



# RUBY PARK PUBLIC SCHOOL



Syllabus

Class X



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Session: 2024 - 25

**ENGLISH**



MONTH	LITERATURE READER	WRITING	GRAMMAR	MAIN COURSE
APRIL	Two Gentlemen of Verona	Email	Tenses	Health and Medicine
	The Frog and the Nightingale			
MAY	Mrs. Packletide's Tiger	Email (contd.)	Tenses (contd.)	Education
JUNE	<b>PERIODIC TEST 1</b>			
JUNE	A Shady Plot Neither Marble, nor the Gilded Monuments	Formal letter	Subject Verb Concord	Science
	The Letter Ozymandias		Modals	
JULY	Potol Babu, Film Star	Factual description	Reported speech Sentence Reordering	
	The Dear Departed Virtually True			
	Snake	Magazine article	Gap filing, Editing or Omission	Travel & Tourism



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<b>AUGUST</b>	<b>REVISION FOR PERIODIC TEST-2, PT2 EXAMINATION</b>			
<b>AUGUST</b>	<b>PERIODIC TEST-2</b>			
<b>SEPTEMBER</b>	<b>PERIODIC TEST-2</b>			
<b>SEPTEMBER</b>	The Rime of the Ancient Mariner	Magazine article contd.	Clauses	National Integration
<b>OCTOBER</b>	Julius Caesar	Revision	Determiners	Revision
<b>PERIODIC TEST-3</b>				
<b>NOVEMBER</b>	Julius Caesar (contd.)	Revision	Revision	Revision
	Board Syllabus completion			
<b>DECEMBER</b>	<b>PRE BOARDS &amp; REVISION</b>			
<b>JANUARY</b>	<b>PRACTICE TEST</b>			



**2<sup>ND</sup> LANGUAGE-HINDI**

MONTH	LANGUAGE	LITERATURE
APRIL	अपठितगद्यांश, अनुच्छेदलेखनसमास, वाक्यरूपांतरण, मुहावरे	बड़ेभाईसाहब, साखी-कबीर
MAY		पद-मीरा
JUNE	PT- 1 EXAMINATION	
JUNE	पदबंध, सूचनालेखन	ततारावामीरोकथा, अबकहाँदूसरेकेदुःखसेदुखीहोने वाले, पर्वतप्रदेशमेंपावस
JULY	औपचारिकपत्र, लघुकथा	पतझड़मेंटूटीपत्तियाँ, मनुष्यता, करचलेहमफ़िदा, हरिहरकाका
AUGUST	विज्ञापनलेखन, ईमेल	कारतूस, सपनोंकेसेदिन , तोप
	REVISION FOR PT- 2 EXAMINATION	
SEPTEMBER	PT- 2 EXAMINATION	
SEPTEMBER	लघुकथालेखन, पदबंध, मुहावरे, समास (पुनरावृत्ति)	टोपीशुक्ला, डायरीकाएकपत्रा
OCTOBER	सूचनालेखन, विज्ञापनलेखन, वाक्य-रूपांतरण (पुनरावृत्ति)	तीसरीकसमकेशिल्पकारशैलेन्द्र , आत्मत्राण
NOVEMBER	PT- 3 EXAMINATION	
NOVEMBER	Board Syllabus completion	
DECEMBER	PRE BOARD	
DECEMBER	REVISION	
JANUARY	PRACTICE TEST	



**2<sup>ND</sup> LANGUAGE-BENGALI**

MONTH	LANGUAGE	LITERATURE
APRIL	ব্যাকরণ-ব্যঞ্জনসন্ধি সাধুচলিতভাষা নির্মিতি-বোধপরীক্ষণ অনুচ্ছেদরচনা	জ্ঞানচক্ষু(গদ্য) তিনপাহাড়েরকোলে (কবিতা)
MAY	ব্যাকরণ-ব্যঞ্জনসন্ধি	গল্পগুচ্ছ-পোস্টমাস্টার
JUNE	<b>PERIODIC TEST - 1</b>	
JUNE	নির্মিতি - সম্পাদকীয়পত্র ব্যাকরণ-বিসর্গসন্ধি	আয় আরো বেঁধে বেঁধে থাকি (কবিতা) গল্পগুচ্ছ-পোস্টমাস্টার
JULY	ব্যাকরণ - বাক্যপরিবর্তন - সরল , জটিল , যৌগিক	আলোবাবু (গদ্য) একাকারে (কবিতা) গল্পগুচ্ছ - কাবুলিওয়ালা
AUGUST	<b>REVISION FOR PERIODIC TEST - 2</b>	
AUGUST- SEPTEMBER	<b>PERIODIC TEST - 2</b>	
SEPTEMBER	ব্যাকরণ - সমাস (দ্বন্দ্ব , অব্যয়ীভাব , কর্মধারয়)	অদলবদল (গদ্য) গল্পগুচ্ছ - দানপ্রতিদান
OCTOBER	ব্যাকরণ - সাধুচলিতভাষা নির্মিতি - অনুচ্ছেদ	বহুরূপী (গদ্য) অস্ত্রেরবিরুদ্ধেগান (কবিতা)
<b>PERIODIC TEST - 3</b>		
NOVEMBER	<b>Board syllabus completion &amp; revision</b>	
DECEMBER	<b>PRE BOARD &amp; REVISION</b>	
JANUARY	<b>PRACTICE TEST</b>	



