL)**	Stating Ohm's law Interpreting values of effective resistance in series and parallel combination Analyzing the dependence of current on potential difference. Developing observation skill	Accountability Comparing and classifying Intellectual development Observation and practical skills	4

		in series and parallel				
	Magnetic effect of electric current Class 8 Geography Industries	Magnetic field and field lines Magnetic field due to a current carrying conductor; Oersted's experiment . Magnetic field due to a current through a straight conductor . Right hand thumb rule Magnetic field due to a circular loop and a solenoid Force on a current carrying	Tracing outfield lines around bar magnet by sprinkling iron fillings--**(EL)** Demonstrating oersted expt. --**(EL)** Application and diagram based work sheet **--TI** Lab activity: Force on a current carrying conductor using strong horse shoe magnet and aluminum rod. --**(EL)**	Analyses the magnetic field lines formed around a bar magnet and a solenoid. Understands the force	Intellectual development	5

		conductor in a magnetic field Electric motor.		acting on a current carrying conductor in a magnetic field.		
UNIT TEST (7th – 13th June) **Portion : Electricity (till 12.5 ; 12.6 excluded)**						
July 23/9 August/ 22/9	Magnetic effect of electric current Class 8 Geography Industries	Electromagnetic induction. Electric generator and domestic electric circuits.	Demonstrating magnetic field lines, solenoid expt. --**(EL)** Video presentation using TATA CLASS EDGE – **TI** **PERIODIC TEST I** **(10th July to 17th July)** **Electricity**	Predicting the magnitude of magnetic strength Understands the magnitude and direction of force on a current carrying conductor. **Draws labelled diagrams** Differentiate the sources of direct current and alternating current.	Accountability Imbibing positive attitude towards practical physics and usage of acquired knowledge in daily life. Universal Outlook	9 4

August/ 22/9	Light Reflection and refraction Class 8 Physics Light	Reflection Image formation by spherical mirror Sign convention Mirror formula	Magic using mirrors--**(EL)** Students present the theory behind the formation of rainbow Work sheet:-Drawing skill based.(Ray Diagrams)-- **AIL**	**Relates processes and phenomena with causes and effects.** Observing the nature and sizes of image while doing experiment.	Observation	5
September 19/4		Refraction Refractive index Refraction by lens Lens formula Magnification power of a lens	Lab activity to demonstrate the image formation by lenses. --**(EL)**	**Draws ray diagrams** Understands the refraction of light by lenses.	Intellectual kindling	4

PERIODIC TEST –II **(16th to 23rd AUGUST)** Magnetic effect of electric current						
October 21/8	Human eye &colorful world Class 8 Physics Light	Human eye Defects of vision Refraction through glass prism Dispersion	Discussion of different correction methods of eye defects**(SI)—**discussion on importance of vitaminA in vision Diagram based work sheet---Eye defects—Show the image formation and correction(Correct ray diagrams) **--AIL** Group activity;To trace the path of refracted ray using glass prism. a) Study the relationship between angle of incidence and angle of emergence. b) Comparative study on refraction in glass slab and glass prism c) Dependence of angle of deviation and angle of incidence--**EL**	Understands the parts of human eye as an integrated part of human body Identifies the reason for defective eyes. Awareness on value of vision/eye donation Infer the reason for lateral shift To trace out the path of light	usage of acquired knowledge in daily life. Health and hygiene Imbibing positive emotions	8
November 25/9	Human eye &colorful world Class 8	Atmospheric refraction	Class activity; formation of rainbow with the help of liquid mirror combination./glass prism. --**(EL)**	Familiarize the phenomenon based on dispersion of light Reasoning on the amount of bending of different	Abstract thinking/coordination Sensitivity to	9

	Physics Light	Scattering	Demonstration of tyndall effect of light (projector in the class room)-- **TI**	light. Classification of visible light on the basis of wavelength. . Compare the angles,(incidence ,emergence,deviation,refraction),understands optical properties of light Demonstrates, and applies the properties of light in daily life situations	beauty/exploding myths and superstitions	
TERM I 5th to 19th OCTOBER **PORTIONS** **1. Electricity 2.Magnetic effect of electric current** **3. Light – reflection and refraction** (*till* **10.2.4** *mirror formula and magnification included*)						
Date of portion completion : November 30th 2023						

LIST OF EXPERIMENTS – PHYSICS PRACTICALS (2023-24)

Class: XI

MONTH	AIM OF EXPERIMENT
JULY	1. To determine the thickness of wire using screw gauge 2. To determine the thickness of lamina using screw gauge.
AUGUST	3.To determine the radius of a bob using vernier caliper 4.To determine the volume of a calorimeter using vernier caliper
OCTOBER	5.To determine the magnitude of resultant vector by using Parallelogram law of vector addition.
NOVEMBER	6.To determine the spring constant using Hooke's law 7. To determine the value of acceleration due to gravity,'g' using simple pendulum
DECEMBER	8.To determine the unknown frequency using resonance column.

CURRICULUM PLANNER 2023-24 (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Class: XI Subject: Physics Resource material/ Text: NCERT No: of Units/Chapter: 14

Month/No. of working days/No.of periods per subject	Unit	Key concepts	Activities/Practical's Art integration/ Experiential Learning/ IT Integration/Sport integration	Learning Outcomes	Integrated values	No of periods for each chapter
June 23/18	Units and measurements. **SI-XI-chemistry-Unit 1 –some basic concepts of chemistry** Basic mathematics – trigonometry & calculus	Systems of units; SI units, fundamental and derived units. significant figures. Dimensional formulae and equations. Dimensional analysis and applications.	Discussion of fundamental and derived units, errors in measurements(theory &practical),significant figures Discussion of dimensional formula and its applications	Uses International System of Units (SI Units), symbols, nomenclature of physical quantities and formulations, conventions Becoming precise by handling sensitive devices. Becoming accurate. Developing mathematical logical and reasoning skill.	Analytical ability. Reasoning and abstract thinking. Divine oneness. Divinity in humanity.	10/18 **CBSE 8** 8/18
	Motion in a straight line. **SI-IX-Maths-**	Describing motion	**(Experiential Learning)**Discussion on the relative motion of different	Recognizes the concepts of Physics related to various	Analytical ability. Reasoning	10/20 **CBSE 24 (for**

July 23/20	**Unit 3- Coordinate geometry**	using graph, laws and equations. Kinematic equations(Integral calculus / Graphical method). Relative velocity.	objects in universe. Describing the nature of motion from graph,laws ,equations. Deriving equations of motion Discussing relative velocity **PERIODIC TEST 1 (10th July to 17th July)** **CHAPTER: Units and measurements.**	natural phenomena Analyzing daily life situations with a scientific approach Analyses and interprets data, graphs, and figures, and draws conclusion		**chapters 3 & 4)**
	Motion in a plane. **SI-X-Maths- Unit 3- Coordinate geometry**	Vectors Introduction and properties 2D motion Projectile motion Circular motion	Discussion of dot and cross products Resolution of Vectors **(Sports Integration)**Identifying the trajectory of projectile through activity and attaining maximum horizontal range. Identifying the trajectory of circular motion.	Understands utility of worldly accepted laws in the playground Exhibits creativity and out-of–the-box thinking in solving challenging physics problems;	Divine oneness. Divinity in humanity. Analytical ability. Reasoning and abstract thinking.	10/20

August 20/18	Laws of motion **SI-XI-Maths Unit 4- Calculus- Limitas& derivatives**	Laws of motion Momentum. Impulse. Collision. Friction and its laws.	**(Experiential Learning)** Discussion of Laws of motion with different examples Demonstrating third law of motion using straws. Differentiating elastic and inelastic collision(qualitative) Discussion of impulse and friction **PERIODIC TEST II (16th to 23rd AUGUST)** **CHAPTER:** **Units and measurements.** **Motion in a straight line.**	Analyzes various situations scientifically Developing Investigatory skills. Applies concepts of physics in daily life with reasoning while decision making and solving problems	Seeing the world as an integrated whole.	9/18 **CBSE 14**

September	Work, Energy and Power **SI-XI-Maths Unit5- Mathematical Reasoning**	Work done by constant force and variable. Kinetic energy and Potential energy Potential energy of a spring. Power	Discussion of work energy theorem Distinguishing kinetic and potential energies **(IT Integration)** Deriving potential energy of spring –Phet simulation Discussing Power and its significance	Distinguishes the properties of kinetic and potential energies Developing Investigatory skills.	Analyzing ability Science and religion Harmony in creation.	9/18 **CBSE 14**
	Gravitation. **SI-IX-English- Albert Einstein truly beautiful mind** **XI-Maths- Algebra(binomiai theorem)**	Universal law of Gravitation. Calibration of "G". Acceleration due to gravity.	Seminar on, Satellites. Influence of gravity. **(Experiential learning)**Investigatory report on typical selection of satellite landing stations	Deriving the expression for "G" Developing Investigatory skills.	Universal law and compassion. Concentration. Observation.	5/15 **CBSE 12**

