



PRATAP
INTERNATIONAL SCHOOL
POCKET -2, SEC- 24, ROHINI, NEW DELHI

SYLLABUS

CLASS X

A decorative border composed of a repeating pattern of small geometric shapes, including triangles, squares, and circles, surrounds the entire page. The shapes are arranged in a grid-like fashion, creating a textured frame around the central text.

Subjects

1. MATHS
2. ENGLISH
3. SOCIAL STUDIES
4. SCIENCE
5. COMPUTER
6. HINDI

MATHEMATICS(041)

TEXT BOOKS TO BE USED:

1. Maths Text book - NCERT
2. Activity plus in MATHEMATICS

Month	Chapter No & Name	Sub Topics	Activities
March	Chap 1- Real Numbers Chap 2 - Polynomials	Euclid's division lemma, Fundamental Theorem of Arithmetic Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals. Zeros of a polynomial. Relationship between zeros and coefficients of quadratic polynomials.	Teaching Aid : Inductive – Deductive method Lab Activity : Plotting of irrational numbers on number line.
April	Chap 2 – Polynomials Chap 3 - Pair of Linear Equations in Two Variables	Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution, by elimination and by cross multiplication method.	Teaching Aid : Inductive method Lab Activity : CH3: To obtain the conditions for consistency of given pair of linear equations in two variables by graphical method.
May + JUNE UT 1	Chap 4 - Quadratic Equations Chap 5 - Arithmetic Progression Chap 15- Probability	Standard form of a quadratic equation $ax^2 + bx + c = 0$, ($a \neq 0$). Solutions of quadratic equations (only real roots) by factorization, and by using quadratic formula. Relationship between discriminant and nature of roots. Arithmetic Progression Derivation of the nth term and sum of the first n terms of A.P. and their application in solving daily life problems.	Teaching Aid : Activity method and inductive method Lab Activity : Ch3: To obtain the conditions for inconsistency of given pair of linear equations in two variables by graphical method CH5: To verify that a given sequence is an arithmetic progression by paper cutting and pasting method

<p>July</p>	<p>Chap 8 - Introduction to Trigonometry Chap 6 - Triangles</p>	<p>Trigonometric ratios, Trigonometric ratios of some specific angles, Trigonometric ratios of complementary angles and Trigonometric identities.</p> <p>Similarity of triangles, Criteria for similarity, Area of similar triangles and Pythagoras theorem.</p>	<p>Teaching Aid : Activity method and inductive method</p> <p>Lab Activity : CH6: To verify Basic Proportionality Theorem using parallel line board and triangle cut-outs . CH6: To verify the Pythagoras Theorem by paper cutting and pasting method.</p>
<p>UT 2 August</p>	<p>Chap 6 - Triangles Chap 11 - Constructions</p>	<p>1. Division of a line segment in a given ratio (internally). 2. Tangents to a circle from a point outside it. 3. Construction of a triangle similar to a given triangle.</p>	<p>Teaching Aid : Inductive and deductive method Activity method.</p>
<p>September</p>	<p>Chap 11 - Constructions</p>	<p>Half Yearly Examination</p>	
<p>October</p>	<p>Chap 7 - Co-ordinate Geometry Chap 10 – Circles Chap 12 - Areas Related To Circles</p>	<p>Distance formula, Section formula and area of triangle. Tangents to circle and number of tangents from a point on a circle. Perimeter and area of circle, areas of sector and segment of a circle.</p>	<p>Teaching Aid : Inductive and deductive method Activity method.</p> <p>Lab Activity : CH10: To verify that the lengths of the tangents drawn from an external point to a circle are equal by paper folding, cutting and pasting method.</p>
<p>November</p>	<p>Chap 9 - Some Applications Of Trigonometry Chap 14 - Statistics</p>	<p>Simple problems on heights and distances. Problems should not involve more than two right triangles. Angles of elevation / depression should be only 30°, 45°, 60.</p>	<p>Teaching Aid : Inductive and deductive method Activity method.</p>

