Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If Z_1= 1 + i, Z_2= 2+3i, then $\|Z_2 - Z_1\|$ = ?	
2	Question Image	
3	One degree is denoted by	A. 1⁰ B. 1' C. 1" D. 1 rad
4	cos (α-β) = cosαcosβ+ sinαsin$\beta$is true for all	A. α>β> 0 B. α>β C. β>α D. None of these
5	sin(π/2+θ) = _____;	A. sinθ B. cosθ C. -sinθ D. -cosθ
6	The parabola y2 + 2y + x = 0 lie in _____ quadrant.	A. First B. Second C. Third D. Fourth
7	Question Image	
8	Domain of y = cot x = _____	
9	A chord passing through the centre of the circle is called	A. the secant of the circle B. the tangent of the circle C. the arc of the circle D. the diameter of the circle
10	f(x) = ax + b will be an identity function if	A. a = 1 , b = 1 B. a = 1 , b = 0
11	If three unequal numbers p, q, r are in H.P. and their squares are in A.P., then the ration p : q : r is	
12	The sum of even coefficient in the binomial expansion is	A. 2ⁿ⁺¹ B. 2ⁿ C. 2ⁿ⁻¹ D. 2n
13	$\tan^{-1}(1/4) + \tan^{-1}(2/9)$ is equal to	A. 1/2 cos⁻¹(3/5) B. 1/2 sin⁻¹(3/5) C. 1/2 tan⁻¹(3/5) D. tan⁻¹1/2
14	In (x +iy) y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
15	An equation in which at least one term contains dy/dx, d^2 y /dx^2etc, is called.	A. Differential equation B. Initial condition C. General solution D. Singular equation
16	The second degree equation of the form Ax2 +By2 +Gx +Fy +C =0 represent hyperbola if	A. A = B≠ 0 B. A≠ B and both are of same sign C. A≠ B both are of opposite sign D. Either A = 0 or B =0
17	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating

18	The magnitude of vector a=i-3j+5k is:	A. 3 B. √35 C. √17 D. √35
19	Domain of cot$\theta$is	
20	Question Image	A. cosec x + c B. -cosec x + c C. -sec x + c D. sec x + c