CUBES AND CUBE ROOTS

1. Which is the smallest three-digit perfect cube?

(a) 125   (b) 343   (c) 729   (d) 512

2. Which is the greatest three-digit perfect cube?

(a) 125   (b) 343   (c) 729   (d) 512

3. Which of the following is not a perfect cube ?

(a) 1   (b) 9   (c) 8   (d) 27

4. The cube of 4 is_____.

(a) 12   (b) 8   (c) 4   (d) 64

5. The value of 5^3 is_____.

(a) 125   (b) 15   (c) 10   (d) 75

6. The cube of an even number is always_____.

(a) odd number   (b) even number   (c) prime number   (d) none of these

7. The cube of an odd number is always_____.

(a) odd number   (b) even number   (c) prime number   (d) none of these

8. Each prime factor appears_____times in its cube?

(a) 2   (b) 3   (c) 1   (d) 4

9. Which of the following is Hardy-Ramanujan Number ?

(a) 1724   (b)1725   (c) 1727   (d) 1729

10. By which smallest natural number 392 must be multiplied so as to make the product a perfect cube ?

(a) 2   (b) 14   (c) 7   (d) 49

11. The smallest natural number by which 243 must be multiplied to make the product a perfect cube is_____.

(a) 3   (b) 9   (c) 8   (d) 7

12. The smallest natural number by which 704 must be divided to obtain a perfect cube is

(a) 22   (b) 12   (c) 11   (d) 13

13. The smallest natural number by which 135 must be divided to obtain a perfect cube is

(a) 5   (b) 3   (c) 15   (d) 9

14. Which of the following is not a perfect cube ?

(a) 216   (b) 343   (c) 125   (d) 108

15. The expansion of a^3 is_____.

(a) $3 \times a$ (b) a+a+a   (c) $3 \times 3 \times 3$ (d) $a \times a \times a$

16. What will be the unit digit of the cube of a number ending with 2 ?

(a) 8   (b) 4   (c) 2   (d) 6

17. What will be the unit digit of the cube of a number ending with 4 ?

(a) 4   (b) 6   (c) 2   (d) 8

18. What will be the unit digit of the cube of a number ending with 6 ?

(a) 4   (b) 6   (c) 2   (d) 8

19. A cuboid has dimensions 5cm , 2cm, 5cm .How many such cuboid will be needed to form a cube ?

(a) 20   (b) 10   (c) 5   (d) 2

20. How many cuboids of dimensions 15cm, 30cm ,15cm will be needed to form a cube?

(a) 15   (b) 4   (c) 30   (d) 5