GTSE SYLLABUS

The question will be based on the concept of the following syllabus

CLASS IV

Geometry

Shapes and Spatial Understanding

- Draws a circle free hand and with compass.
- Identifies centre, radius and diameter of a circle.
- Uses Tangrams to create different shapes.
- Tiles geometrical shapes using one or two shapes.
- Chooses a tile among a given number of tiles that can tile a given region both intuitively and experimentally.
- Explores intuitively the area and perimeter of simple shapes.
- Makes 4-faced, 5-faced and 6-faced cubes from given nets especially designed for the same.
- Explores intuitively the reflections through inkblots, paper cutting and paper folding.
- Reads and draws 3-d objects, making use of the familiarity with the conventions used in this.
- Draws intuitively the plan, elevation and side view of simple objects.

Numbers

Numbers and Operations

- Writes multiplication facts.
- Writes tables upto 10 × 10
- Multiplies two and three digit numbers using lattice algorithm and the standard (column) algorithm.
- Divides a given number by another number in various ways such as
  - by drawing dots.
  - by grouping
  - by using multiplication facts
  - by repeated subtraction
- Applies the four operations to life situations.
- Frames word problems.
- Estimates sums, differences and products of given number.

Mental Arithmetic

- Adds and subtracts multiples of 10 and 100, mentally.
- Completes multiplication facts by adding partial products, mentally (e.g. 7 × 6 = 5 × 6 + 2 × 6).

Fractional Numbers

- Identifies half, one fourth and three-fourths of a whole.
- Identifies the symbols, \( \frac{1}{2}, \frac{1}{4}, \frac{3}{4} \).
- Explains the meaning of \( \frac{1}{2}, \frac{1}{4} \) and \( \frac{3}{4} \).
- Appreciates equivalence of \( \frac{2}{4} \) and \( \frac{1}{2} \) and of \( \frac{2}{3}, \frac{3}{4} \) and 1.

Money

- Converts Rupees to Paise.
- Adds and subtracts amounts using column addition and subtraction with regrouping.
- Uses operations to find totals, change, multiple costs and unit cost.
- Estimates roughly the totals and total cost.

Measurement

Length

- Relates metre with centimeter.
- Converts metre into centimetres and vice versa.
- Solves problems involving length and distances.
- Estimates length of an object and distance between two given locations.
Weight
- Weighs object using a balance and standard units.
- Determines sums and differences of weights.
- Estimates the weight of an object and verifies using a balance.

Volume
- Measures volumes of given liquid using containers marked with standard units.
- Determines sums and differences of volumes.
- Estimates the volume of a liquid contained in a vessel and verifies by measuring.

Time
- Computes the number of weeks in a year.
- Correlates the number of days in a year with the number of days in each month.
- Justifies the reason for the need of a leap year.
- Reads clock time to the nearest hours and minutes.
- Expresses time, using the terms, ‘a.m.’ and ‘p.m.’
- Estimates the duration of familiar events.
- Finds approximate time elapsed by (to the nearest hour) forward counting.
- Computers the number of days between two dates.

Data Handling
- Collects data and represents in the form of bar graphs.
- Draws Inferences by discussing with the teacher.

Patterns
- Identifies patterns in multiplication and division multiplies of 9.
- Casts out nines from a given number to check if it is a multiple of nine.
- Multiplies and divides by 10s, 100s.
- Identifies geometrical patterns based on symmetry.