**MATHEMATICS**

MONTH	TOPIC	SUB - TOPIC
APRIL	Real Numbers	Fundamental Theorem of Arithmetic, Proof of irrationality
MAY	Polynomials	Zeroes of a Polynomial, Relationship between Zeroes and coefficients of quadratic polynomial
JUNE	<b>PT-1 EXAMINATION</b>	
JUNE	Trigonometry	Introduction to Trigonometry, Trigonometric Ratios, Some Specific Angles  Trigonometrical Identities.
	Heights and Distances	Concept of Angle of Elevation, Angle of Depression, Heights and Distances.
	Quadratic Equation	Standard form of quadratic equation. Solution of a quadratic Equations (only real roots) by Factorisation and by using quadratic formula. Relationship between discriminant and nature of roots. Situational problems based on quadratic equations related to day to day activities to be incorporated.
JULY	Circles	Theorems based on Tangent properties of a circle.
	Triangles	Similar Figures, Similarity of Triangles and its criteria
	Pair of Linear Equation In Two Variables	Graphical Method, Solution of a pair of Linear equations, consistency/ inconsistency. Algebraic Methods (Substitution Method, Elimination Method) Simple situational problems.



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<b>AUGUST</b>	Statistics	Calculation of Mean, Median and Mode for grouped frequency distribution
	<b>REVISION FOR PT-2 EXAMINATION</b>	
<b>AUGUST</b>	<b>PT-2 EXAMINATION</b>	
<b>SEPTEMBER</b>	Arithmetic Progression	Identification of a series as AP., nth term of an AP., Sum of first 'n' terms of an AP and their application in solving daily life problem.
	Coordinate Geometry	Concepts of coordinate geometry, graphs of linear equations, Distance Formula, Section Formula (internal division)
<b>OCTOBER</b>	Probability	Probability – A theoretical Approach
	Area Related to Circles	Area of sectors and segments of a circle. Problem based on areas and perimeter / circumference of the above said plane figures (in calculating area of a segment of a circle, problem should be restricted to central angle of $60^\circ$ , $90^\circ$ and $120^\circ$ )
	Surface Area & Volumes	Surface area and volumes of combination of figures – cube, cuboid, right circular cylinder, cones, sphere and hemisphere
<b>NOVEMBER</b>	<b>PT-3 EXAMINATION</b>	
<b>DECEMBER</b>	<b>PRE BOARD</b>	
	<b>REVISION</b>	
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**PHYSICS**

MONTH	UNIT	TOPIC	SUB-TOPIC	PRACTICALS
APRIL	1	Light	Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification. Refraction; Laws of refraction, refractive index.	
			Refraction of light by spherical lens; Image formed by spherical lenses;	To determine the focal length of a concave mirror, by obtaining the image of a distant object;
MAY	1	Light	Lens formula (Derivation not required); Magnification. Power of a lens	To determine the focal length of a convex lens, by obtaining the image of a distant object. To trace the path of a ray of light through a rectangular glass slab for different angles of incidences; Measure the angle of incidence, angle of refraction, angle of emergence and interpret the results;
JUNE	<b>PERIODIC TEST-I</b>			





<b>JUNE</b>	2	Human Eye and colourful world	Functioning of a lens in human eye, defects of vision and their corrections, applications of spherical mirrors and lenses	
<b>JULY</b>	2		Refraction of light through a prism,	To trace the path of a light ray through a glass prism
<b>JULY</b>	2	Human Eye and colourful world	dispersion of light, scattering of light, applications in daily life (excluding colour of the sun at sunrise and sunset).	
<b>AUGUST</b>	3	Electricity	Electric current, potential difference and electric current. Ohm's law; Resistance, Resistivity, Factors on which the resistance of a conductor depends. Series combination of resistors, parallel combination of resistors and its applications in daily life.	To study the dependence of Potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plot a graph between V & I.
<b>AUGUST</b>	<b>REVISION FOR PERIODIC TEST-II</b>			
<b>AUGUST- SEPTEMBER</b>	<b>PERIODIC TEST-II</b>			



