

SQUARES, SQUARE ROOTS AND CUBES, CUBE ROOTS

1) The square root of 73.96 is

- a) 8.6 b) 86 c) 0.86 d) Ans: a

2) If $\sqrt{\frac{x}{49}} = \frac{4}{9}$ then the value of x is :

- a) 9 b) 25 c) 16 d) 8 Ans : c

3) Which of the following cannot be a digit in the unit place of a perfect square:

- a) 1 b) 5 c) 7 d) 0 Ans : c

4) If $\sqrt{35} = 5.9160$, then value of $(\sqrt{7} + \sqrt{5}) \div \sqrt{7 - \sqrt{5}}$ is

- a) 9.1060 b) 10.9160 c) 11.9160 d) 12 Ans : c

5) If $x = \sqrt{3018 + \sqrt{36 + 16 + \sqrt{169}}}$, then value of x is

- a) 55 b) 44 c) 63 d) 42 Ans : a

6) If $\sqrt{0.9 \times 0.09 \times x} = 0.9 \times 0.09 \times \sqrt{2}$ then value of $\frac{x}{2}$ is

- a) 0.081 b) 0.810 c) 0.81 d) 8.09 Ans : a

7) The value of $\sqrt{7 + 2\sqrt{10}}$ is

- a) $\sqrt{6} + 1$ b) $\sqrt{4} + \sqrt{3}$ c) $\sqrt{5} + \sqrt{2}$ d) $2 + \sqrt{5}$ Ans : c

8) If $x = \sqrt[3]{2 \frac{93}{125}}$, the value of x is

- a) $3\frac{1}{5}$ b) $2\frac{1}{5}$ c) $3\frac{4}{5}$ d) $4\frac{4}{5}$ Ans : b

9) A number is 64 times of the square of its reciprocal. The number is :

- a) 10 b) 4 c) 2 d) 16 Ans:

10) The smallest perfect square number exactly divisible by 4,5,6,15,18 is

- a) 800 b) 225 c) 361 d) 900 Ans :

11) A gardener plants 17956 trees in such a way that there are as many rows as there are trees in each row. The number of trees in a row are

- a) 136 b) 164 c) 134 d) 166 Ans :

12) $\sqrt{2\sqrt{2\sqrt{2\sqrt{2\sqrt{2\sqrt{2}}}}}}$ is equal to :

- a) 0 b) 2 c) 1 d) $2\frac{31}{32}$ Ans : d

13) The greatest six digit number which is perfect square is :

- a) 998004 b) 998006 c) 998049 d) 998001 Ans : d

14) Divide the number 26244 by the smallest number so that the quotient is a perfect cube, so the smallest number is :

- a) 4 b) 6 c) 36 d) 16 Ans:c

15) The perfect cube nearest to 2750 is :

- a) 2749 b) 2747 c) 2744 d) 2754 Ans : c

16) The least number which must be added to 4931 to make it perfect square is :

- a) 110 b) 120 c) 130 d) 140 Ans : a

17) The least number which must be subtracted from 18265 to make it a perfect square

- a) 20 b) 30 c) 40 d) 50 Ans : c

18) Least perfect square of 6 digits is :

- a) 998000 b) 998001 c) 998002 d) Ans : b

19) A $8 \times 6 \times 4 \text{ cm}^2$ metallic cube is melted. Find the minimum volume of the molten metal which should be added to mould it into a cube whose edge is an x , when x is an integer.

- a) 20 b) 21 c) 23 d) 24 Ans : d

20) Value of $\sqrt[3]{392} \times \sqrt[3]{448}$ is :

- a) 50 b) 52 c) 54 d) 56 Ans : d

21) The smallest number by which 137592 should be multiplied to make it perfect cube ?

- a) 1183 b) 1180 c) 1181 d) 1180 Ans : a

22) The number of two cubes are in the ratio of $343 : 1331$, the ratio of their edges is :

- a) 7 : 10 b) 7 : 11 c) 7 : 12 d) 7 : 14 Ans : b