



**PERIODIC TEST 1 (APRIL, 2023)**

**SUBJECT-MATHEMATICS**

**GRADE- VIII**

**TIME: 90 MINS**

**M.M: 40**

**GENERAL INSTRUCTIONS:**

1. This question paper consists of 21 questions and 5 sections.
2. All questions are compulsory.
3. Section A consists of 8 questions carrying 1 mark each.
4. Section B consists 02 marks each question.
5. Section C consists of 4 Short Answer type questions carrying 2.5 marks each.
6. Section D consists of 4 questions carrying 3 marks each.

**SECTION-A**

**1×8=8**

1. If  $a + b = b + a$ , name the property used.
2. If  $a \times (b \times c) = (a \times b) \times c$ , name the property used.
3. How many rational numbers are there between any two given rational numbers?
4. Value of  $7^0$  is equal to \_\_\_\_\_
5. 149600000000 in power form is equal to \_\_\_\_\_
6. Evaluate:  $(\frac{1}{3})^{-4}$
7. Express in standard form. 0.005 cm in meters.
8. The value of  $\sqrt{36} + \sqrt{144}$

**SECTION- B (Any 5)**

**2×5=10**

- B.1 Represent  $-\frac{5}{6}$  on a number line.
- B.2 By what number should we multiply  $2^{-4}$  to the power of minus four, so that the product is  $2^2$
- B.3 Compute the value of  $(-4)^{-2}$
- B.4 Find the square root of 1296.
- B.5 By what number should the sum of  $\frac{18}{5}$  and  $-\frac{7}{15}$  be divided to get  $\frac{47}{6}$ .
- B.6 The area of a rectangular plot is  $10\frac{3}{8}$  m<sup>2</sup>. Find the length of the plot if its breath is  $2\frac{1}{2}$  m.

**SECTION- C (Any 4)**

**2.5×4=10**

- C.1 Find the square root of the following numbers using long division  
Method: 42.25
- C.2 Find the smallest 6 digit number, which is a perfect square, also find its square root.
- C.3 Solve

$$\frac{\sqrt{59.29 - \sqrt{5.29}}}{\sqrt{59.29 + \sqrt{5.29}}}$$

- C.4 Find the Square root. 24.01.
- C.5 If the hypotenuse of a right angle triangle is 10 centimeters and one of the other sides is 8 centimeters. Find the third side of the triangle.

**SECTION-D (Any 4)**

**3×4=12**

D.1 Find two rational numbers between  $\frac{1}{5}$  and  $\frac{1}{2}$  .

D.2 Use prime factorization to find the square root of 11664.

D.3 Simplify:  $\frac{3}{4} + \frac{5}{6} + (-\frac{7}{8})$

D.4 Verify associative property of addition i.e

$$x + (y+z) = (x+y) + z \text{ for } x= \frac{1}{2} , y= \frac{2}{3} , z= -\frac{1}{5}$$

D.5 5929 students are sitting in an auditorium in such a manner that there are as many students in a row as there are rows in the auditorium. How many rows are there in the auditorium?