Class 5:-

Statement of Minimum Levels of Learning in Mathematics

Understanding whole Numbers and Numeral

- Recognizes and write numerals from 10000-10000000 (one crore)
- Write number names up to 10000000 (one crore)
- ❖ Demonstrates understanding of place value of 5 and 6-digit numbers by expanding numbers between 10000-999999 into 100000's, 10000's, 1000's, 100's, 10's and ones, and by expressing the expanded form as a 5 or 6-digit number
- ❖ Arrange numbers from 10000-100000 in ascending and descending order
- ❖ Identifies the numeral/numerals before, after or between any numeral/numerals between 10000-100000
- ❖ Compares numbers from 10000-9,99,999 using the signs >, <, =
- Calculates Lower Common Multiple (LCM) of 2 or 3 numbers each of which do not exceed 10

Ability to Add, Subtract, Multiply and Divide whole Numbers

- a) Adds two to four 5 and 6-digit numbers with sum not exceeding 9,99,999
- b) Subtract 5 and 6-digit numbers
- c) Multiplies a number by a number up to 3 digit with product not exceeding 9,99,999
- d) Divides a 4-digit number by a 2-digit number without and with reminder
- Solves 1-2 steps of daily life problems involving any 2 of the 4 basic operations of addition, subtraction, multiplication and division using not more than 6-digit not numbers at any stage in the operations and using one or more of skills of above numbers a) to Numbers d)

- Solves 1-2 steps or daily life problems mentally involving any 2 of the 4 basic operations of addition, subtraction, multiplication and division with sum, product and dividend not 100 and factors not exceeding 10 where no carrying, borrowing or remainder is involved
- Uses unitary method to solve simple daily life problems
- Demonstrates understanding of the meaning of average and is able to compute it
- ❖ Finds the average height/score/ rainfall/ attendance, etc. from the given data

Ability to use and solve simple problems of Daily Life Relating to units of Money Length, Mass (Weight) Capacity, Area, Time and Money

- Solves simple money problems including profit and loss,
- ❖ Interprets and prepares simple bills begin the rates and quantity up to 5 items
- Solves simple problems involving simple interest
- ❖ Solves mentally 1-step daily life money problems involving rupees and paisa where the sum does not exceed Rs100, using any of the 4 operations without conversion, carting, borrowing or remainder and multiplication and division by single digit only

Length

- Solve simple daily life problems relating to standard using of length involving up to 2 of the 4 operations, with conversion
- Measures straight lines or curves in objects or short distance in the immediate environment in meters and centimeters
- Estimates and compares lengths of familiar objects and short distances not exceeding 5 meters in non-standard units
- Solves simple 1-step daily life problems mentally involving Kilometers and meters or meter and centimeters with no number exceeding 100 and no conversion carrying or borrowing or reminder, Multiplication and division by single digit only
- Solves simple daily life problems involving up to 2 of the 4 operations relating to standard units of weight, with conversion
- Solves simple 1-step daily life problems mentally involving liters and militaries with no number exceeding 100 and no conversion carrying and borrowing or remainder. Multiplication and division by single digit only.

Mass (weight)

- Solves simple daily life problems involving up to 2 of the 4 operations relating to standard units of weight, with conversion
- Solves simple 1-step daily life problems mentally involving litres and milliliters with no number exceeding 100 and no conversion, carrying or borrowing or reminder. Multiplication and division by single digit only
- Solves simple daily life problems involving up to 2 of the 4 operations relating to standard units of capacity with conversion
- Estimates and compares small units of capacity in terms of non-standard measures such as cups, match-boxes, small bottles, etc.

Capacity

- Solves simple 1-step daily life problems mentally involving litres and milliliters with no number exceeding 100 and no conversion, carrying or borrowing or remainder. Multiplication and division by single digit only
- Solves simple daily life problems relating to area and perimeter of a rectangle using the respective formula
- Estimates and compares in non-standard and standard units small units of areas in the immediate environment such as match-boxes, bricks, slates, notebooks, Classrooms, playgrounds
- Calculates the duration of an activity/ event across a.m. and p.m.

Area

Solves simple daily life problems relating to time, involving weeks, days and hours- minutes

Ability to use fractions, decimals and percentage 'Fraction'

- ❖ Arranges simple proper fraction in ascending or descending sequence with denominators not exceeding 10
- Reduces simple fractions to lowest terms
- Adds and subtracts fractions and mixed numbers with denominator not exceeding 10
- Solves daily life problems involving comparing, addition and subtraction of fraction and mixed numbers with denominator not exceeding 10
- Adds and subtracts mentally in daily life problems some combinations of fractions which occur frequently [e.g., $\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$]

- Multiplies and divides 2 fractions with denominators up to 10 and expresses the answer in its lowest terms
- Adds and subtracts decimal up to 3 decimal places
- Expresses units of length, weight and capacity in decimals up to 3 decimal places
- Multiplies and divides a decimal number up to 3 decimal places by a single digit number, product and dividend not exceeding 3 decimal places.
- Solves daily life problems involving length, weight, capacity etc. involving comparing, addition, subtraction, multiplication and division of decimals up to 3 places
- Converts fraction and decimals into percentage and percentage into fraction in lowest terms and decimal

Percentage

- Finds required percentage of a given number or measure
- Solves simple daily life problems involving application of percentage
- **Converts** mentally frequently used percentage into fractions and vice-versa (e.g., $50\% = \frac{1}{2}$, $25\% = \frac{1}{4}$ etc)

Understanding of geometrical shapes and spatial relationship

- ❖ Draws triangle, rectangle, square with the help of ruler etc
- Draws a circle of a given radius with the use of compass and ruler
- Knows various terms related to a circle, and their relationship
- Identifies whether a pair of simple figures are reflections of each other or not, and can draw the line of reflection if it exists
- Identifies in two simple figures whether one can be rotated or turned to look like the other