19/15		Weightlessness. Freefall.				
	System of particles and rotational motion. **SI-X-Maths – Unit 2-Circles X-Maths-Unit 6-Surface area and volume**	Motion of centre of mass. Torque and angular momentum. Equilibrium of a rigid body. Moment of inertia. Parallel and perpendicular axes theorem. Rolling motion. Dynamics of rotational motion.	**(Experiential learning)** Assignment on various systems which are executing rotational motion in everyday life and relating torque to it. Group discussion on practical applications of conservation of angular momentum such as, motion of planets two propellers in helicopters etc.	Improving Practical ability. Investigating the situations in every day. Developing Scientific attitude Comparing the motion of different bodies.	Man's role in the system. Indian discoveries. Using discrimination while differentiating. Comparing and classifying. Seeing the world as an integrated whole.	10/15 **CBSE 18**
October 21/20	Mechanical properties of solids. **SI-IX-Chemistry-**	Stress and strain. Hooke's law. Stress-strain	**(Experiential learning)** Collecting and presenting the practical applications of elastic moduli. Young's modulus Bulk modulus	Applying the laws in practical life. Improving the skill of handling apparatus.	Comparing and classifying. Corrective measures.	5/20 **CBSE 24 (for chapter 9,10 & 11)**

	Unit 1-Matter –Nature & behaviour	curve. Elastic moduli. Applications of elastic behavior of materials.	Shear modulus	Generalizing a concept. Recognizes different processes used in Physics-related industrial and technological applications		
October 21/20	Mechanical properties of fluids. **SI-IX-Chemistry-Unit 5-States of matter**	Stream line flow. Bernoulli's principle. Viscosity. Surface tension.	Hands on activities to demonstrate mechanical properties of fluids ➢ Pressure ➢ Viscosity ➢ Density ➢ Surface tension Deducing mathematical expression for ❖ Pascal`s law ❖ Bernoulli`s theorem ❖ Venturimeter **(Experiential Learning)** Demonstration of capillary rise of different liquids – SURFACE TENSION	Observing the changes while doing experiment. Assessing the practical values of surface tension for different liquids.	Comparing and classifying. Observation. Specialization.	15/20
TERM I EXAMINATION : 5th to 19th OCTOBER						
• **UNITS AND MEASURMENTS** • **MOTION IN A STRAIGHT LINE** • **MOTION IN A PLANE** • **LAWS OF MOTION** • **WORK ENERGY & POWER**						

November 25/22	Thermal properties of solids. **SI-IX-Chemistry-Unit 1-Matter –Nature &behaviour** Thermodynamics **SI-XI-Chemistry-Unit 6-Chemical thermodynamics** .	Temperature and heat. Specific heat capacity. Thermal equilibrium Heat transfer. Laws of thermodynamics. Reversible and irreversible processes. Heat engines. Refrigerator and heat pumps.	SEMINAR TOPICS: HEAT CAPACITY Transfer Of Heat Demonstrations **(IT Integration)** Specific heat capacity – Phet simulation **(Experiential Learning)** Anomalous expansion of water – lab activity With the help of daily life examples teacher describes and proves thermal equilibrium and laws of thermodynamics. Understanding isothermal and adiabatic process **(Experiential learning)** Comparative study on heat engine and refrigerator.	Hypothesizing the observation Generalizing the particular concept. Realizes and appreciates the interface of Physics with other disciplines Developing loco motor skills. Comparing engine and refrigerator.	Comparing and classifying. Observation. Reasoning and abstract thinking. Using discrimination while differentiating . Understanding .	10/22 12/22 **CBSE 12**
December 19/17	Waves & Oscillation **SI-XI-Maths-Unit 1-Sets & Functions (Trignometric**	Longitudinal and transverse waves. Dispersion relation.	Demonstrating longitudinal and transverse waves using slinky / straws. **(Art Integration)** Create a collage for	Observation of waves through various matters.	Positive attitude. Abstract thinking.	17/17 **CBSE 26**

	functions)	Speed of a progressing wave. Principle of superpositi on. Simple harmonic motion. Force law. Application s of SHM. Damped SHM.	constructive and destructive interference		Imagination and creativity.	
January 24/10	Kinetic theory of gases. **SI-XI-Chemistry-Unit 1-Some basic concepts of Chemistry**	Specific heat capacity. Kinetic theory of gases Equipartiti on theory	**(Experiential learning)** Pupil correlates the physical theory of boiling point of liquids with chemistry and present in classroom. Assignment on the specific property of water **(Experiential learning)** Pressure of gases – Applications (Pressure cooker Tyre pressure)	Applying the anomalous behavior of water in practical life.	Seeing the world as an integrated whole Man's role in the system.	10/10 **CBSE 8**
PT3 -- 8th to 17th January (CLASS TEST) • **MECHANICAL PROPERTIES OF SOLIDS** • **MECHANICAL PROPERTIES OF FLUIDS** **TERM 2 EXAMINATION -- 12th to 21st FEBRUARY** • **Units and Measurement** • **Motion in a Straight Line**						

• **Motion in a Plane** • **Laws of Motion** • **Work, Energy, and Power** • **Systems of particles and Rotational Motion** • **Gravitation** • **Mechanical Properties of Solids** • **Mechanical Properties of Fluids** • **Thermal Properties of Matter** • **Thermodynamics** • **Kinetic Theory of gases** • **Oscillations & Waves**

LIST OF EXPERIMENTS – PHYSICS PRACTICALS (2023-24)

Class: XII

MONTH	AIM OF EXPERIMENT
JUNE	1. To determine resistivity of two / three wires by plotting a graph for potential difference versus current. 2. To find resistance of a given wire / standard resistor using metre bridge. 3. To verify the laws of combination (series/parallel) of resistances using a metre bridge.
JULY	4. To determine resistance of a galvanometer by half-deflection method and to find its figure of merit. 5. To find the value of v for different values of u in case of a concave mirror and to find the focal length. 6. To find the focal length of a convex mirror, using a convex lens.
AUGUST	7. To find the focal length of a convex lens by plotting graphs between u and v 8. To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and angle of deviation.
SEPTEMBER	9.To draw the I-V characteristics of p-n junction diode in a) forward biasing b) reverse biasing

CURRICULUM PLANNING 2023-24 (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Class: XII Subject: Physics Resource material/ Text: NCERT No: of Units/Chapter: 14

Month/No. of working days/No.of periods per subject	Unit	Key concepts	Activities/Practical's Art integration/ Experiential Learning/ IT Integration/Sport integration	Learning Outcomes	Integrated values	No of periods for each chapter
June 23/21	Electrostatics (Electric fields, electrostatic potential and capacitance) **SI-XII-Chemistry-unit 2-Electrochemistry**	Coulombs law electric field electric field lines, Gauss law andits application, potential difference and capacitance potential energy	Demonstration to show charging by conduction and Induction Discussion on some daily life situation and relate it to static electricity **(Art Integration)** Activity to show the possibility of charging mobile phones using fruit juices Identification of electronic components in electrical gadgets Derives expression for emf due to point charge and dipole:potential due to point charge and dipole: potential energy due to system of charges :energy stored on a capacitor	Understands properties of charges, electric field lines Realizes the application of static electricity Understands the mechanism of charging by conduction. identifies electric and electronic components	Universally accepted theories-universal outlook-coulombs law is applicable throughout the world intellectual kindling-laws and application in various fields classification of system with single charge and multiple charges imbibing positive emotion towards the output of	21/21 **CBSE 26**

					electric circuit	
July 23/21	Current Electricity **SI-XII-Biology-unit 21-Neuralcoordination**	Ohm's law And its limitations Kirchhoff's laws Meter bridge Potentiometer and its applications	Activity to show the linear dependence of current on potential difference **(Experiential Learning)** Planning a circuit for domestic electrification derives equation for ratio of balancing length,internal resistance, collection of numerical related to Kirchhoff's loop rule and Kirchhoff's junction rule Draws circuit diagram of Wheatstone bridge,potentiometer	Handling apparatus of ohms law systematic approach in calibration of galvanometer voltmeter, applies and generalizes the principles of wheat stone bridge, acquisition of knowledge about laws that govern electric circuit, understanding and calibration of electronic devices verifies the relation between current and potential difference	Comparison b/n electric and electronic circuit classification of electrodes, Analysis on series and parallel combination Adopt various steps to make the device (potentiometer) more sensitive	11/21 **CBSE 18**
UT1 7th JUNE TO 13th JUNE • **ELECTRIC CHARGES AND FIELDS**						
July 23/21	Moving charges and magnetism,	Magnetic field magnetic flux, Lorentz force,cyclotron , Gauss's law in magnetism,	Demonstrating the equilibrium state of magnetic dipole and torque(magnets and drawing pins) Exploration on	Understands importance of balanced diet Updating knowledge on geo magnetic data. keep in touch with recent	Observation of magnetic dipole system , abstract thinking how human life influenced by	10/21 **CBSE 25(Chapters 4 and 5)**

		solenoid, toroid, magnetic behavior of earth, magnetic elements of earth	principle behind satellite launching technology **PT1 July 10th To 17th** • **Electrostatic Potential And Capacitance** • **Current Electricity**	world	magnetic field(athletic events in anticlockwise),	
August 20/18	Magnetism and matter **SI-XII-Chemistry-unit 8-Coordination compounds(magnetic properties**	Faraday's law, conservation of energy, Lenz law, Self induction& mutual induction, Eddy current Transformers	**(Experiential Learning)** Collection of geomagnetic data updated by stations throughout India (Gangotri) Presentation (charts/power point) on Hadron collider. **(IT Integration)** Simulation of electromagnetic waves using Phet	Studies magnetic behavior of earth Measures magnetic field of earth at the poles and equator. Records the deflection shown by the galvanometer per unit current Makes magnetic intensity-temperature graph	specialization in magnetism, Indian culture death related rituals, countries glories gangothri, great lives behind the discovery of BOSON	8/18

