



**TAGORE INTERNATIONAL SCHOOL  
EAST OF KAILASH, NEW DELHI**

**PARENT SYLLABUS**

**Class XI 2023 -2024**

**Science**

MONTH	English	Math	Physics	Chemistry
April and May	<p><b>April</b></p> <p><b>Prose:</b> The Portrait of a Lady</p> <p><b>Writing Skills:</b> Poster Making</p> <p><b>Art Integrated Activity:</b> Preparing a nutritious diet chart for elder people of the family</p> <p><b>Values:</b> -compassion -empathy -respect and love for elderly</p> <p><b>Life Skills:</b> -Self- awareness -coping with emotions</p> <p><b>General Awareness:</b></p>	<p><b>April</b></p> <p><b>Topic:</b> <b>*Sets</b></p> <p><b>Sub topics:</b> - Representation of sets(Roster and set builder form) -Types of sets - Subsets - Universal sets - Venn diagrams - Operations on sets (Union and intersection of sets) - Difference of sets - Complement of a set</p> <p><b>Topic:</b> <b>* Linear Inequalities</b></p> <p><b>Sub topics:</b> - Introduction of inequations - Algebraic solution of Linear Inequalities in one variable and their graphical representation</p>	<p><b>April</b></p> <p><b>Topic:</b> Units and Measurements</p> <p><b>Sub Topics:</b> Need for measurement- Units of measurement</p> <p>Systems of units; SI units</p> <p>Fundamental and derived units</p> <p>Dimensions of physical quantities, dimensional analysis and its applications</p> <p><b>Lab Activity:</b> To measure diameter of a small spherical/cylindrical body using Vernier Calipers.</p> <p><b>Life Skill:</b></p>	<p><b>April</b></p> <p><b>Topic:</b> Some Basic Concepts of Chemistry</p> <p><b>Sub Topics:</b> -Importance of chemistry -Nature, Properties and classification of matter -Precision, accuracy, significant figures -Atomic and molecular masses -Laws of Chemical Combination and numerical -Mole concept</p> <p><b>Lab Activity: (Volumetric Analysis)</b> -Instructions and experiment demonstration for Volumetric analysis</p> <p>-Determine the strength</p>

