



G.S. PUBLIC SCHOOL

MATHEMATICS MODEL PAPER

Subject: Mathematics

Class: VI

Time Allowed: 2.5 Hours

Maximum Marks: 80

Session: 2026-27

No. of Printed Pages: 2

Student Name: _____ Roll No.: _____

General Instructions: 1. All questions are compulsory. Reading time of 15 minutes is allotted. 2. The question paper consists of 40 questions divided into five sections (A, B, C, D, and E). 3. Use of calculators is strictly prohibited. Rough work should be shown clearly in the margins.

SECTION A (MULTIPLE CHOICE QUESTIONS - $20 \times 1 = 20$ MARKS)

- Q1.** What are the common factors of 20 and 28?
(A) 1, 2, 5 (B) 1, 2, 4 (C) 1, 4, 8 (D) 1, 2, 4, 7
- Q2.** Guna checked the divisibility of 14560 by only two numbers and declared that it was divisible by 2, 4, 5, 8, and 10. Which two numbers did he check?
(A) 2 and 4 (B) 4 and 10 (C) 5 and 8 (D) 2 and 5
- Q3.** Which of the following numbers is the product of exactly three distinct prime numbers?
(A) 45 (B) 60 (C) 105 (D) 330
- Q4.** If a piece of string of length 36 cm is used to form a regular hexagon, what will be the length of each side?
(A) 9 cm (B) 12 cm (C) 6 cm (D) 4 cm
- Q5.** Which of the following comparisons between fractional units is correct?
(A) $\frac{1}{9} > \frac{1}{5}$ (B) $\frac{1}{100} < \frac{1}{200}$ (C) $\frac{1}{5} > \frac{1}{9}$ (D) $\frac{1}{5} = \frac{1}{9}$

SECTION B (VERY SHORT ANSWER QUESTIONS - $6 \times 2 = 12$ MARKS)

- Q21.** A rectangle having side lengths 5 cm and 3 cm is made using a piece of wire. If the wire is straightened and then bent to form a square, what will be the length of a side of the square?
- Q22.** Find the length of the third side of a triangle having a perimeter of 55 cm and having two sides of length 20 cm and 14 cm, respectively.
- Q23.** Find the sum of $\frac{2}{3}$ and $\frac{2}{7}$ using Brahmagupta's method (converting to equivalent fractions with a common denominator).

SECTION C (SHORT ANSWER QUESTIONS - $6 \times 3 = 18$ MARKS)

- Q27.** Identify the mystery numbers based on the following clues:
a. I am a number less than 40. One of my factors is 7. The sum of my digits is 8.
b. I am a number less than 100. Two of my factors are 3 and 5. One of my digits is 1 more than the other.
- Q28.** What would be the cost of fencing a rectangular park whose length is 150 m and breadth is 120 m, if the fence costs Rs. 40 per metre?

- Q29.** Jaya's school is $\frac{7}{10}$ km from her home. She takes an auto for $\frac{1}{2}$ km from her home daily, and then walks the remaining distance to reach her school. How much does she walk daily?

SECTION D (LONG ANSWER QUESTIONS - $4 \times 5 = 20$ MARKS)

- Q33.** A farmer has a rectangular field having length 230 m and breadth 160 m. He wants to fence it with 3 rounds of rope.
- Calculate the perimeter of the field using the rectangle formula.
 - What is the total length of rope needed for 3 rounds?
- Q34.** Explain why Shabnam and Mukta argue that comparing fractions requires equivalent fractional units (same denominators). Show step-by-step how to find equivalent fractions for $\frac{3}{4}$ and $\frac{7}{10}$ to determine which fraction is greater.

SECTION E (CASE STUDY BASED QUESTIONS - $4 \times 3 = 12$ MARKS)

Q37. CASE STUDY 1: Circular Games & Multiples

In a circular classroom game, children play 'Idli-Vada' with numbers from 1 to 90. They say 'idli' for multiples of 3, 'vada' for multiples of 5, and 'idli-vada' for common multiples.

- How many times would the children say 'idli' (including the times they say 'idli-vada')?
- How many times would they say 'vada' (including the times they say 'idli-vada')?
- What is the first number at which 'idli-vada' is said?

Q38. CASE STUDY 2: Horticultural Planning & Layouts

Four rectangular flower beds, each having sides of length 2 m and width 1 m, are dug at the four corners of a rectangular school garden that is 15 m long and 12 m wide.

- Find the area of the entire school garden before digging.
- Find the total area occupied by all four corner flower beds.
- What is the remaining area available for laying down a grass lawn?

***** END OF MODEL PAPER *****