

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	(1, 2) is in the solution of the inequality	A. $2x + y \geq 8$ B. $2x + y < 6$ C. $2x - y \geq 1$ D. $2x + 3y \leq 2$
2	Question Image	A. -2 B. -1 C. 1 D. 2
3	Question Image	
4	Five engineering, four mathematics, two chemistry books are placed on a table at random. The probability that the books of each kind are all together is	
5	If in a set of real no a is multiplicative identity then	A. $a, a = a^{>2}$ B. $a, a = 1$ C. $a, a = 0$ D. None of these
6	Question Image	
7	Another name of quadratic equation is	A. Polynomial B. 2nd degree polynomial C. Linear equation D. simultaneous equations
8	For a square matrix A, if $A = A^t$, then A is called	A. Matrix B. Transpose C. Symmetric D. Non-symmetric
9	Question Image	
10	If the roots of $ax^2 + b = 0$ are real and distinct then	A. $ab \geq 0$ B. $a = 0$ C. $ab \leq 0$ D. $a \geq 0, b \geq 0$
11	(1,0) is in the solution of the inequality	A. $3x + 2y \geq 8$ B. $2x - 3y \leq 4$ C. $2x + 3y \geq 3$ D. $x - 2y \leq -5$
12	The number of arbitrary constants in the general solution of a differential equation is equal to the different equation	A. Order B. Degree C. Variables D. All are correct
13	Only one of the root of $ax^2 + bx + c = 0$, $a \neq 0$ is zero if	A. $c = 0$ B. $c = 0, b \neq 0$ C. $b = 0, c = 0$ D. $b = 0, c \neq 0$
14	A sequence is a function whose domain is	A. N B. Subset of N C. R D. None of these
15	$\forall x, y \in R$ and $x < 0, y < 0$, which one is true	A. $xy \leq 0$ B. $xy = 0$ C. $xy \geq 0$ D. None of these
16	If $(1+x-2x^3)^6 = 1+a_1x + a_2x^2 + a_3x^3 + \dots$ the the value of $a_2 + a_4 + a_6 + \dots + a_{12}$ will be	A. 32 B. 31 C. 64 D. 1024
17	$\sin^{-1}(\sin 2\pi/3) =$	A. $\pi/2$ B. $2\pi/3$ C. $-3\pi/2$ D. $\pi/3$

18	Which of the following is a scalar.	A. force B. frequency C. weight D. acceleration
19	The set $\{-1, 1\}$ is	A. Group under the multiplication B. Group under addition C. Does not form a group D. Contains no identity element
20	The standard form of the quadratic function $f(x) = -x^2 + 4x + 2$, is	A. $(x-2)^2 + 6$ B. $-(x-2)^2 + 6$ C. $(x-3)^2 + 5$ D. $(x+4)^2 - 7$