



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

**Class XII**  
**2023 -2024**  
**Science**

MONTH	English	Math	Physics	Chemistry	Biology	Computer science	Economics	Psychology	Ped.
JULY	<b>Short Writing Skills:</b> Formal and Informal Invitations & Replies <b>Long Writing Skills:</b> Report Writing <b>Flamingo: Prose:</b> The Rattrap by Selma Lagerlof <b>Flamingo: Poetry:</b> Keeping Quiet by Pablo Neruda <b>Vistas:</b> Journey to the end of the Earth by Tishani Joshi <b>Art Integrated Activity:</b> Imagine an interview where Green is asked to explain more about his work and why he decided to initiate programs	<b>Topic:</b> Integrals <b>Sub Topic:</b> *Integration using Trigonometric Identities *Special Integrals *By parts and partial fractions *properties of definite integrals <b>Activity-</b> Evaluate the definite Integral as limit of sum and verify by actual Integration. <b>Value-</b> Union is strength- Evaluation of any integral and discuss the importance of integration (unity) in life.	<b>Topic:</b> Magnetism And Matter <b>Sub Topics:</b> Bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (qualitative treatment only), torque on a magnetic dipole in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials, Magnetization of materials, effect of temperature on magnetic properties.	<b>Topic:</b> Electrochemistry <b>Sub Topics:</b> -Redox reactions, Electrochemical & electrolytic cells, - Electrode potential and its measurement, -EMF of a cell, standard electrode potential -Electrochemical series and its applications. -Nernst equation & its application to chemical cells, -Relation between Gibb's energy change & emf of a cell and Numerical. - Conductance in electrolytic solutions, specific & molar conductivity, -Variation of conductivity with dilution & related numerical, -Kohlrausch law and its applications (numerical) -Concept of electrolysis,	<b>Topic:</b> Molecular basis of Inheritance <b>Subtopics:</b> -Transcription -Genetic code -Translation -Regulation of Gene Expression -Human Genome Project -DNA fingerprinting <b>Topic:</b> Evolution <b>Subtopics:</b> -Origin of Life and Evolution of Life Forms- A Theory -What are the Evidences for Evolution? -Adaptive Radiation -Biological Evolution -Mechanism of	MySQL-PYTHON Connectivity : PROJECT WORK Interface of Python with an SQL database -Connecting SQL with Python -Creating Database connectivity Applications - Performing Insert, Update, Delete queries Display data by using fetchone(), fe	DETERMINATION of INCOME and EMPLOYMENT. Component of Aggregate Demand Consumption Function Savings Functions Determination of Equilibrium. Multiplier Excess Demand	<b>PSYCHOLOGICAL DISORDERS</b> -Concepts of Abnormality & psychological disorders -Classification of psychological disorder -Factors underlying abnormal behavior Major psychological disorders- Bipolar Disorders, Depression schizophrenic disorders, dissociative disorders,	<b>Unit IV - Physical Education &amp; Sports for CWSN (Children with Special Needs - Divyang)</b> Organization promoting Disability Sports (Special Olympics; Paralympics; Deaflympics) Concept of Classification and Divisioning