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<b>SEPTEMBER</b>	3	Electricity	Heating effect of electric current and its applications in daily life. Electric power, Interrelation between P, V, I and R.	To determine the equivalent resistance of two resistors when connected in series; determine the equivalent resistance of two resistors when connected in parallel.
<b>OCTOBER</b>	4	Magnetic Effects of Electric Current	Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's Left Hand Rule	
<b>PERIODIC TEST-III</b>				
<b>NOVEMBER</b>	4	Magnetic Effects of Electric Current	Direct current. Alternating current: frequency of AC. Advantage of AC over DC. Domestic electric circuits.	
<b>NOVEMBER</b>	<b>REVISION</b>			
<b>DECEMBER</b>	<b>PRE-BOARD</b>			
<b>JANUARY</b>	<b>PRACTICE TEST</b>			



**CHEMISTRY**

MONTH	UNIT	TOPIC	SUB TOPIC	PRACTICAL EXPERIMENT
APRIL	1	Chemical Reactions and Equations	Chemical reaction - definition, characteristics of chemical reaction with examples. Writing a chemical equation, skeletal equation, balanced chemical equation, balancing of chemical equations.	To perform and observe different types of chemical reactions.
MAY	1	Chemical Reactions and Equations	Types of chemical reactions - combination, exothermic and endothermic reactions, decomposition, displacement, double displacement, oxidation and reduction. Corrosion, rancidity.	
JUNE	<b>PERIODIC TEST - 1</b>			
	2	Acids, Bases and Salts	Introduction to acids, bases, indicators. Understanding the chemical properties of acids and bases. Understanding the chemical properties of acids and bases (continued). What do all acids and all bases have in common? Dilution of acids and bases. Strength of acids and basic solutions.	To study the properties of acids and bases.



<b>JULY</b>	2	Acids, Bases and Salts	Importance of pH in everyday life. Salts - family of salts, pH of salts, chemicals from common salt, chlor-alkali process, bleaching powder, baking soda, washing soda, water of crystallization in salts, Plaster of Paris.	To find the pH of sample solutions by using pH paper/ universal indicator.
	3	Metals and Non-metals	Introduction, physical properties of metals and non-metals. Chemical properties of metals (reactions), the reactivity series. How do metals and non-metals react? Properties of ionic compounds.	To study the reactivity of metals using the metals and their salt solutions.
<b>AUGUST</b>	3	Metals and Non-metals	Occurrence of metals, extraction of metals, refining of metals. Corrosion of metals and its prevention, alloys.	
	<b>REVISION OF PERIODIC TEST - 2</b>			
	<b>PERIODIC TEST - 2</b>			
<b>SEPTEMBER</b>	4	Carbon and its Compounds	Importance of carbon, catenation, bonding in carbon - the covalent bond, versatile nature of carbon. Saturated and unsaturated carbon compounds. Saturated and unsaturated carbon compounds	



			(continued), chains, branches and rings present in carbon compounds. Homologous series, functional groups.	
<b>OCTOBER</b>	4	Carbon and its Compounds	Hydrocarbons, isomerism. Nomenclature of carbon compounds. Chemical properties of carbon compound (reactions). Some important carbon compounds - Ethanol and Ethanoic acid. Soaps and detergents.	To study the properties of acetic acid.
				To study the comparative cleaning capacity of a sample of soap in soft and hard water.
<b>NOVEMBER</b>	<b>PERIODIC TEST - 3</b>			
	<b>REVISION</b>			
<b>DECEMBER</b>	<b>PRE-BOARD &amp; REVISION</b>			
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**BIOLOGY**

MONTH	UNIT	CHAPTER	SUB-TOPIC	PRACTICAL
APRIL	1	Life Processes	<ul style="list-style-type: none"> <li>• What are life processes?</li> <li>• Autotrophic nutrition</li> <li>• Heterotrophic nutrition</li> </ul>	Preparing a temporary mount of a leaf peel to show stomata.
JUNE	<b>PERIODIC TEST 1 EXAMINATION</b>			
MAY	1	Life Processes	<ul style="list-style-type: none"> <li>• Respiration</li> </ul>	
JUNE	1	Life Processes	<ul style="list-style-type: none"> <li>• Transportation</li> <li>• Excretion</li> </ul>	
JULY	2	Control and Coordination	<ul style="list-style-type: none"> <li>• Animal-Nervous System</li> <li>• Coordination in plants</li> <li>• Hormones in animals</li> </ul>	To show experimentally that CO <sub>2</sub> is given out during respiration (animals and plants)
AUGUST	3	How do Organism Reproduce?	<ul style="list-style-type: none"> <li>• Do organisms create exact copies of themselves?</li> <li>• Modes of reproduction used by single organisms</li> </ul>	Studying Budding in Yeast and Binary fission in <i>Amoeba</i> sp. From prepared slides.



