

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 2 B. 1 C. 5 D. 0
2	Question Image	A. a = 4, b = 1 B. a = 1, b = -4 C. a = 0, b = 4 D. a = 2, b = 4
3	A square matrix $A = [a_{ij}]$ is lower triangular matrix when:	A. $a_{ij} = 0$ for all $i \neq j$ B. $b_{ij} = 0$ C. $c_{ij} = 0$ D. $d_{ij} = 0$
4	The period of $ \sin 2x $ is	A. $\pi/2$ B. $-\pi/2$ C. π D. $\pi/3$
5	An equation in which at least one term contains $dy/dx, d^2y/dx^2$ etc, is called.	A. Differential equation B. Initial condition C. General solution D. Singular equation
6	Question Image	A. (-1, 2) B. (-1, 1) C. (1, 2) D. {-1}
7	The n th term of an A.P., is $12-4n$. Its common difference is	A. 8 B. 4 C. 4 D. 16
8	A subset of set of complex number whose elements are of the form $(a,0)$ is called	A. Real number B. Complex number C. Rational number D. Irrational number
9	$2x + 3y > 4$ is a linear inequality in	A. one variable B. two variables C. three variables D. none of these
10	Question Image	
11	If G is a G.M between a and b then a,G,b are in	A. A.P B. H.P C. G.P D. None of these
12	Question Image	A. Biconditional B. Implication C. Antecedent D. Hypothesis
13	Question Image	
14	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = 2$ D. All are
15	$3x + 4 \leq 0$ is	A. not inequality B. equation C. identity D. inequality
16	Given two independent event A and B such that $P(A) = 0.30$ and $P(B) = 0.60$. Probability of getting neither A nor B is	A. 0.28 B. 0.13 C. 0.12 D. 0.10

17 -2, 1, 4, 7,.... is _____

- A. Harmonic sequence
- B. Arithmetic sequence
- C. Geometric sequence
- D. Arithmetic series

18 Question Image

- C. 1
- D. 0

19 Question Image

20 If $\sin\theta$ and $\cos\theta$ are the roots of the equation $ax^2 - bx + c = 0$, then a, b, c satisfy the relation

- A. $b^2 - a^2 = 2ac$
- B. $a^2 - b^2 = 2ac$
- C. $a^2 + b^2 = c^2$
- D. $b^2 + a^2 = 2ac$