THE LAWRENCE SCHOOL SANAWAR

Syllabus for Class V Entrance Examination: MATHEMATICS

1. GEOMETRY

Shapes & Spatial Understanding

Draw a circle free hand and with compass, Identifies centre, radius and diameter of a circle, Tiles geometrical shapes: using one or two shapes, The area and perimeter of simple shapes, 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.

2. NUMBERS

Numbers and Operations

Writes multiplication facts, Writes tables up to 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, Applies the four operations to life situations. Frames word problems, Estimates sums, differences and products of given numbers. Adds and subtracts multiples of 10 and 100, mentally, Completes multiplication facts by adding partial products, mentally.

3. FRACTIONAL NUMBERS

Identifies half, one fourth and three- fourths of a whole.

5. 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.

6. MEASUREMENT

Length

Relates metre with centimeter, Converts metre into centimeters and vice versa, Solves problems involving length and distances, Estimates length of an object and distance between two given locations.

Weight

Weighs objects 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, Computes the number of days between two dates.

10. DATA HANDLING

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

11. PATTERNS

Identifies patterns in multiplication and division: multiples 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.

Time: 01 Hour   **Max Marks: 100**

General Instructions:

- ✓ Answer all the questions on this sheet only.
- ✓ No separate sheet will be provided for rough work.
- ✓ Write neatly and briefly.
- ✓ Question 1 for 10 marks.
- ✓ Question 2 to 15 carries 5 marks each.
- ✓ Question 16 to 17 carries 10 marks each.

Q. 1. Fill in the blanks: -

i. A brick has _____ faces.

ii. 1 liter is _____ ml.

iii. 1 hour is _____ minutes.

iv. Three Quarters means _____.

v. Diameter of a circle = 2 x (_____ of the circle).

vi. Half of a Kg means _____g.

vii. 5:30 pm in 24 hours' clock means _____ hours.

viii. 20 x 7 = _____.

ix. 54 -:- 1 = _____.

x. The face of a clock has _____ divisions.

Q. 2. Write the numbers between 25 & 50 which are :

i. divisible by 3:

ii. divisible by 5:

Q. 3.   Draw the face of a clock to show the time "half past seven".

Q. 4.   The cost of 1000 bricks is Rs. 1800. Calculate the cost of 3000 such bricks.

Q. 5.   Compute the following: -

   i.   485 x 25

   ii.   308 x 15

Q. 6. **Divide the following: -**

   i.   108 by 9 :

   ii.   308 by 14 :

Q. 7. **Draw a diagram and shade it to show the following fractions: -**

   i.   ¼: -

   ii.   ¾: -

Q. 8. Draw a circle of radius 5 cm. Also, mark its centre, radius and diameter.

Q. 9. Mona and Raman weigh as 36 kg & 43 kg respectively. If the total weight of Mona, Raman and Rahul is 100 kg then find Rahul's weight.

Q. 10. A track in a stadium is 400 m long. If a runner takes 10 rounds of the rack, then find the distance (in km) covered by the runner.

Q. 11. An ant climbs a distance of 3 cm in one minute but slips down by 2cm. find how much time it is going to take to climb 5 cm.

Q. 12. Rocky gave 4 toffees each to 4 of his friends and 3 toffees are left with him. Find the number of toffees Rocky had.

Q. 13. The amount of water used daily by a family is 30 liters for cooking and drinking, 40 liters for washing clothes, 75 liters for bathing and other miscellaneous activities. Find the total amount of water consumed daily by the family.

Q. 14. **Draw a Pie or Chapati chart to show the number of children liking various types of drinks, if 50 children like Milk, 25 like coffee and 25 like tea.**

Q. 15. **Suman watches T. V. from 2:30 pm to 4:30 pm every day. Calculate the amount of time she spends in front of her T. V. in a week.**

Q. 16. **Draw a Pictograph or chart to show the number of students in different classes of a school if "●" represents 5 students and the strength of classes is as below: -**

Class-I – 30; Class-II – 35; Class-III – 40; Class-IV – 45; Class-V – 25.

Q. 17. **Calculate the length of the boundary of the fields shown below: -**

a)

b)

(Some rectilinear shape which is combination of different rectangles)