

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Matrices $A = [a_{ij}] 2 \times 3$ and $B = [b_{ij}] 3 \times 2$ are suitable for	A. BA B. $A^{2 \times 2}$ C. AB D. $B^{2 \times 2}$
2	The solution of the quadratic equation $x^2 - 7x + 10 = 0$, is	A. 2 B. 5 C. 2, 5 D. 7
3	In set builder notation the set $\{0, 1, 2, \dots, 100\}$ can be written as	A. $\{x / x \in B \wedge x \leq 100\}$ B. $\{x / x \in W \wedge x \leq 101\}$ C. $\{x / x \in Z \wedge x \leq 101\}$ D. The set of first 100 whole numbers
4	Which one is not defined $\forall n \in \mathbb{Z}^+$	A. $-n!$ B. $n!$ C. $(-n)!$ D. $n! + 0! = n! + 1$
5	the largest degree of the terms in the polynomials is called	A. terms of the polynomial B. degree of a polynomial C. co-efficient D. monomial
6	A die is rolled. What is the probability that the dots on the top are greater than 4?	A. $1/4$ B. $1/2$ C. $1/3$ D. $1/33$
7	If $a, b = 0$ then	A. $a \parallel b$ B. $a \parallel b$ C. $a = b$ D. None
8	The range of $y = \sin x$ is _____	A. $[1, -1]$ B. $[-1, 1]$ C. $[0, -1]$ D. $[-\infty, \infty]$
9	A tower subtends an angle α at a point on the same level as the root of the tower and at a second point, b meters above the first, the angle of depression of the foot of the tower is β . The height of the tower is	A. $b \cot \alpha \tan \alpha$ B. $b \tan \alpha \cot \alpha$ C. $b \tan \alpha \cot \alpha$ D. None of these

10	Two unbiased dice are thrown. The probability that the total score is > 5 is	B. $7 / 18$ C. $13 / 18$ D. $11 / 18$
11	For two events A and B if $P(A) = P(A/B) = 1/4$ and $P(B/A) = 1/2$, then	A. A is sub-event of B B. A and B are mutually exclusive C. A and B are independent and $P(A/B) = 3/4$ D. None of these
12	An integer is chosen at random from the number ranging from 1 to 50. the probability that the integer chosen is a multiple of 2 or 3 or 10 is	A. $3 / 10$ B. $5 / 10$ C. $7 / 10$ D. $9 / 10$
13	If $y=f(x)$ is a function then x is called	A. dependent variable B. independent variable C. constant D. none of these
14	The set of the first elements of the orders pairs forming a relations is called its	A. Relation in B B. Range C. Domain D. Relation in A
15	Question Image	A. 25 B. 16 C. 5 D. 0
16	If $e > 1$, then the conic, is:	A. Ellipse B. Parabola C. Hyperbola D. None of these
17	Question Image	
18	The graph of $y < 2$ is the	A. Left half plane B. upper half plane C. Right half plane D. Lower half plane
19	$x = \underline{\hspace{2cm}}$ is in the solution of $2x + 3 < 0$	A. 0 B. 2 C. -1 D. -2
20	e-radii are denoted by	A. η B. r_2 C. r_3 D. All of these