Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	The point (x_1, y_1) lies outside the circle $x^2+ y^2+ 2gx + 2fy + c =0$ if	
3	If x, y, z are the pth, qth, rth terms of an A.P. and also of G.P., then $x^{y-z}. y^{z-x}. z^{x-y}$eqals	A. xyz B. 0 C. 1 D. None of these
4	Any recurring decimal represents a	A. Irrational no B. Integer C. Rational no D. None of these
5	Area of the circle with ends of a diameter at (-3,2) and (5,-6)	A. 128π sq. units B. 64π sq. units C. 32π sq.units D. None of these
6	For≥ -2 , 1+3+5+.....+(2n+5)	A. (n+2)² B. (n-2)² C. 2n+1 D. (n+3)²
7	Question Image	A. 2x cos x2 B. -2xcosxsinx C. 2x Sin x2 D. -Sin x2
8	The general term in the expansion of (a+x)n is	A. (r-1)th term B. (r+1)th term C. rth term D. none
9	If one root of the equation $ix^2- 2(i + 1) x +(2 - i) = 0$ is 2 - i, then the other root is	A. -i B. 2 + i C. i D. 2 - i
10	The vector k = [0,0,1] is called unit vector along:	A. x -axis B. y - axis C. z- axis D. None of these
11	The square of the distance between two points $P(x_1, y_1)$ and $Q(x_2, y_2)$ is	
12	The set of positive integers, 0 and negative integers is known as the set of	A. Natural numbers B. Rational numbers C. All integers D. Irrational numbers
13	Question Image	
14	Question Image	A. A complex number B. A rational number C. A natural number D. An irrational number
15	Question Image	A. 30° B. 45° C. 60° D. 90°
16	f(x) = ax + b will be a constant function if	A. a = 1 , b = 1 B. a = 1 , b = 0
17	Question Image	
18	Let the sequence 1, 2, 2, 4, 4, 4, 4, 8, 8, 8, 8, 8, 8, 8, 8, ... where n consecutive terms have the value n, then 1025th term is	A. 2⁹ B. 2¹⁰ C. 2¹¹ D. 2⁸
19	The angle between the vectors 3i + j - k and 2i - j + k is	

19	The angle between the vectors $2\hat{i}-\hat{j}+\hat{k}$ and $\hat{i}-\hat{j}+2\hat{k}$ is	
20	√2 +√3 +√5) = (√2 +√3 +√5: this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition D. Additive identity