SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

MONTH	WORKING DAYS	TOPIC TO BE TAUGHT	ACTIVITY	LEARNING OUTCOME	VALUES &SKILLS IMPARTED	ASSESSMEN T
APRIL	23	**CH-1Number system** *Euclid's division lemma *Fundamental theorem of arithmetic *Proofs of irrational number √2,√3,√5...and so on. *Decimal representation of rational numbers in terms of terminating/non-terminating decimals. **CH-2 Polynomials** *Zeroes of a polynomial *Relationship between zeroes and coefficients of quadratic polynomials * statement as simple problems on division algorithm for polynomial with real coefficients.	To find the zero(es) of a quadratic polynomial geometrically.	Students will be able to: explain Euclid's Division, calculate the HCF of numbers using Euclid's Division Lemma and the HCF and LCM of numbers. Find the zero or zeroes of a polynomial , to verify the relationship between the zeroes and the coefficients of linear, quadratic and cubic polynomials.	Imagination Respect, Team spirit Thinking skill Facing challenges Drawing skill neatness	Class Test: Oral Written MCQ Worksheet And extra sums from reference books.

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

APRIL MAY	23 8	**Ch-3 Pair of linear equations** *Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency *Solving Pair of linear equation in two variables algebraically by substitution, elimination method *Solving by cross multiplication method *simple situational problems **Ch-7Coordinate Geometry** *Introduction *Graph of linear equations. *Distance between two points *Section formula(internal division) *Area of a triangle	To obtain the conditions for consistency of a system of linear equations in two variables by graphical method.	Learners will be able to solve a pair of Linear equations in two variables by using the graphical method algebraic methods, such as substitution, elimination and cross-multiplication, Solve non-linear equations. Students Will be able to know and use the distance formula , section formula ,	Drawing skill Neatness Creativity	Class Test: Oral Written MCQ Worksheet And extra sums from reference books ppt making

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

JUNE	11	**Ch-6 Triangle** Definitions, examples, counter examples of similar triangles. 1.(Prove):-If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio. 2.(Prove):-If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side . Triangles to be continued…. 3.(Prove):-If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar. 4.(Prove):-If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar. 5.If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional the two triangles are similar. 6.(Prove):-The ratio of the areas	To illustrate that medians of a triangle occur at a point called the centroid which always lies inside the triangle using paper folding method.	Learners will be able to explain the Concept of similarity, to prove the basic proportionality theorem and its converse, to prove the theorems related to the areas of similar triangles	Creativity Team spirit	ClassTest: Oral Written MCQ Worksheet And extra sums from reference books

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

		Of two similar triangles is equal to the ratio of the squares on their corresponding sides. 7.(Prove)If a perpendicular is drawn from the vertex at the right angle of a right triangle to the hypotenuse, the triangles on each side of the perpendicular are similar to the whole triangle and each other. Triangles to be continued…. 8.(Prove):-In a right triangle, the square on the hypotenuse is equal to sum of the squares on the other two sides. 9.(Prove):-In a triangle, if the square on one side is equal to the sum of the squares on the other two sides, the angles opposite to the first side is a right angle.				
JULY	26	**Ch-8 Trigonometry** *Introduction to trigonometry *Trigonometric identities *values(with proofs)of the trigonometric ratios of 30°, 45°and 60°.	Basic proportionality theorem	Students should be able to find the trigonometric ratios of 0^0, 90^0, 45^0, 60^0 and $30^0$and the trigonometric ratios of complementary angles to use different trigonometric identities		Class Test: Oral Written MCQ Worksheet And extra sums from reference books

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

AUGUST	24	**Ch-12Areas related to Circle** *Motivate the area of a circle, Area of sectors and segments of a circle, problem based on area perimeter/circumference of the above said plane figures*Problem should be restricted to central angle of 60°,90°and 120°only Plane figures involving triangles, simple quadrilaterals and circle should be taken. **Ch-15 Probability** *Introduction *classical definition of probability simple problem on single events	To make a right circular cylinder of given height and circumference of base.. To get familiar with the idea of probability of an event through a double colour card experiment.	Learners will be able to describe various geometrical terms related to a circle, such as chord, radius, diameter, arc, segment, sector and circumference, to calculate the length of an arc and area of sectors of a circle.	Creativity Facing challenges Accepting challenges	Class Test: Oral Written MCQ Worksheet Case study And extra sums from reference books

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

SEPTEMBER	23	**TERMI EXAM** **Ch-4Quadratic equation** *standard form of a quadratic equation $ax^2+bx+c=0(a\neq0)$. *Solution of the quadratic equation (only real roots) by factorization, and by using quadratic formula. *Relationship between discriminant and nature of roots. *Situational problems **Ch-5Arithmetic Progression** *introduction Motivation for studying arithmetic progression*Derivation of then th term and sum of the first n terms of A.P and their application in solving daily life problems	To verify that the sum of first n natural numbers is n(n+1)/2 by graphical method.	learners will be able to find the roots of quadratic equations using the methods of factorisation and completing the square, quadratic formula , to find the nature of the roots of a quadratic eqn. Learners should be able to identify an AP, find the nth term of an AP, sum of the first n positive integers.	imagination	**TERMI EXAM** Class Test: Oral Written MCQ Flow chart Worksheet Case study And extra sums from reference books

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

OCTOBER	16	**Ch-10 circle** Tangents to a circle at a point 1.(Prove):-The tangent at any point of a circle is perpendicular to the radius through the point of contact 2.(Prove):-The length of tangents drawn from an external point to circle are equal. **Ch-9 Some application of trigonometry** *Application of the trigonometry i.e heights and distances	To show that Length of tangents from an external point are equal to a circle. To make a clinometer and use it to measure the height of an object.	Learners will be able to explain the Concepts of a tangent of a circle, to prove theorems and solve problems , Students should be able to know about line of sight, angle of elevation, angle of depression. Solve word problems	Creativity, Integrity Problem solving Creativity, neatness	Class Test: Oral Written MCQ Worksheet Case study And extra sums from reference books

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

NOVEMBER	19	**Ch-14 Statistics** *Introduction *Mean, median and mode of grouped data		. Students should be able to calculate the mean median and mode of grouped data, .	Team spirit, sharing	Class Test: Oral Written MCQ Flow chart Worksheet Case studyand extra sums from reference books
NOVEMBER	19	**Ch-13Surface areas and Volumes** *surface areas and volume of combination of any two of the following cubes, cuboids, Spheres, hemisphere, right circular cylinder/cones, Problems involving converting one type of metallic solid into another and other mixed problems. *Problems with combination of two different solids	To give a suggestive demonstration of the formula for the volume of a right circular cone	Learners should be able to calculate the surface areas and the volumes of the combination of solids.	Creativity Team spirit	Class Test: Oral Written MCQ Worksheet And extra sums from reference books

SANTNANDLALSMRITIVIDYAMANDIR,GHATSILA
YEARLY SYLLABUS OF MATHEMATICS
SESSION–2026-2027
STD – X

DECEMBER	19	**REVISION AND PREBOAARD**				
JANUARY	20	**Revision**				
FEBRUARY MARCH	23 22	**Revision** **TERMII EXAM**				Term-IIExam

SubjectTeacher – GURBAX SINGH SOKHEY **Principal**