	Electromagnetic induction **SI-XII-Unit 3-Calculus and differential equations**		**(Experiential Learning)** Demonstration of Faraday's law Demonstration of Lenz law Obtain the expression for self-inductance and mutual inductance of a coil(s).	Understands conservation of energy in electromagnetism Applies mathematical skill in finding inductance of coil.	Conservation of energy Universal outlook	10/18 **CBSE 24(for Chapters 6 and 7)**
PT2 AUGUST 16th TO 23rd • **MOVING CHARGES AND MAGNETISM,** • **MAGNETISM AND MATTER** • **ELECTROMAGNETIC INDUCTION**						
September 19/17	Alternating Current electromagnetic waves **SI-XI-Maths-Unit 1-Sets and functions(trignometry**	A.C across resistor, capacitor,inductor, LCR oscillator, resonance, transformers, Maxwell's displacement current, electromagneti	Demonstration of LCR circuit Transformer, Generator. Eddy current, Phasor diagram, Video presentation Demonstrating longitudinal and transverse waves using DNA structure	Analyses and interprets data, graphs, and figures, and draws conclusion; Applications of LCR circuit Differentiating longitudinal and transverse waves. Understands the evil effects of micro waves	Correlation and integration with biology (teaching waves with the help of DNA structure). Man and his role in minimize the use of wave triggering gadgets Seeing the	13/17 4/17 **CBSE 4**

		c spectrum, Application	Innovative work(working model of lie detector),presentation through assignment regarding applications and over use of electromagnetic waves **(Experiential Learning)** Collecting the information about working principles of technological devices in various fields.(satellite,oven,international space station)assignment	Realizes the scientific advancement in the field of SPACE research	world as integrated one through micro wave communication . Realizing world issues regarding use of mobile phones	
October 21/19	Ray Optics **SI-XI-Biology-Unit 21-Neural coordination-human eye** **XII-Unit 1 –maths-Inverse trignometric functions**	Laws of reflection and refraction, lens makers formula, refraction through prism, total internal reflection, application of Total Internal Reflection,	Demonstration of TIR using laser beam Activity to obtain spectrum using glass prism Derives lens makers formula,	Handles tools and laboratory apparatus properly; measures physical quantities using appropriate apparatus, instruments, and devices Systematically deduce the formula of Len's makers formula scientific approach while determine the fringe width Understands the applications of optical fiber in	Micro body like gaseous molecules scatter the light of shorter wavelength Causes the effect of spectacular world (macro universe), Interplay between light and object, Great lives(Raman effect)Indian	10/19 **CBSE 30 (for Chapters 9 & 10)**

	Wave optics	Huygens's principle , wave front, interference, Young's double slit experiment, Diffraction and polarization	Collection of information about the applications of optical phenomenon and Young's double slit expt.	communication. Distinguishes guided and unguided media(twisted pair, coaxial cable, optical fiber and satellite communication)	scientist world peace positive emotions towards informative technology Distinguishes India's ancient gift and recent gift to the world Observation- Change over from micro atom to macro universe Correlates physics with spirituality, physics with biology(binary fission and binary fusion)	9/19

TERM 1: October 5th to 19th

- **ELECTRIC CHARGES AND FIELDS**
- **ELECTROSTATIC POTENTIAL AND CAPACITANCE**
- **CURRENT ELECTRICITY**
- **MOVING CHARGES AND MAGNETISM**
- **MAGNETISM AND MATTER**
- **ELECTROMAGNETIC INDUCTION**
- **ALTERNATING CURRENTS**

November 25/22	Dual nature of radiation **SI-XI-Chemistry-Unit 2-Structure of atoms Unit 9-Hydrogen (heavy water) Unit 3-Chemical kinetics** Atoms /Nuclei/ **SI-XI-Chemistry-Unit 2-Structure of atoms Unit 9-Hydrogen (heavy water) Unit 3-Chemical kinetics**	Rutherford & Bohr Model of H atom. Spectral lines, binding energy per nuclear, fission fusion, De Broglie, photoelectric effect, photon, laws of photo electric effect Davisson and Germer Experiment	compares the contributions of ancient Rishis and modern scientist (Kanadhan and John Dalton) Collaborative learning on different model of atom and drawbacks.(group discussion and presentation by group leader) Assignment based on harmful (hazardous) effects of fission and fusion Collection of information about recent atomic power plant launching in our neighboring states(POWER POINT PRESENTATION)	Understands that ancient Rishis are scientist. Analysis and synthesis of different models of atom. understands the relation between science and spirituality Explores the after effects of nuclear radiations from the reactor. Issues related to nuclear waste management, treatment of polluted air/water. remedies to overcome threats to living organism	Great lives World peace	6/22 **CBSE 8** 10/22 **CBSE 15 (for chapters 12 & 13)**
	Semiconductor and devices **SI-XI-Chemistr**	Classification of materials (into metals,semiconductors &	Identification of electronic equipment and its terminals using millimeter >**USING VIRTUAL**	Applies concepts of physics in daily life with reasoning while decision-making and solving problems	Analytical ability accountability in estimation of current - voltage	6/22 **CBSE 10**

	y-Unit 3-Classification of elements and periodicity in properties	insulators) on the basis of energy band diagram, N-type &P-type semiconductor, PN junction diode, forward and reverse biased circuit, characteristics of PN junction diode,	**LAB** to show the working of p-n junction diode,transfer characteristics of transistor,transistor amplifier	Assembling electronic components, Observing the working of circuit, calibration of electrical devices, taking precautions while doing electrical experiments(understands the sources of error) analyses the graph-I-V characteristics of diode under forward and reverse biasing	characteristics man's role in electronics,	
DATE OF COMPLETION: 30th November 2023						

CURRICULUM PLANNING 2023-24 (PALLAVUR, TATTAMANGALAM, KOLLENGODE)

Class: XI Subject: CHEMISTRY Resource Material/ Text: NCERT No.Of Units/Chapter: 14

Month / No. of Working days/ No. of Periods	Unit/ Chapter/ Subtheme	Key Concepts	Activities/ Practical's/ Technology Integration/Art integration /Experiential learning	Learning Outcomes	Integrated Values	No. of Periods /chapter
JUNE 23/23	Some basic concepts in Chemistry PHYSICS IX WORK AND ENERGY (CHAPTER 11)	Importance of Chemistry Nature of matter Laws of chemical combination Atomic and molecular masses Mole concept and molar masses Percentage composition Expressing the concentration of solution	Discussion on role of Chemistry in day to day life Arrangement of particles in solids ,liquids and gases using eco friendly materials (AI) Grouping the students in to different groups and arranging them as molecules in three states to explain states of matter Using digital slides explains the laws of chemical combination.(IT) Provides worksheets to solve numerical problems on the concepts discussed.	Understand and appreciate the role of chemistry Differentiates technical terms based on unit in which amount of solute is expressed Explains states of matter and classifies substances into three different states States the laws of chemical combinations. Appreciate the significance of atomic and molecular mass Identifies and then calculates percentage composition Identifies the ways to express the concentration of solutions	Intellectual development Comparison Analytical ability. Independent thinking	CBSE-12 10