<p>December & January</p>	<p>Chap 13 - Surface Areas and Volumes</p>	<p>Surface areas and volumes of combinations of any two of the following: cubes, cuboids, spheres, hemispheres and right circular cylinders/cones. Frustum of a cone.</p> <p>Pre – Board Examination 1 & 2</p>	<p>Teaching Aid : Inductive and deductive method Activity method. Teaching Aid : CH13: To compare the volumes of two right circular cylinders which are formed from a rectangular sheet of paper having same dimensions 10 CH13: To make a cone of a given slant height and base circumference</p>
<p>February</p>		<p>Revision</p>	
<p>March</p>		<p>Board Examination</p>	

ENGLISH LANGUAGE AND LITERATURE

LEARNING OBJECTIVE:

1. Acquire basic language skills (listening, speaking, reading and writing) in order to communication with speakers of English language.
2. Develop their intellectual, personal and professional abilities.
3. To develop knowledge and understanding of grammar.
4. To understand the meaning of English passage.
5. To develop abilities to make use of the grammar in own writing English.

TEXTBOOKS TO BE USED:

1. FOOTPRINTS WITHOUT FEET
2. FIRST FLIGHT

MONTH	CHAPTER NAME	GRAMMAR	WRITING SKILLS
MARCH	FIRST FLIGHT - Ch. 1: A Letter to God Poems: Dust of Snow, Fire And Ice FOOTPRINTS WITHOUT FEET Ch.1: A Triumph of Surgery Ch.2: The Thief's Story	GRAMMAR – Gap Filling, Editing, Omission, Rearrangement, Integrated Grammar	WRITING - Letter to the Editor, Story writing

<p>APRIL</p>	<p>FIRST FLIGHT - Ch.2: Nelson Mandela: Long Walk to Freedom Ch.3: Two Stories about Flying 1.His First Flight 2. Black Aeroplane</p> <p>Poems: A Tiger in the Zoo, How to tell Wild Animals, The Ball Poem</p>	<p>GRAMMAR – Gap Filling, Editing, Omission, Rearrangement, Integrated Grammar</p>	<p>WRITING - Letter for Placing an Order and Letter of Inquiry</p>
<p>MAY</p>	<p>FOOTPRINTS WITHOUT FEET Ch.3: The Midnight Visitor, Ch.4: A Question of Trust</p>	<p>GRAMMAR- Determiners, Tenses, Modals, Passive voice, Subject-verb Agreement, Integrated Grammar</p>	<p>WRITING - Letter to the Editor, Story writing</p>

<p>JUNE</p>	<p>FIRST FLIGHT - Ch.4: From the Diary of Anne Frank,</p>	<p>GRAMMAR - Reported Speech, Clauses, Prepositions</p>	<p>WRITING - Complaint Letter, Article Writing</p>
<p>JULY</p>	<p>FIRST FLIGHT Ch.5: The Hundred Dresses-I, Ch.6: The Hundred Dresses-II Poems: Amanda! , Animals</p> <p>FOOTPRINTS WITHOUT FEET Ch.5:Footprints Without Feet, Ch.6: The Making of a Scientist</p>	<p>Integrated Grammar</p>	<p>WRITING - Complaint Letter, Article Writing</p>

<p>AUGUST</p>	<p>FIRST FLIGHT - Ch.7 Glimpses of India 1. A Baker from Goa 2. Coorg 3. Tea from Assam, Ch.8: Mijbil the Otter</p> <p>Poems: The Trees, Fog</p> <p>FOOTPRINTS WITHOUT FEET Ch.7: The Necklace Ch.8: The Hack Driver</p> <p>WRITING - Story writing (Revision)</p>	<p>Integrated Grammar</p>	<p>WRITING - Story writing (Revision)</p>
<p>SEPTEMBER</p>	<p>Revision for Half Yearly Exams</p>		

