

A Select and write the correct options of any four questions in the following:

$$\frac{1}{2} \times 4 = 2$$

- Which of the following numbers are obviously not perfect squares?
(a) 6400 (b) 7928 (c) 89722 (d) 23453
- Quadrilateral in which diagonals are equal and perpendicular to each other is :
(a) Parallelogram (b) Rectangle (c) Rhombus (d) Square
- Solution of equation $x - 2 = 7$ is
(a) 5 (b) -5 (c) 9 (d) -9
- The rational number that does not have a reciprocal is-
(a) 1 (b) -1 (c) 0 (d) all of these
- Parallelogram is a quadrilateral in which:
(a) Opposite angles are equal
(b) adjacent angles are equal
(c) sum of opposite angles is equal to 180°
(d) all of these

B Fill any four blanks given below:-

$$\frac{1}{2} \times 4 = 2$$

- The square of 95 is _____.
- In a parallelogram RING, if $\angle R$ is 70° then $\angle I$ is _____.
- The reciprocal of -5 is _____.
- The solution of equation $6x = 12$ is _____.
- The unit digit of the square of 123562 is _____.

C Give answers of any six questions of the following :

$$1 \times 6 = 6$$

- Find the square root of 324.
- State the name of regular polygon of 3 sides
- Find the number of sides of a regular polygon whose each exterior angle has a measure of 45° .
- Solve the following equation:
 $2x - 3 = x + 2$
- Solve the following equation:

$$\frac{x}{3} + \frac{5}{2} = \frac{-3}{2}$$

- Write the additive inverse of the following:
(a) $\frac{-5}{7}$ (b) $\frac{8}{9}$
- Identify all the quadrilaterals that have four sides of equal length.

D Short answer type questions:

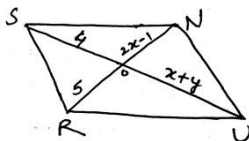
$$2 \times 3 = 6$$

- Find four rational numbers between $\frac{1}{5}$ & $\frac{1}{4}$
- Three consecutive integers add up to 51. What are these integers?

OR

The present age of Sahil mother is three times the present age of Sahil. After 5 years there is will be add to 66 years. Find their present ages.

- Find the value of x & y in parallelogram RUNS:



E Problem solving type

$$2 \times 2 = 4$$

- Find the least number that must be subtracted from 5607 so as to get a perfect square.

OR

There are 500 children in a school. For a P T drill they have to stand in a such a manner that the number of rows is equal to number of columns. How many children would be left out in this arrangement?

2. Present ages of Anu and Raghav in the ratio 4 : 5. Eight years from now the ratio of their ages will be 5: 6. Find their present ages.

OR

Aman's age is 3 times his son's age. Ten years ago he was 5 times his son's age. Find their present ages.