Pre-Calculus Terms

MULTIPLE CHOICE

1. Algebraic expression consisting of any number of terms is called a:

    a. multinomial

    b. summation

    c. binomial

    d. monomial

    ANS: A   PTS: 1

2. An equation which is satisfied by all values of the variable for which the members of the equation defined is known as:

    a. linear equation

    b. rational equation

    c. literal equation

    d. defective equation

    ANS: C   PTS: 1

3. This consists of products and quotients of ordinary numbers and letters which represent numbers.

    a. Expression

    b. Term

    c. Equation

    d. Coefficient

    ANS: B   PTS: 1

4. An expression of two terms is called:

    a. Polynomial

    b. duomial

    c. Binomial

    d. all of the above

    ANS: C   PTS: 1

5. Any fraction that contains one or more fractions in either numerator or denominator or both is called:

    a. compound fraction

    b. composite fraction

    c. complex fraction

    d. all of the above

    ANS: C   PTS: 1

6. The angle which the line of sight to the object makes with the horizontal which is above the eye of the observer is called:

    a. angle of depression

    b. angle of elevation

    c. acute angle

    d. bearing

    ANS: B   PTS: 1

7. The median of triangle is the line connecting the vertex and the midpoint of the opposite side. For a given triangle, these medians intersects at a point which is called the:

    a. orthocenter

    b. circumcenter

    c. centroid

    d. incenter

    ANS: C   PTS: 1

8. The point of concurrency of the altitude of the triangle

    a. orthocenter

    b. centroid

    c. metacenter

    d. incenter

    ANS: A   PTS: 1

9. The point of concurrency of the perpendicular bisector of the sides of the triangle.

    a. orthocenter

    b. incenter
    c. circumcenter

    d. metacenter

    ANS: C   PTS: 1

10. The inverse function of a logarithm is known as:

    a. antilogarithm

    b. cologarithm

    c. antiderivative

    d. antecedent

    ANS: A   PTS: 1

11. In general quadratic equation, if the discriminant is zero, the curve is a figure that represent a/an:

    a. parabola

    b. circle

    c. ellipse

    d. hyperbola

    ANS: B   PTS: 1

12. If the eccentricity is less than one, then the curve is

    a. parabola

    b. ellipse

    c. hyperbola

    d. circle

ANS: B   PTS: 1

13. A line passing through the focus and perpendicular to the directrix of a parabola is called:

    a. axis of parabola

    b. tangent line

    c. cycloid

    d. hypocloid

ANS: A   PTS: 1

14. What is the graph of the equation $ax^2 + Bx + Cy^2 + Dy + Ex + F = 0$?

    a. circle

    b. ellipse

    c. parabola

    d. helix

ANS: D   PTS: 1

15. If the product of the slopes of any two straight lines is negative 1, one of these is said to be _____ to the other.

    a. parallel

    b. skew

    c. non-intersecting

    d. perpendicular

ANS: D   PTS: 1

16. 7+ Oi is

    a. irrational number

    b. real number

    c. imaginary number

    d. a variable

ANS: B   PTS: 1

17. The number 0.123123123123..... is

    a. irrational

    b. surd

    c. rational

    d. transcendental

ANS: C   PTS: 1

18. 10 to the 12th power is the value of the prefix
    a. micro

    b. femto

    c. teta

    d. atto

    ANS: C   PTS: 1

19. The micro or ì means
    a. 10^-2

    b. 10^-6

    c. 10^3

    d. 10^-12

    ANS: B   PTS: 1

20. The prefix pico means
    a. 10^{-12} of a unit

    b. 10% of a unit

    c. 10^{-15} of a unit10-15 of a unit

    d. $10°$ of a unit

    ANS: A   PTS: 1

21. The prefix nano is opposite to
    a. mega

    b. giga
    c. tera

    d. hexa

    ANS: B   PTS: 1

22. 1 foot is to 12 inches as 1 yard is to_____ spans.
    a. 4
    b. 6
    c. 9
    d. 24

    ANS: A   PTS: 1

23. A one-inch diameter conduit is equivalent to
    a. 254 mm

    b. 25.4 mm

    c. 100 mm
    d. 2.54 mm

    ANS: B   PTS: 1

24. The standard acceleration due to gravity is
    a. 32.2 ft/s^2

    b. 980 ft/s^2

    c. 58.3 ft/s^2

    d. 35.3 ft/s^2

    ANS: A   PTS: 1

25. One horsepower is equivalent to
   a. 746 watts

   b. 7460 watts

   c. 74.6 watts

   d. 7.46 watts

   ANS: A   PTS: 1

26. The equation $y = a1 + a2x$ is an algebraic expression for which of the following choices?
   a. A cosine expansion series
   b. A circle in polar form
   c. Projectile motion
   d. A straight line