<p>OCTOBER</p>	<p>FIRST FLIGHT - CH.9: Madam Rides The Bus, Ch.10: The Sermon at Benaras, CH. 11: The Proposal</p> <p>Poems: The Tale of Custard the Dragon, For Anne Gregory</p> <p>FOOTPRINTS WITHOUT FEET Ch.9: Bholi, Ch.10: The Book that Saved the Earth</p>	<p>Integrated Grammar</p>	<p>Letter to the Editor (Revision), Business Letters (Revision)</p>
<p>NOVEMBER</p>	<p>Recapitulations of the chapters</p> <p>Revision from supporting material</p> <p>Revision of writing section</p>		

DECEMBER	Recapitulations of the chapters Revision from supporting material Revision of writing section		
JANUARY	Winter Break- Remedial Classes Revision and Pre- Board examination Discussion and solution of Pre-Board examination paper with follow up work to be done by students in notebooks.		

SOCIAL SCIENCE

MONTHS	UNITS	ACTIVITY
APRIL	1. Development 2. Power Sharing	Map work-Geography Objective:- to enhance accuracy and map skill
MAY	3. Resources and Development 4. Nationalism in Europe	
JULY	5. Agriculture 6. Federalism 7. Gender, Religion and Caste	
AUGUST	8. Nationalism in India 9. Minerals & Energy Resources 10. Political Parties	Class work/Home work Multidisciplinary Activity
SEPTEMBER	11. Outcomes of Democracy 12. Globalization and Indian Economy 13. Money and Credit 14. Manufacturing Industries	
OCTOBER	15. Print Culture 16. Sectors of Indian Economy	Project Report on any one topic. Consumer Awareness OR Social Issues
NOVEMBER	17. Age of Industrialization 18. Lifelines of National Economy	Class work/Home work
DECEMBER	Preparation for Pre-Board Examination	
JANUARY	Pre-Board Examination	
FEBRUARY	Preparation of Board Examination	
MARCH	Board Examination	

Science

Month	Name of the chapter	Subject	Activity to be undertaken
April – May	Electricity	Physics	Electric Circuits-Model Making in class
	Life Processes	Biology	Presentation/ Illustration through diagram - Structure of Human Heart/Kidney/ Reflex Arc
	Chemical Reactions and Equations	Chemistry	—
June	Magnetic Effects of Current	Physics	
	Control & Co-ordination	Biology	— —
	Acids, Bases and Salts	Chemistry	Prepare a ppt or a poster on the process of metallurgy/ kinds of chemical reactions.
July	Sources of Energy	Physics	Practical work
	Control and Coordination How Do Organisms Reproduce	Biology	Practical work
	Metals and Non-Metals	Chemistry	Practical work
August	Sources of Energy (Continued)	Physics	Practical work
	How do Organisms Reproduce Heredity and Evolution	Biology	
	Carbon and its Compounds	Chemistry	
September	Light (Reflection and Refraction)	Physics	Project Report on Optical fibres
	Heredity and Evolution	Biology	Observation of Analogous and Homologous organs.
	Carbon and its Compounds (Continued)	Chemistry	Make a model depicting the property of catenation of carbon/Structures of any CARBON Compounds
October	Light (Reflection and Refraction)	Physics	—
	Our Environment	Biology	Make a chart showing Food Chain and Food Web existing in an Ecosystem

	Periodic Classification of Elements	Chemistry	
November	Human Eye and the Colourful World	Physics	
	Management of Natural Resources	Biology	
	Periodic Classification of Elements (Continued)	Chemistry	
December	Revision and Pre – Board Examination - 1		
January	Pre – Board Examination - 2		
February	Revision		
March	Board Examination		

