Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The mid point of the line segment joining the points (4,0) and (0,4) is	A. (4,4) B. (2,2) C. (-4,-4) D. (-2,-2)
2	If the radius of a circle is increased by 1 then area of circle will be	A. $\pi r2$ B. $\pi(r+1)2$ C. $\pi r2 +1$ D. $2\pi (r+1)$
3	The expression $x2 - x + 1$ has	A. One proper linear factor B. No proper linear factor C. Two proper linear factors D. None of these
4	Domain of $\cos\theta$ is	A. Set of odd numbers B. Set of integers C. Set of real numbers D. Set of complex numbers
5	Question Image	
6	Question Image	
7	y=-a is the equation of the directrix of	A. $y2 =4ax$ B. $x2=-4ay$ C. $x2=4ay$ D. $y2=-4ax$
8	The conic $ax2+2hxy+by2+2gx+2fy+c= 0$ never represent a circle if	A. $a\neq b, h\neq 0$ B. $a=b$ C. $h\neq 0$ D. $h=0$
9	The domain of the principle sine function is	
10	The range of the tangent function is	A. all real numbers B. $-1 \leq x \geq 1$ C. natural number D. z⁺
11	Question Image	D. none of these
12	The sum of the cubes of three consecutive natural number is divisible by	A. 9 B. 6 C. 5 D. 10
13	The transpose of a column matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
14	If two balls are drawn from a bag containing 3 white, 4 black and 5 red balls. Then the probability that the drawn balls are of different colours is	A. 1 / 66 B. 3 / 66 C. 19 / 66 D. 47 / 66
15	Which conjunction is not true ?	
16	The greatest integer which divides the number $101^{100}- 1$ is	A. 100 B. 1000 C. 10000 D. 100000
17	Question Image	
18	Question Image	A. 1 B. 2 C. 3 D. None of these
		A. -i -15j

19	If a = 2i +2j, b= 3i -j and c=4i +5j, the 3b -a-2c =	B. i-15j C. i-3j D. None of these
20	G is geometric mean between a and b if a, G, b is	A. A.P. B. G.P. C. H.P. D. None of these