JUNE 23/24 JULY 23/23	Structure of atom BIOLOGY-XI STRUCTURAL ORGANISATION (CHAPTER 7)	Subatomic particles Atomic models Developments leading to Bohr model of atom. Quantum mechanical model of atom.	Practicals : Volumetric analysis No:1(EL) Demonstration using glass rod and silk cloth.(EL) Bohr model of an atom(AI) Power point presentation by students to explain different models of atom.(IT) Using digital slides to explain quantum mechanical model of atom.	Knows about the discovery of subatomic particles. Takes initiative to know about scientific discoveries/ inventions Describe different models of atom. Exhibits creativity in designing models using eco- friendly resources and out of box thinking in solving problems. Understands the features of quantum mechanical model of atom.	Man's role in the system. Divine oneness. Intellectual development. Analytical ability.	CBSE-14 14
JULY 23/23	Periodic classification of elements BIOLOGY-XI MINERAL NUTRITION(CHAPTER 12)	Genesis of periodic classification Modern periodic law and modern periodic table. Nomenclature of elements with atomic number greater than 100. Electronic configuration of elements	Creating life situations to understand the necessity of classification of elements. Chart preparation: modern periodic table. (EL) Provides worksheets to name the elements. Role play-Properties of elements (AI) Using digital slides explain electronic configuration of elements.(IT) Practical: Inorganic salts.(EL)	Appreciate the development of periodic table. Understands periodic table. Names the elements according to IUPAC nomenclature. Writes the electronic configuration of elements	Seeing the world as an integrated whole. Intellectual development. Independent thinking Intellectual development	CBSE-8 10
AUGUST 20/20	Chemical bonding	Kossel-Lewis approach to chemical bonding.	Making still models of different molecules.(AI)	Understand Kossel- Lewis approach of chemical bonding.	Imagination and creativity. Abstract thinking.	CBSE-

	VALUE EDUCATION SHARING AND CARING Environmental chemistry (*PPt*) SCIENCE-IX NATURAL RESOURCES (CHAPTER 14) Deleted as per CBSE2023-24	Ionic bond and covalent bond. Valence shell electron pair repulsion theory. Valence bond theory. Hybridization. Molecular orbital theory. Hydrogen bonding Acid rain , global warming And water atmospheric pollution and green chemistry	Creating life situation to explain ionic bond. Showing ball and stick model of different molecules.(AI) Chart preparation: Molecular orbital diagram. Practicals : Inorganic salts.(EL) Group activity: Slide show / power point presentation. (IT)	Explains the formation of different types of bonds. Describe and predict the geometry of simple molecules. Draws the molecular orbital diagram of molecules. Understands about different environmental problems. Creates awareness. Team teaching will be developed.	Intellectual assessment. Creativity. Emotional expansion. Independent thinking. Specialisation. Application. Observation and classification. Handling emotions.	14
SEPTEMBER 19/19	Organic chemistry some basic principles and technique.	Tetra valence of carbon and shapes. Nomenclature of organic compounds. Isomerism. Concepts in organic	Showing ball and stick model of various compounds of carbon(AI). Providing worksheet to understand the nomenclature of organic compounds.	Understands the reason for tetravalence. Names the organic compounds according to IUPAC nomenclature. Understands the concept of	Intellectual development.	CBSE-14 14

		reaction mechanism. Methods of purification.	Uses digital slides to explain the organic reaction mechanism.(IT) Demonstration using separating funnel and chromatographic paper.	organic reaction mechanism. Learns the techniques of purification.	Harmony in creation. Universal outlook	
OCTOBER 6/21 NOV 25/25	BIOLOGY-XI PLANTGROWTH AND DEVELOPMENT(CHAPTER 15) Revision TERM-1 Hydrocarbons Continuation of Hydrocarbons SCIENCE X CARBON AND ITS COMPOUNDS (CHAPTER4) States of matter.	Qualitative and quantitative analysis. Alkanes. Alkenes. Alkynes. Aromatic hydrocarbons. Carcinogenicity and toxicity. Gas laws. Ideal gas equation.	Demonstration of tests for chlorine, bromine and fluorine. Provides worksheets to understand the nomenclature of hydrocarbons. Chart preparation: methods of preparation of alkane, alkene and alkyne. Making still models of resonance structures of benzene.(AI) Power point presentation on carcinogenicity and toxicity of hydrocarbons.(IT) Practical's : Inorganic salt. (EL) Creating life situation. Deriving ideal gas equation.	Writes the chemical reactions involved. Names hydrocarbons according to IUPAC nomenclature. Learns the methods of preparation of hydrocarbons. Comprehend the structure of benzene and explains aromaticity. Understands carcinogenicity and toxicity. Apply gas laws in various real life situations. Understands ideal gas equation.	Unity in Diversity Intellectual development. Comparison. Independent thinking Analytical ability. Application.	CBSE-12 16

	BIOLOGY-XI BREATHING AND EXCHANGE OF GASES (CHAPTER 17) Deleted as per CBSE2023-24	Deviation from ideal gas behaviour. Liquid state. Redox reaction	Using digital slides to explain deviation of real gases (IT) and liquid state. Practicals : Inorganic salt(EL) Using digital slides to explain redox reaction.(IT) Providing worksheet to assign oxidation number to different compounds.	Explains behaviour of real gases. Identifies redox reactions.	Universal outlook Intellectual development Scientific attitude Creativity.	CBSE-6
NOV 25/25	Redox reaction BIOLOGY-XI RESPIRATION IN HIGHER PLANTS (CHAPTER 14)	Oxidation number. Redox reaction as electrode process Thermodynamic state.	Chart making: Redox reaction in electrochemical cells(.AI) Demonstration of open , closed and isolated systems using boiled water.	Assign oxidation numbers. Able to know about redox reaction in electrochemical cells. Discriminates open, closed and isolated systems.	Universal outlook Intellectual development.	6
NOV 25/25	Thermodynamics PHYSICS XI THERMODYNAMICS (CHAPTER 12)	Extensive and intensive properties. Enthalpies of different types of reaction. Spontaneity.	Demonstration using water. Using digital slides to explain enthalpies of different types of reaction.(IT)	Classifies properties in to intensive and extensive. Explains enthalpies of different reactions.	Observation and comparison. Intellectual development.	CBSE-16
DEC 19/19	S block elements Deleted as per	Group 1 element. Characteristics and some important compounds of sodium.	Demonstration of reaction of group 1 metal with water. Showing various salts of sodium. Role play-Properties of group 1 and group2-(AI)	Describe the general characteristics of alkali metals and their compounds. Describe the manufacture and	Observation Andcomparison. Intellectual	18

DEC 20/20	CBSE2023-24 p-block elements BIOLOGYXI PLANT GROWTH & DEVELOPMENT (CHAPTER 15) Deleted as per CBSE2023-24 DEC 20/20	Group 2 elements. Characteristics and some important compounds of calcium. Group 13 elements. Characteristics and important compounds of boron. Group 14 elements. Characteristics and some important compounds of carbon. . Equilibrium in chemical process. Law of chemical	Demonstration of reactions of group 2 elements with HCl. Digital slides to explain characteristics of group 13 and 14 elements. Chart making : important compounds of boron and carbon (EL) General discussion on various group elements. Its physical and chemical properties using digital slides. Model making- allotropes of phosphorous and sulphur.(AI) Worksheets to learn the physical and chemical properties of elements and its compounds. Providing life situation to understand the equilibrium in physical process.(EL)	uses of compounds of calcium. Describe the trends in physical and chemical properties of group 13 and 14 elements. Understands the compounds of boron and carbon. Able to interpret the elements belong to various groups Identifies the allotropic forms and their properties Enables to learn the physical and chemical properties of elements. Draws the structures of various elements its oxides and oxo acids Identifies dynamic nature of equilibrium involved in physical and chemical processes.	development. Independent thinking Analytical skill will be developed. Scientific skill will be developed. Emotional expansion. Independent thinking. Observation and comparison. Analytical ability. Application.	6 13

JAN 5/24	Chemical equilibrium SCIENCE-XACIDS BASES AND SALTS (CHAPTER 2) Hydrogen PHYSICS-XI GRAVITATION(CHAPTER 8) Deleted as per CBSE2023-24	equilibrium and equilibrium constant. Factors affecting equilibrium of a chemical reaction. Ionization of acids and bases. Hydrogen Position of hydrogen in the periodic table. Dihydrogen Preparation properties of dihydrogen. Hydrides-types. Water Structure of water Hard and soft water. Permanent hardness and temporary hardness. Hydrogen peroxide. Heavy water ,etc	Demonstration using potassium thiocyanate and ferric nitrate. Using digital slides to explain chemical equilibrium(IT) Demonstration using pH paper. Using digital slides to explain chemical equilibrium.(IT) Demonstration using pH paper. Class room activity: (EL) Specified topic will be given to Students .seminar will be taken related to their topic. Submission of records.	States law of chemical combination. Understands the concept of ionisation. Understands the concept. Develops skill in taking class among the peer. Interact with the peer. Leader ship quality will be developed.	Universal outlook	CBSE-14