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<b>AUGUST - SEPTEMBER</b>	<b>REVISION FOR PT 2 EXAMINATION</b>			
	<b>PERIODIC TEST 2 EXAMINATION</b>			
<b>SEPTEMBER</b>	3	How do Organism Reproduce?	<ul style="list-style-type: none"> <li>Sexual reproduction in Plants</li> <li>Sexual reproduction in Humans</li> <li>Reproductive Health</li> </ul>	To identify the different parts of an embryo of a dicot seed (gram)
	4	Heredity	<ul style="list-style-type: none"> <li>Accumulation of variation during reproduction</li> <li>Heredity – Monahybrid and Dihybrid Crosses</li> <li>Sex Determination</li> </ul>	
<b>OCTOBER</b>	5	Our Environment	<ul style="list-style-type: none"> <li>Ecosystem-What are its components?</li> <li>How do our activities affect the environment?</li> </ul>	
<b>NOVEMBER</b>	<b>PERIODIC TEST 3 EXAMINATION</b>			
	<b>REVISION</b>			
<b>DECEMBER</b>	<b>PRE-BOARD EXAMINATION</b>			
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**ECONOMICS**

MONTH	UNIT	TOPICS	SUB TOPICS
APRIL	1	DEVELOPMENT	<ul style="list-style-type: none"> <li>• What Development Promises - Different people different goals</li> <li>• Income and other goals</li> <li>• National Development</li> <li>• How to compare different countries or states?</li> </ul>
MAY	1	DEVELOPMENT	<ul style="list-style-type: none"> <li>• Income and other criteria</li> <li>• Public Facilities</li> <li>• Sustainability of development</li> </ul>
JUNE	2	SECTORS OF INDIAN ECONOMY	<ul style="list-style-type: none"> <li>• Sectors of Economic Activities</li> <li>• Comparing the three sectors</li> <li>• Primary, Secondary and Tertiary Sectors in India</li> </ul>
JUNE	<b>PT 1 EXAMINATION</b>		
JULY	2	SECTORS OF INDIAN ECONOMY	<ul style="list-style-type: none"> <li>• Division of sectors as organized and unorganized.</li> </ul> <p>Sectors in terms of ownership: Public and Private Sectors</p>





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<p><b>AUGUST</b></p>	<p>3  4</p>	<p><b>MONEY AND CREDIT</b></p> <p><b>CONSUMERRIGHTS</b></p> <p>Note: The Chapter ‘Consumer Rights’ to be done as Project Work.</p>	<ul style="list-style-type: none"> <li>• Money as a medium of exchange</li> <li>• Modern forms of money.</li> <li>• Loan activities of Banks.</li> <li>• Two different credit situations.</li> <li>• Terms of credit.</li> <li>• Formal sector credit in India.</li> <li>• Self Help Groups for the Poor</li> </ul> <p>Gets familiarized with the rights and duties as a consumer; and legal measures available to protect from being exploited in markets. Every student has to compulsorily undertake the project on Consumer Rights/Awareness</p>
<p><b>AUGUST</b></p>	<p><b>REVISION FOR PT 2 EXAMINATION</b></p>		
<p><b>AUGUST - SEPTEMBER</b></p>	<p><b>PT 2 EXAMINATION</b></p>		
<p><b>SEPTEMBER - OCTOBER</b></p>	<p>5</p>	<p><b>GLOBALISATION AND THE INDIAN ECONOMY</b></p>	<ul style="list-style-type: none"> <li>• What is globalization?</li> <li>• Factors that have enabled Globalisation.</li> </ul> <p><b>TO BE EVALUATED IN THE BOARD EXAMINATION</b></p> <p><b>FOR INTER-DISCIPLINARY PROJECT</b></p> <ul style="list-style-type: none"> <li>• Production across the countries</li> <li>• Chinese toys in India</li> <li>• World Trade Organisation</li> <li>• The Struggle for a Fair</li> </ul>



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			Globalisation
<b>NOVEMBER</b>	<b>PT 3 EXAMINATION</b>		
<b>NOVEMBER</b>	<b>REVISION FOR PRE-BOARD</b>		
<b>NOVEMBER- DECEMBER</b>	<b>PRE-BOARD</b>		
<b>JANUARY</b>	<b>PRACTICE TEST</b>		



