
MATHEMATICS MOCK TEST

Class: VI | Set: 06

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

NAME: _____

ROLL NO: _____

SECTION A

(1 Mark Each)

1. Using the divisibility rule, check if 2, 97, 144 is divisible by 6.
2. Write "2 tenths and 5 hundredths" as a decimal.
3. What is the relationship between the radius and diameter of a circle?
4. If a symbol \square represents 4 students in a pictograph, how many students are represented by $\square\square\square$?
5. Which number is neither prime nor composite?

SECTION B

(2 Marks Each)

6. Is it possible to fill a grid with all distinct numbers such that there are no supercells? Justify your answer.
7. Arrange the following decimals in descending order: 2.7, 2.07, 2.77, 0.27.
8. Draw a line segment $AB = 5.6$ cm and construct its perpendicular bisector using a ruler and compasses.
9. A die was thrown 20 times and the following scores were recorded:
1, 3, 2, 5, 1, 4, 6, 2, 5, 2, 2, 2, 4, 1, 2, 3, 2, 2, 3, 2.
Organize this data in a table using tally marks.
10. Subtract: $18.5 - 6.79$.

SECTION C

(3 Marks Each)

11. There were 219 stickers in Jatin's collection. Raman gave him his album containing 237 stickers. Estimate how many stickers Jatin has now (round off to the nearest hundred).
12. Nasreen bought 3 m 20 cm cloth for her shirt and 2 m 5 cm cloth for her trousers. Find the total length of cloth bought by her in metres using decimals.
13. Draw a line l and a point X on it. Through X , draw a line segment \overline{XY} perpendicular to l using a ruler and compasses.

14. The following table shows the number of cars produced by a factory in 5 years:

Year	2018	2019	2020	2021	2022
No. of Cars	600	800	700	900	500

Taking a scale of 1 unit length = 100 cars, draw a bar graph to represent this data.

SECTION D

(4 Marks Each - Case Study)

Case Study 1: Sanjay's Sunflower Garden

Sanjay loves gardening and has many sunflowers in his garden. He is using his math skills to estimate the features of his plants.

- (i) Sanjay counted the petals of a sunflower and found them to be 79. Estimate the total number of petals in 122 such sunflowers. (2 Marks)
- (ii) If there are 55 seeds in 8 fruits of a plant, estimate the number of seeds in each fruit. (2 Marks)

Case Study 2: Metric Conversion Challenge

A student is asked to convert various measurements into decimals for a science project.

- (i) Express 5 paise and 75 paise as rupees using decimals. (2 Marks)
- (ii) Express 2 mm as centimetres and 2 g as kilograms using decimals. (2 Marks)

VIVA VOCE

(5 Marks)

- **Logic:** After how many years does the calendar repeat itself?
- **Decimals:** How do you write $\frac{7}{1000}$ as a decimal?
- **Construction:** How many perpendicular bisectors can a single line segment have?
- **Data Handling:** What is a Pictograph?
- **Multiples:** Write the first three multiples of 15.