

DAV BR PUBLIC SCHOOL, M.P. Zone
PRACTICE PAPER, Session (2023-24)

Class: VII
Time Allowed: 2 Hrs.

Subject: Maths
Maximum Marks: 50

SECTION - A (1x6=6)

Q 1 CHOOSE THE CORRECT ANSWER: -

- a) Identity element for subtraction of rational numbers is-
- (i) 1 (ii) 0 (iii) -1 (iv) does not exist
- b) The quotient when 0.00639 is divided by 0.213 is-
- (i) 3 (ii) 0.3 (iii) 0.03 (iv) 0.003
- c) If $4x - 3 = 21$, what is the value of $(3x - 5)$?
- (i) 16 (ii) 14 (iii) 13 (iv) 15
- d) The diameter of a circle whose circumference is 22 cm is-
- (i) 3.5 cm (ii) 7 cm (iii) 14 cm (iv) 12 cm
- e) How many lines of symmetry a scalene triangle has-
- (i) 3 (ii) 2 (iii) 1 (iv) none
- f) A tetrahedron has _____ vertices.
- (i) 2 (ii) 3 (iii) 4 (iv) 5

SECTION - B (1x4=4)

- Q 2 A teacher took all the students of class VII on educational trip to Agra and Fatehpur Sikri. They saw many monuments like Taj Mahal, Sikandra, Lal Quila, Dayal Bagh in Agra and Buland Darwaja in Fatehpur Sikri. Students were seeing monuments very attentively. They were very happy to visit these historical monuments and excited to know about the history and architecture. Teacher told them about the symmetry of these buildings.





After completion of visit, teacher asked the following questions:

- a) In how many figures line of symmetry is visible?
(i) 1 (ii) 2 (iii) 3 (iv) 4
- b) How many lines of symmetry are visible in Taj Mahal?
(i) 1 (ii) 2 (iii) 3 (iv) None of these
- c) How many lines of symmetry a circle has?
(i) 1 (ii) 2 (iii) 3 (iv) infinite
- d) How many lines of symmetry does a heptagon has?
(i) 5 (ii) 6 (iii) 7 (iv) 8

SECTION - C (2x6=12)

- Q 3 Simplify and express the result as decimals: **(75.05 ÷ 0.05) x 0.001 + 2.351**
- Q 4 Out of a class of 45 students, five were absent, 30% of the remaining had failed to do homework. Find the number of students who did the homework.
- Q 5 Find the product of: **(p³ + 3p + q) (9p + 2q)**
- Q 6 The sum of two numbers is 72. If one of the numbers is 6 more than the other, find the numbers.
- Q 7 The height of a parallelogram is one-third of its base. If the area is 108 cm², find the base and height.
- Q 8 How many lines of symmetry will the following have?
(i) A circle (ii) A rhombus

SECTION - D (3x6=18)

- Q 9 Verify the property $a \times (b+c) = axb + axc$ by taking $x = 1/3$, $y = 1/5$, $z = 1/7$
- Q 10 Find the value of x so that $\left(\frac{3}{4}\right)^{2x+1} = \left(\frac{3}{4}\right)^3$
- Q 11 Find the sum of money that amounts to Rs.5850 in six years at 5% per annum.
- Q 12 Find the HCF of the terms and factorize: $20x^3 - 40x^2 + 80x$
- Q 13 Sudesh is twice as old as Seema. If six years is subtracted from Seema's age

and four years added to Sudesh's age, Sudesh will be four times Seema's age. How old were they three years ago?

- Q 14 Draw a triangle ABC in which $\angle A = 120^\circ$ and $AB = AC = 3$ cm. Draw the bisector of angle A.

SECTION - E (2x5=10)

- Q 15 Simplify the following and verify the results for the given values;
 $(7x^2y - 3z^2)(x + y + z)$ if $x = 1$, $y = 1$ and $z = -1$
- Q 16 A wire is bent to form a square of side 22 cm. If the same wire is bent in the form of a circle, find the area enclosed by it.