

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	Matrices $A = [a_{ij}] 2 \times 3$ and $B = [b_{ij}] 3 \times 2$ are suitable for	A. BA B. $A^{>2}</sup>$ C. AB D. $B^{>2}</sup>$
4	Question Image	
5	Corner point of the system $x - y \leq 2, x + y \leq 4, 2x - y \leq 6, x \geq 0, y \geq 0$	A. (1,4) B. (4,2) C. (3,1) D. (4,1)
6	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is	A. 1 / 500 B. 1 / 504 C. 1 / 252 D. 1 / 250
7	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
8	$\forall x, y \in \mathbb{R}$ and $x < 0, y < 0$, which one is true	A. $xy \leq 0$ B. $xy = 0$ C. $xy \geq 0$ D. None of these
9	120° degrees are equal to how many radians?	
10	If $ ai + (a+1)j + 2k = 3$ then value of a is	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
11	Question Image	
12	Question Image	
13	$H_1, H_2, H_3, \dots, H_n$ are called n harmonic means between a and b if $a, H_1, H_2, H_3, \dots, H_n, b$ are in	A. H.P. B. G.P. C. A.P. D. None of these
14	Question Image	B. $\sin 2x + c$ C. $-\sin 2x + c$
15	Question Image	
16	$\forall x, y \in \mathbb{R}$ and $x > 0, y > 0$, if $x > y$	D. None of these
17	If $Z_1 = 1 + i, Z_2 = 2 + 3i$, then $ Z_1 - Z_2 = ?$	A. $\sqrt{5}$ B. $\sqrt{7}$ C. $-1 - 2i$ D. $\sqrt{3}$
18	The locus of intersection of perpendicular tangents to the parabola $y^2 = 4ax$ is:	A. Axis of the parabola B. Focal chord of the parabola C. The tangent at vertex of the parabola D. a directrix of the parabola
19	Question Image	A. Symmetric property B. Cancellation property w.r.t. multiplication C. Reflexive property D. Transitive property
20	Question Image	