<p>for students. Keeping both Green and the interviewer's perspectives in mind, pen down this interview.</p> <p><b>Life Skills:</b> introspection, retrospection</p> <p><b>Values:</b> universal brotherhood, sensitivity to the environment, peace, empathy, unity</p> <p><b>General Awareness:</b> healing the environment</p> <p><b>Sewa: Health and wellness:</b> Health and mental fitness</p> <p><b>Gender sensitivity:</b> sensitivity towards the environment</p> <p><b>07.07.23:</b></p> <p><b>Weekly Test 2 Syllabus:</b></p> <p><b>1. Reading:</b> comprehension passage</p> <p><b>2. Writing Skills:;</b> Notice writing, Article Writing, Letter to the Editor</p> <p><b>3. Literature:</b> Lost</p>	<p><b>Topic:</b> Application of Integration</p> <p><b>Sub Topic:</b> *Point of intersection</p> <p>*area bounded by the curves such as lines, ellipse, parabola, circle.</p> <p><b>14.07.23:</b></p> <p><b>Weekly Test 2 Syllabus</b></p> <p>*Application of Derivatives</p> <p>*Integrals: Ex 7.1, 7.2, 7.4</p> <p><b>Art Integration: Various forms of functions - Dancing Math</b></p>	<p><b>Topic:</b> Electromagnetic Induction</p> <p><b>Subtopics:</b> Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.</p> <p><b>Topic:</b> Alternating Current</p> <p><b>Subtopics:</b> Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits.</p> <p><b>Experiential Learning: Lab Activity:</b> (i) To find the frequency of AC mains using a sonometer. (ii) To determine the focal length of a convex lens by plotting a graph between <math>u</math> and <math>v</math>.</p> <p><b>Connect to Real</b></p>	<p>Faraday's laws of electrolysis &amp; related numerical</p> <p>-Cells and batteries, Mechanism of corrosion.</p> <p><b>Topic:</b> Chemical Kinetics</p> <p><b>Sub Topics:</b></p> <p>-Rate of a reaction (instantaneous &amp; average)</p> <p>- Factors affecting rate of reaction (conc, temp, catalyst) and their graphical representation.</p> <p>- Order and molecularity, rate law, specific rate constant.</p> <p>- Integrated rate equations &amp; half-life (zero and first order reactions).</p> <p>- Pseudo molecular reactions.</p> <p>- Collision theory (elementary idea only), Activation energy, Arrhenius equation- Mathematical expression.</p> <p>-Numerical on the above topics</p> <p><b>Activities:</b> -Construct an electrochemical cell using different electrodes and fruits / vegetables (lemon, orange, potato etc) and</p>	<p>Evolution and Hardy-Weinberg Principle</p> <p>-A Brief Account of Evolution</p> <p>-Origin and Evolution of Man</p> <p><b>Topic:</b> Human Health and Disease</p> <p><b>Subtopics:</b></p> <p>-Common Diseases in Humans</p> <p>-Immunity</p> <p><b>Art Integration- 'Word Search Game'</b></p> <p>Students will make a word search game on Transcription/Genetic Code/Translation/Lac Operon/DNA fingerprinting and their peers will search the words.</p> <p><b>Activities:</b> - Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness. - Prepare a temporary mount of onion root tip to study mitosis. - Meiosis in onion bud</p>	<p>tchall(), rowcount</p> <p>Data-structures: lists, stacks</p> <p>Stacks</p> <p>Applications</p> <p>Functions- push, pop, peek, display</p> <p><b>Life Skill:</b> Coping with emotions and stress</p> <p><b>Value:</b> Responsibility and awareness</p> <p><b>Gender Sensitivity:</b> Females as hackers</p> <p><b>Health and Wellness:</b> Protection against diseases</p> <p><b>General Awareness:</b> Promoting computer education among disabled</p>	<p>Deficient demand</p> <p>Monetary Policy</p> <p>Life skills</p> <p>Problem solving</p> <p>Critical thinking</p> <p>Acceptance of a new model with equal rights</p>	<p>somatic symptom and related disorders, anxiety disorders, neurodevelopmental disorders, substance-use disorders.</p> <p>Value: Empathy</p> <p>LS: Pro-social behavior.</p> <p>Gender sensitivity: Discrimination practices among gender roles.</p> <p>General awareness: Strategies for handling</p> <p><b>Weekly test</b> (14.7.2023)</p> <p>Syllabus: Self and Personality</p> <p><b>THERAPEUTIC APPROACHES</b></p> <p>-Nature and process of psychotherapy</p> <p>-Therapeutic relationship</p> <p>-PRACTICAL</p>	<p>in Sports</p> <p>Concept of Inclusion in sports, its need, and Implementation</p> <p>Advantages of Physical Activities for children with special needs</p> <p>Strategies to make Physical Activities assessable for children with special needs</p> <p><b>Unit V - Sports &amp; Nutrition</b></p> <p>Concept of balanced diet and nutrition</p> <p>Balanced Diet &amp;</p>
