1. The square of which of the following is odd?
   (a) 194 (c) 914 (b) 491 (d) Both (a) and (c)
2. Which of the following is not a perfect square?
   (a) 1000 (b) 9000 (c) 100000 (d) All of these
3. Which of the following can never be the ones digit of a square number?
   (a) 7 (b) 4 (c) 5 (d) 1
4. If the one's digit of square of a number is 6 , then the one's digit of the number is
   (a) 4 (b) 6 (c) Either (a) or (b) (d) Neither (a) nor (b)
5. The square of which of the following prime numbers end in 9 ?
   (a) 71 (b) 53 (c) 179 (d) None of these
6. If there are 162 non-perfect squares between 81^2 and m^2, then $m =$
   (a) 82 (b) 80 (c) 79 (d) None of these
7. $25^2 =$
   (a) 24×26 (b) $312 + 313$ (c) $24 \times 26 + 1$ (d) Both (b) & (c)
8. The sum of first ' 17 ' odd natural numbers is
   (a) 289 (b) 17 (c) 16 (d) 34
9. If $1^2 = 1, 11^2 = 121, 111^2 = 12321, 1111^2 = 1234321$, then $11111^2 =$
   (a) 12345321 (b) 124321 (c) 123454321 (d) 1234321
10. If $99^2 = 9801, 999^2 = 998001$, then $9999^2 =$
    (a) 9988001 (b) 99880001 (c) 99980001 (d) 99988001
11. If $69 \times k + 3^2 = 66^2$, then k is multiple of which of the following?
    (a) 7 (b) 9 (c) 21 (d) All of these
12. If $104^2 = 10816$, then $(10.4)^2 =$
    (a) 1081.6 (b) 108.16 (c) 10.816 (d) 1.0816
13. Find the other two numbers of a Pythagorean triplet, whose one number is 12.
    (a) 35,37 (b) 30,33 (c) 35,39 (d) 40,42
14. $\sqrt{7056} =$
    (a) $2 \times 2 \times 3 \times 11$ (b) $2 \times 3 \times 3 \times 7$ (c) $2 \times 2 \times 3 \times 7$. (d) $2 \times 3 \times 3 \times 11$
15. If prime factorisation of a number is $2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 5 \times 5$, then its square root is
    (a) 522 (b) 180 (c) 258 (d) 252
16. When finding square root of a perfect square number by repeated subtraction, We subtract consecutive natural numbers starting from 1 .
    (a) Prime (b) Even (c) Odd (d) None of these

17. The least square number divisible by 6,9,15 and 20 is

(a) 180 (b) 900 (c) 360 (d) 540

18. Which of the following must be subtracted from 1380 to make it a perfect square?

(a) 11 (b) 13 (c) 19 (d) 3

19. The number of digits in the square root of 81225 is

(a) 3 (b) 4 (c) 5 (d) Can't be determined

20. If $\sqrt{0.03 \times 0.3 \times a} = 0.003 \times 0.3 \times \sqrt{b}$, then $\frac{a}{b}$ is

(a) 0.00009 (b) 0.0009 (c) 0.009 (d) 0.90

21. If $\sqrt{6.5536} = y^2$, then $y =$

(a) 1.4 (b) 1.6 (c) 2.6 (d) None of these

22. Find the square root of 380.25 correct up to 2 decimal places.

(a) 17.5 (b) 19.5 (c) 13.5 (d) 23.5

23. The estimated value of $\sqrt{211}$ to nearest whole number is

(a) 14 (b) 15 (c) 13 (d) 16

24. The approximate value of $\sqrt{1870}$ is

(a) 44 (b) 43 (c) 42 (d) 45

25. 196 is the square of

(a) 11 (b) 12 (c) 14 (d) 16

26. A number ending in 9 will have the units place of its square as

(a) 3 (b) 9 (c) 1 (d) 6

27. Which of the following cannot be a perfect square?

(a) 841 (b) 529 (c) 198 (d) All of the above

28. Which letter best represents the location of $\sqrt{25}$ on a number line?

(a) A (b) B (c) C (d) D

29. If one member of a Pythagorean triplet is $2m$, then the other two members are

(a) m, m^2+1 (b) m^2+1, m^2-1 (c) m^2, m^2-1 (d) m^2, m^2+1

30. The hypotenuse of a right triangle with its legs of lengths $3x$ and $4x$ is

(a) 5x (b) 7x (c) 16x (d) 25x

31. Which among $43^2, 67^2, 52^2, 59^2$ would end with digit 1?

(a) 43^2 (b) 67^2 (c) 52^2 (d) 59^2

32. If m is the square of a natural number n, then n is

(a) the square of m (b) greater than m (c) equal to m (d) equal to $\sqrt{m}$

33. The value of $\sqrt{248+\sqrt{52+\sqrt{144}}}$ is

(a) 14 (b) 12 (c) 16 (d) 13

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.

34. Statement-I : There are 6 non-perfect square numbers between 3^2 and 4^2.

Statement-II : There are 2 n $non-perfectsquarenumbersbetween$ n^2 and $(n+1)^2$.

35. Statement-I : $(10,24,26)$ forms a Pythagorean triplet.

Statement-II : For any natural number $m>1$, $\left(2m,m^2,m^2+1\right)$ forms a Pythagorean triplet.

36. Statement-I : Every perfect square has odd number of factors.

Statement-II : The numbers that divides the given number leaving no remainder are called the factors of given number.

37. Statement-I : No perfect square is prime.

Statement-II : Square of prime numbers don't exist.

38. Statement-I : $\sqrt{36}\times\sqrt{256}=\sqrt{36\times256}$

Statement-II : For any natural numbers x and y, $\sqrt{x}\times\sqrt{y}=\sqrt{xy}$.

39. Statement-I : The smallest square number which is divisible by each of the numbers 4, 6 and 12 is 12.

Statement-II : The greatest two digit perfect square is 81.

ANSWERS

1. B 2. D 3. A 4. C

5. B	6. A	7. D	8. A
9. C	10. C	11. D	12. B
13. A	14. C	15. B	16. C
17. B	18. A	19. A	20. A
21. B	22. B	23. B	24. B
25. C	26. C	27. C	28. C
29. B	30. A	31. D	32. D
33. C	34. A	35. C	36. D
37. C	38. A	39. D	