

**Academic Planner 2019-20**

**Sub: Mathematics - V**

| <b>Date</b>                               | <b>Topic</b>   | <b>Assignments / Homework</b>  | <b>Activity/Teaching Technique</b>   |
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| <b>April</b><br>1-15th April<br>(11 days) | <b>Unit-1</b><br><b>LARGE NUMBERS</b><br>Introducing 7- and 8-digit numbers<br>Face value and place value<br>Numeration system<br>Numbers in expanded form<br>Predecessor and successor<br>Comparing numbers<br>Forming numbers<br>Rounding off numbers<br>Roman numerals<br>Mental Maths<br>Maths around us   | Ex 1.1 -1.7<br><br><br><br><br><br><br><br><br><br><br>Pg-25<br>Pg- 26   | <i>Lab activity</i> – To understand concept of rounding off to nearest 100..                 |
| 16-30th April<br>(11 days)                | <b>Unit-2</b><br><b>FUNDAMENTAL OPERATIONS</b><br>Addition of 6- and 7-digit numbers<br>Subtraction of 6- and 7-digit numbers<br>Multiplication<br>Multiplication by 10 and their multiples<br>Lattice Multiplication<br>Division<br>Bodmas<br>Problem solving skills<br>Estimating operations on numbers<br>Read and interpret<br>Mental Maths<br>Maths around us | Ex 2.1 -2.8<br><br><br><br><br><br><br><br><br><br><br>Pg- 48<br>Pg- 49  | <i>Lab activity</i> – To explore multiplication using Russian Peasant multiplication method. |
| <b>May</b><br>1-15th May<br>(11 days)     | <b>Unit- 3</b><br><b>FACTORS AND MULTIPLES</b><br>Factors<br>Even and odd number<br>Test of divisibility<br>Prime and composite numbers<br>Highest common factor (HCF)<br>Multiples<br>Lowest common multiple (LCM)<br>Application of HCF and LCM<br>Mental Maths<br>Maths around us   | Ex 3.1 – 3.7<br><br><br><br><br><br><br><br><br><br><br>Pg- 69<br>Pg- 70 |  |

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| <p><b>July</b><br/>1-15th July<br/>(12 days)</p>     | <p><b>Unit- 4</b><br/><b>FRACTIONS</b><br/>Equivalent fractions<br/>Mixed fractions<br/>Comparing and ordering fractions<br/>Reducing fractions to the lowest terms<br/>Addition and subtraction of unlike fractions<br/>Addition and subtraction of mixed fractions</p>   | <p>Ex 4.1 – 4.4</p>                                    | <p><i>Lab activity</i> – To find the LCM of 2 numbers using a 10 by 10 number grid.</p>  |
| <p>16-31st July<br/>(14 days)</p>                    | <p><b>FRACTIONS</b><br/>Multiplication of fractions<br/>Division of fractions<br/>Word problems<br/>Maths around us</p> <p><b>Revision of UT 1</b></p>   | <p>Ex 4.5- 4.7<br/>Pg - 91</p>                         | <p><i>Lab activity</i> – To work practically with multiplication of fractions.</p> <p><b>UT 1 ACTIVITY :</b><br/> <b>1. Concept ( U 1,2 )</b><br/> <b>2. Mathematical Interpretation (U 1,2)</b><br/> <b>3. Mental Maths ( U 1,2)</b><br/> <b>4. Problem Solving and Procedural Skill ( U 1,2)</b></p> |
| <p><b>August</b><br/>1-15th August<br/>(10 days)</p> | <p><b>UNIT 6</b><br/><b>GEOMETRY</b><br/>Recalling basic geometrical concepts<br/>Plane<br/>Relationship between points and lines<br/>Angle<br/>Measuring angle<br/>Constructing angles<br/>Types of lines<br/>Polygons<br/>Circles<br/>Maths around us</p> <p><b>Unit- 8</b><br/><b>MONEY</b><br/>The unitary method<br/>Profit and loss<br/>Finding the cost price and selling price</p> | <p>Ex 6.1 – 6.7</p> <p>Pg - 138</p> <p>Ex 8.1 -8.2</p> | <p><i>Lab activity</i> – To understand types of angles using ice-cream sticks.</p>   |