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Spring, Deep Water, A Thing of Beauty, Tiger King		<p><b>Life:</b> Working of security scanners, MRI machines, magnetic flow meter</p> <p><b>Value:</b> Scientific attitude.</p> <p><b>Life Skill:</b> Problem Solving, Critical thinking.</p> <p><b>Health and Wellness:</b> Staying healthy during Monsoon</p> <p><b>Gender Sensitivity:</b> Gender Identity</p>	<p>compare the cell output. -Study the variation of cell potential of Daniel cell with change in the concentration of both the electrolytes at room temperature/ varied temperature. (Project work).</p> <p><b>Art Integration Activity 'Word Search Game' on different aspects of Electrochemistry</b></p> <p><b>Lab Activity</b> - To determine an anion and a cation present in the given salt samples. (Group 1 – salts- lead acetate and nitrate) (Zero Group – NH<sub>4</sub> salts)-Ammonium sulphate and phosphate ( (Group 3 Al salts) Aluminium chloride and sulphate/nitrate (Group 5 –Ba, Sr, Ca salts)Chloride and nitrate</p> <p><b>Life Skills:</b> Creative Thinking and Problem solving <b>Value:</b>Fosteri Respect for Differences, Conflict Resolution</p> <p><b>Gender sensitivity:</b> Gender and education <b>Health and wellness:</b> Time management</p>	<p>cell or grasshopper testis through permanent slides - Flash cards/ models showing examples of homologous and analogous organs. - Common disease-causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through virtual images. Comment on symptoms of diseases that they cause.</p> <p><b>Life Skill:</b> Problem solving</p> <p><b>Value:</b> Concern for life</p> <p><b>Gender Sensitivity:</b> Genes influence gender identity</p> <p><b>Health and wellness:</b> Genetic disorders</p>			<p>Nutrition</p> <p>Macro &amp; Micro Nutrients: Food sources &amp; functions</p> <p>Nutritive &amp; Non-Nutritive Components of Diet</p> <p>Eating for Weight Control – A Healthy Weight, The Pitfalls of Dieting, Food Intolerance &amp; Food Myths</p> <p>Importance of Diet in Sports-Pre, During and Post competition Requirements</p>
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<p><b>Gender Awareness</b> Women empowerment through creative expression. Raising a voice against marital discord and patriarchal setup.</p>	<p><b>Programming Problem</b></p> <p><b>Sub-Topic</b></p> <p>*constraints, Objective fun ,optimization</p> <p>*Different types of L.P.P</p> <p>*Graphical method of solution of problems</p> <p><b>Topic Concept-Probability</b></p> <p><b>Sub-Topic</b></p> <p>*Definition</p> <p>*Sample space, random experiment, event</p> <p>*Types of events</p>	<p>central maxima (qualitative treatment only)</p> <p><b>Topic:</b> Ray Optics <b>Subtopics:</b> Mirror formula, refraction of light, total internal reflection and optical fibers.</p> <p><b>Experiential Learning:Lab Activity:</b></p> <p>(i)To find the focal length of a given concave lens using a convex lens. (ii) Activity 3: To study the variation in potential drop with length of a wire for a steady current.Activity 4: To study the effect of intensity of light(by varying the distance of the source) on an LDR ( light dependent resistor)</p> <p><b>Value:</b>Empathy</p> <p><b>Life Skill:</b> Teamwork and collaboration</p>	<p><b>Topic:</b> Amines <b>Sub Topics</b> -Introduction, Nomenclature and Isomerism. - Methods of preparation (Ethanamine and Aniline), Hoffmann Ammonolysis. -Physical and Chemical properties of aliphatic and aromatic amines (Hoffmann Bromamide) -Hinsberg test for 1<sup>o</sup>, 2<sup>o</sup> &amp; 3<sup>o</sup> amines. <b>Diazonium salts:</b> Benzene Diazonium Chloride- Preparation, Chemical reactions and Importance in synthetic organic chemistry.