1. The smallest Hardy-Ramanujan number is
   (a) 7129 (b) 2197 (c) 9127 (d) 1729
2. The cube of which of the following is odd?
   (a) 26 (b) 30 (c) 48 (d) None of these
3. Cube of 12 is
   (a) 864 (b) 1728 (c) 2744 (d) 144
4. Cube of 3.2 is
   (a) 1.024 (b) 327.68 (c) 102.4 (d) 32.768
5. Cube of $\left(5 \times \frac{1}{4}\right)$ is
   (a) $\frac{9261}{16}$ (b) $\frac{9261}{64}$ (c) $\frac{125}{16}$ (d) $\frac{125}{64}$
6. The unit digit in the cube of 517 is
   (a) 7 (b) 1 (c) 3 (d) 9
7. The square root of sum of cubes of first three natural numbers is
   (a) 6 (b) 36 (c) 216 (d) 1296
8. The value of $(11)^3 + 5^3 + 6^3$ is
   (a) 900 (b) 1672 (c) 945 (d) 120
9. Which of the following is a perfect cube?
   (a) 181 (b) 521 (c) 105 (d) 216
10. The smallest number by which 5400 must be multiplied such that the product becomes a perfect cube is
    (a) 2 (b) 3 (c) 5 (d) 25
11. The smallest number by which 6860 must be divided such that the resulting quotient becomes a perfect cube is
    (a) 4 (b) 5 (c) 10 (d) 20
12. The cube root of 729 is
    (a) 27 (b) 9 (c) 6 (d) 3
13. Cube root of 29.791 is
    (a) 1.3 (b) 2.1 (c) 3.1 (d) 4.9
14. Number of zeroes in the cube root of 27000000 is
    (a) 2 (c) 4 (b) 3 (d) None of these
15. The ten's digit of the cube root of 12167 is
    (a) 1 (b) 2 (c) 3 (d) 4
16. The unit digit of cube root of 19683 is
    (a) 9 (b) 7 (c) 3 (d) None of these
17. The cube root of which of the following is a perfect square?
    (a) 8 (b) 64 (c) 125 (d) 216

18. The cube root of which of the following is 1000 ?

(a) $100^2 \times 10^3$ (b) $100^3 \times 10^2$ (c) $10^3 \times 1000^2$ (d) 100×10^2

19. Cube root of $\left(3 - \frac{32}{125}\right)$ is

(a) $2 - \frac{3}{5}$ (b) $1 + \frac{2}{5}$ (c) Both (a) and (b) (d) Neither (a) nor (b)

20. Simplify: $\sqrt[3]{\frac{4096}{64}} + 2\sqrt[3]{\frac{5832}{216}} - 3\sqrt[3]{\frac{3375}{125}} + 4\sqrt[3]{\frac{1728}{64}}$

(a) 13 (b) 11 (c) 15 (d) None of these

21. $\frac{\sqrt[3]{343} + \sqrt[3]{125}}{\sqrt[3]{343} - \sqrt[3]{125}} =$

(a) 12 (b) 6 (c) 2 (d) 4

22. Find the cube root of $\frac{3.375}{1728}$.

(a) $\frac{1}{4}$ (b) $\frac{1}{6}$ (c) $\frac{1}{8}$ (d) $\frac{5}{8}$

23. Find the sum of cube root and square root of 64 .

(a) 10 (c) 12 (b) 13 (d) None of these

24. Which of the following numbers is a perfect cube?

(a) 243 (b) 216 (c) 392 (d) 8640

25. $\sqrt[3]{1000}$ is equal to

(a) 10 (b) 100 (c) 1 (d) None of these

26. If m is the cube root of n , then n is

(a) m^3 (b) $\sqrt{m}$ (c) $\frac{m}{3}$ (d) $\sqrt[3]{m}$

Codes:

(a) If both Statement I and Statement II are true and Statement II is the correct explanation of Statement I.

(b) If both Statement I and Statement II are true but Statement II is not the correct explanation of Statement I.

(c) If statement I is true but Statement II is false.

(d) If statement I is false but Statement II is true.

27. Statement-I : No perfect cube is a perfect square.

Statement-II : Any number raised to the power 3 is a perfect cube.

28. Statement-I : Is 9261 a perfect cube or not?

Statement-II : In the prime factorisation of a perfect cube, every factor forms a group of three.

29. Statement-I : 64000000 is a perfect cube.

Statement-II : No perfect cube ends in even number of zeroes.

30. Statement-I : 1729 is the smallest Hardy-Ramanujan number.

Statement-II : Hardy-Ramanujan numbers is defined as the smallest number that can be expressed as a sum of two positive cube numbers.

31. Statement-I : The unit digit of cube of 19, 29, 39 is always 9.

Statement-II : The unit digit of a number and its cube remains same in case of 1,4,5,9 and 0.

ANSWERS

1. (d)	2. (d)	3. (b)	4. (d)
5. (d)	6. (c)	7. (a)	8. (b)
9. (d)	10. (c)	11. (d)	12. (b)
13. (c)	14. (a)	15. (b)	16. (b)
17. (b)	18. (c)	19. (c)	20. (a)
21. (b)	22. (c)	23. (c)	24. (b)
25. (a)	26. (a)	27. (d)	28. (a)
29. (c)	30. (a)	31. (a)	