REVISED SYLLABUS : GRADE - 11
SUBJECT : MATHEMATICS (041)
SESSION : 2020-21

SN.	MONTH	CHAPTER	TOPIC	SUB TOPICS	WEIGHTAGE	PERIODS REQUIRED
1	April	Ch. 1	Sets	Sets and their representatives, Empty Set, Finite & Infinite Sets,Equal Sets, Subsets, Power Set, Universal set, Venn Diagram, Union & Intersection of Sets.		14
2	June	Ch. 2	Relation & Functions	Ordered Pair, Cartesian Products of Sets, Number of elementsin the Cartesian Products of Finite Sets, Cartesian Products of the Sets with itself, Definition of Relation, Pictorial diagrams, domain, codomains and range of a relation, Function, Pictorial diagrams, domain, codomains and range of a function, Real Valued functions with their graphs,	23	15
		Ch. 3	Trigonometric Functions	Positive and negative angles, measuring angles in radians and degrees and conversion of one measure to another. Definition of Trigonometric functions, Signs of Trigonometric functions, Expression of sin (x+y), cos (x+y) in terms of sinx, siny, cosx, cosy etc, Identities related to sin2x, cos2x, tan2x, sin3x, cos3x and tan3x.		14
4	July	Ch. 5	Complex Numbers and Quadratic Equations	Introduction of Complex number, Algebraic properties of Complex Numbers, Argand Plane, statement of fundamental theorem of Algebra. Solution of Quadratic Equations in the complex number system.	30	10
		Ch. 6	Linear Inequalities	Linear Inequalities, Algebraic Solutions of linear inequlities in one variable and their representation on the number line. Graphical solution of linear inequalities in wo variables. Solution of system of linear inequalities in two variables graphically.		15
	August	Ch. 7	Permutation & Combinations	Fundamental Principle of Counting, Factorial n (n!), Permutations & Combinations, their connections, Simple Applications.		8
5	September/ October	Ch. 9	Sequences and Series	Sequence and Series, Arithmetic Progression (A.P), Arithemetic Mean (A.M), Geometric Progression (G.P), Geometric Mean (G.M),General Term Of G.P, Sum of n terms of a A.P and G.P, Arithmetic and Geometric Series Infinite G.P and its sum , Relation between A.M and G.M		8
				Revision for Half Yearly Examination		
6	October	Ch. 10	Straight Lines	Brief recall of two dimensional geometry, Shifting of origin, Slope of a line and angle between two lines, Various forms of equations of a line, parallel to axis, point - slope form, Slope intercept form, Two point form, Intercept Form and Normal Form. General equation of a line. Distance of a point from a line.	10	8
		Ch. 11	Conic Sections	Section of a Cone, Circles, Ellipse, Parabola, Hyperbola, standard equations and simple properties of Parabola, Ellipse and Hyperbola , Standard equation of a circle.		15
7		Ch. 12	Introduction of Three Dimensional Geometry	Coordinate axes and coordinate planes in three dimensions, Coordinates of a point, Distance between two points and Section Formula		10

	November	Ch. 13	Limit and Derivatives	Derivative introduced as rate of change both as that of distance function and geometrically, Intutive idea of limit, Limits of polynomials and rational functions trigonometric, exponential and logarithemic functions. Definition of derivative, relate it to scope of tangent of the curve, derivative of sum, difference product and quotient of functions. Derivative of polynomials and trigonometric functions.	7	30
	December	Ch. 15	Statistics	Measures of Dispersion; mean deviation, variance and standard deviation of ungrouped/grouped data.	10	11
		Ch. 16	Probability	Random experiments; outcomes, Sample spaces, Events; occurrence of events, 'not', 'and', 'or' events, mutually exclusive events, probabilty of an event, probability of 'not', 'and' and 'or' events.		10
					THEORY 80 + INTERNAL ASSESSMENT 20 = M.M 100	**TOTAL 168**
MATHEMATICS ACTIVITIES: Ten Mathematics Activities will be conducted and assessed.						
	January	**Revision for Final Examination**				