**GEOGRAPHY**

MONTH	UNIT	TOPICS / CHAPTERS	SUB TOPICS
APRIL	1	RESOURCE AND DEVELOPMENT	<ul style="list-style-type: none"> <li>• Concept</li> <li>• Development of Resources</li> <li>• Resource Planning Resource Planning in India, Conservation of Resources</li> <li>• Land Resources</li> <li>• Land Utilization</li> <li>• Land Use Pattern in India</li> <li>• Land Degradation and Conservation Measures</li> <li>• Soil as a Resource - Classification of Soils, Soil Erosion and Soil Conservation</li> </ul>
MAY	2	FOREST RESOURCES	<ul style="list-style-type: none"> <li>• Conservation of forest and wildlife in India</li> <li>• Types and distribution of forests and wildlife resources</li> <li>• Community and Conservation</li> </ul>
JUNE	<b>PT 1 EXAMINATION</b>		
JUNE	3	WATER RESOURCES	<ul style="list-style-type: none"> <li>• Water Scarcity and The Need for Water Conservation and Management</li> <li>• Multi-Purpose River Projects and Integrated Water Resources Management</li> <li>• Rainwater Harvesting</li> </ul>
JULY	4	AGRICULTURE	<ul style="list-style-type: none"> <li>• Types of Farming - Primitive Subsistence, Intensive Subsistence, Commercial</li> <li>• Cropping Pattern - Major Crops, Food Crops other than Grains, Non-Food Crops</li> <li>• Technological and Institutional Reforms</li> </ul>



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<b>JULY</b>	5	MINERALS AND ENERGY RESOURCES	<ul style="list-style-type: none"> <li>• What is a mineral?</li> <li>• Mode of occurrence of Minerals- Where are these minerals found?</li> <li>• Ferrous Minerals, Non-Ferrous Minerals, Non- Metallic Minerals, Rock Minerals</li> <li>• Conservation of Minerals</li> <li>• Energy Resources – Conventional Sources of Energy, Non-Conventional Sources of Energy</li> <li>• Conservation of Energy Resources</li> </ul>
<b>AUGUST</b>	6	MANUFACTURING INDUSTRIES	<ul style="list-style-type: none"> <li>• Importance of Manufacturing - Industrial Location</li> <li>• Classification of Industries.</li> </ul>
<b>AUGUST</b>	<b>REVISION FOR PT-2 EXAMINATION</b>		
<b>AUGUST- SEPTEMBER</b>	<b>PT 2 EXAMINATION</b>		
<b>SEPTEMBER – OCTOBER</b>	6	MANUFACTURING INDUSTRIES	<ul style="list-style-type: none"> <li>• Industrial pollution and environmental degradation.</li> <li>• Control of Environmental Degradation</li> </ul>
<b>NOVEMBER</b>	7	LIFELINES OF NATIONAL ECONOMY	<p>ONLY MAP POINTING TO BE EVALUATED IN BOARD EXAMINATION</p> <p>INTER DISCIPLINARY PROJECT (INTERNAL ASSESSMENT)</p>
<b>NOVEMBER</b>	<b>PT 3 EXAMINATION</b>		
<b>DECEMBER</b>	<b>PRE-BOARD</b>		
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## HISTORY AND POLITICAL SCIENCE

MONTH	UNITS	TOPICS	SUB TOPICS
<b>APRIL</b>	1	Power Sharing	Case Studies of Belgium and Sri Lanka
			Why Power Sharing is Desirable?
			Forms of Power Sharing
<b>APRIL</b>	2	Federalism	What is Federalism?
			What makes India a Federal Country?
			How is Federalism practiced?
			Decentralisation in India
<b>MAY</b>	1	The Rise of Nationalism in Europe	The French Revolution and the Idea of Nation
			The Making of Nationalism in Europe
			The Age of Revolutions: 1830-1848
			The Making of Germany and Italy
			Visualizing the Nation
			Nationalism and Imperialism
<b>JUNE</b>	<b>PERIODIC TEST I</b>		
<b>JUNE</b>	2	Nationalism in India	The First World War, Khilafat and Non-Cooperation
			Differing Strands within the Movement
			Towards Civil Disobedience
			The Sense of Collective Belonging
<b>JULY</b>	4	Political Parties	Why do we need Political Parties?
			How many Parties should we have?
			National Political Parties



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			State Parties
			Challenges to Political Parties
			How can Parties be reformed?
<b>AUGUST</b>	5	Print Culture and the Modern world	The First Printed Books
			Print Comes to Europe
			The Print Revolution and its Impact
			The Reading Mania
			The Nineteenth Century
			India and the world of Print
			Religious Reforms and Public Debates
			New forms of Publication
			Print and Censorship
<b>AUGUST</b>	3	Gender, Religion and Caste	Gender and Politics
			Religion, Communalism and Politics
			Caste and Politics
<b>AUGUST- SEPTEMBER</b>	<b>PERIODIC TEST II</b>		
<b>SEPTEMBER</b>	4	The Age of Industrialisation (This chapter will be only tested for Periodic Assessment)	Before the Industrial Revolution
			Hand labour and Steam power
			Industrialisation in the colonies
			Factories Come up



