

33) Roots are real and distinct if _____ .
a- $b^2 - 4ac < 0$ b- $b^2 - 4ac > 0$ c- $b^2 - 4ac = 0$ d- $b^2 - 4ac$ is square

34) Roots are imaginary and conjugate if _____ .
a- $b^2 - 4ac > 0$ b- $b^2 - 4ac = 0$ c- $b^2 - 4ac < 0$ d- $b^2 - 4ac$ is square

35) Roots will be rational if _____ .
a- $b^2 - 4ac < 0$ b- $b^2 - 4ac = 0$ c- $b^2 - 4ac > 0$ d- $b^2 - 4ac$ is a square

36) Eq with roots $2w$ and $2w^2$ is _____ invariable x .
a- $x^2 - 2x + 4 = 0$ b- $x^2 + 2x + 4 = 0$ c- $x^2 - 2x - 4 = 0$ d- $x^2 + 2x - 4 = 0$

37) Roots of $x^2 + 2x + 3 = 0$ are _____ .
a- Rational b- Real and unequal c- Imaginary d- Equal

38) $2x^2 + 5x - 1 = 0$ has _____ roots.
a- Real and unequal b- Equal c- Imaginary d- Rational

39) Roots of $2x^2 - 7x + 3 = 0$ are _____ .
a- Rational b- Equal c- Imaginary d- Real and unequal

40) Roots of $9x^2 - 12x + 4 = 0$ are _____ .
a- Rational b- Real and unequal c- Equal d- Imaginary

41) Equations have common solution are called _____ Equations.
a- Exponential b- Reciprocal c- Simultaneous d- Radical

42) One root of $x^2 - 3x + a = 0$ is 2 then $a =$ _____ .
a- -2 b- 2 c- 1 d- -1

43) Equal roots of $ax^2 + bx + c = 0$ are _____ .
a- $\left\{ \frac{a}{2b}, \frac{a}{2b} \right\}$ b- $\left\{ \frac{2b}{a}, \frac{2b}{a} \right\}$ c- $\left\{ \frac{2a}{b}, \frac{2a}{b} \right\}$ d- $\left\{ \frac{-b}{2a}, \frac{-b}{2a} \right\}$

44) Solutions of $2x^4 - 32 = 0$ are _____ .
a- $\{2, -2, i, -i\}$ b- $\{\pm 2, \pm 2i\}$ c- $\{\pm 2, \pm 3i\}$ d- $\{\pm 2, \pm 4i\}$

Chapter: 5

0312-7160828

1) Fraction $\frac{P(x)}{Q(x)}$ for $Q(x) \neq 0$ is called _____ fraction.
a- Rational b- Irrational c- Algebraic d- Proper

2) $\frac{P(x)}{Q(x)}$ for $Q(x) = 0$ is proper if _____ .
a- Degree of $P(x) >$ Degree of $Q(x)$ b- Degree of $P(x) <$ Degree of $Q(x)$ c- Degree of $P(x) =$ Degree of $Q(x)$ d- None of them

3) Degree of Numerator \geq Degree of Denominator in _____ fraction.
a- Fraction b- Proper c- Improper d- Rational

4) $\frac{3}{x-1}$ is _____ Fraction.
a- Proper b- Improper c- Irrational d- Compound

- 5) _____ is improper fraction.
- a - $\frac{2x-5}{x^2+4}$ b - $\frac{3}{x-1}$ c - $\frac{9x^2}{x^3-8}$ d - $\frac{x^3-8}{x^2-4}$
- 6) $(x+3)(x+4) = x^2 + 7x + 12$ is _____.
- a - Identity b - Conditional Eq c - Irrational fraction d - None
- 7) Identity is true for _____ value/values of variable.
- a - One b - two c - Three d - All.
- 8) $\frac{P(x)}{Q(x)}$ for $Q(x) \neq 0$ with no common factors is called _____ fraction.
- a - Proper b - Improper c - Reducible d - Irreducible.
- 9) Types of rational fraction are _____.
- a - One b - Two c - Three d - Infinite.
- 10) $2x+1=0$ is _____.
- a - Identity b - Proper fraction c - Reducible fraction d - Conditional Equation.
- 11) Partial fractions of $\frac{1}{x^2-1}$ are of type _____.
- a - $\frac{A}{x+1} + \frac{B}{x-1}$ b - $\frac{A}{x-1} + \frac{Bx+C}{x+1}$ c - $\frac{Ax+B}{x-1} + \frac{C}{x+1}$ d - $\frac{A}{x+1} + \frac{B}{(x-1)^2}$
- 12) Partial fraction of $\frac{1}{(x-1)(x+1)}$ are of type: _____.
- a - $1 + \frac{A}{x-1} + \frac{B}{x+1}$ b - $\frac{A}{x-1} + \frac{B}{x+1}$ c - $\frac{Ax+B}{x-1} + \frac{C}{x+1}$ d - $\frac{A}{(x-1)^2} + \frac{B}{x+1}$
- 13) Fraction of $\frac{1}{(x-1)(x^2-1)}$ are of the form: _____.
- a - $\frac{A}{x+1} + \frac{B}{x-1} + \frac{C}{(x-1)^2}$ b - $\frac{A}{x-1} + \frac{B}{x+1} + \frac{C}{(x+1)^2}$ c - $\frac{A}{x+1} + \frac{B}{x-1}$ d - $\frac{A}{x-1} + \frac{Bx+C}{x^2-1}$
- 14) If Degree of $P(x) = 3$ and Degree of $Q(x) = 2$ then $\frac{P(x)}{Q(x)}$ is _____ fraction.
- a - Proper b - Improper c - Reducible d - Equivalent.
- 15) Fractions of $\frac{x+1}{(x-1)(x^2+1)}$ are of the form: _____.
- a - $\frac{A}{x^2+1} + \frac{B}{x-1}$ b - $\frac{A}{x-1} + \frac{B}{x^2+1}$ c - $\frac{A}{x-1} + \frac{Bx+C}{x^2+1}$ d - $\frac{Ax+B}{x^2+1}$
- 16) x^2+x+1 is _____ quadratic factor. 0312-7160828
- a - Reducible b - Irreducible c - Improper d - None
- 17) Conversion of fraction into more than one fraction is _____.
- a - Reducibility b - Irreducibility c - Partialization d - None.
- 18) An equation can be divided into _____ kinds.
- a - One b - Two c - Three d - Infinite.
- 19) $(ax+b)x = ax^2+bx$ is _____.
- a - Identity b - Equation c - Fraction d - Proper fraction.
- 20) Every partial fractional Expression is _____.
- a - Equation b - Identity c - Improper d - Proper