
MATHEMATICS MOCK TEST

Class: VI | Set: 19

Time: 2 Hours | Written Marks: 35 | Viva: 5 | Total: 40 Marks

NAME: _____

ROLL NO: _____

SECTION A

(1 Mark Each)

1. Write the decimal "41.643" in words.
2. Write the palindromic date that occurred in the year 2021.
3. Evaluate: $(0.7)^2$.
4. What is the measure of each interior angle of a square?
5. If a symbol represents 5 students, how many symbols are needed to represent 30 students?

SECTION B

(2 Marks Each)

6. Write the place value of each digit in the decimal 26.43.
7. Write any three numbers whose digit sum is 12.
8. Draw an angle of 60° using a pair of compasses and bisect it to make an angle of 30° .
9. Find the product: 0.854×12 .
10. Prepare a frequency table using tally marks for the following scores of a student: 7, 8, 7, 9, 6, 7, 8, 7, 9,

SECTION C

(3 Marks Each)

11. What is the sum of the smallest and the greatest numbers formed by the digits 7, 2, 0, and 5?
12. A bag contains 45 kg 80 g of sugar and the mass of the empty bag is 950 g. What is the total mass of the bag containing this much sugar? (Express in kg using decimals).
13. Using a pair of compasses, construct an angle of 75° . (Hint: Construct 90° and 60° , then bisect the part between them).
14. The following data represents the favorite subject of 30 students. Represent this using a Bar Graph.

Subject	English	Maths	Science	Hindi
No. of Students	6	12	8	4

SECTION D

(4 Marks Each - Case Study)

Case Study 1: The Supercell Grid Search

In a "Number Game" workshop, students are analyzing a grid of distinct numbers. A "supercell" is a cell whose value is strictly greater than all its adjacent cells.

4491	6443	1930	3024
5875	5037	5113	8054
7089	4219	6031	2368

- (i) From the grid above, identify any two supercells. (2 Marks)
- (ii) Is it possible to fill a 3×3 grid with distinct numbers such that there are no supercells at all? Justify. (2 Marks)

Case Study 2: Rickshaw Earnings and Spending

A rickshaw puller tracks his daily income and expenses. During three days, he earns ₹462.50, ₹385.80, and ₹507.70.

- (i) Find his total earning during these three days. (2 Marks)
- (ii) If he spends ₹248.63 on repairs at the end of the week, how much from his 3-day earnings is left? (2 Marks)

VIVA VOCE

(5 Marks)

- **Numbers:** How many iterations does it take to reach Kaprekar's constant starting from 3814?
- **Decimals:** How do you write $2113/1000$ as a decimal?
- **Constructions:** Can we construct a $22\frac{1}{2}^\circ$ angle using compasses? How?
- **Data Handling:** What is the difference between a Pictograph and a Bar Graph?
- **Estimation:** If there are 55 seeds in 8 fruits, estimate the number of seeds in each fruit.