

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A circle is a limiting case of an ellipse whose eccentricity	A. Tends to a B. Tends to b C. Tends to 0 D. Tends to a + b
2	The equation $(\cos p - 1)x^2 + x(\cos p) + \sin p = 0$ in the variable x, has real roots, then p can take any value in the interval	A. $(0, 2\pi)$ B. $(-\pi, \pi)$ C. $(0, \pi)$ D. None of these
3	If $e > 1$, then the conic, is:	A. Ellipse B. Parabola C. Hyperbola D. None of these
4	The point (1,3) is one solution of	A. $3x + 5y > 29$ B. $3x + 5y < 7$ C. $x + 2y < 4$ D. $x + 4y > 3$
5	A - B = _____	
6	Which of the following function form 1 to itself are bi-jective	A. $F(x) = x + 3$ B. $F(x) = x^5$ C. $F(x) = 3x + 2$ D. $F(x) = x^2 + x$
7	$1 + 2 + 3 + \dots + n =$ _____	
8	If distance between (3,b) and (0,0) is 3 then b = _____	A. 3 C. 9 D. 0
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 2 C. 4/3 D. 5/3
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1
13	l is not	A. Real number B. Natural number C. Prime Number D. Whole Number
14	If $2x + y + \lambda = 0$ is normal to parabola $y^2 = -8x, \lambda =$ _____	A. 12 B. 8 C. 24 D. -24
15	The different of $\tan x$ is	A. $\sec^2 x$ B. $\ln \sec x $ C. $\sec^2 x dx$ D. $-\cos^2 x$

16	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
17	The locus of the centre of a circle which touches two given circles externally is:	A. a hyperbola B. an ellipse C. a circle D. a parabola
18	The proposition $S(n)$ for any $n \in \mathbb{N}$ is only true if $k \in \mathbb{N}$ and	A. $S(k+1)$ is true B. $S(1)$ is true and $S(k+1)$ is true whenever $S(k)$ is true C. $S(k+1)$ is true whenever $S(k)$ is true D. $S(k)$ is true
19		A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t. to addition
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