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			The Peculiarities of Industrial growth
			Market for goods
<b>OCTOBER</b>	5	Outcomes of Democracy	How do we assess democracy's outcome?
			Accountable, responsive and legitimate
			government
			Economic Growth and Development
			Reduction of Inequality and Poverty
<b>OCTOBER</b>	3	The Making of a Global World  (To be assessed through inter disciplinary project with Geography and Economics)	The Pre-Modern World (only this sub-topic will be assessed in Board exam)
			The Nineteenth Century
			The Inter- war Economy
			Rebuilding a World Economy: The Post – war Era
<b>NOVEMBER</b>	<b>PERIODIC TEST III</b>		
<b>DECEMBER</b>	<b>PRE-BOARD EXAMINATION</b>		
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**COMPUTER**



MONTH	UNIT	TOPIC	SUB- TOPIC
APRIL	1	INTRODUCTION TO INTERNET	<ul style="list-style-type: none"> <li>● Basics of Internet</li> <li>● Internet Terminologies</li> <li>● Internet Protocols</li> <li>● Internet Services</li> </ul>
	2	INTRODUCTION TO HTML	<ul style="list-style-type: none"> <li>● Fundamentals of HTML</li> <li>● Creating a Web Page</li> </ul>
	2	SETTING THE PAGE APPEARANCE	<ul style="list-style-type: none"> <li>● Setting the Page Properties</li> <li>● Organising Text on a Web Page</li> </ul>
MAY	2	SETTING THE PAGE APPEARANCE	<ul style="list-style-type: none"> <li>● Organising Text on a Web Page</li> </ul>
JUNE	<b>PERIODIC TEST- 1</b>		
JUNE	2	FORMATTING TEXT	<ul style="list-style-type: none"> <li>● Inserting Paragraphs and Changing Fonts</li> <li>● Emphasizing Text/ Applying Text Style</li> </ul>
	2	CREATING LISTS	<ul style="list-style-type: none"> <li>● Creating an Unordered List</li> <li>● Creating an Ordered List</li> <li>● Creating a Nested List</li> <li>● Creating a Definition List</li> </ul>
JULY	2	NAVIGATING THROUGH WEB PAGES	<ul style="list-style-type: none"> <li>● Linking Web Pages</li> <li>● Linking Sections of a Web Page</li> </ul>
	2	ADDING IMAGES, TABLE, AUDIO AND	<ul style="list-style-type: none"> <li>● Adding Images in a Web Page</li> <li>● Making Images as Hyperlinks</li> </ul>





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		VIDEO	<ul style="list-style-type: none"> <li>● Adding Tables in a Web Page</li> <li>● Merging Table Cells</li> <li>● Enhancing the Appearance of a Table</li> <li>● Embed Audio and Video in an HTML Page.</li> </ul>
	2	CREATING A FORM	<ul style="list-style-type: none"> <li>● Creating the Structure of a Form</li> <li>● Adding Data Input Elements</li> <li>● Adding Data Selection Elements</li> <li>● Adding Buttons</li> </ul>
	2	CASCADING STYLE SHEETS	<ul style="list-style-type: none"> <li>● Cascading Style Sheets and its Advantages</li> <li>● Types of CSS</li> <li>● Format of Internal CSS Style Rule</li> <li>● Color and Background Properties in CSS</li> <li>● Border, Margin, Padding, Outline, Font, Text Properties and Content Alignment in CSS</li> <li>● Constraints in CSS</li> </ul>
<b>AUGUST</b>	3	CYBER ETHICS	<ul style="list-style-type: none"> <li>● Netiquette</li> <li>● Software Licenses and Open-Source Software Movement</li> <li>● Plagiarism</li> <li>● Intellectual Property Rights</li> <li>● Digital Property Rights</li> <li>● Freedom of Information and the Digital Divide</li> <li>● E- Commerce : Privacy, Fraud ,</li> </ul>



