BK BIRLA CENTRE FOR EDUCATION

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

PERIODIC TEST-2 (2024)

MARKING SCHEME

Class : VIII
Date : 06-12-2024

Duration : 1 Hr
Max. Marks : 25

I. MCQ (1 mark each)

1. 9 (D)
2. 8 (C)
3. 343 (C)
4. $-60x^3y$ (C)
5. 0 (D)
6. 256 = 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 — 1
   One of the prime factor 2 is not in the group of three — ½
   Hence 256 is not a perfect cube — ½
7. 392 = 2 x 2 x 2 x 7 x 7 — 1
   Prime factor 7 is not in the group of three , — ½
   Smallest number to be multiplied is 7 to make it perfect cube. — ½
8. ab- b c + b c – c a + c a - a b = a b - a b - b c + b c – c a + ca — 1
   = 0 — 1
9. Simplify : $3x(4x-5)+3 = 12x^2-15x+3$ — ½
   For $x = 3$ $= 12(3)^2-15(3)+3$ — ½
   $= 12 \times 9 - 45 + 3$ — ½
   $= 66$ — ½
10. 10648 = 2 x 2 x 2 x 11 x 11 x 11 — 1 ½

    $\sqrt[3]{10648} = \sqrt[3]{2 \times 2 \times 2 \times 11 \times 11 \times 11}$ — ½
    $= 2 \times 11$ — ½
    $= 22$ — ½
11. 704 = 2 x 2 x 2 x 2 x 2 x 2 x 11 — 1 ½
    Prime factor 11 is not in the group of triplets
    Smallest number to be divided is 11 — ½
    $\sqrt[3]{64} = \sqrt[3]{2 \times 2 \times 2 \times 2 \times 2 \times 2}$ — ½
    $= 4$ — ½

12. a c – a d + b c – b d + a c + a d –b c – b d + 2 a c + 2 b d 1

a c + a c + 2 a c – b d – b d + 2 b d 1

4 a c 1

13. i) 2 x (4 x – 3) + 5 (4 x – 3) = 8 x^2 – 6 x + 20 x – 15 1

= 8 x^2 + 14 x – 15 ½

ii) x (7 x- y) + 7 y (7 x- y) ½

7 x^2 – x y + 49 x y – 7 y^2 ½

7 x^2 + 48 x y – 7 y^2

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