Class VIII

SYLLABUS OVERVIEW
SUBJECT: MATHEMATICS-A

Teacher: Sir KN

Chapter No.	Name of the Chapter	Marks
1	Rational numbers	12
2	Linear equation in one variable	14
5	Squares and square roots	14
Total		**40**
6	Cubes and cube roots	8
8	Algebraic expressions and identities	12
10	Exponents and powers	8
12	Factorisation	12
Total		**40**

Month	No. of Days	No. of Periods	Lesson/Unit	Activities/Projects/Practical experiment to be held/Specific Assessment Tools(s)
April-June	22	10 12	CHAPTER-1. RATIONAL NUMBERS • Introduction • Properties of Rational Numbers • Closure • Commutativity • Associativity • Distributivity • Case Based Problems CHAPTER-2. LINEAR EQUATION IN ONE VARIABLE • Introduction • Equations Having variables on both sides • Reducing Equations to Simpler Form • Case Based Problems	**Subject Enrichment Activity-1:** To Compare two rational numbers **Subject Enrichment Activity-2:** To Solve linear equations by bar method (Visually) **Maintain Portfolio Multiple Assessment:** Oral/Test/Quiz

July-Aug	15	15	CHAPTER-5. SQUARES AND SQUARE ROOTS • Introduction • Properties of Square Numbers • Some more Interesting Patterns • Finding the Square of a Number • Pythagorean Triplets • Square Roots • Square Roots of Decimals • Case Based Problems	**Subject Enrichment Activity-3:** To find out the Pythagorean Triplets **Maintain Portfolio Multiple Assessment:** Oral/Test/Quiz
Sept-Nov	18	6 12	CHAPTER-6. CUBES AND CUBE ROOTS • Introduction • Cubes • Patterns of Cubes • Smallest multiple that is a perfect cube • Cube Roots • Cube Root through Prime Factorization Method. • Case Based Problems CHAPTER-8. ALGEBRAIC EXPRESSIONS AND IDENTITIES • Addition and Subtraction of Algebraic Expressions • Multiplication of Algebraic Expressions • Multiplying a Monomial by a Monomial • Multiplying a Monomial by a Polynomial • Multiplying a Polynomial by a Polynomial. • Case Based Problems	**Subject Enrichment Activity-4:** Visual Proof for $(a+b)^2 = a^2 + 2ab + b^2$ **Maintain Portfolio Multiple Assessment:** Oral/Test/Quiz

Dec-Feb	24	9 15	CHAPTER-10. EXPONENTS AND POWERS • Introduction • Powers with Negative Exponents • Laws of Exponents • Use of Exponents to Express Small Numbers in Standard Form • Case Based Problems CHAPTER-12. FACTORISATION • Introduction • What is Factorisation? • Division of Algebraic Expressions • Division of Monomial by another monomial • Division of a Polynomial by a monomial • Division of Polynomial with a Polynomial Case Based Problems	**Subject Enrichment Activity-5:** To understand the exponential growth of a Triangle by folding a paper **Maintain Portfolio Multiple Assessment:** Oral/Test/Quiz

SYLLABUS OVERVIEW
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SPLIT-UP SYLABUSS
SUBJECT: MATHEMATICS-B

Teacher: Miss LC

Chapter No.	Name of the Chapter	Marks
1	Understanding quadrilaterals	15
2	Data handling	10
5	Comparing quantities	15
Total		**40**
6	Mensuration	15
8	Direct and inverse proportion	15
10	Introduction to graph	10
Total		**40**

Month	No. of Days	No. of Periods	Lesson/Unit	Activities/Projects/Practical experiment to be held/Specific Assessment Tools(s)
April-may	30	18	Chapter: Understanding quadrilaterals • Introduction • Types of quadrilateral • Sum of interior angles = (n−2)×180 • Sum of exterior angles = 360° • Elements of parallelogram Types of parallelogram	Subject enrichment activity-1: sum of interior angles = (n−2)×180 Maintain portfolio multiple assessment: oral/presentation/class test/worksheet/discussion
June-July	32	19	Chapter: Data handling • Collection, Organising of data • Bar graph • Pie chart • Conversion of degree to frequency and vice versa • Formula of probability Probability	Subject enrichment activity-2: Collection and representation of data among students Maintain portfolio multiple assessment: Oral/presentation/class test/worksheet/discussion

Aug-sept	29	18	Chapter: Comparing quantities • Introduction • Conversion of ratios to percentage and vice versa • Sales tax • Value added tax • Goods and services tax • Discount • Simple interest • Compound interest	Subject enrichment activity-3: understanding profit and loss in real-life scenarios Maintain portfolio multiple assessment: Oral/presentation/class test/worksheet/discussion
Oct-nov	35	21	Chapter: Mensuration • Introduction • Types of polygon • Cube • Surface area and volume of cube • Cuboid • Surface area and volume of cuboid • Cylinder • Surface area and volume of cylinder	Subject enrichment activity-4: Making 3d models Maintain portfolio multiple assessment: Oral/presentation/class test/worksheet/discussion
January	16	09	Chapter: Direct and inverse proportions • Introduction • Direct proportion • Formula & application • Indirect proportion • Formula & application	Subject enrichment activity-5: Concept of direct proportion by means of marbles and rubber band Maintain portfolio multiple assessment: Oral/presentation/class test/worksheet/discussion
February	20	12	Chapter: Introduction to graph • Introduction • Line graph • Dependent and independent variable • Applications • Interpretation of graph	Subject enrichment activity-6: Plotting point on a graph Maintain portfolio multiple assessment: Oral/presentation/class test/worksheet/discussion