Computer

MONTH	TOPIC / UNIT	CONTENTS
April	Networking	Internet: World Wide Web, web servers, web clients, web sites, web pages, web browsers, blogs, news groups, HTML, web address, e-mail address, downloading and uploading files from a remote site. Internet protocols: TCP/IP, SMTP, POP3, HTTP, HTTPS. Remote login and file transfer protocols: SSH, SFTP, FTP, SCP, TELNET, SMTP, TCP/IP.
May	Networking	Services available on the internet: information retrieval, locating sites using search engines and finding people on the net;
June	Networking	Web services: chat, email, video conferencing, e-Learning, e-Banking, e-Shopping, e-Reservation, e-Governance, e-Groups, social networking. Mobile technologies: SMS, MMS, 3G, 4G
July	HTML	Introduction to web page designing using HTML: create and save an HTML document, access a web page using a web browser. HTML tags: html, head, title, body, (attributes: text, background, bgcolor, link, vlink, alink), br (break), hr(horizontal rule), inserting comments, h1..h6 (heading), p (paragraph), b (bold), i (italics), u (underline), ul (unordered list), ol (ordered list), and li (list item). Description lists: dl, dt and dd. Attributes of ol (start, type), ul (type).
August	HTML	Font tags (attributes: face, size, color). Insert images: img (attributes: src, width, height, alt), sup (super script), sub (subscript). HTML Forms: Textbox, radio buttons, checkbox, password, list, combobox. Embed audio and video in a HTML page. Create a table using the tags: table, tr, th, td, rowspan, colspan
September	HTML	Links: significance of linking, anchor element (attributes: href, mailto), targets. Cascading style sheets: colour, background-colour, border-style, margin, height, width, outline, font (family, style, size), align, float.

October	Cyber ethics	Netiquettes. Software licenses and the open source software movement. Intellectual property rights, plagiarism and digital property rights. Freedom of information and the digital divide. E-commerce: Privacy, fraud, secure data transmission.
November	Scratch/ Python Theory	SCRATCH OR PYTHON: Revision of Python basics, Conditionals: if, if-else statements Loops: for, while (e.g., sum of first 10 natural numbers) Practice simple programs
December, January, February	COMPLETION OF PRACTICAL FILE / PROJECT WORK	LAB EXERCISES

Hindi

क्रम	पाठ	अनुमानित आवश्यक कालांश	माह
1	पाठ - 1 पद (सूरदास) पाठ - 10 नेताजी का चश्मा पाठ - 11 बालगोबिन भगत पाठ - 12 लखनवी अंदाज व्याकरण - रचना के आधार पर वाक्य - भेद पद परिचय, पत्र - लेखन	8 5 5 4 7 10	मार्च - अप्रैल
2	पाठ - 2 राम - लक्ष्मण - परशुराम संवाद पाठ - 13 मानवीय करुणा की दिव्य चमक पाठ - 1 माता का अंचल (कृतिका - पूरक पुस्तक) व्याकरण - पद परिचय, वाच्य	5 4 4 12	मई
3	पाठ - 14 एक कहानी यह भी पाठ - 2 जॉर्ज पंचम की नाक (कृतिका - पूरक पुस्तक) व्याकरण - पत्र - लेखन, अपठित बोध, वाच्य	4 8 10	जुलाई
4	पाठ - 5 उत्साह, अट नहीं रही है पाठ - 9 संगतकार पाठ - 3 साना - साना हाथ जोड़ि (कृतिका - पूरक पुस्तक) व्याकरण - निबंध लेखन, पुनरावृत्ति कार्य	4 4 5 6	अगस्त
5	पाठ - 6 यह दंतुरित मुसकान, फसल पाठ - 16 नौबतखाने में इबादत व्याकरण - रस	4 6 12	सितंबर
6	पाठ - 7 छाया मत छूना पाठ - 8 कन्यादान व्याकरण - रस, विज्ञापन	4 4 9	अक्टूबर
7	पुनरावृत्ति कार्य एवं अभ्यास		नवंबर
8	पुनरावृत्ति कार्य एवं अभ्यास प्री-बोर्ड परीक्षा		दिसंबर

9	प्री-बोर्ड परीक्षा		जनवरी
10	वार्षिक परीक्षा		फरवरी - मार्च