						16

Revision& Annual Examination						

MONTH	PRACTICALS	Date of the work given	Date of submission
JULY	VOLUMETRIC ANALYSIS 1.	21.7.2023	29.7.2023
AUGUST	VOLUMETRIC ANALYSIS 2.	1.8.2023	9.8.2023
SEPTEMBER	INORGANIC SALT ANALYSIS.	2.9.2023	9.9.2023
OCTOBER	INORGANIC SALT ANALYSIS.	25.10.2023	06.11.2023
NOVEMBER	INORGANIC SALT ANALYSIS.	10.11.2023	25.11.2023
DECEMBER	INORGANIC SALT ANALYSIS.	2.12.2023	20.12.2023
	INORGANIC SALT ANALYSIS.		
JANUARY,	SUBMISSION OF RECORDS AND EXAM.	2.1.2024	

CURRICULUM PLANNING (Pallavur/ Tattamangalam/ Kollengode)-2022-2023

Class: XII Subject: CHEMISTRY Resource material/text: NCERT No. of Units/Chapter: 16

Month/No. of working days/No. of periods per subject	Unit/ Chapter/Sub theme	Key concepts	Activities /Practical's/ Technology integration/Art in tegration /Experiential Learning	Learning Outcomes	Integrated values	No of periods for each chapter
JUNE 23/23	Solid state Physics Conductors, insulators, semiconductors and magnetic materials Deleted as per CBSE2023-24	Crystalline and amorphous solids Classification of crystalline solids Crystal lattices and unit cells Close packed structures Packing efficiency calculations involving unit cell dimensions Imperfections in solids Electrical properties magnetic proprerties Deleted as per 2021 -22CBSE pattern	Describe general characteristics of solid-state Observe ,compare and group materials such as amorphous and crystalline solids Video presentation of unit cells Activity using ball and stick model Close packing (EL) representation using beads (AI) Calculate the packing efficiency of each unit cell Showing images of different defects.Eg:3D model of NaCl to show Schottky defect Identification of conductors,insulators (EL) Observes different solid materials around us	Differentiates technical terms /phenomena/ processes, based on properties/ characteristics Identifies different types of unit cells Recognizes the % of voids in each type of unit cells Compares the packing efficiency of each type of unit cells. Exhibits creativity in designing models Correlates the Electrical properties and magnetic properties of materials based on the structure	Intellectual development. Scientific skill Independent thinking Analytical skill	6

JUNE 23/23	Solution BIOLOGY –X LIFE PROCESSES(UNIT-6)	Types of solutions Expressing the concentration of the solution Vapor pressure of the solutions – Raoult's law and Henry's law. Ideal and non-ideal solutions. Colligative properties. Osmosis and osmotic pressure Abnormal molar mass Deleted as per 2021 -22CBSE pattern	Lab activity. Experiment to show the dynamic equilibrium between liquids and gases Graphical representation of positive nad negative deviation (using threads)(AI) Lab activity .Preparing the molar solution of various strength Students are instructed to make freezing mixture(EL) Osmosis in daily life (EL) Raw mangoes in salt solution) Digital slides to show the laws. And its deviation Numerical problems to calculate the colligative properties Demonstration using dries fruits and raw mango Numerical problems to calculate abnormality.	plans and conducts experiments/ to arrive at and verify the facts/ principles/ Understands the various types of solutions. Understands the law and its necessity Identifies ideal and non ideal solutions. relates processes and phenomena with causes/ effects, Identifies elevation in boiling point , depression in freezing point Enables to find out application of Osmosis Identifies the Vant-Hoff's factor	Intellectual development. Scientific skill Independent thinking Analytical skill Universal outlook Analytical skill	CBSE-10 10

JUNE 24/23 JUNE 24/23	Haloalkanes And haloarenes. PHYSICS –XII OPTICS(CHAPTER 9&10) Polymers Deleted as per CBSE2023-24 PHYSICS-XII OPTICS (CHAPTER 9&10) Making the model of doll or flower using polythene bags(AI) Identification of	Classification Nomenclature. Nature of C-X bond. Method of preparation. Physical properties. Chemical properties. Stereochemistry of nucleophilic substitution reaction Poly halogen compounds. Deleted as per 2021 -22CBSE pattern Classification of polymers. Types of polymers. Molecular mass of polymers. Bio- degradable polymers. Polymers of commercial importance.	Work sheet – To name the organic compounds using IUPAC nomenclature. Lab activity: Preparation of organic compounds. Group activity: Grouping the children into five: Mind mapping will be done based on the topic. Representation of SN1 and SN2 (CHART)(AI) Making models of molecules to represent the products of SN1 and SN2 using ball and stick model(EL) Digital slides to show the usage of polyhalogen compounds.(IT) Practicals: Salt analysis 1-4 (EL) Collection of some objects and classifying them as thermoplastics and thermosetting plastics. Digital slides to show types of plastics. Power point presentation on biodegradable and non-	Learns to name the organic compounds using IUPAC nomenclature. Understands the method of preparation. Acquires knowledge on physical and chemical properties. explains scientific terms/ factors/ theories governing processes and phenomena. Identifies the uses of polyhalogen compounds in various fields. Understands the term monomer, polymer, and types of polymers. Distinguishes various types of polymers. Identifies bio degradable and non bio degradable plastics and Creates awareness among the public about the ill effects of non-biodegradable	Intellectual development. Scientific skill will be developed. Independent thinking will be developed. Universl outlook. Intellectual development. Independent thinking Scientific skills and attitudes. Universal outlook	CBSE-10 8 5

	Different types of polymers (EL)		biodegradable polymers.	plastics.		
JULY 23/23	Alcohols, Phenols and Ethers. BIOLOGY-X LIFE PROCESSES (CHAPTER 6)	Classification,method of preparation and nomenclature of functional groups. Alcohols, Phenols and Ethers. Some commercially important alcohols.	Group discussion: some important application of polymers. Work sheet – To name the organic compounds using IUPAC nomenclature. Still models to show the structure of alcohols, Phenols and ethers.(AI) Lab activity: Diazotization Test for alcohol. phenol (EL) And ethers.	Learns to name the organic compounds using IUPAC nomenclature. Acquires knowledge to differentiate alcohols, phenols and ether. Realizes and appreciates the interface of chemistry with other disciplines, Knowledge about alcohols – preparation and properties.	Intellectual development. Independent thinking will be developed. Scientific skill will be developed. Universal outlook.	CBSE-10 12
JULY 23/23	Electrochemistry PHYSICS-X&XII ELECTRICITY (CHAPTER-12)	Electro chemical cells. Galvanic cells. Nernst equation. Conductance of electrolytic solutions. Electrolytic cells and electrolysis.	Group activity: Grouping the children into five: Mind mapping will be done based on the topic. Representation of Daniel cell(AI) Lab activity to show the working principle of electro chemical cell and galvanic cell,(EMF of various cells(EL) Worksheet to do the numerical problems. Demonstration of an experiment to show the working principle	Draws diagram of Daniel cell Derives expression for Nernst Equation . Analyzes and Interprets Graphs Calculates the conductance specific conductance etc. Calculates the quantity of substance	Intellectual development Analytical skill Scientific skill Independent thinking	CBSE-12 14

JULY 23/23	General principles and process of isolation of elements Deleted as per CBSE2023-24 GEOGRAPHY-X MINERALS AND ENERGY RESOURCES (CHAPTER5) ENGLISH-XII LOST SPRING	Batteries and Fuel cells Deleted as per 2021 - 22CBSE pattern Corrosion Occurrence of metals Concentration of ores Extraction of crude metals from concentrated ore. Thermodynamics and electrochemical principles of metallurgy. Oxidation reduction refining, Applications of metals in our daily life.	of electrolytic cell. Explaining the construction of the cells by showing the cell and digitally slides also. Demonstrating corrosion and corroded particles. (EL) Conduct a survey to different industries to find out the process of extraction of various metals from their ores. To conduct this survey, students may be encouraged to visit various industries such as copper, iron aluminium etc., and find out the process which industries are using for metal extraction. They can prepare a report and discuss the findings in the class. Animation in digitally to show the extraction of metals (IT) Diagram of furnace(AI) Practicals ;Inorganic salt 4-6 (EL) Discussion based on daily life experience	deposited based on the quantity of current . Appreciates the contribution of ancient chemistry of India and its role in different spheres of life Realizes and appreciates the interface of chemistry with other disciplines. Appreciates the contribution of ancient chemistry of India and its role in different spheres of life Applies the thermodynamic concepts. Enables to find the application of various metals Makes efforts to conserve environment,	Universal outlook Intellectual development Independent thinking Analytical skill will be developed Universal outlook	4

