BK BIRLA CENTRE FOR DUCATION

SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL

PERIODIC TEST- 2 (2024)

MATHEMATICS

Class : VIII   Duration : 1 Hr
Date : 06-12-2024   Max. Marks : **25**
Admission No.:   Roll No.:

General Instructions:

1. All Questions are compulsory.
2. There are 13 questions.

I. **CHOOSE THE CORRECT ALTERNATIVE IN THE FOLLOWING.**   **5**

1. The digit at units place of the cube of 129 is :
   a) 1   b) 8   c) 7   d) 9
2. The value of $\sqrt[3]{8} \ x \ \sqrt[3]{64}$ is :
   a) 2   b) 4   c) 8   d) 16
3. Which of the following is the perfect cube ?
   a) 405   b) 147   c) 343   d) 75

4. Product of $15 \ x^2 \ y$ and $-4 \ x$ is :
   a) $15 \ x^3 \ y$ b) $-60 \ x^2 \ y$ c) $-60 \ x^3 \ y$ d) $-60 \ x^3 \ y^2$

5. The value of $x^2 - 2 \ x + 1$ when $x = 1$ is :

   a) 1   b) 2   c) -2   d) 0

II. **SOLVE THE FOLLOWING**

6. Show that 256 is not a perfect cube.   **2**
7. Find the smallest number by which 392 to be multiplied so that product is perfect cube .   **2**
8. Add : i) $ab - bc , bc - ca \ and \ ca - ab$
   ii) $2 \ p^2 \ q^2 - 3 \ p \ q + 4 , 5 + 7 \ p \ q - 3 \ p^2 \ q^2$ **2**
9. Simplify : $3 \ x \ (4 \ x - 5) + 3$ and find its value for $x = 3$ **2**

10. Find the cube root by prime factorisation method : 10648   **3**

11. Find the smallest number by which 704 to be divided to obtain a perfect cube.   **3**
12. Simplify: $(a + b) (c - d) + (a - b) (c + d) + 2 (ac + b d)$ **3**
13. Find the product of : i) $(2 \ x + 5) (4 \ x - 3)$
    ii) $(x + 7 \ y) (7 \ x - y)$ **3**