**Course Division 2082**

Subject: Mathematics

Class: 5

**First Term Exam**

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| **Subject Matter** |
| **Units** | **Topics** | **Sub-Topics** |
| Arithmetic | Number SystemFundamental 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 operationsFraction | - 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 | DecimalPercent | - 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
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| Capacity  | * Measurement of capacity
* Multiplication and division of capacity
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| Mensuration  | Perimeter, Area and Volume  | * Space occupied by solid
* Volume of cube and cuboid
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| 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
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**Final Exam**

**Subject matters**

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| **Units**  | **Topics**  | **Sub-topics**  |
| Algebra  | Equation  | * Use of equations
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| 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
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| Bill and Budget  |  | * Basic concept of bill and budget
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| Statistics  |  | * Presentation of data
* Bar graph
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