Month/No. of working days/No. of periods per subject	Unit/ Chapter/Sub theme	Key concepts	Activities /Practical's/ Technology integration	Learning Outcomes	Integrated values	No of periods for each chapter
AUGUST 20/20	P Block elements BIOLOGY-XI& XII PLANT GROWTH AND DEVELOPMENT (CHAPTER15) Deleted as per CBSE2023-24	Group 15 elements Group 16 elements Di oxygen , simple oxides, ozone Sulphur allotropic forms and oxo acids of sulphur. Group 17 elements Chlorine, HCl ,oxoacids of halogen. Inter halogen compounds Group 18 elements	General discussion on various group elements. Role play (AI) Its physical and chemical properties using digital slides. Model making- allotropes of phosphorous and sulphur.(AI) Worksheets to learn the physical and chemical properties of elements and its compounds. Practicals : Inorganic salt: 7-8(EL). Test for halides and nitrates**(Brown ring test_)**	Able to interpret the elements belong to various groups Identifies the allotropic forms and their properties Enables to learn the physical and chemical properties of elements. Draws the structures of various elements its oxides and oxoacids	Intellectual development. Independent thinking. Analytical skill will be developed. Scientific skill will be developed.	10

Month/No. of working days/No. of periods per subject	Unit/ Chapter/Sub theme	Key concepts	Activities /Practical's/ Technology integration	Learning Outcomes	Integrated values	No of periods for each chapter
AUGUST 20/20 AUGUST 22/2	d and f Block elements. PHYSICS-XII ATOMS AND NUCLEI (CHAPTER 12&13) Chemistry in every day Drugs and their classification Life Deleted as per CBSE2023-24	Position in the periodic table Electronic configuration General properties Some important compounds. Deleted as per 2021 -22CBSE pattern Lanthanides. Actinides. Some application of d andf block. Deleted as per 2021 -22CBSE pattern Drugs and their classification. Drug Target	Lab activity: Showing the coloured salts copper sulphate, Ferrous sulphate, etc Formed by d block elements. Lab activity: conversion of dichromate to chromate.(EL) Work sheets: To discuss the applicative aspects. Draws the structures of various elements its oxides and oxo acids Structures of permanganate and chromate ions.(AI) Group discussion using digital slides.(IT) Chart preparation- elements present in various sources. Investigate the daily life experience, such as, cleaning	Able to interpret the elements belong to various groups Identifies the allotropic forms and their properties Enables to learn the physical and chemical properties of elements. Exhibits creativity in designing models using eco- friendly resources and out of box thinking in solving problems Visualize the importance Of chemistry in daily life. Understands the classification of	Intellectual development. Independent thinking. Analytical skill will be developed. Scientific skill will be developed. Intellectual Development. Independent development.	CBSE-12 10

	BIOLOGY-XII HUMAN HEALTH AND DISEASES (CHAPTER 8)	interaction Therapeutic actions. Chemicals in food Cleansing agents.	action of soap; tranquilizers to treat stress; antibiotics to treat infection; artificial sweetening agents for diabetics or calorie conscious people ; food preservatives prevent food spoilage; etc. Students may be encouraged to search for their composition, formulae end action. Students may also compare the cleaning capacity of various soap samples and find out which soap sample worked best.	drugs. Enables to know about artificial sweetener, Food preservatives. Applies the knowledge of cleansing agents	Scientific skill will be developed. Universal outlook	4
SEPTEMBER 19/19	Co ordination compounds BIOLOGY-XI PHOTOSYNTHESIS IN HIGHER PLANTS (CHAPTER 13)	Werner's theory Definition. Nomenclature of coordination compounds. Bonding in coordination compounds. Bonding in metal carbonyls. Stability of coordination compounds. Importance and application of coordination compounds.	Digitally slides to show drug –target interaction.(IT) Collection of list of food items and chemicals used. (EL) Uses scientific conventions, symbols, chemical formulae of Coordination compounds Worksheets: To name coordination compounds. Digital slides to show bonding in metal carbonyl compounds. Draws the structure of compounds using valence bond theory and crystal field splitting theory. Representation of crystal	Understands the presence of elements and coordination compounds. Learns to name the coordination compounds. Identifies the general terms ligands,central atom coordination sphere etc, List the application of coordination compounds.	Intellectual development Independent thinking. Scientific skill and attitudes. Universal outlook.	CBSE-12 14

			field splitting in octahedral and tetrahedral complexes(AI) Practicals inorganic salt 7,8 (EL)			
SEPTEMBER 19/19 Revision TERM-1- EXAMINATION OCTOBER 21/21	Biomolecules BIOLOGY-XI BIOMOLECULES (CHAPTER 10) Aldehydes, ketones, and carboxylic acids	Carbohydrates. Proteins Enzymes Vitamins Nucleic acid Nomenclature and structure. Preparation of aldehydes and ketones Physical and chemical properties. Uses of aldehydes and ketones.	Digital slides to show the structure of carbohydrates. Lab activity: Chemical test to identify Reducing and non-reducing sugars. Denaturation of protein-EL Presentation- enzyme action Deficiency diseases Slide show preparation in groups.(IT) Model making –DNA Structure.(AI) Practicals :Content based experiments:1,2 Lab activity: Chemical test to distinguish aldehydes, ketones and acids. Tollen's test and Fehling test.(EL) Worksheets: To name the organic compounds with	Understands the role of biomolecules in daily life. Distinguishes reducing and non reducing sugars. Identifies the role of enzymes. Acquires the knowledge on vitamins and their deficiency diseases. Appreciates the role of DNA and biomolecule in biosystem. Identifies the Various functional groups and differentiates it. Learns to differentiate aldehyde from ketone using	Intellectual development Scientific skill Observation and inference Physical development Universal outlook. Intellectual development. Scientific skill Logic reasoning.	CBSE-12 10 CBSE-10 14 6

NOV /25	Chemical kinetics. PHYSICS-XI MOTION IN A STRAIGHT LINE (CHAPTER 3) Organic compounds containing nitrogen. PHYSICS-XII ATOMS AND NUCLEI (CHAPTER 13	Nomenclature and structure. Methods of preparation of acids. Physical and chemical properties of acids. Uses of carboxylic acids. Rate of a chemical reaction Factors influencing the rate of a reaction Integrated equation Pseudo first order reaction. Temperature dependence of rate of a reaction . Collision theory of a chemical reaction Structure of amines	aldehydes, ketones and acids as functional groups. Group activity: Mind mapping Physical and chemical properties of the three functional groups. Explains uses of acids Practicals: content based experiments:2(EL) Rate of the reaction between sodium thiosulphate and hydrochloric acid.(EL) Lab activity: experiment) The effect of temperature on the rate of a reaction.(EL) Derives the rate equation. Draws the graph Temperature vs probability factor(AI) Graph using threads. Numerical problems-calculating order and molecularity Still model-structure of	chemical test. Enables to name the organic compounds using IUPAC nomenclature. Remembers the physical and chemical properties by mind mapping. Finds application in various fields Identifies the dependence of rate of a reaction on concentration , Temperature and Catalyst. Determines the rate constant of zero and first order reaction. Calculates order, Half –life time of a reaction. Understands the relation between temperature and probability factor.	Observation. Mental development. Universal outlook Independent thinking Scientific skill Analytical skill Observation and inference.	CBSE-10 10 CBSE-10

		Classification and nomenclature. Preparation of amines. Physical and chemical properties. Method of preparation of diazonium salt. Physical and chemical properties. Importance of diazonium salt.	amines.(AI) Write formulae of simple compounds ,chemical equations, nomenclature of organic compounds etc, using paper and pen and interactive ICT simulations or games of cards. Work sheet: To name the organic compounds containing amines as functional groups. Chemical test:to distinguish primary ,secondary amines (EL) Preparation of diazonium salt preparation salt (content based experiment 4)(EL) Lab activity: Azo dye preparation EL) Group activity : Mind mapping - physical and chemical properties of amines. Lab activity: (content based experiment) (content based EL)	. Learns to name the organic compounds. Distinguishes primary secondary and teritiary amines. Prepares the dye in the laboratory. Remembers the physical and chemical property of amines easily.	Intellectual development Independent thinking Scientific skill and values. Universal out look. Mental development. .	10

NOVEMBER 24/24 DECEMBER JANUARY FEBRAURY	Surface chemistry BIOLOGY-XII BIOTECHNOLOGY PRINCIPLES AND PROCESSES (CHAPTER11) Deleted as per CBSE2023-24 Pre board examination-I AISSCE-Practical	Adsorption Absorption Catalysis Colloids Classification of colloids –based on various factors. Emulsions. Colloids around is.	Activity using ball and chalk in water to show the difference between adsorption and absorption.(EL) Lock and key model in digitally.(IT) Preparation of colloid in the laboratory. (content based experiment 3) Experiments to show colloidal property using starch powder. Micelle model-AI Butter, cream, shampoo-to show types of emulsion. Group discussion: various applications of colloids. Practical's: organic compounds.1,2,3	Differentiates adsorption and absorption. Understands the role of catalyst and catalysis process. Acquires knowledge on colloidal solution. Identifies the colloidal properties. Differentiates oil in water emulsion and water in oil emulsion	Intellectual development. Independent thinking Intellectual development. Scientific skill identification Universal outlook	5

MARCH	Examination AISSCE Examination.					