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			Secure Data Transmission
<b>AUGUST</b>	<b>REVISION FOR PERIODIC TEST - 2</b>		
<b>AUGUST - SEPTEMBER</b>	<b>PERIODIC TEST 2</b>		
<b>SEPTEMBER</b>	4	FUN WITH SCRATCH	<ul style="list-style-type: none"> <li>Basics of Scratch</li> <li>Understanding Control Blocks</li> <li>Creating Games, Animated Images, Stories and Songs</li> </ul>
	---	INTRODUCTION TO PYTHON (SPECIAL COVERAGE PYTHON MODULE -1)	<ul style="list-style-type: none"> <li>Data types in Python</li> <li>Using Variables in Python</li> <li>Lists in Python</li> </ul>
	---	STRINGS IN PYTHON (SPECIAL COVERAGE PYTHON MODULE -2)	<ul style="list-style-type: none"> <li>Working with Strings</li> <li>Converting a String</li> </ul>
<b>OCTOBER</b>	5	PROGRAMMING WITH PYTHON (PYTHON MODULE- 2)  REVISION	<ul style="list-style-type: none"> <li>Python data types and variables</li> <li>Conditionals: if, if- else and elif Statements</li> </ul>
<b>PERIODIC TEST 3</b>			
<b>NOVEMBER</b>	5	PROGRAMMING	<ul style="list-style-type: none"> <li>Nested Conditional Construct</li> </ul>



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		WITH PYTHON	
<b>DECEMBER</b>	5	PROGRAMMING WITH PYTHON	<ul style="list-style-type: none"> <li>Loops in Python: for and while</li> </ul>
<b>JANUARY</b>	1	ARTIFICIAL INTELLIGENCE – EXCITE	<ul style="list-style-type: none"> <li>Introduction to AI</li> <li>Human and Machine Interactions: AI based Games (based on different AI domains)</li> <li>Three Domains of AI</li> </ul>
	2	ARTIFICIAL INTELLIGENCE – RELATE	<ul style="list-style-type: none"> <li>Applications of AI in daily lives</li> <li>Smart Homes and Human – Machine Interactions</li> </ul>
<b>FEBRUARY</b>	<b>REVISION FOR ANNUAL EXAMINATION</b>		
	<b>ANNUAL EXAMINATION</b>		



## ARTIFICIAL INTELLIGENCE

MONTH	CHAPTER	CORE CONCEPTS
APRIL	Foundational concepts of AI	Session: What is Intelligence?
		<ul style="list-style-type: none"> <li>• Role of Intelligence in Our Lives</li> <li>• Types of Intelligence</li> </ul>
		<ul style="list-style-type: none"> <li>• What is Decision-Making</li> <li>• Role of Intelligence in Decision-Making</li> </ul>
		<ul style="list-style-type: none"> <li>• What is AI?</li> <li>• What is NOT AI?</li> <li>• How Machines become Intelligent</li> </ul>
	Basics of AI: Let's Get Started	Session: Introduction to AI and related terminologies
<ul style="list-style-type: none"> <li>• AI Technologies</li> <li>• Domains of AI</li> <li>• Real Life AI Applications</li> <li>• Ethical Issues Around AI</li> <li>• AI bias and AI Access</li> </ul>		
MAY	AI Project Cycle: Introduction Problem Scoping	Session: Introduction to AI Project Cycle



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	Data Acquisition Data Exploration	<ul style="list-style-type: none"> <li>• Stages of AI Project Cycle</li> <li>• Choosing a Theme and Topic of AI Project</li> <li>• Identify the Problems and Around the Selected Topics</li> <li>• Define problem statement and set actions</li> <li>• Significance of Data</li> <li>• Types of Data used in AI Projects</li> <li>• Data Acquisition</li> <li>• Ways to Visualise Data</li> </ul>
	AI Project Cycle: Modelling Evaluation	<ul style="list-style-type: none"> <li>• Categories of AI Models</li> <li>• Supervised Learning</li> <li>• Unsupervised Learning</li> <li>• Semi-Supervised Learning</li> <li>• Reinforcement Learning (Optional)</li> <li>• Model Evaluation Metrics</li> </ul>
<b>JUNE</b>	<b>PERIODIC TEST- 1</b>	
<b>JUNE</b>	AI Project Cycle: Modelling Evaluation	<ul style="list-style-type: none"> <li>• Artificial Neural Network (ANN)</li> </ul>
	NATURAL LANGUAGE PROCESSING: Introduction Chatbots	Session: Introduction to Natural Language Processing
		<ul style="list-style-type: none"> <li>• What is NLP?</li> <li>• NLP Applications</li> <li>• Revisiting AI Project Cycles for an NLP Application</li> <li>• Understanding Chatbots</li> </ul>
NATURAL LANGUAGE PROCESSING: Language Differences Concepts of NLP	<ul style="list-style-type: none"> <li>• Human Language vs. Computer Language</li> <li>• Concepts of NLP</li> <li>• Text Normalization</li> <li>• Bag of Words</li> </ul> <p>Hands-on: →TFIDF (Optional) → NLTK(Optional)</p>	



