THE AIR FORCE SCHOOL: SUBROTO PARK : DELHI CANTT-110010

Class – XI

Sub: MATHEMATICS

Weekly Syllabus

Academic Session 2023-24

Month	Week	Dates		Days	No of Periods	Chapter	Contents	Syllabus
Apr-23	IV	17-21		05	08	**Chapter 1** Sets	Sets & their Representations, Empty Sets, Finite & Infinite Sets, Equal Sets, Subsets, Subsets of a set of real numbers especially intervals, Universal Set	
	V	24-29	**29-Working Saturday (Student)** **29 – Parent Orientation VI & IX**	06	08	**Chapter 1** Sets	Venn Diagrams, Operations on Sets, Difference of sets,	
May-23	I	01-05	**05 – Budha Purnima** **01-04 : ES-1 (XII)/ CT-1 (X)**	04	06	**Chapter 1** Sets **Chapter 6** Linear Inequalities	Complement of a set, properties of Complement Inequalities, Algebraic Solutions of Linear Inequalities in One Variable and their representation on the number line	**ES-1 (XII)/ CT-1 (X)** **Date: 01-08 May**
	II	08-12	**08 : ES-1 (XII)/ CT-1 (X)** **11,12 – The Quest**	05	08	**Chapter 6** Linear Inequalities	Algebraic Solutions of Linear Inequalities in One Variable	
	III	15-20	**20- Working Saturday (Open House X & XII)**	06	08	**Chapter 6** Linear Inequalities	Algebraic Solutions of Linear Inequalities in One Variable	
******* SUMMER BREAK 22 MAY -30 JUN 2023 ********								
Jul-23	I	01-	01- School reopens for staff	01				**PT-I** **Class VI-X Date: 07 Jul –**

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								19Jul
	II	03-07		05	08	**Chapter 6** Linear Inequalities **Chapter 1** Sets	Recapitulation for new students	**ES-2 (XII): 07 Jul – 19Jul**
	III	10-14		05	08	**Chapter 2** Relations and Functions	Ordered pairs, Cartesian Product of Sets, number of elements in cartesian product of 2 finite sets. **Relations**- Definition, pictorial diagram, Relation as a Subset of Cartesian Product of Sets, Domain and Range of Relation	
	IV	17-22	**22 – Working Saturday (Students)**	06	08	**Chapter 2** Relations and Functions	**Functions**- Introduction as a Special Type of Relation, Pictorial representation of a function, Domain & Range of Special Types of Functions with graphs. Sum, difference, product and quotient of functions	
	V	24-28	**29-Muharram**	05	08	**Chapter 3** Trigonometric Functions	Positive & negative angles, Radian measure, Domain & Range of Trigonometric Functions and their graphs.	
	VI	31		01	01	**Chapter 3** Trigonometric Functions	Trigonometric Functions of Sum & Difference of Two Angles. Identities related to sin 2x, cos2x, tan 2x, sin 3x, cos 3x & tan 3x	
Aug-23	I	01-05	**05 – Working Saturday (Open House (VI-X), XII)**	05	08	**Chapter 3** Trigonometric Functions	Trigonometric Functions of Sum & Difference of Two Angles.	

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	II	07-11		05	08	**Chapter 3** Trigonometric Functions	Identities related to sin 2x, cos2x, tan 2x, sin 3x, cos 3x & tan 3x	
	III	14-18	**15 – Independence Day**	04	06	**Chapter 5** Complex Numbers and Quadratic Equations	Definition, Algebra of Complex Numbers, Modulus and Conjugate of Complex number, Argand plane	
	IV	21-26	**24,25-Class Test** **26-Working Saturday (Students)** **26-Annual Prize Distribution**	06	06	**Chapter 9** Sequences and Series	Sequences & Series, Geometric Progression, A.M.	**ES-1 (XI): 21 Aug – 25 Aug** **Chapter 1** Sets **Chapter 3** Trigonometric Functions **Chapter 6** Linear Inequalities
	V	28-31	**30-Raksha Bandhan** **28,29 -Class Test**	03	05	**Chapter 9** Sequences and Series	Relationship between A.M. & G.M Infinite G.P. and its Sum	
Sep-23	I	01	**01 -Class Test**	01	01		**REVISION**	
	II	04-08	**07-Janmashtami**	04		Mid Term/ HYE Exam		**Mid Term (PT-II)/ HYE** **Date 11-23 Sep** **Chapter 1** Sets **Chapter 2** Relations and Functions **Chapter 3** Trigonometric Functions
	III	11-16	**16 – Working Saturday (Students)**	06				
	IV	18-23	**23 – Working Saturday (Students)**	06				
	V	25-30	**28-Milad-un-Nabi**	04	06	**Chapter 7** Permutations & Combinations	Fundamental principle of counting, factorial n(n!), Permutations	

