Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A tower subtends an angle of 30° at a point distant d from the foot of the tower and on the same level as the foot of the tower. At a second point, h vertically above the firs, the angle of depression of the foot of the tower, is 60°. The height of the tower is	A. h/3 B. h/3d C. 3h D. 3h / d
2	Question Image	A. 0 B. 1
3	Question Image	A. xy B. y C. 0 D. x
4	if a_1 =3, d=7 and a_n =59 , then the number of terms in A.P is	A. 7 B. 9 C. 11 D. 13
5	Question Image	A. Rational B. Irrational C. Natural D. Odd
6	Question Image	A. 1 B. 1/2 C. 0 D. None
7	The number of terms in the expansion of $(a + x)^{12}$is	A. 13 B. 12 C. 11 D. 10
8	Question Image	A. -sinθ B. cosθ C. sinθ D. -cosθ
9	The law of tangents is _____	
10	The point of contact of the circles $x^2 + y^2 - 6x - 6y + 10 = 0$ and $x^2 + y^2 = 2$ is	A. (-3 ,2) B. (1 , 3) C. (-2 , -1) D. None of these
11	If in a set of real no a is additive identity then	A. a+a = 2a B. a+a = 1 C. a+a = 0 D. None of these
12	The general term of the A.P. is	A. a₁+ (n - 1) d B. n + (a₁- 1) d C. d + (n - 1) a₁ D. None of these
13	A line joining two distinct points on a parabola is called a _____ of the parabola.	A. Chord B. Tangent C. Lust rectum

		D. directrix
14	If B-A≠φ , then n(B-A) is equal to	A. n(a)+n(c) B. n(c)-n(a) C. n(a)-n(c) D. None of these
15	Question Image	
16	If the st. line $3x + 4y = K$ touches the circle $x^2 + y^2 - 10x = 0$ then the value of K is	A. -1 or 20 B. -10 or 40 C. -2 or 20 D. 2 or 20
17	Which of the following does not represent absolute value of a vector	A. magnitude B. length C. norm D. number
18	The solution set of the equation $\tan^{-1}x - \cot^{-1}x = \cos^{-1}(2 - x)$ is	A. [0, 1] B. [-1, 1] C. [1, 3] D. None of these
19	If a polynomial P(x) is divided by x + a, then the remiander is	A. P(a) B. P(-a) C. P(0) D. None of these
20	The real numbers which satisfy an inequality form its	A. solution B. coefficient C. domain D. range