Split up Syllabus

Class-VIII Subject - Mathematics (2019-20)

Book Prescribed: Text book of NCERT

Months	Working days	Chapters	Contents	Suggested Activities/Innovations
April' 19	**16**	**1. Rational Numbers** **2. Linear Equation in one variable**	• Introduction • Properties of R.Nos • Role of 0,1 & Negative numbers • Reciprocal • Distribution of multiplication over addition and subtraction for R.No • Representation of R.Nos on number line • Rational number between two rational numbers • Introduction • Solving Equation which have linear expression on one side &number on other side, Applications • Solving equation having variable both side, Applications • Reducing equation in simpler form and reduce in linear form	**Activity on number pattern**
May'19	**9**	**3. Understanding Quadrilateral**	• Introduction • Classification of polygons • Angle sum property of Qudr. And Exterior and interior angles • Kinds of Qudr. Parallelogram etc. • Elements of llgm & angles • Diagonals of llgm (Rec and Square)	**Work sheet on Quadrilaterals Rectangles, Squares, Rhombus and Trapezium and Parallelograms**
July'19	**25 (19 + 6)**	**4. Practical Geometry** **5. Data - Handling**	• Introductions • Constricting of Quadrilateral. 4-sides and diagonals are given • 3-sides and 2- diagonals given • 2-sides and 3-amgles are given • 3-sides and 2-angles are given • Some special cases • Looking for information: pie, pictograph and bar graphs • Organise, bars, grouping of data • Circle-graph and pie-charts • Drawing pie-chart • Chance and probability • Equality likely outcomes, linking chances to probability, outcome as events • Chance , probability in real life •	
Examination	**6**	**25 - 31 July'19**	**Unit-Test-I (Chapter: 1-5)**	

August'19	**22**	**6. Square and Square Roots** **7. Cube and Cube roots**	• Introduction • Properties of square numbers • Some interesting pattern • Square of the numbers and Pythagorean triplet • Square roots by prime factorisation • Square roots by long division method • Square roots of decimals • Estimations of square roots • Introduction • Cubes and interesting patterns, Adding consecutive pattern • Cubes and prime factors • Smallest multiple is a perfect cube • Cube roots with prime factors • Cube roots of cube numbers	**Work sheet on square and square roots** **Work sheet on cubes and cube roots**
September	**20 (8 + 12)**	**8. comparing Quantities**	• Introduction • Recalling ratio and percentage • Finding, increase & decrease % • Finding discount, estimation in % • Price relate to buying and selling (profit and loss) • Finding CP/SP, Profit & Loss % • Sale-Tax, Value Added Tax • Revision for half-yearly exams	
Examination	**12**	**16-27 Sep'19**	**Half- Yearly (Chapter: 1-8)**	
October'19	**13**	**02-11 Oct'19** **9. Algebraic Expressions and Identities** **25-29 Oct'19**	• **Autumn Breaks** • What is expression? • Terms. Factors, coefficient, mono, bi, trinomials, like and unlike term • Addition, subtraction, multiplication of monomials and binomials with trinomials • Multiplication bi- to binomials • What is Identity? • Standard identities and their applications • **Diwali Holidays**	**Activity to Prove** **$(a + b)^2$** **$(a - b)^2$** **$(a^2 – b^2)$**
November	**23**	**10. Visualizing Solid Shapes**	• Introduction • Views of 3-D shapes • Mapping shapes around us • Faces, Edges and vertices • Euler's formula	**Activity** **Draw a View of HUT**

		11. Mensuration	• Introduction • Let us recall • Area of trapezium, Qudr, polygon • Solid Shapes • Surface area of cube, cuboids and cylinder • Volume of cube, cuboids and cylinder	**Activity On find CSA and TSA of Cuboids and Cylinder**
December	**23 (13 + 10)**	**12. Exponents and powers**	• Introduction • Power with negative exponents • Law of exponents • Use of exponents to express small numbers in standard form • Comparing very large & small numbers	
Examination	**10**	**09 - 18 Dec'19**	**Unit Test - II (Chapter: 9- 12)**	
January'20	**17**	**31Dec'19 to 09 Jan'20** **13. Direct and Inverse Properties** **14. Factorization**	**Winter – Vacations** • Introduction • Direct proportion • Inverse proportion --- • Introduction • Factorization of Algebraic expression • Method of common, regrouping factors • Factorize by using Identities • Division of Algebraic Expressions • Divide, mono to bi and trinomials • Can you find error	**Activity On direct and Inverse Variations**
February'20	**20**	**15.Introducing Graphs** **16. Playing with Numbers**	• Introduction • Bar, Linear, Pie Graphs • Location of point, Coordinates, Some applications --- • Introduction • Numbers in General form • Game with numbers • Letter for digits • Test for divisibility 10,2,5,9 and 3	**Activity Drawing graphs related to daily life**
			Revision for Annual- Examination (Chapters: 1-16)	
Examination		**Last week of Feb'20**.	**Annual- Examination**	

Prepared By:-
Mr. PRADEEP KUMAR SHARMA
TGT (Mathematics)