Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The radius of the circle $x^2 + y^2 - 6x + 4y + 13 = 0$, is	A. 1 B. 2 C. 0 D. None of these
2	In the expansion of $(a + x)^n$ the general term T_{r+1} is	
3	If $\tan^{-1}3 + \tan^{-1}x = \tan^{-1}8$, then x=	A. 5 B. 1/5 C. 5/14 D. 14/5
4	If f(x) = cos x then f(0) is	A. 0 B. 1 C. 1/2
5	The symbol of irrational is	A. W B. N C. Q D. Q'
6	Question Image	A. 5 B. 25 D. 3
7	6 is	A. A prime integar B. An irrational number C. A rational number D. An odd integer
8	The general term of the A.P. is	A. $a_1 + (n - 1)d$ B. $n + (a_1 - 1)d$ C. $d + (n - 1)a_1$ D. None of these
9	202.04 is an example of	A. Recurring decimals B. Non-recurring decimals C. Terminating decimals D. None of these
10	An ellipse slides between two lines at right angles to one another. The locus of its centre is :	A. a parabola B. an ellipse C. a circle D. a hyperbola
11	If the cutting plane is slightly tilted and cuts only one nappe of the cone, the intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
12	Question Image	A. 1 B. 0
13	For what value of k, 3x -2y+ k= 0 is tangent to the circle x2 +y2 +6x -4y =0	A. k=0 B. k=0 or 26 C. k = 26 D. k=-13
14	A bag contains 5 white, 7 red and 5 black balls. If four balls are drawn one by one with replacement, the probability that none is white is	A. $(11/16)^2$ B. $(5/16)^2$ C. $(11/16)^4$ D. $(5/16)^4$
15	Question Image	
16	The angle of elevation of the tops of two towers at the middle point of the line joining the foots of the tower are 60° and 30° respectively. The the ratio of the heghts of the tower is	A. 2 : 1 B. 3 : 1 C. 1 : 2 D. 1 : 3
17	Question Image	
18	Question Image	A. cos 2x B. 2 cos 2x

		C. 2 sin2x
		D. -2 cos2x
19	If #n = (n-5)2 + 5, then find #3 x #4.	A. 54
		B. 12
		C. 4
		D. 9
20	Question Image	