LIST OF PRACTICALS 2023- 2024

CLASS: XII **SUBJECT: CHEMISTRY**

MONTH	**PRACTICALS**	**Date of the work given**	**Date of Submission.**
June	I To familiarize the common apparatus used in the chemistry laboratory 2.To determine the strength of permanganate solutions using 1. Mohr's salt 2. Oxalic acid.	24.6.2023	29.6.2023
July	Analysis of inorganic salt. 1 -4	21.7.2023	31.7.2023
August	Analysis of inorganic salt. 5-8	10.8.2022 3	1.9.2023
September	Content based experiments 1 -5	2.9.2023	30.9.2023
October	Organic compounds with various functional groups. 1-5	4.10.2023	28.10.2023
November	Project work.	3. 11.2023	15.11.2023
December			
January	**Pre board practicals** **AISSCE practicals**		
February	-		
March	-		

CURRICULUM PLANNING (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Grade: XI Subject: BIOLOGY Resource material/text: NCERT No: of chapters:22 Year: 2023-24

Month/No. of working days/No. of periods	Unit/Chapter/ Subtheme	Key concepts	Activities/ Practicals / Technology integration//Experiential learning/Art integrated learning/Sports integrated learning/	Learning Outcomes	Integrated Value	No. of Periods for each chapter / unit
June/23/20	1)The Living World (Taxonomic aidsDeleted as per CBSE 23-24 pattern) 2.Biological Classification. (Kingdom Plantae & Animalia Deleted as per CBSE 23-24 pattern) 3.Plant Kingdom (SEMINAR-	Taxonomiccategories, . Characters of five kingdoms. Salient features of various divisions in plant kingdom, ,plant life cycles.	Spotting:Study of plant specimens and identification with reasons.	Illustrates the taxonomical hierarchy Describes the features of five kingdoms in biological classification Compares and classifies plants under various division	Universal outlook Microbody and macro universe Integrated developme nt.	**CBSE-27** **20**

	Pteridophyta & Gymnosperms) (From Angiosperms - Deleted as per CBSE 23-24 pattern)		EL: Making Herbarium ART: Visit to a Botanical Garden			
July/23/18 **PERIODIC TEST 1(JULY 10 TH – 17 TH)**	4.Animal Kingdom (Seminar) Class:IX- Biology- Chapter VII – Diversity in living organisms 5.Morphology of flowering plants. (stem,fruitleaf structure and modifications - project) (Family - Deleted as per CBSE 23-24 pattern) 6.Anatomy of flowering	Basis of classification,salient features of different phyla in the Animal Kingdom Flower, fruit, seed,description of flower and important families	Observation ofspecimens of animalsand analysis Practical:To study and describe three locally available flowering plants from Solanaceae, FabaceaeandLiliaceae families. Study and identification of different type of inflorescence Spotting:To study the different modifications	Compares and classifies animals under various phyla prepares slides for study the structural intricacies of life forms and structural organisations, such as, transverse sections of root, stem and leaves,	Universal outlook	**CBSE-27** **18**

	plants(- Tissues, secondary growth Deleted as per CBSE 23-24 pattern)	Dicot and monocot root,Dicot and monocot stem,Dicot and monocot leaf,secondary growth	in root, stem, and leaves Practical:Study of T.S of dicot and monocot stem	Compares and contrasts monocot and dicot root.		
August/20 /15 **PERIODIC TEST 2 (AUG 16TH – 23)**	7. Structural organization (Seminar) (Cockroach - Deleted as per CBSE 23-24 pattern) Class: IX- Biology- Chapter 6- Tissues 8. Cell (Assignment) 9. Cell cycle and cell division Class:IX- Biology- Chapter	Structural organization – tissues,details of an insect Cell and cell inclusions Cell cycle-mitosis and meiosis	Practical:Study of distribution of stomata in the upper and lower epidermis. Practical: Study of plant and animal tissues from permanent slides EL; Research Project on Pomology AI; Preparing Scrap Book of In Vertebrates and Vertebrates EL: Practical:Study of mitosis in onion root ti	Recall the organization, understands the characteristics, prokaryotes and eukaryotes, plant cell and animal cell, meristematic tissues and permanent tissues; squamous epithelium and cuboidal epithelium, diploblastic and triploblastic organisation; chromosomes; etc. Should be able to understand the components of cell organelle.	Universal outlook	**CBSE-26** 15

	5- The Fundamental Unit of Life			Compare and contrast cell division		
September /19/23	10.Biomolecules 11.Transportation in plants (Deleted as per CBSE 23-24 pattern)	Chemical constituents of living cells. Biomolecules, structure and function of proteins, carbohydrates, lipids, nucleic acids, enzymes et. Movement of water, diffusion, active transport, symplast, apoplast, guttation, imbibition, mass flow etc….	Practical:Test for the presence of sugar, starch, protein, fat. Practical:Study of plasmolysis in epidermal peels AIL: Slide Show Mitosis	Compare the chemical bonding in each compound. Should be able to understand the mechanism of movement of materials in plant.	Universal outlook Micro body and macro universe.	**CBSE-40** 23

	Class IX- Biology- Chapter 6- Tissues 12.Mineral Nutrition(Seminar) (Deleted as per CBSE 23-24 pattern) Class:IX- Biology Chapter 15- Improvement in food resources 13.Photosynthesis in higher plants Class X- Biology-Chapter 6- Life processes	Essential minerals, macro and micro nutrients, their role, deficiency symptoms, N_2 metabolism, N_2 cycle, biological N2fixation Photosynthesis, pigments, cyclic and non cyclic photophosphorylation, chemi osmosis, C3 and C4 plants, affecting photosynthesis.	EL: Practical:Separation of plant pigments through paper chromatography. AIL: Sketching Calvin Cycle and Hatch and Slack Cycle	Interpret the functions of plant nutrients and animal nutrients. Understand the mechanism of photosynthesis. Compare & contrast the physiology of C3 & C4 pathways. Understand the involvement of molecules in catabolism.	Universal outlook Division of labour. Integrated development	
October/ 21/12	15. Plant growth & development (seminar) (Seed germination	Plant hormones		Understand the hormones in plants & their role in plant physiology.	Intellectual development	**CBSE-35**

TERM 1 OCT 5th - 19 thNOV) **REVISION**	,phases of plant growth, conditions of growth and differentiation - Deleted as per CBSE 23-24 pattern) Class X- Biology-Chapter 7- Control and coordination 14.Respiration in higher plants Class XI- Chemistry- Chapter 8- Redox reactions	Exchange of gases, glycolysis, TCA cycle, ETS, amphibolic pathways.	Practical:Study of imbibitions in seeds/raisins	Appreciates the coordinated mechanism present in living organisms	Universal outlook Physical Intellectual development	12

November 25/29	16. Digestion & absorption. (Deleted as per CBSE 23-24pattern) 17. Breathing & exchange of gases 18.Body fluids and circulation 19. Excretion &osmo regulation Class X-Biology-Chapter	Alimentary canal and process of digestion Respiratory organs,breathing and exchange of gases Structure of heart, components of blood, cardiac cycle, instruments related to the function of heart, disorders. Human excretory system, urine formation, osmo regulation	Spotting: specimen identification with reasons Amoeba, liver fluke, starfish etc EL: Study BP using Sphygmomanometer Research: Occupational Diseases AIL: Role Plat Double Circulation Digital Board {Process of urine	*Recall the organs of digestion in human beings &understand the process of digestion & absorption of materials. *Recall the organs of breathing in animals & human beings & understand the process of exchange of gases. Understanding the structure & function of human heart. Recall the function, *components of human blood. *Understand Human excretory system, urine formation, osmo regulation	Universal outlook Physical developme nt Intellectual developme nt	**CBSE-25** 29

	6- Life processes		formation and osmoregulation} Practicals:To test the presence of glucose,bile salts ,albumin and urea in urine	appreciates technological applications and processes in Biology towards the improvement in the quality of life and sustainable development, such as dialysis for kidney failure patients; uses of artificial arms and limbs, etc.	Universal outlook	
December/ 19/22	20. Locomotion Types of movements, muscular movement - Deleted as per CBSE 23-24 pattern) Class XI- Chemistry- Chapter 10-S block elements	Skeletal system, joints, and disorders.	Spotting: Different types of muscular tissues EL:Research Project Neurological Disorders AIL: Video Making on different types of Movement	*Understand Types of movements, skeletal system, joints	Universal outlook Harmony in creation	**CBSE-25** 22

	21. Neural control & coordination (Reflex action and sense organs - Deleted as per CBSE 23-24pattern) Class:VIII-Physics-Chapter 14- Chemical effects of electric current.	CNS, PNS, nerve impulseS		*Recognize & recollect the CNS, PNS, nerve impulse, reflex action .		
January **22/10**	22.Chemical coordination (Seminar) Class X-Biology-Chapter 6- Life processes	Major endocrine glands in our body.(location, structure, secretion & function)	EL:Research Project Hormonal Disorders	*To recall various endocrine glands. *To understand the structure & function of endocrine glands.	Universal outlook Harmony in creation	**CBSE-5** 10
FEBRUARY	**REVISION & TERM 2 EXAM (FEB-12th -26th)**					

