ACADEMIC PLANNER 2019 - 2020
Subject : Mathematics
Class - VIII

DATE	TOPIC	ASSIGNMENTS / HOMEWORK	ACTIVITY / MODE OF ASSESSMENT
April 1-15th April (11 days)	**Ch. 1 – Rational Numbers** Concept, properties of addition & multiplication of rational numbers, Rational number on number line, rational numbers between two rational numbers.	Ex. 1.1 to 1.2	To explore the relationship between (a) length and perimeter (b) length and area of squares of different dimensions.
16- 30th April (11 days)	**Ch. 13 – Direct and inverse proportion** Direct proportion, Inverse proportion **Ch. 15 Introduction to graphs** Bar graphs – single & double Pie graph, histogram, line graph linear graphs, co-ordinates, some applications	Ex. 13.1 to 13.2 Ex. 15.1 to 15.3	Online Assessment
May 1-15th May (11 days)	**Ch. 2 – Linear Equations** Solving equations, Applications, Solving equations with variable on both sides Reducing equations to simpler forms Equations reducible to linear form	Ex. 2.1 to 2.6	To derive formula for TSA of a Cuboid.
JULY 1-15th July (12 days)	**Ch. 8 – Comparing Quantities** Concept of ratio and percentage Increase and decrease as percent Discount, profit and loss, sales tax Compound interest compounded annually and semi annually	Ex. 8.1 to 8.3	Finding Squares by Alternate Method.
16- 31st July (14 days)	**Ch. 6 Squares & square roots** Introduction, properties, patterns, Finding square of a number square root by repeated subtraction prime factorization method, division method square root of decimals, estimating square roots.	Ex. 6.1 to 6.4	Online Assessment
August 1-15th Aug. (10 days)	**Ch. 7 Cubes & cube roots** Introduction, cubes, patterns, prime factors Cube roots by prime factorization **Ch. 10 Visualising Solid Shapes** View of 3D shapes, Mapping space around us Faces, Edges, Vertices	Ex. 7.1 to 7.2 Ex. 10.1 to 10.2	To draw Top view, Front View and side view of 3-D shapes.
16 -31st Aug. (13 days)	**Ch. 12 Exponents & powers** Introduction, negative powers laws of exponents, Scientific notation	Ex. 12.1 to 12.2	Online Assessment
September 1-15th Sept. (10 days)	**Ch. 16 Playing with numbers** Introduction, numbers in general form Games for numbers, letters for digits, Divisibility tests	Ex. 16.1 to 16.2	Revision for Half Yearly Exam.
16-30th Sept. (13 days)	**Half Yearly Exam**		
October 1-15th Oct.	**Ch. 5 – Data Handling** Concepts of Pictograph, bar graph	Ex. 5.1 to 5.3	

(6 days)	Frequency distribution, Histogram pie chart, chance and probability		Online Assessment
16 -31st Oct. (11 days)	**Ch. 9 Algebraic expressions & Identities** Expressions, terms, factors coefficient, types of polynomials, like & unlike terms Addition & subtraction of expressions Multiplication, patterns, multiplication of monomials	Ex. 9.1 to 9.3	To verify the identity $(a+b)^2 = a^2 + 2ab + b^2$

November 1-15th Nov. (11 days)	**Ch. 9 Algebraic expressions & Identities** multiplication of monomial with a polynomial Multiplication of a polynomial with a polynomial, Algebraic identities	Ex. 9.4 to 9.5	Online Assessment
16-30th Nov. (13 days)	**Ch. 11 - Mensuration** Review, Area of trapezium, quadrilateral, Special quadrilateral, polygon, Surface area (Cube, Cuboid and Cylinder , Volume (cube, cuboid and cylinder)	Ex. 11.1 to 11.4	Online Assessment

December 1-15th December (11 days)	**Ch. 14 Factorisation** Factors of natural numbers, algebraic expressions method of common factors, regrouping terms Factorisation using identities Division of algebraic expressions, Finding errors	Ex. 14.1 to 14.4	To verify angle sum property of a Quadrilateral.
16-31st December (13 days)	**Ch. 3 Understanding quadrilaterals** Polygons, diagonals, convex & concave polygons Regular & irregular polygons, Angle sum property Exterior angles of a polygon, Special types & their properties	Ex. 3.1 to 3.4	To verify the exterior angle sum property of a polygon.

January 1-15th January	**Winter Break**		
January 15 -31st January (14 days)	**Ch. 4 practical geometry** Construction of quadrilaterals- four sides & one diagonal, two sides & two diagonals, Two adjacent sides & three angles, Three sides & two included angles, Special cases- construction of rhombus, square & rectangle	Ex. 4.1 to 4.5	To form Special Quadrilaterals by paper folding. (Kite and Rhombus)

February 1-15th Feb (12 days)	**Revision for Annual Exam**
16-28th Feb (11 days)	**Annual Exam**

TERMWISE SYLLABUS
Unit Test - I
Online Assessment + Written test of Chapters - 1, 13, 15
Half Yearly Exam
Ch. 1, 2, 6, 7, 8, 12, 13, 15
Unit Test - II
Online Assessment + Written test of Chapters - 5, 16, 9(Ex- 9.1 to 9.4)
Annual Examination
Ch. 1, 2, 3, 4, 5, 9, 11, 12, 14