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<b>JUNE</b>	EVALUATION: Introduction	<p>Session: Introduction to Model Evaluation</p> <ul style="list-style-type: none"> <li>• Concept of Evaluation</li> <li>• Different types of Evaluation techniques: Under Fit, Perfect Fit, OverFit</li> </ul>
	EVALUATION: Model Evaluation Terminology	<p>Session: Model Evaluation Terminologies</p> <ul style="list-style-type: none"> <li>• The Scenario - Prediction, Reality, True Positive, True Negative, False Positive, False Negative</li> <li>• Confusion Matrix</li> <li>• Activity- to make a confusion matrix based on data given for Containment Zone Prediction Model</li> </ul>
	EVALUATION: Confusion Matrix	<p>Session &amp; Activity: Confusion Matrix</p>
<b>JULY</b>	EVALUATION: Evaluation Methods	<p>Session: Evaluation Methods</p> <ul style="list-style-type: none"> <li>• Accuracy</li> <li>• Precision</li> <li>• Recall</li> <li>• Which Metric is Important? - Precision or Recall</li> <li>• F1 Score</li> </ul>
	ADVANCE PYTHON (To be assessed)	<p>Session: Advance Python</p>



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<b>JULY</b>	through Practical's)	<ul style="list-style-type: none"> <li>• Jupyter Notes &amp; other Python Development Platforms</li> <li>• Working in Python</li> <li>• Tokens - Smallest Individual Units</li> <li>• Barebones of a Python Program</li> <li>• Variables &amp; Assignments</li> <li>• Data Types</li> <li>• Getting User Input in Python</li> <li>• Operators</li> <li>• The if Statement</li> <li>• The if-else statement</li> <li>• The range() Functions and Operators in, not in</li> <li>→ The for Loop</li> <li>→ The while Loop</li> </ul>
	Self-Management Skills-II	<ul style="list-style-type: none"> <li>• Stress</li> <li>• Work Independently</li> </ul>
	ICT Skills - II	<ul style="list-style-type: none"> <li>• Types of Operating Systems</li> <li>• Menu, Icons, and Taskbar on the Desktop</li> <li>• Creating and Managing Files and Folders</li> <li>• Cleaning External Components</li> <li>• Scanning and Cleaning Viruses</li> <li>• Firewall and Cookies</li> </ul>
<b>AUGUST</b>	Entrepreneurial Skills - II	<ul style="list-style-type: none"> <li>• Entrepreneurship and Society</li> </ul>
	DATA SCIENCE	<p>Session: Introduction to Data Science</p> <ul style="list-style-type: none"> <li>• What is Data Science?</li> <li>• Application of Data Science</li> <li>• Data Science with AI Project Cycle</li> <li>• Data Collection</li> </ul>
<b>AUGUST</b>	<b>REVISION FOR PERIODIC TEST - 2</b>	
<b>AUGUST - SEPTEMBER</b>	<b>PERIODIC TEST - 2</b>	
<b>SEPTEMBER</b>	DATA SCIENCE (To be assessed through Practical's)	<ul style="list-style-type: none"> <li>• NumPy</li> <li>• Pandas</li> <li>• Matplotlib</li> </ul>



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	PYTHON FOR DATA SCIENCE	<ul style="list-style-type: none"> <li>• Basic Statistics &amp; Data Visualisation</li> <li>• K-nearest Neighbour Model (Optional)</li> </ul>
	Communication Skills - II	<ul style="list-style-type: none"> <li>• Body language</li> <li>• Communication Cycle</li> <li>• Barriers to Effective Communication</li> <li>• Principles of Effective Communication</li> <li>• Parts of a Sentence and Speech</li> <li>• Articles &amp; Phrases</li> <li>• Art of Storytelling</li> </ul>
	Green Skills - II	<ul style="list-style-type: none"> <li>• Sustainable Development</li> </ul>
OCTOBER	COMPUTER VISION	Session: Introduction to Computer Vision <ul style="list-style-type: none"> <li>• What is CV?</li> <li>• Application of CV</li> <li>• Concepts of CV</li> <li>• Python OpenCV</li> <li>• Convolution Operator (Optional)</li> <li>• Introduction to CNN (Optional)</li> </ul>
		Hands-On: <ul style="list-style-type: none"> <li>• Image Processing Using OpenCV</li> </ul>
<b>PERIODIC TEST - 3</b>		
NOVEMBER	<b>BOARD SYLLABUS COMPLETION &amp; REVISION</b>	
DECEMBER	<b>PRE-BOARD &amp; REVISION</b>	
JANUARY	<b>PRACTICE TEST</b>	