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								Chapter 5 Complex Numbers and Quadratic Equations **Chapter 6** Linear Inequalities **Chapter 9** Sequences and Series
Oct-23	II	02-07	**02-Mahatma Gandhi's Birthday** **07-Annual Prize Distribution**	05	06	**Chapter 7** Permutations & Combinations	Combinations Simple applications	
	III	09-14	**14- Working Saturday(Open House VI-XII)**	06	08	**Chapter 8** Binomial Theorem **Chapter 10** Straight Lines	Binomial theorem for positive integral indices, Pascal's Triangle, simple applications Slope of a Line, Angle between two lines	
	IV	16-20		05	08	**Chapter 10** Straight Lines	Various Forms of the Equations of a Line	
	V	23-27	**23– Autumn Break** **24- Dussehra** **28-Maharishi Valmiki's Birthday**	03	04	**Chapter 10** Straight Lines	Various Forms of the Equations of a Line	
	VI	30-31		02	03	**Chapter 10** Straight Lines	Distance of a Point from a Line	
***** Autumn Break 23 Oct 2023 *****								
Nov-23	I	01-04	**01– Karwa Chouth** **04 – Working Saturday (Students)**	03	04	**Chapter 12** Introduction to Three Dimensional Geometry	Introduction, Coordinate Axes and Coordinate Planes in Three Dimensional Space, Coordinates of a Point in Space	
	II	06-10	**07 – Annual Day**	05	06	**Chapter 12** Introduction to Three Dimensional	Distance between Two Points	

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						Geometry **Chapter 11** Conic Sections	Introduction, Section of a Cone, Circle	
	III	13-18	**11-15 – Diwali Break**	03	04	**Chapter 11** Conic Sections	Parabola	**ES-2 (XI):** 21 Nov-14 Dec **Chapter 7** Permutations & Combinations **Chapter 10** Straight Lines
	IV	20-24		05	08	**Chapter 11** Conic Sections	Ellipse	
	V	27-30	**27 – Guru Nank's Birthday**	03	03	**Chapter 11** Conic Sections	Hyperbola	
Dec-23	**I**	01-02	**01,02 – Annual Athletic Meet**	02	02	**Chapter 13** Limits and Derivatives	Introduction, intuitive idea of limits, limits of polynomial & rational functions	
	II	04-09	**09 – Sports Day**	06	08	**Chapter 13** Limits and Derivatives	Limits of trigonometric functions, Limits of Exponential and Logarithmic functions	
	III	11-16	**16-Working Saturday, Open House (IX,X & XII)**	06	08	**Chapter 13** Limits and Derivatives	Definition of derivative, derivative of sum, difference, product and quotient of functions	
	IV	18-22	**20-22 – TAFS MUN** **24,25 – Christmas Holidays**	05	08	**Chapter 13** Limits and Derivatives	Derivative of sum, difference, product and quotient of functions	
***** Winter Break from 26 Dec to 05 Jan 2024 *****								
Jan-24	I	08-12		05	08	**Chapter 16** Probability	Random Experiments, Types of Experiments Axiomatic Approach to Probability	**Pre-Board (X & XII):** **09 Jan-23 Jan**

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	II	15-20	**20-Working Saturday, Open House (VI-VIII, XI)**	06	08	**Chapter 16** Probability	(cont.) Axiomatic Approach to Probability	
	III	22-27	**26-Republic Day** **27- Farewell XII**	05	08	**Chapter 15** Statistics	Introduction, Measures of Dispersion, Range, Mean Deviation	
	IV	29-31		03	04	**Chapter 15** Statistics	Variance and Standard Deviation of grouped or ungrouped data	
Feb-24	I	01-03	**01,02- Class Test** **03-Working Saturday, Citation Ceremony, Open House (X& XII)**	03			Revision	
	II	05-09	**05-08- Class Test**	05			Revision	**Annual Exam Class IX & XI – 07 Feb-21 Feb 2023** **Complete syllabus**
	III	12-16		05				
	IV	19-23		05				
	V	26-29		04				
Mar-24	**Annual Exam Classes VI-VIII – 26 Feb-11 Mar 2024**							

Note: The examination syllabus as mentioned above is to be considered Tentative. The final syllabus for each exam will be uploaded on the website along with the Date Sheet at the time of the examination.