Fill in the blanks**.**

1. Every point on the number line corresponds to a................number which may be either.................or.....................

2. The decimal form of an irrational number is neither...................nor..............

3. The decimal representation of the rational number 8/27 is ....

4. 0 is..............number.[a rational/an irrational]

5. A polynomial of degree 1 is called............polynomial.

Multiple Choice Questions (MCQs)

6. Every rational number is-

   (a)a natural number   (b)an interger   (c)a real number   (d)a whole number

7. The product of two irrational number is-

   (a)always an irrational number   (b)always a rational number   (c)always an integer   (d)can be rational or irrational

8. Which of the following is irrational?

   (a)0.14   (b)0.1416416....   (c)0.14161416...   (d)401400140001...

9. The value of 1.999.. in the form of p/q, where p and q are integers and q≠0 is-

   (a)19/10   (b)1999/1000   (c)1/9   (d)2

10. Which one is not a polynomial

   (a) $4x^2 + 2x - 1$ (b) $y + \dfrac{3}{y}$ (c) $x^3 - 1$ (d) $y^2 + 5y + 1$

11. The polynomial $px^2 + qx + rx^4 + 5$ is of type-

   (a) linear   (b) quadratic   (c) cubic   (d) Biquadratic

12. Identify the polynomial

   (a) $x^{-2} + x^{-1} + 5$ (b) $x^2 + 5\sqrt{x} + 7$ (c) $\dfrac{1}{x^3} + 7$ (d) $3x^2 + 7$

13. The zero of the polynomial p(x) = 2x + 5 is

   (a) 2   (b) 5   (c) $\dfrac{2}{5}$ (d) $-\dfrac{5}{2}$

14. The number of zeros of $x^2 + 4x + 2$

   (a) 1   (b) 2   (c) 3   (d)   none of these

15. The polynomial of type $ax^2 + bx + c$, a = 0 is of type

   (a) linear   (b) quadratic   (c) cubic   (d) Biquadratic

16. The value of k, if (x − 1) is a factor of $4x^3 + 3x^2 - 4x + k$, is

   (a) 1   (b) 2   (c) −3   (d) 3

17. The degree of polynomial $p(x) = x + \sqrt{x^2 + 1}$ is

   (a) 0   (b) 2   (c) 1   (d) 3

18. If 3 + 5 − 8 = 0, then the value of $(3)^3 + (5)^3 - (8)^3$ is

   (a) 260   (b) −360   (c) −160   (d) 160

19. If value of 104 × 96 is

   (a) 9984   (b) 9469   (c) 10234   (d) 11324

20. The value of 5.63 × 5.63 + 11.26 × 2.37 + 2.37 × 2.37 is

   (a) 237   (b) 126   (c) 56   (d) 64