

St. Thomas' School, Sunari, Agra

Sample Maths paper (2024-2025)

Class: VI

Subject: Mathematics

M. Time: 2 h. 30 min.

MM: 80

Name: _____

Roll no.: _____ General Instructions:

- i. All questions are compulsory from Section A, Section B, Section C, and Section D.
- ii. Solve each question with proper steps.
- iii. Show calculations related to each question in rough work.
- iv. Omission of essential working will result in loss of marks.

Section A

(10 marks)

Q1. Choose the correct answers from the given options. (Do not copy the question, write the correct answers only.)

[10 × 1 = 10]

I. The ratio of 25 to 50 is:

- a) 1:2
- b) 2:1
- c) 1:3
- d) 5:2

II. If a car travels 120 km in 2 hours, what is its speed?

- a) 60 km/h
- b) 120 km/h
- c) 240 km/h
- d) 30 km/h

III. A quadrilateral has how many sides?

a) 2

b) 3

c) 4

d) 5

IV. Which of the following is a three-dimensional shape?

a) Square

b) Rectangle

c) Circle

d) Cube

V. If a train covers 150 km in 3 hours, how much distance will it cover in 5 hours at the same speed?

a) 200 km

b) 250 km

c) 300 km

d) 350 km

VI. The number of diagonals in a pentagon is:

a) 2

b) 5

c) 7

d) 10

VII. The sum of all angles in a quadrilateral is:

a) 180°

b) 360°

c) 540°

d) 720°

VIII. If a triangle has angles measuring 60° , 60° , and 60° , it is:

a) Isosceles

b) Equilateral

c) Scalene

d) Right-angled

IX. A circle with a radius of 7 cm has a diameter of:

a) 7 cm

b) 14 cm

c) 21 cm

d) 28 cm

X. The value of x in the equation $2x + 3 = 11$ is:

a) 2

b) 3

c) 4

d) 5

Section B

(20 marks)

Q2. Find the ratio of 45 to 180.

[2]

Q3. Convert 1200 metres into kilometres.

[2]

Q4. If the cost of 7 notebooks is £35, what is the cost of 1 notebook?

[2]

Q5. Find the perimeter of a rectangle with length 12 cm and breadth 8 cm.

[2]

Q6. A car travels 240 km in 4 hours. What is the speed of the car?

[2]

Q7. Simplify: $3(x + 5) = 24$.

[2]

Q8. Find the area of a square with a side of 5 cm.

[2]

Q9. A box contains 3 red balls, 5 blue balls, and 7 green balls. What is the ratio of red balls to the total number of balls?

[2]

Q10. How long will it take for a train moving at 80 km/h to travel a distance of 320 km?

[2]

Q11. Represent the equation $2x + 5 = 15$ on a number line.

[2]

Section C

(30 marks)

Q12. Draw and label a quadrilateral ABCD, where $AB = 5$ cm, $BC = 6$ cm, $CD = 4$ cm, and $DA = 7$ cm.

[3]

Q13. A car covers a distance of 180 km at a speed of 60 km/h. Calculate the time taken by the car to cover the distance.

[3]

Q14. If a person walks 5 km in 1 hour, how long will it take to walk 15 km at the same speed?

[3]

Q15. Solve the linear equation: $5x - 7 = 18$.

[3]

Q16. Draw a circle with a radius of 4 cm and mark its centre as O.

[3]

Q17. A train covers 600 km in 8 hours. What is the speed of the train in km/h?

[3]

Q18. If the ratio of boys to girls in a class is 3:2 and there are 30 boys, how many girls are there?

[3]

Q19. Find the area of a rectangle with length 10 cm and breadth 6 cm.

[3]

Q20. Plot the points (2, 3) and (4, 5) on a graph paper.

[3]

Q21. Identify the type of polygon with 6 sides.

[3]

Section D

(20 marks)

Q22. A cyclist covers a distance of 90 km in 3 hours. If he increases his speed by 10 km/h, how long will it take to cover the same distance?

[4]

Q23. Solve for x: $7(x - 4) = 3x + 20$.

[4]

Q24. Find the circumference of a circle with a diameter of 14 cm.

[4]

Q25. A shopkeeper sold 15 kg of rice for £450. What is the price per kg? How much will 25 kg of rice cost?

[4]

Q26. Draw a triangle with sides 6 cm, 8 cm, and 10 cm. Measure and label the angles of the triangle.

[4]