

## CHAPTER - 7

### Cubes and Cube Roots

**Questions carrying 1 Mark each :-**

Q.1 Find the one's digit of  $(9 \quad )^3$ .

Q.2 State true or false:

The cube of a rational number is equal to cube of its numerator divided by the cube of its denominator.

Q.3  $( \quad )^3 = 9$  = \_\_\_\_\_.

**Questions carrying 2 marks each:-**

Q.4 Find the cube of  $( \quad )^3$ .

Q.5 Find the cube root of 117649 by prime factorisation method.

Q.6 Find the smallest number by which 648 may be multiplied so that the product is a perfect cube.

**Questions carrying 3 marks each:-**

Q.7 The volume of a cubical box is 46. 656 . Find the length of the side of the box.

Q.8 Find the cube root of  $2\frac{3}{125}$ .

Q.9 Find the cube root of 0.008.

- Q.10 Find the smallest number by which 3456 must be divided so that the quotient become a perfect cube. Find the cube root of the quotient.

**Questions carrying 6 marks each:-**

Q.11 Evaluate  $\sqrt[3]{\frac{99}{99}} = \frac{2}{9} + \frac{2}{9}$ .

- Q.12 The sides of a cube are doubled. Find the ratio between the volume of the first cube and the new cube.

**Multiple choice Questions carrying 1 mark each:-**

- Q.13 The cube of a negative number is

- (a) always positive (b) always negative  
(c) may be positive or negative (d) none of these.

- Q.14 The unit digit of the cube of 3 is

- (a) 9 (b) 6 (c) 7 (d) 3

- Q.15 The symbol  $\sqrt[3]{\phantom{x}}$  demotes

- (a) cube root (b) cube  
(c) square (d) square root.