</p> <p><b>Activities: Lab Activity</b> -To determine an anion and a cation present in the given salt samples. (Group 4 –Zn salts) sulphate/ acetate/ nitrate, (Group 6 – Mg salts) sulphate and Unknown salt sample -Determination of the functional group in the given sample of organic compound. (- COOH, -OH, -CHO. - CO- groups)</p> <p><b>Art Integration Activity</b></p>	<p>and its Applications <b>Subtopics:</b> -Biotechnological Applications in Agriculture -Biotechnological Applications in Medicine -Transgenic animals -Ethical issues</p> <p><b>Art Integration - ‘Role Play’</b> Students will prepare role play on the topic “Microbes in Human Welfare”. They will present it in the class.</p> <p><b>Activities:</b> -Model specimens showing symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens. -Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc -Study the plant population density by quadrat method. -Study the plant population frequency by quadrat method.</p>	<p><b>Transmissi on media:</b> Twisted pair cable, coaxial cable, optical fiber, infrared, radio link, microwave link and satellite link.</p> <p><b>Network devices:</b> Modem, RJ45 connector, Ethernet Card, Router, Switch, Gateway, WiFi card.</p> <p><b>Network Topologies and types:</b> Bus, Star, Tree, PAN, LAN, WAN, MAN.</p> <p><b>Network Protocol:</b> TCP/IP, File Transfer Protocol (FTP), PPP,</p>	<p>productive activities to sustain livelihood</p> <p>Values</p> <p>To create awareness of about the need for rural developmen t</p> <p>EMPLOYM ENT AND EMPLOYM ENT</p> <p>How growth gets affected because of high levels of unemploy ment.</p> <p>Different kinds of unemploy ment.</p>	<p><b>Attitude and Social cognition</b></p> <p>Explaining social behavior</p> <p>Nature and component s</p> <p>of attitude</p> <p>Attitude formation and change</p> <p>Prejudice and discrimination</p>	<p>Partial Curl Up, Push-Ups for boys, Modified Push-Ups for girls)</p> <p>Measuremen t of Cardio-Vascular Fitness – Harvard Step Test</p> <p>•Duration of the Exercise in Seconds x100/5.5 X Pulse count of 1-1.5 Min after Exercise</p> <p>Computing Basal Metabolic Rate (BMR)</p> <p>Rikli &amp; Jones - Senior Citizen Fitness Test</p> <p>I.Chair Stand</p>
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						Human Development	emotions	<p>Motor Educability (Front Roll, Roll, Jumping Half-Turn, Jumping fullturn</p> <p><b><u>Unit VII</u></b></p> <p><b><u>Physiology &amp; Injuries in Sports</u></b></p> <p>Physiological factors determining components of physical fitness</p> <p>Effect of exercise on Muscular System</p> <p>Effect of exercise on Cardio-Respiratory System</p> <p>Physiological changes due to aging</p>
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								Sports injuries: Classification (Soft Tissue Injuries - Abrasion, Contusion, Laceration, Incision, Sprain & Strain; Bone & Joint Injuries - Dislocation, Fractures - Green Stick, Comminuted, Transverse Oblique & Impacted)
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SEPTEMBER	<b>Vistas:</b> On the Face of It by Susan Hill  Assessment of Listening and Speaking Skills, Revision  <b>18.09.23 - 29.09.23</b>  <b>Mid -Term Examination:</b>  <b>Syllabus:</b>  <b>Reading Skills:</b>  1. One factual/descriptive/literary unseen passage to assess comprehension, interpretation, analysis and inference and vocabulary  2. One unseen case-based factual passage with verbal/visual inputs like statistical data, charts etc.  <b>Creative Writing Skills:</b>	<b>Topic - Probability-</b>  <b>Sub-Topic</b>  *Bayes Theorem  *Mean  <b>Experiential Learning-</b> *Identify the role of probability in Casino games  * Probability of Patients recovering from Covid 19 in Delhi in August 2020  <b>Activity- students will explain the computation of conditional Probability</b>  <b>Mid -Term Examination:</b>  18.09.23 to 29.09.23	<b>Topic:</b> Ray Optics(contd) <b>Subtopics:</b> Refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism.  <b>Revision for Mid Term</b>  <b>Value:</b> Curiosity and Optimism  <b>Life Skill:</b> Web of Relationship, Critical thinking  <b>Health and Wellness:</b> Effective time management  <b>Gender Sensitivity:</b> Gender Equality	<b>Topic:</b> d and f-Block Elements <b>Sub</b> <b>Topics:</b> -Introduction-d & f block elements, position in periodic table, electronic config, occurrence - Characteristics of transition metals. -General trends in properties of the first-row transition metals-metallic charac, ionization enthalpy, oxidation state, ionic radii, colour, catalytic property, magnetic properties, interstitial comp, alloy formation.  <b>Revision for Mid Term Examination</b>  <b>Life Skills:</b> Problem solving and Interpersonal Relationship <b>Value:</b> Fostering Respect For Differences <b>Gender sensitivity:</b> Gender Equality <b>Health and wellness:</b> Stress management	<b>Topic:</b> Organisms and Populations <b>Subtopics:</b> -Population Attributes -Population Growth  Revision for exams  <b>Mid-Term Examination 18.09.23 to 29.09.23</b>  <b>Life Skill:</b> Decision making <b>Value:</b> Determination <b>Gender sensitivity:</b> Awareness <b>Health and Wellness:</b> Safety issues	<b>Unit II: Computer Networks</b>  <b>Mobile Telecommunication Technologies:</b> 1G, 2G, 3G, 4G and 5G; Mobile processors; Electronic mail protocols such as SMTP, POP3, Protocols for Chat and Video Conferencing: VoIP, Wireless technologies such as Wi-Fi and WiMax  <b>Network Security Concepts:</b> Threats and prevention from Viruses, Worms, Trojan	ENVIRONMENT AND SUSTAINABLE DEVELOPMENT  Meaning  Importance and functions(2)  Problems (2)  Causes  State of Degradation (1)  G20  MID TERM EXAMINATION 18.09.23 to 29.09.23	<b>Attitude and Social cognition</b>  Schemas and stereotypes  Impression formation and explaining behavior of others through attributions  Behavior in the presence of others	<b>Unit VIII Biomechanics &amp; Sports</b>  Newton's Law of Motion & its application in sports  Types of Levers and their application in Sports  Equilibrium – Dynamic & Static and Centre of Gravity and its application in sports  Friction & Sports  Projectile in Sports  <b>Unit IX Psychology &amp; Sports</b>  Personality;
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<p><b>Short:</b> Notice writing, Invitations and Replies</p> <p><b>Long:</b> Job Application, Letter to the Editor, Article Writing, Report Writing</p> <p><b>Literature:</b></p> <p><b>Flamingo: Prose:</b></p> <p>The Last Lesson, Lost Spring, Deep Water, The Rattrap, Indigo, Poets and Pancakes</p> <p><b>Flamingo: Poetry:</b></p> <p>My Mother at Sixty-six, Keeping Quiet, A Thing of Beauty, Aunt Jennifer's Tigers, A Roadside Stand</p> <p><b>Vistas:</b> The Third Level, The Tiger King, Journey to the end of the Earth</p>	<p><u>Syllabus:</u></p> <p><u>Chap 2-</u> Inverse Trigonometric Functions</p> <p><u>Chap-3</u> Matrices</p> <p><u>Chap-4 -</u> Determinants</p> <p><u>Chap5-</u> Continuity and Differentiation</p> <p><u>Chap6-</u>App of Derivatives</p> <p><u>Chap7-</u>Integrals</p> <p><u>Chap8-</u>App of Integrals</p> <p><u>Chap 9-</u> Differential Equations</p>				<p>horse, Spams Use of Cookies, Protection using Firewall, https; India IT Act, Cyber Law, Cyber Crimes, IPR issues, hacking.</p> <p><b>Introduction To Web services:</b></p> <p>WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML); Hyper Text Transfer Protocol (HTTP); Domain Names; URL; Website, Web browser, Web Servers; Web Hosting</p> <p><b>REVISION FOR MID TERM EXAM</b></p>		<p>Value: Patriotism</p> <p>LS: Pro-environment behaviour</p> <p>Gender sensitivity: Type of aggression portrayed by men and women.</p> <p>General awareness: Environmental effects on human behaviour.</p> <p>Health and Wellness: Balanced diet</p>	<p>its definition &amp; types (Jung Classification &amp; Big Five Theory)</p> <p>Motivation, its type &amp; techniques</p> <p>Exercise Adherence: Reasons, Benefits &amp; Strategies for Enhancing it</p> <p>Meaning, Concept &amp; Types of Aggressions in Sports</p> <p>Psychological Attributes in Sports – Self Esteem, Mental Imagery, Self-Talk, Goal Setting</p>
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Values-  
Say no to  
Piracy  
Ready to  
Share  
Making  
something  
which is  
beneficial for  
society  
Become a  
programmer  
who has a  
motto "I find  
this useful,  
maybe some  
others will as  
well." So make  
softwares  
without  
thinking about  
profit.  
Health &  
wellness:-  
Disability and  
Computer  
Equipment  
Gender  
Sensitivity-  
Respect  
opposite  
gender in the  
team