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| 16-31st August<br>(13 days)                          | <b>Unit – 5</b><br><b>DECIMALS</b><br>Decimals<br>Converting fractions into decimals<br>Place value and decimal<br>Converting decimals into fractions<br>Expanded form of decimals<br>Like and unlike decimals<br>Comparing and ordering of decimals  | Ex 5.1 – 5.4   |   |
| <b>September</b><br>1-15th<br>September<br>(10 days) | <b>Revision of Half Yearly Exams</b>  |  | <b>Assessment</b><br><b>1. Concept ( U 3,4,6 and 8 )</b><br><b>2. Mathematical Interpretation ( U 3,4,6 and 8 )</b><br><b>3. Mental Maths ( U 3,4,6 and 8 )</b><br><b>4. Problem Solving and Procedural Skill ( U 3,4,6 and 8 )</b> |
| 16-30th<br>September<br>(13 days)                    | <b>Half Yearly Exams</b>  |  |   |
| <b>October</b><br>1-15th October<br>(6 days)         | Addition and subtraction of decimals<br>Multiplication of decimals<br>Division of decimals  | Ex 5.5 – 5.8   | <i>Lab activity</i> – To understand fractions and percentages through decimals.   |
| 16-31 <sup>st</sup><br>October<br>(11 days)          | Percentage- an introduction<br>Finding the percentage of a whole<br>Using percentage<br>To do<br>Maths around us<br><br><b>Unit 7</b><br><b>MEASUREMENT</b><br>The metric measures<br>Conversion of lower units to higher units<br>Conversion of higher units to lower units<br>Expressing metric units in decimal form | Ex 5.9 – 5.10<br><br>Pg- 113<br>Pg - 115<br><br>Ex 7.1 – 7.3 | <i>Lab activity</i> -To reinforce the concept of measurement of different objects.  |
| <b>November</b><br>1-15th<br>November<br>(11 days)   | Fundamental operations on metric measures<br><br><b>Revision of UT 2</b>  | Ex 7.4   | <b>UT 2 ACTIVITIES :</b><br><b>1. Concept ( U 5,7)</b><br><b>2. Mathematical Interpretation ( U 5,7)</b><br><b>3. Mental Maths ( U 5,7)</b><br><b>4. Problem Solving and Procedural Skill ( U 5,7)</b>                              |

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| 16-30th<br>November<br>(13 days)                   | <b>Unit – 9</b><br><b>TIME</b><br>Converting bigger units of time into smaller units<br>Converting smaller units of time into bigger units   | Ex 9.1 – 9.2  |  |
| <b>December</b><br>1-15th<br>December<br>(11 days) | The 24- hour clock<br>Addition and subtraction of time<br>Remembering days<br>Using a calendar   | Ex 9.3 – 9.4  | <i>Lab activity</i> – Tambola game for conversion of 12-hr format to 24-hr format and vice versa.  |
| 16-31st<br>December<br>(13days)                    | Calculating days<br>Mental Maths<br>Maths around us<br><br><b>Unit - 10</b><br><b>SYMMETRY</b><br>Symmetry<br>Symmetry in plane shapes<br>Reflection and symmetry<br>Tessellation<br>Slides, Flips and turns<br>Patterns in numbers<br>Patterns in sequence of numbers<br>Patterns in multiplication tables<br>To do | Ex- 9.5<br>Pg- 174<br>Pg - 176<br><br><br><br>Ex 10.1– 10.5<br><br><br>Pg – 192 | <i>Lab activity</i> – Discovering symmetry in decorative objects.  |
| <b>January</b><br>1-15th<br>January                | <b>Winter Vacations</b>  |   |  |
| 16-31st<br>January<br>(14 days)                    | <b>Unit – 11</b><br><b>PERIMETER, AREA AND VOLUME</b><br>Rectilinear figure<br>Area<br>Area of figures when whole squares are not covered<br>Volume<br><b>Unit 12</b><br><b>DATA HANDLING</b><br>Data collection<br>Bar graph  | Ex 11.1-11.4<br><br><br><br><br><br><br><br>Ex 12.1- 12.2                       | <i>Lab activity</i> – To measure and compare the circumference of coins of different denominations.<br><br><br><i>Lab activity</i> – Newspaper activity on Bar Graph |

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| <b>February</b><br>1-15th<br>February<br>(12 days) | <b>Revision of Final Exams</b> |  | <b>Assessment</b><br><b>1. Concept ( U 9- 12 )</b><br><b>2. Mathematical Interpretation ( U 9- 12 )</b><br><b>3. Mental Maths (U 9- 12)</b><br><b>4. Problem Solving and Procedural Skill ( U 9-12 )</b> |
| 16-28th<br>February<br>(11 days)                   | <b>Final Exams</b>             |  |  |

### Maths Syllabus of Examination ( 2019-2020 )

| <b>UT 1</b>                          | <b>Half Yearly Exams</b>            | <b>UT 2</b>               | <b>Final Exams</b>                        |
|--------------------------------------|-------------------------------------|---------------------------|---|
| <b>Unit 1 Large numbers</b>          | <b>Unit 3 Factors and Multiples</b> | <b>Unit 5 Decimals</b>    | <b>Unit 9 Time</b>                        |
| <b>Unit 2 Fundamental operations</b> | <b>Unit 4 Fractions</b>             | <b>Unit 7 Measurement</b> | <b>Unit 10 Symmetry</b>                   |
|                                      | <b>Unit 6 Geometry</b>              |                           | <b>Unit 11 Perimeter, Area and Volume</b> |
|                                      | <b>Unit 8 Money</b>                 |                           | <b>Unit 12 Data handling</b>              |