

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	$\sin(\alpha - \beta) =$	<p>A. $\sin\alpha \cos\beta - \cos\alpha \sin\beta$</p> <p>B. $\sin\alpha \cos\beta + \cos\alpha \sin\beta$</p> <p>C. $\sin\alpha \cos\beta - \sin\alpha \cos\beta$</p> <p>D. $\sin\alpha \cos\beta - \sin\alpha \cos\beta$</p>
3	Question Image	<p>A. The law of cosines</p> <p>B. The law of sines</p> <p>C. The law of tangents</p> <p>D. None of these</p>
4	Question Image	
5	If the st. line $3x + 4y = K$ touches the circle $x^2 + y^2 - 10x = 0$ then the value of K is	<p>A. -1 or 20</p> <p>B. -10 or 40</p> <p>C. -2 or 20</p> <p>D. 2 or 20</p>
6	$(\sqrt{3} + \sqrt{5}) + \sqrt{7} = \sqrt{3} + (\sqrt{5} + \sqrt{7})$ property used in above is	<p>A. Commutative property of addition</p> <p>B. Closure property of addition</p> <p>C. Additive inverse</p> <p>D. Associative property w.r.t to addition</p>
7	The set $\{a, b\}$ is	<p>A. Infinite set</p> <p>B. Singleton set</p> <p>C. Two points set</p>

		D. Empty set
8	The range of function $f(x) = -x^2 + 2x - 1$ is	A. R B. $(-\infty, 0]$ C. $(-\infty, 1]$ D. $[0, \infty)$
9	The set of all positive even integers is	A. Not a group B. A group w.r.t subtraction C. A group w.r.t division D. A group w.r.t multiplication
10	Question Image <input type="text"/>	
11	In a class of 100 students, 60 drink tea, 50 drink coffee and 30 drink both. A student from his class is selected at takes at last one of 2 drinks is	A. $\frac{2}{5}$ B. $\frac{3}{5}$ C. $\frac{4}{5}$ D. None of these
12	If $a = 5j + 2j, b = 2i - 3j$, then $ a + 2b =$	A. $\sqrt{21}$ B. $\sqrt{97}$ C. $\sqrt{39}$ D. None of these
13	Rational number is a number which can be written as a terminating decimal fraction or a	A. Non-terminating decimal fraction B. Non-recurring C. Recurring decimal fraction D. a, b and c
14	The set of natural no. is closed under	A. multiplication B. subtraction C. difference D. division
15	If $kx^2 + 2hxy - 4y^2 = 0$ represents two perpendicular lines then	A. $k = 2$ B. $k = \pm 2$ C. $k = -2$ D. $k \neq 0$
16	Question Image <input type="text"/>	A. 0 B. 20 C. 90 D. 80
17	The first three terms in the expansion of $(1 - x)^{-3}$ are	A. $1 + 3x + 6x^2$ B. $1 - 3x + 6x^2$ C. $-3 - 3x - 6x^2$ D. $1 - 3x - 6x^2$
18	Question Image <input type="text"/>	
19	Number of lines passing through three non-collinear points is	A. 2 B. 3 C. 1 D. 0 E. ∞
20	Question Image <input type="text"/>	