**Course Division 2082**

Subject: Mathematics

Class: 5

**First Term Exam**

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| **Subject Matter** | | |
| **Units** | **Topics** | **Sub-Topics** |
| Arithmetic | Number System  Fundamental operation (I) | - Hindu Arabic number System  - Place, place value and face value  - Eight-digit, Nine-digit, Ten- digit  numerals  - Nepali and International place name  System  - Devanagari numbers  - Expanded form  - greatest and least numbers  -Natural and Whole numbers  - Odd and even numbers  -Prime and composite numbers  - Addition and Subtraction |
| Mensuration | Perimeter, area and Volume | - perimeter of plane shapes  - perimeter of triangle and quadrilateral  - perimeter of square and rectangle  -Area of plane shapes  - Area of square and rectangle |
| Algebra | Algebra Expressions | -Constant and variable  - Operation on constant and variable  - Algebraic term and expressions and its types  - Evaluation of algebraic expressions  - Coefficient and base of algebraic term  - Like and unlike terms  -Addition and subtraction of monomial expression |
| Geometry | Line and angle | - Point, Line and line segment  - Perpendicular line segment  - Parallel line segment  - Intersecting line segment  - Measurement of angles  - Construction of angle |

**Half Yearly Exam**

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| **Subject Matter** | | |
| **Units** | **Topics** | **Sub-Topics** |
| Arithmetic | Fundamental operation (II)  Order of operations  Fraction | - Basic concept  - Division facts  - Multiplication and division of bigger numbers.  - Multiplication and division of 10, 100, 200, 300……  - Quantity and cost  - Rate of cost  - Test of divisibility  - Factors and multiples  - Prime factors and process of finding prime factors  - Process of finding multiples  - Simplifications  - Use of brackets in Simplification  - Basic concept  - Conversation of unlike fraction into like fraction  - Reducing fraction on their lowest term  - Proper, improper and mixed numbers  - Conversion of improper to mixed number.  - Conversion of mixed to improper fraction  - Addition Subtraction of like and unlike fraction  - How many halves, thirds etc. in a whole?  - Finding the value of fraction of number in a collection. |
| Measurement | Length, Weight and Capacity | - Measurement of length and distance  - Conversion of units of length  - Addition and Subtraction of length  - Multiplication and division of length  - Measurement of weight  - Multiplication and division of weight |
| Algebra | Algebraic Expressions | - Addition and Subtraction of polynomial expressions |
| Geometry | Line and angle | - Types of angle by their sides  - Types of pair of angles by their structure and properties. |

**Second Term Exam**

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| **Subject Matter** | | |
| **Units** | **Topics** | **Sub-Topics** |
| Arithmetic | Decimal  Percent | - Basic Concept  - Comparison of decimal numbers  - Conversion of fraction into decimal and decimal into fraction  - Addition and Subtraction of decimal numbers.  - Multiplication of decimal numbers by 10, 100 and 1000  - Sharing of whole numbers into decimals  - Sharing of whole numbers into 10, 100 and 1000.  - Basic Concept  - Conversion of fraction into decimal and decimal into fraction  - Conversion of percent into decimal and decimal into fraction  - Finding value of the given percent of a quantity |
| Measurement | Time | * Basic concept * Conversion of units of time * Addition and subtraction of time * Multiplication and division of time |
| Capacity | * Measurement of capacity * Multiplication and division of capacity |
| Mensuration | Perimeter, Area and Volume | * Space occupied by solid * Volume of cube and cuboid |
| Algebra | Equation | * Basic concept * Mathematical sentence on addition and substation * Mathematical sentence on multiplication and division * Using letters * Open mathematical sentences * Equations * finding the values of variables in equations * Solving equations |

**Final Exam**

**Subject matters**

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| **Units** | **Topics** | **Sub-topics** |
| Algebra | Equation | * Use of equations |
| Geometry | Plane Shapes and Solid Objects | * Plane shapes * Triangles and its types by sides and by angles * Sum of angle of a triangle * Quadrilaterals * Sum of angle of a quadrilateral * Circle and solid objects * Models of cube and cuboid * parts of solid objects |
| Bill and Budget |  | * Basic concept of bill and budget |
| Statistics |  | * Presentation of data * Bar graph |