

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The factorial of a positive integers is a (an)	A. Rational number B. Positive integer C. Real number D. None
2	A _____ divides the plane into left and right half planes.	A. Vertical line B. Horizontal line C. Non vertical line D. Inequality
3	The radius of the circle $2x^2 + 2y^2 - 4x + 12y + 11 = 0$ is:	A. $\sqrt{4.5}$ B. $\sqrt{11}$ C. $\sqrt{29}$ D. $\sqrt{15}$
4	The equation of the normal to the circle $x^2 + y^2 = 25$ at (4, 3) is	A. $3x - 4y = 0$ B. $3x - 4y = 5$ C. $4x + 3y = 5$ D. $4x + 3y = 25$
5	The solution of the equation $\cos^2\theta + \sin\theta + 1 = 0$ lies in the interval	
6	The sum of first 60 natural numbers is	A. 1830 B. 3660 C. 1640 D. 1770
7	If $\cos^{-1}p + \cos^{-1}q + \cos^{-1}r = \pi$ then $p^2 + q^2 + r^2 + 2pqr$ is equal to	A. 3 B. 1 C. 2 D. -1
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	Roots of the equation $x^2 + 7x + 12 = 0$ are	A. {3, -4} B. {-3, 4} C. {3, 4} D. {-3, -4}
10	The number of tangents to the circle $x^2 + y^2 - 8x - 6y + 9 = 0$ which pass through the point (3, -2) is	A. 2 B. 1 C. 0 D. None of these
11	In R the number of identity elements w.r.t. '!' is	A. One B. Two C. Three D. Four
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. I B. A C. A ! D. None of these
13	$\tan(\pi - \theta) =$ _____;	A. $\tan\theta$ B. $\cot\theta$ C. $-\tan\theta$ D. $-\cot\theta$
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 5 / 12 B. 3 / 8 C. 5 / 8 D. 7 / 4
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	A Geometric Series is divergent only if	A. $ r > 1$ B. $r \geq 1$ C. $ r = 1$ D. None of these
17	A conditional "if p then q" is denoted by	A. 0

18	No term of a harmonic sequence can be	B. 1 C. 2 D. 3
19	Which of the following integrals can be evaluated	
20	The third term in the expansion of $(1+2x)$ is	A. $-2x^2$ B. $-4x^2$ C. $2x^2$ D. $4x^2$