St. JOHN'S RESIDENTIAL PUBLIC SCHOOL

Sona Gopalpur, Sampatchak, Patna – Gaya Highway, Patna – 7

Pre – Mid Term Exam - I (2023 – 24)

Grade: VIII **Date : / 05/ 23**

Subject: MATHEMATICS **Max Marks: 25** **Duration: 1 hr.**

Name: _____ **Roll: _____**

Section – A comprises of 9 questions with 1 mark each.

A. Multiple choice questions:

1. Additive Inverse of $\frac{a}{b}$ is

a) $\frac{b}{a}$ b) $\frac{a}{-b}$ c) $\frac{a}{b}$ d)) $\frac{-b}{a}$

2. A rational number between $\frac{1}{3}$ and $\frac{1}{4}$ is

a) 0.09 b)) $\frac{7}{24}$ c)) $\frac{1}{24}$ d) $\frac{-1}{24}$

3. $(2^{-3})^{-2}$ is

a) $\frac{1}{64}$ b) 64 c) 32 d) $\frac{1}{32}$

B. Fill in the blanks:

4. $(-1)^{113} \times (-1)^{112}$ = _____

5. A number in the form of $\frac{a}{b}$ where $a \neq 0$ is called _____

6. The product of 0 and any rational number is 0. This property os known as _____

C. State True/False for the given statement:

7. There are infinite rational numbers between two rational numbers.

8. $a^m \times a^n = a^{m+n}$

9. The square of an even number is always an odd number.

SECTION – B

Section – B comprises of 3 questions with 2 marks each.

10. Find the square root of 256 by prime factorisation method.

11. Represent $\frac{2}{5}$ on number line.

12. Evaluate $(\frac{3}{7})^{-1} \times (\frac{4}{5})^{-1}$

SECTION – C

Section – C comprises of 2 questions with 3 marks each.

13. Find the smallest number by which 882be multiplied to get a perfect square.

14. Verify that x + y = y + x, if x = $\frac{-7}{18}$ and y = $\frac{-4}{15}$

SECTION – D [4 marks]

15. Find x so that $(\frac{2}{3})^{-2} \times (\frac{2}{3})^{-9} = (\frac{2}{3})^{2x+1}$