LORD KRISHNA PUBLIC SCHOOL
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Affiliation No. 530600

ASSIGNMENT - 4

Class – 8th **Subject : MATHS**
Max Marks:20 **Time : 1 Hour**

CHAPTER – 4 CUBES AND CUBE ROOTS

Q.1 Which of the following is the cube of a negative number?
a. -396 b. 4096 c. -81 d. -2744

Q.2 Calculate the value of $\sqrt[3]{64} + \sqrt{9^2}$
a. 4 b. 3 c. 13 d. 77

Q.3 Which of the following is the cube of an integer?
a. 200 b. 9 c. 512 d. 1024

Q.4 $\sqrt[3]{3 - \frac{17}{27}}$ =
a. $\frac{4}{3}$ b. $\frac{3}{4}$ c. $\frac{1}{4}$ d. $\frac{1}{3}$

Q.5 $(3)^3 - (-0.6)^3$ =
a. 27.216 b. 26.784 c. -26.784 d. -27.216

Q.6 The value of $(-0.4)^3$ is
a. 0.640 b. 0.064 c. -0.064 d. -0.640

Q.7 If $\sqrt[3]{x - 12} = 19$ then the value of x is
a. 6871 b. 6072 c. 6889 d. 5080

Q.8 Which of the following numbers is a perfect cube?
a. 1525 b. 1728 c. 1458 d. 3993

Q.9 What least number must be multiplied to 3456 so that the product becomes a perfect cube?
a. 2 b. 3 c. 4 d. 6

Q.10 $\sqrt[3]{144} \times \sqrt[3]{12}$ equals
a. 12 b. 14 c. 13 d. 6

Q.11 Possible unit digit of cube root of a number ending with 5 is
a. 0 b. 5 c. 7 d. 9

Q.12 The surface area of a cube is 216 cm^2. What is its volume?
a. 1296 cm^3 b. 648 cm^3 c. 864 cm^3 d. 216 cm^3

Q.13 If $(125)^x = 3125$ then x is equals to-

a. $\frac{3}{5}$ b. $\frac{5}{3}$ c. $\frac{1}{4}$ d. $\frac{1}{5}$

Q.14 By what least number should 9720 be multiplied to get a perfect cube?

a. 15 b. 25 c. 5 d. 75

Q.15 If $\sqrt[3]{(156 + x)} = 12$ then the value of x is

a. 1570 b. 1572 c. 1560 d. 1512

Q.16 The volume of a cube is 778688 mm^3. Find the measure of its edge.

a. 62mm b. 72mm c. 82mm d. 92mm

Q.17 The value of $\frac{(2.3)^3 - 0.027}{(2.3)^2 + 0.69 + 0.09}$ is

a. 2 b. 2.273 c. 2.327 d. none of these

Q.18 Evaluate :- $\sqrt[3]{32.768}$

a. 3.2 b. 4.2 c. 5.2 d. 1.2

Q.19 If $\sqrt[3]{\frac{x}{729}} + \sqrt[3]{\frac{8x}{729}} + \sqrt[3]{\frac{27x}{5832}} = 1$ then find the value of x.

Q.20 If $\sqrt[3]{\frac{x}{729}} + \sqrt[3]{\frac{27x}{3375}} = 1$ then find the value of x.

Q.21 Evaluate $\sqrt[3]{\frac{4096}{64}} + 2\sqrt[3]{\frac{5832}{216}} - 3\sqrt[3]{\frac{3375}{125}} + 4\sqrt[3]{\frac{1728}{64}}$

Q.22 If a = 2b and b = 4c then find the value of $\sqrt[3]{\frac{a^2}{16bc}}$.

Q.23 Three numbers are in the ratio 1 : 2 : 3. The sum of their cubes is 98784. Find the numbers.

Q.24 Find the cube root of 0.003375.

Q.25 Find the smallest number by which 3087 must be divided so that the quotient is a perfect cube.

Q.26 Evaluate :- $\sqrt[3]{0.008} - \sqrt[3]{-512} + \sqrt[3]{2.197}$

Q.27 By what least number 3600 must be divided to make it a perfect cube?

Q.28 Cube root of a number when divided by the smallest prime number gives square of the smallest prime number. Find the number.