Curriculum
Subject- Mathematics (041)
Session – 2023-24
Class –X

Month	March	April	May	June	July
Concepts	Ch. 1 Real Numbers Ch.2 Polynomials	Ch. 2 Polynomials(continued) Ch. 3 Pair of Linear equations in two variables	Ch. 3 Pair of Linear equations in two variables(contd.) Ch. 4 Quadratic Equations	Ch. 5 Arithmetic Progression Ch. 6 Triangles	Ch. 6 Triangles(contd.) Ch. 7 Coordinate Geometry
Learning Outcomes	**Students will be able to:** ● Understand Fundamental theorem of arithmetic ● Understand the proofs of irrationality of ● $\sqrt{2}, \sqrt{3}, \sqrt{5}$ etc. ● Recall the concept of Polynomials ● Find Zeros of Polynomials	**Students will be able to:** ● Understand Geometrical meaning of zeroes and coefficients of Linear and Quadratic polynomials ● Identify different Coordinate axis and plot points on them. ● Understand the conditions of consistency for linear equations. ● Identify the correct method for solving the linear equations.	**Students will be able to:** ● Solve linear equations with different methods ● Differentiate between a quadratic polynomial and a quadratic equation ● Find the different methods to solve quadratic equations ● Applications of the concept to solve everyday problems.	**Students will be able to:** ● Recognise an Arithmetic Progression ● Find the given terms and sum of the given Arithmetic Progression ● Solve a given application based question through real life situations ● Identify the difference between Congruency and Similarities of triangles ● Apply Basic Proportionality theorem and its converse ● Understand the criteria for Similarity of triangles	**Students will be able to:** ● Understand the concept of Coordinate geometry ● Find the distance between two points using their coordinates ● Use of section formula
Skills	Knowledge/Understanding/Critical Thinking/ Problem Solving	Knowledge/Understanding/ Critical Thinking/Problem Solving	Knowledge/ Understanding/ Critical Thinking/Problem Solving/Evaluation	Knowledge/Understanding/Critical Thinking/Problem Solving/Application	Knowledge/Understanding/Critical Thinking/Problem Solving
Activities	**Competency-skill based activity/Experiential Learning**: Based on HCF and LCM	**Competency-skill based activity/Experiential Learning**: Graph Paper - Based on the conditions for consistency of a system of linear equations in two variables by graphical representation.	**Competency-skill based activity/ Experiential Learning:** Based on Factorisation	**Competency-skill based activity/Experiential Learning:** Based on the Arithmetic Progression and its sums	**Competency-skill based activity/Experiential Learning:** Based on Proportionality theorem and Pythagoras theorem
Assessments	● **Periodic Tests** ● **Multiple Assessments** ● **Portfolio** ● **Student Enrichment Activities-practical work** **Main Book: NCERT**				

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Class –X

Month	**August**	**September**	**October**	**November/December**
Concepts	• Introduction to Trigonometry • Applications of Trigonometry	• Circles • Areas related to Circles	• Surface Area and Volume • Statistics	• Probability • Revision
Learning Outcomes	**Students will be able to:** • Use Pythagoras theorem in right angled triangle • Identify Trigonometry ratios and apply them • Use different identities to prove the given results • Apply Trigonometry to find angle of elevation/ depression and in various fields such as Physics, Engineering, Navigation, Seismology and Art	**Students will be able to:** • Understand the difference between Secant and Tangents to the circle • Learn that only one tangent can pass through a point lie on the circle • Observe that tangent to any point of a circle is perpendicular to the radius through the point of contact and apply it • Calculate the areas and perimeter of the Circle, area of a given segment or sector of the circle, the length of major and minor arc and the area of combination of plane figures	**Students will be able to:** • Identify the 3-D shapes combined to form an object • Determine Surface area of combination of different solids • Make formulas for Volume of a combination of solids • Convert one solid form to another • Solve the questions based on mean, median and mode of grouped data • Find mean by different methods	• Differentiate between experimental and Theoretical Probability • Differentiate between equally likely and not equally likely outcome • Understand Sure and impossible event • Solve the problems based on single events • Recapitulate all the concepts
Skills	Knowledge/Understanding/Critical Thinking/Problem Solving/Application	Knowledge/Understanding/CriticalThinking/Problem Solving	Knowledge/Understanding / Application/Critical Thinking/Problem Solving	Knowledge/Understanding/ Application/Critical Thinking/Problem Solving
Activities	**Competency-skill based activity/Experiential Learning:** Based on Trigonometry	**Competency-skill based activity/Experiential Learning:** Area of sector formed at the vertices of triangle	**Competency-skill based activity/Experiential Learning:** Based on Surface area and volume of cylinder and cone.	**Competency-skill based activity/Experiential Learning:** Based on Probability
Assessments	• **Periodic Tests** • **Multiple Assessments** • **Portfolio** • **Student Enrichment Activities-practical work** **Main Book: NCERT**			