



Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

Class 08 - Mathematics

Squares and Cubes

Maximum Marks: 35

Time Allowed: 1 hour and 30 minutes

Section A

1. Fill up the following:

2

- a. $\sqrt{350}$ lies between ____ and ____.
- b. The square root of 75 to the nearest whole is ____.
- c. The square of 23 is ____.
- d. By using identity $(a - b)^2 = a^2 + b^2 - 2ab$, the square of 491 is ____.

2. Fill in the blanks.

2

- a. The cube of an even natural number is always a multiple of ____.
- b. If a number has 0 in its ones place, then the number of zeroes in its cube will have ____ zeroes.
- c. The units digit of the cube root of a perfect cube ending in 4 is = ____.
- d. If 51A is a perfect cube, then the value of A = ____.

Section B

3. Match the following:

2

Column A	Column B
1. 7^2	(a) $60 + 61$
2. 21^2	(b) $84 + 85$
3. 13^2	(c) $220 + 221$
4. 11^2	(d) $24 + 25$

4. Match the following:

2

Column A	Column B
(a) $\sqrt[3]{\frac{x}{y}}$	(p) x^3y^3
(b) $\sqrt[3]{x \times y}$	(q) $\frac{x^3}{y^3}$

(c) $\left(\frac{x}{y}\right)^3$	(r) $\frac{\sqrt[3]{x}}{\sqrt[3]{y}}$
(d) $(x \times y)^3$	(s) $\sqrt[3]{x} \times \sqrt[3]{y}$

Section C

5. Find the length of the side of a square where area is 441 m^2 . 2
6. Find the least number which must be subtracted from 825 so as to get a perfect square. Also find the square root of the perfect square so obtained. 2
7. Find the least number which must be subtracted from 4000 so as to get a perfect square. Also find the square root of the perfect square so obtained. 2
8. Find the smallest number by which 704 must be divided to obtain a perfect cube. 2
9. Find the cube root of 10648 by prime factorisation method. 2
10. Find the cube root of 27000 by prime factorisation method. 2
11. Find the smallest whole number with which 252 should be multiplied so as to get perfect square number. Also find the square root of the square number so obtained. 3
12. Find the smallest whole number with which 1008 should be multiplied so as to get perfect square number. Also find the square root of the square number so obtained. 3
13. A helicopter landing pad has a square shape. The area is 400 m^2 . Use prime factorization to find the side length of the pad. 3
14. Find the cube root of 4.913 3
15. Find the value of $\sqrt[3]{648} \times \sqrt[3]{576}$. 3