   ANS: D   PTS: 1

27. If the roots of an equation are zero, then, how do you classify the solutions?
   a. Extranous solutions
   b. Trivial solutions
   c. Conditional solutions
   d. Ambiguous solutions

   ANS: B   PTS: 1

28. How do you call the axis of the hyperbola that passes through the center, the foci and vertices?
   a. Transverse axis
   b. Conjugate Axis
   c. Asymptotic axis
   d. Major Axis

   ANS: A   PTS: 1

29. What is a number, which could not be expressed as a quotient of two integers?
   a. Natural
   b. Rational
   c. Irrational
   d. Surd

   ANS: C   PTS: 1

30. What do you call a triangle having three unequal sides?
   a. Obtuse
   b. Oblique
   c. Scalene
   d. Isosceles

   ANS: C   PTS: 1

31. How do you call the distance of a point from the y-axis?
   a. Polar distance
   b. Coordinate
   c. Abscissa
   d. Ordinate

   ANS: C   PTS: 1

32. What is the measure of central tendency defined as the most frequent score. How do you call this measure of central tendency?
   a. Median
   b. Mode
   c. Mean
   d. Deviation

   ANS: B   PTS: 1

33. Which of the following is the equivalent of 1 mil?
   a. One-tenth of an inch
   b. One-thousandth of an inch
   c. One millionth of an inch
   d. One-half of an inch

   ANS: B   PTS: 1

34. A polygon with ten sides is said to be:
   a. Dodecagon
   b. Decagon
   c. Decahedron
   d. Dodecahedron

   ANS: B   PTS: 1

35. Any number expressed in place-value notation with base 12 is known as:
   a. Duodecimal
   b. Deontic
   c. Decile
   d. Dedekind

   ANS: A   PTS: 1

36. Another term for rhombus is said to be:
   a. Dichotomy
   b. Diamond
   c. Cyclic quadrilateral
   d. Bi-rectangular

   ANS: B   PTS: 1

37. A prefix denoting a multiple of ten times any of the physical units of the system international.
   a. Deka
   b. Nano
   c. Hecto
   d. Exa

   ANS: A   PTS: 1

38. The father of plane geometry.
   a. Euclid
   b. Pythagoras
   c. Aristotle
   d. Galileo

   ANS: A   PTS: 1

39. This is the case of a solution of a plane triangle where the given data leads to two solutions. How do you call this case?
   a. Ambiguous case
   b. Quadratic case
   c. Extraneous case
   d. Conditional case

   ANS: A   PTS: 1

40. It is a type of polygon in which each interior angle must be less than or equal to 180°, and all vertices 'point outwards' away from the interior. How do you call this polygon?
   a. Concave Polygon
   b. Convex polygon
   c. Regular polygon
   d. Irregular polygon

   ANS: B   PTS: 1

41. When two planes intersect with each other, the amount of divergence between the two planes is expressed by measuring the:
    a. Reflex angle
    b. Dihedral angle
    c. Polyhedral angle
    d. Plane angle

    ANS: B   PTS: 1

42. If the eccentricity is less than one, then curve is known as:
    a. Ellipse
    b. Hyperbola
    c. Parabola
    d. Circle

    ANS: A   PTS: 1

43. What can you say to the following statement: "the volume of a circular cylinder is equal to the product of its base and altitude."?
    a. Postulate
    b. Corollary
    c. Axiom
    d. Theorem

    ANS: D   PTS: 1

44. What is the study of the properties of figures of three dimensions?
    a. Physics
    b. Solid geometry
    c. Plane geometry
    d. Trigonometry

    ANS: B   PTS: 1

45. If the eccentricity is less than one, then curve is known as:
    a. Ellipse
    b. Hyperbola
    c. Parabola
    d. Circle

    ANS: A   PTS: 1

46. Points that lie in the same plane:
    a. Coplanar
    b. Collinear
    c. Oblique
    d. Parallel

    ANS: A   PTS: 1

47. What do you call the one-fourth of a great circle?
    a. Cone
    b. Pyramid
    c. Chord
    d. Quadrant

    ANS: D   PTS: 1

48. A plane closed curve, all points of which are the same distance from a point within, called the center.
    a. Arc
    b. Radius
    c. Circle
    d. Chord

    ANS: C   PTS: 1

49. This is the process of expressing a polynomial as the product of another polynomial or monomial of lower degree. What is this mathematical process?
    a. Decomposition
    b. Rationalization
    c. Factoring
    d. Polynomial damping

    ANS: C   PTS: 1

50. This is a point where the concavity of a curve changes or when the slope of the curve is neither increasing nor decreasing. What is this point commonly called?
    a. Maximum point
    b. Minimum point
    c. Point of tangency
    d. Point of inflection

    ANS: D   PTS: 1