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OCTOBER	<b>Vistas: Prose:</b> The Enemy by Pearl S. Buck <b>Flamingo: Prose:</b> The Interview by Christopher Silvester, Going Places by A.R. Barton	<b>Topic: Vectors</b>  <b>Sub topic:</b> *Definition *Difference btw Vector and scalar *Types of Vectors *Direction cosines/Ratios *Addition, Multiplication of Vector *Scalar dot product *Vector product *Projection of a vector  <b>Topic: Three Dimensional Geometry</b>  <b>Sub topic:</b> *Cartesian /Vector form of line	<b>Topic:</b> Ray Optics (contd) <b>Subtopics:</b> Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.  <b>Topic:</b> Dual Nature of Radiation and Matter <b>Subtopics:</b> Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of photoelectric effect Matter waves-wave nature of particles, de-Broglie relation. <b>Topic:</b> Electronic Devices <b>Subtopics:</b> Energy bands in conductors, Intrinsic and extrinsic semiconductors- p	<b>Topic:</b> d and f-Block Elements contd.. <b>Sub Topics:</b> - General trends in properties- Colour, magnetic properties, interstitial comp, alloy formation. - Preparation & properties of $\text{KMnO}_4$ & $\text{K}_2\text{Cr}_2\text{O}_7$ , Structures of their ions -Lanthanoids & Actinoids: Configuration, Oxidation state, chemical reactivity - Lanthanoid contraction & its consequences. -Comparison between lanthanoids and actinoids. <b>Topic:</b> Coordination Compounds <b>Sub Topics:</b> -Introduction to the coordination compounds (terms- ligand, central atom/ion, coordination sphere, coordination entity, counter ion, oxidation state & coordination no & their calculation) -IUPAC nomenclature of mononuclear compounds - Isomerism (structural & stereo-isomerism) -Bonding: Werner's theory -VBT (Hybridisation &	<b>Topic:</b> Organisms and Populations <b>Subtopic:</b> Population Interactions <b>Topic:</b> Ecosystem <b>Subtopics:</b> -Ecosystem-structure and Function, Productivity, Decomposition -Energy Flow -Ecological Pyramids <b>Topic:</b> Biodiversity and Conservation <b>Subtopics:</b> - Biodiversity - Biodiversity conservation  <b>Art Integration</b> <b>'PowerPoint / Video Presentation</b> Students will make a powerpoint or video presentation on the various population interactions existing in nature and present it in the class.  <b>Life Skill:</b> Healthy relationships <b>Value:</b> Dependability <b>Gender sensitivity:</b> Awareness <b>Health and Wellness:</b> Being responsible and safe	Net Work case study Values- Collaboration and Team Spirit Gender Sensitivity- Right to equality Health & wellness:- Right posture in front of Computer Life Skills- Problem Solving Skills, Decision-making skills, Critical Thinking	BALANCE of PAYMENTS and FOREIGN EXCHANGE  Balance of Payments and Foreign Exchange.  Determination of Foreign Exchange  Causes of Forex- demand and supply  Equilibrium  Balance of Payments  Current and capital account	<b>Social Influences and Group processes</b>  - Nature and formation of groups  - Type of groups  - Influence of group on individual behavior  Health and Wellness: Mental well being  LS: stress management	<b>Unit X Training in Sports</b>  Concept of Talent Identification and Talent Development in Sports Introduction to Sports Training Cycle – Micro, Meso, Macro Cycle Types & Method to Develop – Strength, Endurance and Speed Types & Method to Develop – Flexibility and Coordinative Ability Circuit Training - Introduction & its importance
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	<p>*Coplanar/Skew lines</p> <p>*Shortest Distance btw lines.</p> <p><b>Topic</b>-Relation and Function</p> <p><b>Sub topic:</b></p> <p>*Reflexive, Symmetric and transitive relation</p> <p>*One and onto function and inverse of function.</p> <p>Experiential Learning- Physical significance of cross and dot product.</p> <p>Lab Activity- To verify that the angle in a semi circle is right angle.</p> <p>Lab activity- Distance between two</p>	<p>and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode - diode as a rectifier.</p> <p><b>Experiential Learning: Lab Activity:</b> (i) To draw the IV characteristics of a pn junction diode. (ii) Activity 5: To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items. Activity 6: To study the nature and size of the image formed by a convex lens, on a screen by using a candle and a screen (for different distances of the candle from the lens).</p> <p><b>Value:</b> Curiosity and Optimism</p> <p><b>Life Skill:</b> Web of</p>	<p>Geometry of complexes) -CFT- Properties (magnetic behavior and color) -Importance of coordination compounds (in qualitative inclusion, extraction of metals.</p> <p><b>Lab Activity -</b> Determination of the functional group in the given sample of organic compound. (Phenolic and Amine group) -To separate the coloured components, present in the given mixture of ink by ascending paper chromatography and also calculate <math>R_f</math> values. -Determination of the presence of carbohydrates and proteins in the given food sample. <b>Art</b></p> <p><b>Integration Activity :</b> Presentation on isomerism and application of complexes.</p> <p><b>Life Skills:</b> Problem solving and Interpersonal Relationship <b>Value:</b> Fostering Respect For Differences <b>Gender sensitivity:</b> Gender</p>			<p>DEVELOPMENT EXPERIENCE of INDIA</p> <p>India's relation with China and Pakistan</p> <p>Pakistan's progress</p> <p>China path</p> <p>Value: Good relations with neighbours and appreciate their strengths.</p>	<p>Value: Sound mind in a sound body</p> <p>Gender sensitivity: Gender disparities in mental health</p>	
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points.

