

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Which conjunction is not true ?	
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix
3	The point R dividing externally the line joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$ in the ratio $k_1 : k_2$ has the coordinates	
4	Distance between $A(3, 8)$, $B(5, 6)$ is	
5	The n th term of a G.P. is	A. $a^{n-1}r^{n-1}$ B. $a^{n-1}r^{n+1}$ C. $a^{n-1}r^{n-1}$ D. $a^{n-1}r^{-n}$
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	D. none of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. are real no B. both are not real C. are imaginary no D. both are imaginary
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	If $f(x) = 2x+1$ then $f \circ f(x) =$ _____;	A. $4x+3$ B. $2x+3$ C. $4x+1$ D. None of these
10	Given X, Y are any two sets such that number of elements in set $X = 28$, number of elements in set $Y = 28$, and number of elements in set $X \cup Y = 54$, then number of elements in set $X \cap Y =$	A. 4 B. 3 C. 2 D. 1
11	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = xy + 2$ D. All are
12	The maximum value of $Z = 3x + 4y$ subjected to the constraints $x + y \leq 40, x + 2y \leq 60, x \geq 0$ and $y \geq 0$ is	A. 120 B. 100 C. 140 D. 160
13	A class contains nine boys and three girls, in how many ways can the teacher choose a committee of four?	A. 60 B. 460 C. 495 D. 272
14	For a square matrix A , if $A = A^t$, then A is called	A. matrix B. Transpose C. Symmetric D. Non-symmetric
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $f(x) = x^2$ B. $f(x^2) = x$ C. $f(x) = x$ D. none of these
16	The 6th term of an arithmetic sequence whose first term is 3 and common difference is zero	A. 18 B. 6 C. 3 D. 0
17	The expansion of $(1 + 2x)^{-2}$ is valid if	A. $ x < 1/2$ B. $ x < 1$ C. $ x < 2$ D. $ x < 3$

18 Question Image

- A. $2x - 3x + c$
- C. $x^2 - 3x + c$

19 Question Image

- A. Lies between 4 and 7
- B. Lies between 5 and 9
- C. Has no value between 4 and 7
- D. Has no value between 5 and 9

20 Question Image