

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 0 B. 1 C. -1 D. none of these
2	Question Image	
3	If A is a skew-symmetric matrix of order n and P, any square matrix of order n. prove that $P^T A P$ is	A. Skew-symmetric B. Symmetric C. Null D. Diagonal
4	The exact value of $\cos^{-1}(0)$ is	A. $\pi/2$ B. $-\pi/2$ C. 3π D. $\pi - \pi/6$
5	Question Image	
6	Question Image	
7	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. $1/33$
8	Question Image	
9	The differential equations of all conis whose axes coincide with the co-ordinate axis is	
10	Question Image	
11	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. ∞ Infinite series D. geometric sequence
12	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$, then which expression defines the product of z_1 and z_2 ?	A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $0, +(-12)i$
13	Question Image	
14	A and B throw a dice. The probability that A's throw is not greater then B's is	A. $5/12$ B. $7/12$ C. $1/6$ D. $1/2$
15	Question Image	
16	The value of x which is unchanged by the mapping in the function defined by $f(x) = x^2 + 5x - 5$ for $x > 0$ is	A. 1 B. 5 C. -5 D. -1
17	Question Image	
18	If $A = [a_{ij}]_{m \times p}$ and $B = [a_{ij}]_{p \times n}$ then order of BA is	A. $m \times n$ B. $p \times n$ C. $n \times m$ D. None of these
19	Form a group of 5 men and 3 women, a committee of 4 persons is to be selected randomly. The probability that there is a majority of men is	A. $1/4$ B. $1/3$ C. $1/2$ D. $1/6$
20	The roots of $ax^2 + bx + c = 0$ are always unequal if	A. $b^2 - 4ac = 0$ B. $b^2 - 4ac \neq 0$ C. $b^2 - 4ac > 0$ D. $b^2 - 4ac \geq 0$

