### QB365-Question Bank Software

### **SYLLABUS 2020 - 2021**

# CLASS - 8

## **SUBJECT: MATHEMATICS**

UNIT		CONTENTS
1. Numbers	1.2	Rational Numbers
	1.2.1	Rational Numbers on a Number Line
4	1.2.2	Decimal Representation of a Rational
		Number
	1.2.3	Positive and Negative Rational Numbers
į.	1.2.4	
	1.2.5	Rational Numbers in Standard Form
	-	Example 1.2
	1.2.6	
		Type 1 : Comparing Two Rational Numbers
		with Opposite Signs
		Type 2 : Comparing Two Rational Numbers
		Represented by Two Fractions with
	21.5	same Denominators
		Type 3 : Comparing Two Rational Numbers
		Represented by Two Fractions with Different
		Denominators
		Type 4 : Comparing Two Rational Numbers
		that are not in Standard Form
Control of the Contro	1.2.7	
		Rational Numbers
		Method of Averages:
		Method of Equivalent Rational Numbers
	1.3	Basic Arithmetic Operations on Rational
		Numbers
	1.3.1	Addition
was a second		Type 1 : Adding numbers that have same
		Denominators
		Type 2 : Adding Numbers that have
, the time for a section		different Denominators
		Additive Inverse
		Subtraction
	1.3.4	Multiplication

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3. Algebia	<ul> <li>3.2 Multiplication of Algebraic Expressions</li> <li>3.2.1 Multiplication of two or more Monomials</li> <li>3.2.2 Multiplication of a Polynomial by a Monomial</li> <li>3.2.3 Multiplication of Two Polynomials</li> <li>3.5 Identities</li> <li>3.6. Cubic Identities</li> <li>3.7 Factorization Type 1-5</li> <li>3.8 Linear Equations in One Variable,3.8.1, 3.8.2,3.8.3,3.8.4 (i)</li> <li>3.8.5 Word problems that involve Linear Equations</li> <li>3.9 Graph</li> <li>3.9.7 To Obtain a Straight Line</li> <li>3.9.8 Line Parallel to Coordinate Axes</li> <li>3.9.9 Scale in a Graph</li> <li>3.10 Linear Graph, 3.10.1 - 3.10.2</li> </ul>
4. Life Mathematics	<ul> <li>4.3 Profit, Loss, Discount, Overhead Expenses and GST</li> <li>4.5 Compound Variation</li> <li>4.6 Time and work</li> </ul>
5. Geometry	<ul> <li>5.2.1 Congruent Triangles</li> <li>5.2.2 Similar Triangles</li> <li>5.3 The Pythagorean Theorem</li> <li>5.4 Converse of Pythagoras Theorem</li> <li>5.5 Point of Concurrency</li> <li>5.6 Medians of a Triangle</li> <li>5.6.1 Centroid of a Triangle</li> <li>5.8.1 Circumcentre</li> <li>5.9.1 In centre</li> <li>5.10 Constructing a Quadrilateral</li> <li>5.10.1 Constructing a Quadrilateral when 4 sides and a Diagonal are given</li> <li>5.10.2 Constructing a Quadrilateral when 3 sides and two diagonal are given</li> <li>5.10.3 Constructing a Quadrilateral when 4 sides and a angles are given</li> </ul>

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	<ul> <li>5.11.2 Constructing a Trapezium when its Three Sides and one angle are Given</li> <li>5.13 Construction of a Parallelogram</li> <li>5.13.1 Constructing a Parallelogram When its two Adjacent Sides and one Angle are Given Adjacent Sides and one Diagonal are Given Adjacent Sides and one Diagonal are Given Adjacent Sides and one Diagonal are Given</li> <li>5.14.1 Construction of a Rhombus when One Side and One Diagonal are Given</li> <li>5.14.3 Construction of a Rhombus when Two Diagonals are Given</li> <li>5.15 Construction of a Rectangle</li> <li>5.15.1 Construction of a Rectangle when its Length and Breadth are Given</li> <li>5.15.2 Construction of a Rectangle when side length and diagonal are given</li> <li>5.16 Construction of a Square</li> <li>5.16.1 Construction of a Square when its Side is Given</li> <li>5.16.2 Construction of a Square when its Diagonal is Given</li> </ul>
6. Statistics	<ul> <li>6.2 Frequency Distribution Table</li> <li>6.2.2 Construction of Frequency Distribution table for Grouped Data</li> <li>6.2.2 (i) Construction of Grouped Frequency Distribution table Continuous Table</li> <li>6.3.2 Method of Constructing a Pie Chart</li> <li>6.4 Graphical Representation of the Frequency Distribution for Grouped Data</li> <li>6.4.1 Histogram</li> <li>6.4.2 Frequency Polygon</li> </ul>
7. Information Processing	<ul><li>7.6 Highest Common Factor</li><li>7.8 Shopping Comparison</li></ul>