Relationship,  
Critical thinking

**Health and  
Wellness:** Stress  
Management

**Gender  
Sensitivity:**  
Gender Bias

Equality **Health and  
wellness:** Stress  
management



TAGORE INTERNATIONAL SCHOOL  
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NOVEMBER	<p><b>Vistas: Prose:</b> Memories of Childhood by Zitkala-Sa and Bama. Revision</p> <p><b>17.11.23 - 28.11.23</b> <b>Revision Test:</b></p> <p><b>Syllabus:</b> <b>Reading Skills:</b></p> <p>1. One factual/descriptive/iterary unseen passage to assess comprehension, interpretation, analysis and inference and vocabulary</p> <p>2. One unseen case-based factual passage with verbal/visual inputs like statistical data, charts etc.</p> <p><b>Creative Writing Skills:</b></p> <p><b>Short:</b> Notice writing, Invitations and Replies</p>	<p><b>Revision Tests</b></p> <p><b>17.11.23 to 28.11.23</b></p> <p><b>Syllabus for Revision Test</b></p> <p><b>CHAPTER 7 : INTEGRALS</b></p> <p><b>CHAPTER 8 : APPLICATION OF INTEGRALS</b></p> <p><b>CHAPTER 9 : DIFFERENTIAL EQUATIONS</b></p> <p><b>CHAPTER 10 : VECTOR ALGEBRA</b></p> <p><b>CHAPTER 11 : THREE DIMENSIONAL GEOMETRY</b></p> <p><b>CHAPTER 12 :</b></p>	<p><b>Topic:</b> Atoms and Nuclei <b>Subtopics:</b> Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only). Composition and size of nucleus, nuclear force Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.</p> <p><b>Value:</b> Responsibility and awareness</p> <p><b>Life Skill:</b> Problem solving and critical thinking</p> <p><b>Health and Wellness:</b></p>	<p>Revision for exams</p> <p><b>Revision Tests</b> 17.11.23 to 28.11.23</p>	<p>Revision for exams</p> <p><b>Revision Tests</b> 17.11.23 to 28.11.23</p>	<p>Revision</p> <p><b>Revision Tests</b> 17.11.23 to 28.11.23</p>	<p><b>Revision Tests</b> 17.11.23 to 28.11.23</p>	<p><b>Revision Tests</b> 17.11.23 to 28.11.23</p>	REVISION
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<p><b>Long:</b> Job Application, Letter to the Editor, Article Writing, Report Writing</p> <p><b>Literature:</b></p> <p><b>Flamingo: Prose:</b></p> <p>The Last Lesson, Lost Spring, Deep Water, The Rattrap, Indigo, Poets and Pancakes, The Interview, Going Places</p> <p><b>Flamingo: Poetry:</b></p> <p>My Mother at Sixty-six, Keeping Quiet, A Thing of Beauty, Aunt Jennifer's Tigers, A Roadside Stand</p> <p><b>Vistas:</b> The Third Level, The Tiger King, Journey to the end of the Earth, The Enemy, On the Face of It, Memories of Childhood.</p>	<p><b>LINEAR PROGRAMMING</b></p> <p><b>G</b></p> <p><b>CHAPTER 13 : PROBABILITY</b></p>	<p>Importance of adequate sleep</p> <p><b>Gender Sensitivity:</b> Gender roles and society</p> <p><b>Revision for Revision Test</b></p> <p><b>Revision Test</b> 17.11.23 - 28.11.23</p>						
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**Life Skills:**  
managing  
responsibilities

**Values:**

love for one's  
vocation and for  
the life of others.