<p>human emotions  <b>Sewa:</b>  taking care of grandparents  <b>Health and Wellness:</b>  emotional balance  <b>Gender sensitivity:</b>  respect for grandmothers</p> <p><b><u>MAY</u></b></p> <p><b>Poem:</b>  A Photograph  <b>Art integrated Activity:</b>  -showing a photograph of one's own and sharing the details of the memory it brings  Back in poetic/prose form</p> <p><b>Prose:</b></p>	<p><b><u>May</u></b>  <b>Topic:</b>  * <b>Complex Numbers and Quadratic Equations</b>  <b>Sub topics:</b>  - Introduction  - Need of complex numbers  - Algebraic properties of complex numbers  - Argand Plane</p> <p>* <b>Probability</b></p> <p><b>Sub topics:</b>  - Random experiment  - Sample space  - Events  - Types of events (Impossible and sure events, simple event, compound event)  - Algebra of events (Complementary event, Event A or B, Event A and B, Event A but not B)  - Mutually exclusive events  - Exhaustive events</p> <p><b>Art Integration Activity:</b>  Students will apply their</p>	<p>Teamwork and Collaboration</p> <p><b>Value:</b>  Appreciation for differences</p> <p><b>Gender Sensitivity:</b> Gender Equality</p> <p><b>Health and Wellness:</b>  Importance of healthy diet</p> <p><b><u>MAY</u></b></p> <p><b>Topic:</b>  Motion In A Straight Line</p> <p><b>Sub Topics:</b>  Rest and Motion  Graphical Representations  Derivations</p> <p><b>Lab Activity:</b></p>	<p>of the given NaOH solution by titrating it against M/10 HCl solution.</p> <p><b>Life Skill:</b>  Problem solving, Critical Thinking</p> <p><b>Value:</b>  Fostering respect for differences, Team work, Discipline</p> <p><b>Gender sensitivity:</b>  Gender and education</p> <p><b>Health and wellness:</b>  Time management</p> <p><b><u>May</u></b></p> <p><b>Topic:</b>  Some Basic Concepts of Chemistry contd...</p> <p><b>Subtopics:</b>  -Mole Concept-</p>
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<p>The Summer of the Beautiful White Horse</p> <p><b>Writing Skills:</b> Speech Writing</p> <p><b>Life Skills:</b> coping with emotions</p> <p><b>Values:</b> compassion, empathy, respect</p> <p><b>General Awareness:</b> integral role played by mothers in the shaping of families,</p> <p><b>Health and wellness:</b> mental health</p> <p><b>Sewa:</b> care for the elderly</p> <p><b>Gender sensitivity:</b> role of the girl child in a family</p>	<p>knowledge of plotting the graph of linear inequalities and showcase their creativity on the graph paper by shading the letters of their name.</p> <p><b>Activities:</b></p> <ol style="list-style-type: none"> <li>1) To verify that if a set has n number of elements ,then the total number of subsets is <math>2^n</math></li> <li>2) To verify that the graph of a given inequality, say <math>5x+4y-40 &lt; 0</math> of the form <math>ax+by+c &lt; 0</math> where <math>a, b &gt; 0, c &lt; 0</math> represents only one of the two half planes.</li> <li>3) To find the number of ways in which three cards can be selected from given 5 cards</li> <li>4) To write a sample space , when a coin is tossed once, twice, thrice and four times.</li> </ol> <p><b>Life Skill:</b>Critical Thinking,Problem Solving</p> <p><b>Values-</b>Responsibility</p> <p><b>Gender Sensitivity-</b></p>	<p>To measure the internal diameter and depth of a given beaker/ calorimeter using Vernier Calipers and find its volume.</p> <p>To measure diameter of a given wire and thickness of a given sheet using screw gauge.</p> <p><b>Activity:</b></p> <p>To measure reaction time in free fall taking help of either sibling or parent and note the factors on which reaction time depends.</p> <p><b>Life Skill:</b></p> <p>Problem solving</p> <p><b>Value:</b></p> <p>Fostering Respect For Differences</p> <p><b>Gender sensitivity:</b></p> <p>Gender Equality</p> <p><b>Health and Wellness:</b></p> <p>Social and emotional support</p>	<p>numerical</p> <p>-Empirical and molecular formula and masses, related numerical</p> <p>-Reactions in solutions (mass %age, molarity, molality, mole fraction) and related numerical</p> <p>-Limiting reagent, Stoichiometric calculations, related numerical</p> <p><b>Topic:</b></p> <p>Classification Of Elements and Periodicity in Properties</p> <p><b>Subtopics:</b></p> <p>-Need of classification- History of classification- Modern periodic law and the present long form of periodic table</p> <p><b>Lab Activity:</b></p> <p>Determine the strength of the given NaOH</p>
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		<p>Gender Equality awareness</p> <p><b>Health and Wellness-</b> Emotional Balance</p> <p><b>General Awareness-</b> Time management</p> <p>-Equity and Equality</p>		<p>solution by titrating it against M/20 oxalic acid solution.</p> <p><b>Life Skill:</b></p> <p>Analytical Thinking and Problem solving</p> <p><b>Value:</b></p> <p>Fostering Respect For Differences</p> <p><b>Gender sensitivity:</b></p> <p>Gender Equality</p> <p><b>Health and wellness:</b></p> <p>Seasonal Diet</p>
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MONTH	Biology	Computer science	Economics	Psychology	Ped.
April and May	<p><b><u>April</u></b>  <b>Topic:</b>  The Living World  <b>Subtopic:</b>  -Diversity in the living world -Taxonomic categories</p> <p><b>Topic:</b>  Biological Classification  <b>Subtopics:</b>  -Kingdom Monera  -Kingdom Protista  -Kingdom Fungi  -Kingdom Plantae  -Kingdom Animalia  -Viruses, Viroids, Prions and lichens</p> <p><b>Activity</b>  -Parts of a compound microscope</p> <p><b>Art integration-</b>  <b>Video Presentation/</b>  <b>Power Point</b>  <b>Presentation</b>  -Students in groups will</p>	<p><b><u>April</u></b>  <b>Unit I: Computer Systems and Organisation</b>  • Basic Computer Organisation:  Introduction to computer system, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (Bit, Byte, KB, MB, GB, TB, PB)  • Types of software: system software (operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler &amp; interpreter),</p>	<p><b><u>April</u></b>  Unit 1- Meaning of micro macro economics, positive and normative economics, economic problems, central problems</p> <p><b><u>May</u></b>  Concept of PPC, Consumers' equilibrium and demand- Consumer's equilibrium by utility analysis and indifference curve analysis. Demand and elasticity of demand</p> <p><b>values-</b> Acceptance of consumption goods available to us.  <b>life skills-</b> Decision making  <b>gender sensitivity-</b></p>	<p><b><u>April</u></b>  Chapter 1: What is Psychology?  -Psychology as a Discipline  -Psychology as a Natural Science  -Psychology as a Social Science  -Understanding Mind and Behaviour  -Popular Notions about the Discipline of Psychology  -Evolution of Psychology  -Development of Psychology in</p>	<p><b><u>Unit II Olympism</u></b>  Ancient and Modern Olympics  Olympism – Concept and Olympics Values (Excellence, Friendship &amp; Respect)  Olympics - Symbols, Motto, Flag, Oath, and Anthem  Olympic Movement Structure - IOC, NOC, IFS, Other members  <b><u>Unit III Yoga</u></b>  Meaning &amp; Importance of Yoga</p>

