

ACADEMIC PLANNER 2025-26
MATHEMATICS CLASS IX

MONTH /DATES/ DAYS	CONTENT	LEARNING OUTCOME	H.W./ ASSIGNMENT	ACTIVITY/MODEOF ASSESSMENT	TEACHING PEDAGOGY	INTERDISCIP LINARY ASPECT	21ST CENTURY SKILLS/ SDG
APRIL(1-15) 10 Days	Bridge course	strengthens the foundational concepts	Revision worksheet	MCQ Test	Scaffolding		problem solving
APRIL(16-30) 12 Days	Ch- 1 Number System Introduction,irrational numbers,real number line,operations on real numbers,laws of exponents	applies logical reasoning in classifying real numbers and proving their properties	Ex 1.1 - Ex 1.5	educosoft assessment , class test Activity-To construct square root spiral , construction of angles , perpendicular bisector etc.	storytelling,expl anation and visualization	history of numbers	reasoning and critical thinking / SDG 4 Quality education
MAY(1-15) 11 Days	Ch -2 Polynomials Introduction, zeroes of polynomials, Factorisation, algebraic identities	identifies/classifies polynomials and factorises them by applying algebraic identities.	Ex 2.1 - Ex 2.3	educosoft assessment , graphic organiser	Collaborative Learning	polynomials used in calculating molecular mass	Creativity, Logical Reasoning
MAY(16-25) 8 Days	Ch -2 Polynomials algebraic identities		Ex 2.4	Activity- Verification of algebraic identity	Hands-on Manipulatives		
JULY(1-15) 12 days	Ch - 3 Coordinate Geometry Introduction, cartesian system, plotting points on graph Ch-4 Linear equations in two variables Formation and solutions of linear equations	develops strategies to locate points in a Cartesian plane. relates the algebraic and graphical representations of a linear equation in one or two variables	Ex 3.1 - Ex 3.2 Ex 4.1-Ex 4.2	educosoft assessment , class test Activity - Graphical representation of linear equations	Technology Integration	graph of relation between celcius and fahrenheit	Analytical thinking / SDG 11 - Sustainable Cities & Communities
JULY(16-31) 14 days	Ch -6 Lines and Angles Basic terms , related angles, transversal , intersecting lines and parallel lines	Uses angle properties and proves basic theorems	Ex 6.1 - Ex 6.2	educosoft assessment , math vocabulary card Activity - Verification of angle sum property and exterior angle property of a triangle	Peer teaching	Art integration - angles used in yoga poses	Creativity

AUGUST (1-15) 11 days	Ch - 7 Triangles Introduction to congruence, conditions for congruence of triangles, Isosceles triangle property, triangle inequalities	Establishes congruency in triangles and solves problems	Ex 7.1 - Ex 7.3	educosoft assessment Activity - Verification of triangle inequality property and construction of triangle	Demonstration - use of TLM	Architecture	Proof construction / SDG 11 - Sustainable Cities & Communities
AUGUST (1-15) 12 days	Ch-10 Heron's Formula Area of triangle when sides are given , application of Heron's formula	finds areas of all types of triangles by using appropriate formulae and apply them in real life situations.	Ex 10.1	educosoft assessment , case study	Inquiry based learning	Land area calculation	measurement skills / SDG 15 - life on land
SEPTEMBER (1-15) 11 days	REVISION FOR HALF YEARLY EXAMINATION						
SEPTEMBER (16-30) 12 days	HALF YEARLY EXAMINATION						

OCTOBER (1-15) 8 days	Ch-11 Surface areas and Volumes Surface areas of cuboid, cube, cylinder, cone, sphere and hemisphere	derives formulae for surface areas and volumes of different solid objects like, cubes, cuboids, right circular cylinders/ cones, spheres and hemispheres and applies them to objects found in the surroundings.	Ex 11.1 - Ex 11.2	educosoft assessment , formula test	Experiential learning - Use of TLM	Sports integration	Creativity / SDG 6 - Clean water and sanitation
OCTOBER (16-31) 10 days	Ch-11 Surface areas and Volumes Volumes of cuboid, cube, cylinder, cone, sphere and hemisphere		Ex 11.3 - Ex 11.4	Activity - verification of relation between volume of cylinder and volume of cone(demonstration)			
NOVEMBER (1-15) 11 days	Ch-12 Statistics Histogram of uniform width, varying width, frequency polygon, mean median and mode of ungrouped data Probability	analyses data by representing it in different forms like, tabular form (grouped or ungrouped), bar graph, histogram (with equal and varying width and length), and frequency polygon.	Ex 12.1	educosoft assessment , case study	Data-Driven Learning, Technology Integration	Climate and population studies	Analytical thinking / SDG 13 Climate action

NOVEMBER (16-30) 12 days	Ch-8 Quadrilaterals Properties of parallelogram , Mid Point theorem , areas of parallelograms and triangles	derives proofs of mathematical statements particularly related to geometrical concepts by applying axiomatic approach and solves problems using them.	Ex 8.1 - Ex 8.2	educosoft assessment Activity - Verification of mid point theorem and areas of triangles on the same base and between the same parallels	Visual Learning - Use of TLM	Art integration	Spatial Intelligence
DECEMBER (1-15) 12 days	Ch - 9 Circles Angles subtended by equal chords at the centre are equal and vice- versa perpendicular from centre to the chord bisects the chord	derives proofs of mathematical statements particularly related to geometrical concepts by applying axiomatic approach and solves problems using them.	Ex 9.1 - Ex 9.2	educosoft assessment	Experiential learning - Use of TLM	Art integration	Critical Thinking, Logical Reasoning
DECEMBER (16-31) 13 days	Ch - 9 Circles Equal chords and their distances from the centre Angle subtended by an arc of a circle Cyclic quadrilateral		Ex 9.3	Activity - To verify that angle subtended by an arc at the centre is double the angle subtended by it on the remaining part of circle.			
JANUARY (1-15)	WINTER BREAK						
JANUARY (16-31) 13 days	Ch-5 Introduction to Euclid;s Geometry Definitions, Axioms and postulates	Explains Euclid’s axioms/postulates with examples	Ex 5.1	educosoft assessment , mathematical comprehension , Revision tests	Story telling	History of geometry	logical reasoning
FEBRUARY (1-15)11 days	REVISION FOR ANNUAL EXAMINATION						
FEBRUARY (16-28)12 days	ANNUAL EXAMINATION						

TERMWISE SYLLABUS

UNIT TEST 1	Ch - 1 , 2
HALF YEARLY	Ch - 1,2,3, 4, 6, 7,10
UNIT TEST 2	Ch - 11 , 12
ANNUAL EXAM	Ch - 1,2,3,4,5,6,7,8,9,10,11,12