**General  
Awareness:**  
concept of time  
and travel

**Sewa:**  
universal  
brotherhood

**Health and  
wellness:**  
emotional health

**Gender  
sensitivity:**  
sensitivity towards  
mankind



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<p>DECEMBER</p>	<p><b>Board Practicals:</b> Assessment of Listening and Speaking Skills, Revision</p> <p><u>18.12.23 - 28.12.23</u> <b>Pre -Board Examination</b> <b>Syllabus:</b> <b>Reading Skills:</b></p> <p>1. One factual/descriptive/ literary unseen passage to assess comprehension, interpretation, analysis and inference and vocabulary</p> <p>2. One unseen case-based factual passage with verbal/visual inputs like statistical data, charts etc.</p> <p><b>Creative Writing Skills:</b></p> <p><b>Short:</b> Notice writing, Invitations and Replies</p> <p><b>Long:</b> Job Application, Letter</p>	<p><b>Pre-Board Examination</b> <u>18.12.23 - 28.12.23</u></p> <p><b>Syllabus:</b></p> <p><b>CHAPTER 1 : RELATIONS AND FUNCTIONS</b></p> <p><b>CHAPTER 2 : INVERSE TRIGONOMETRIC FUNCTIONS</b></p> <p><b>CHAPTER 3: MATRICES</b></p> <p><b>CHAPTER 4: DETERMINANTS</b></p> <p><b>CHAPTER 5 : CONTINUITY AND DIFFERENTIATION</b></p>	<p>Revision for exams</p> <p><b>Pre-Board Examination</b> 18.12.23 to 28.12.23</p>	<p>Revision for exams</p> <p><b>Pre-Board Examination</b> 18.12.23 to 28.12.23</p>	<p>Revision for exams</p> <p><b>Pre-Board Examination</b> 18.12.23 - 28.12.23</p>	<p>Revision</p> <p><b>Pre-Board Examination1</b> <u>8.12.23 - 28.12.23</u></p>	<p><b>Pre-Board Examination</b> <u>18.12.23 - 28.12.23</u></p>	<p><b>Pre-Board Examination</b> 18.12.23 - 28.12.23</p>	<p>Revision</p>
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<p>to the Editor, Article Writing, Report Writing</p> <p><b>Literature:</b></p> <p><b>Flamingo: Prose:</b></p> <p>The Last Lesson, Lost Spring, Deep Water, The Rattrap, Indigo, Poets and Pancakes, The Interview, Going Places</p> <p><b>Flamingo: Poetry:</b> My Mother at Sixty-six, Keeping Quiet, A Thing of Beauty, Aunt Jennifer's Tigers, A Roadside Stand</p> <p><b>Vistas:</b> The Third Level, The Tiger King, Journey to the end of the Earth, The Enemy, On the Face of It, Memories of Childhood.</p>	<p>LITY</p> <p><b>CHAPTER 6 :</b> <b>APPLICATION</b> <b>OF</b> <b>DERIVATIVES</b></p> <p><b>CHAPTER 7 :</b> <b>INTEGRALS</b></p> <p><b>CHAPTER 8 :</b> <b>APPLICATION</b> <b>OF INTEGRALS</b></p> <p><b>CHAPTER 9 :</b> <b>DIFFERENTIAL</b> <b>EQUATIONS</b></p> <p><b>CHAPTER 10 :</b> <b>VECTOR</b> <b>ALGEBRA</b></p> <p><b>CHAPTER 11 :</b> <b>THREE</b> <b>DIMENSIONAL</b> <b>GEOMETRY</b></p>							
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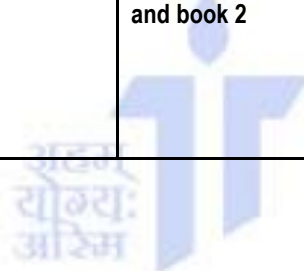
CHAPTER 12 :  
LINEAR  
PROGRAMMIN  
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CHAPTER 13 :  
PROBABILITY



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JANUARY	Revision	*Revision of the concepts, *Revision Exam, *Preboard Examination *Practical's (Complete Syllabus)- NCERT book 1 and book 2				Revision	Revision	Revision	Revision
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FEBRUARY	Revision	*Revision of the concepts,  *Preboard Examination - corrections  *Practical's  (Complete Syllabus)- NCERT book 1 and book 2				Revision		Revision	Revision
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