	<p>make a video presentation or a power point presentation on different kingdoms/ groups and present the same in the class</p> <p><b>Topic:</b> -Plant Kingdom <b>Subtopics:</b> - Algae -Bryophytes</p> <p><b>Activity</b> -Specimens/ slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.</p> <p><b>Life Skill:</b> Healthy relationships</p> <p><b>Value:</b> Responsibility</p>	<p>application software</p> <ul style="list-style-type: none"> <li>● Operating system (OS): functions of operating system, OS user interface</li> </ul> <p><b>Values-</b> Collaboration and Team Spirit</p> <p><b>Gender Sensitivity-</b> Right to equality</p> <p><b>Health &amp; wellness:-</b> Right posture in front of Computer</p> <p><b>Life Skills-</b> Problem Solving Skills, Decision-making skills, Critical Thinking</p> <p><b>May</b></p> <ul style="list-style-type: none"> <li>● Boolean logic: NOT, AND, OR, NAND, NOR, XOR, truth table, De Morgan's laws and logic circuits</li> </ul>	<p>Achieving balanced participation for consumption items at home.</p> <p><b>health and wellness-</b> Emotional balance behaviour.</p>	<p>India</p> <p>Health and Wellness: Mental health</p> <p>Values: Acceptance</p> <p>LS: Self awareness</p> <p>Gender sensitivity: Contribution of women in the field of psychology.</p> <p><b>MAY</b> -Branches of Psychology</p> <p>-Themes of Research and Applications</p> <p>-Psychology and Other Disciplines</p>	<p>Introduction to Ashtanga Yoga</p> <p>Introduction to Yogic Kriyas (Shat Karma)</p>
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	<p><b>Gender sensitivity:</b> Awareness</p> <p><b>Health and Wellness:</b> Social wellness</p> <p><b><u>MAY</u></b></p> <p><b>Topic:</b> Plant Kingdom (contd.)</p> <p><b>Subtopics:</b> -Pteridophytes -Gymnosperms</p> <p><b>Topic:</b> Animal Kingdom</p> <p><b>Subtopics:</b> -Basis of classification -Levels of organisation -Porifera -Coelenterata -Ctenophora -Platyhelminthes -Aschelminthes -Annelida -Arthropoda -Mollusca -Echinodermata -Hemichordata</p>	<ul style="list-style-type: none"> <li>● Number system: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems.</li> <li>● Encoding schemes: ASCII, ISCII and UNICODE (UTF8, UTF32)</li> </ul> <p>Values- Collaboration and Team Spirit Gender Sensitivity- Right to equality Health &amp; wellness:- Right posture in front of Computer Life Skills- Problem Solving Skills, Decision-making skills, Critical Thinking</p>		<p>-Psychologists at Work Psychology in Everyday Life</p> <p>Chapter 2: Methods of Enquiry in Psychology Goals of Psychological Enquiry Steps in Conducting Scientific Research Alternative Paradigms of Research Nature of Psychological Data Some Important Methods in Psychology - Observational Method Experimental Method Some Important Methods</p>	
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	<p>-Chordata  <b>Activity:</b>  -Virtual specimens / slides/models and identifying features of Amoeba, Hydra, liver fluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.</p> <p><b>Life Skill</b>  Interpersonal relationship</p> <p><b>Value</b>  Kindness</p> <p><b>Gender Sensitivity</b>  Gender inequality</p> <p><b>Health and Wellness:</b>  Social and emotional support</p>			<p>in Psychology  - Correlational Research  - Survey Research  - Psychological Testing  - Case Study</p> <p>Health and Wellness: Cognitive agility</p> <p>Value: Morality</p> <p>LS: Problem solving</p> <p>Gender sensitivity: Ethics and gender role</p>	
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