PRACTICALS XI

BIOLOGY LIST OF PRACTICALS: 2023-24

MONTH	PRACTICALS
June	1. Identification-plant specimens. Spirogyra, mushroom, moss, fern 2. Study of specimens- identification with reasons Amoeba, liver fluke, starfish, prawn. 3. Parts of compound miocroscope
July	4. Study of distribution of stomata in the upper and lower epidermis
August	5. Study of T.S of dicot and monocot stem 6. Animal Tissues-slides
November	7. Study of plasmolysis in epidermal peels 8. Permanent slides of mitosis
December	9. Test for the presence of sugar, starch, protein, fat. 10. Study of human skeleton & different types of joints

CURRICULUM PLANNING (PALLAVUR/TATTAMANGALAM/KOLLENGODE)

Grade:XII **Subject:**BIOLOGY **Resource material/text:**NCERT**No: of chapters: 13 Year: 2023-24**

MONTH/ NO:OF WORKING DAYS/ NO:OF PERIODS	UNIT/CHAPTER/SUB THEME	KEY CONCEPT	ACTIVITIES/ PRACTICALS /TECHNOLOGY INTEGRATION//EXPERIENTIAL LEARNING/ART INTEGRATED LEARNING/SPORTS INTEGRATED LEARNING/	LEARNING OUTCOMES	INTEGRATED VALUES /CVP	NO:OFPRDS / CHAPTER
June/23/22	**1)REPRODUCTION IN ORGANISMS** (Deleted as per CBSE 23-24 pattern) **2)SEXUAL REPRODUCTION IN PLANTS** **3)HUMAN REPRODUCTION** **4)REPRODUCTIVE HEALTH** Class X-BiologyChapter 8- How do organisms	*Modes of reproduction *Structure of flower , double fertilization , development of endosperm *Male and female reproductive organs, spermatogenesis , oogenesis, post fertilization changes	EL: Practical: 1.Study of pollen germination 2.Water holding capacity of soil 3.Gamete developmental stages-Testis and ovary 4.spotting – flowers adapted to pollination by wind , insect and bird 6.Study of pedigree analysis ResearchProject: To study pollen morphology of different species AIL: Sketching pollen grain,	- Recall the types of reproduction and compare the types of reproduction - Understand the process of fruit and seed formation -Understand the parts of human reproductive system - able to enlist the steps in spermatogenesis - Awareness of reproductive health and its need - knows the modern	Integrated development Intellectual development Universal outlook	**CBSE-REPRODUCTION - 30** 22

UNIT TEST 1 (2ND WEEK)	reproduce **5)PRINCIPLES OF INHERITANCE AND VARIATIONS** Class XI- Mathematics- Chapter 7- Permutations and combinations Class IX- Mathematics- Chapter 2- Polynomials	*Birth control , IVF , GIFT , ZIFT , STD's Mendelian crosses Sex determination Genetic disorders	Megasporangium, Dicot and Monocot seed 5.Temporary mount of onion root tip – mitosis [ClassXI based] 7.Mendelian inheritance study using seed or beads AIL: Video making on Genetic Disorders	methods of ART -understand the need of birth control measures **-applies scientific concepts in daily life and solving problems, such as; maintain hygiene and sanitation during menstruation** Understands the derivations of Mendel's experiments and the reasons for genetic disorders		
July23/28	**6)MOLECULAR BASIS OF INHERITANCE** Class XI-Chemistry- Chapter 4- Chemical bonding and molecular structure	applications of fingerprinting and HGP -Explains the characteristics of genetic code - can schematically represent replication, translation, operon	Isolation of DNA- PRACTICALS 8.Action of salivary amylase on	- appreciate the work of various scientists involved in cytology and genetics awareness of the applications of fingerprinting and HGP - Explains the characteristics of genetic code	Universal outlook	**CBSE-GENETICS - 40**

	7)EVOLUTION Class IX- Mathematics- Chapter 2- Polynomials	model and central dogma *Origin of life and evidences , Darwin's contributions , modern theory , variation , types of natural selection , adaptive radiation , human evolution	starch	- can schematically represent replication, translation, operon model and central dogma understand and estimate the age of earth and origin of life unerstand different eras and stages in the evolution of life compare and contrast the features of Homo erectus and Homo sapiens diagrammatically represent the different types of natural selection	Intellectual development Integrated development	
August 20/15	**8)HUMAN HEALTH AND DISEASES** Class XII-Chemistry - Chapter 15- Chemistry in everyday life	*Diseases , pathogens , basic concepts of immunology , cancer , HIV , AIDS , drug and alcohol abuse	9.Spotting – disease causing micro organisms	recalls the different types of disease with examples understands the pathogens , symptoms , preventive measures of common diseases get awareness , judge and assess the after effects of alcohol and drug abuse	Integrated development Intellectual development	**CBSE- HUMAN WELFARE - 30**

PERIODIC TEST 2 (16 aug -23 aug)	**9)STRATEGIES IN FOOD PRODUCTION** (Deleted as per CBSE 23-24 pattern) X-Geo-Chapter 4-Agriculture **10)MICROBES IN** **HUMAN WELFARE** Class 8 Chapter 8 : microbes-friend and Foe	Plant breeding, tissue culture, SCP, Biofortification, Apiculture, Animal husbandry. Household processing, industrial production, sewage treatment, biofertilizers, biocontrol agents, energy generation	10.Controlled pollination techniques 11.Meiosis – permanent slide. EL: To study Lactobacillus in Curd/ Fermentation in Yeast AIL: Visit to Breweries / Sewage Treatment Plant/Sketching Bio Gas Plant	collects information on the basic concepts of immunology Able to expand their knowledge related to agriculture. - Identify HYV of crops. - Understand plant breeding technique. - Appreciate the role of microbes in our daily life. - Understand the areas where microbes/ action of microbes were used for human welfare. -Awareness on the various methods of energy generation and conservation. -Knowledge of sewage treatment. - exhibits creativity in designing models using eco-friendly resources / preparing charts / paintings / sketching/ etc. on different topics; such as; water purification systems	physical development Universal out look	

OCTOBER 21/26 **TERM 1 EXAM- 5 OCT- 19 OCT**	**13) ORGANISMS AND POPULATION.** ClassVIII Geography- Chapter 6- Human resources	*Habitat, adaptation, population interaction, population attributes.	EL:13.Study of plant population AIL:Film making Population Bloom .	- recollect and recall population interaction and their significance. -Identifies and collects data's regarding population attributes. - Collects more information regarding population and ecological adaptation. -calculates using the data given for determination of population density, productivity, etc.	Universal outlook Integrated development	**CBSE- ECOLOGY - 30**
November **25/22**	**14)ECOSYSTEM** ClassIX- Chemistry-Chapter 14- Natural resources	* Productivity, energy flow, pyramids of number, biomass, energy, and nutrient cycles * Patterns of	Technology Integration: Environmental Issues AIL:SketchingNutrient Cycling	Collects more information regarding population and ecological adaptation. understand the need to study about ecosystem.	Integrated development. Patriotism Indian culture.	22

	15) BIODIVERSITY AND ITS CONSERVATION ClassX- Geography- Chapter 2- Forest and wildlife **16) ENVIRONMENTAL ISSUES** **(Deleted as per CBSE 23-24)** VIII- CHEMISTRY- Chapter 18- Pollution of air and water	biodiversity, importance, Biosphere reserves, national park, sanctuaries, Loss of biodiversity. * Pollution, climatic change, water pollution, solid waste management, ozone depletion, agro chemicals and its effects.	EL: To study pollutants at two different sites AIL: Creating Art Reservoir using waste material 14. Two plants and two animals found in xeric conditions 15. Two plants and two animals found in aquatic conditions.	understand the after effects of industrialization. -recall the cause of green house effect & understand how to reduce it. -enlist the impact of the loss of bio diversity	Indian culture	
December, **January,** **February**	**REVISION MODEL EXAMS**					

CLASS XII BIOLOGY

PRACTICALS: 2023-24

MONTH	PRACTICALS
June	1.Study of pollen germination 2.Study of pollen germination –permanent slide
	3.Study of adaptation of flowers for pollina*ti*on 4. Controlled pollination
July	5.Gamete developmental stages-Testis and ovary
	6 .spotters: a)Blastula 7. pedigree
	8. Analysis of seed samples for Mendelian Ratio.
August	9.Isolation of DNA from plant samples
	10.Study of Mitosis in onion Root Tip. 11. Study of Meiosis
September	12.Study of disease causing organisms. 13. Study of population density & population frequency
October	14..Symbolic association in root nodules 15. Homologous & analogous organs