

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. Associate law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
2	$\forall a, b, c \in \mathbb{R}$ and $c > 0$, then	A. $a > b \Rightarrow ac < bc$ B. $a > b \Rightarrow ac > bc$ C. $a < b \Rightarrow ac > bc$ D. None of these
3	Question Image	A. $1/2$ B. 2 C. $1/4$ D. 4
4	Question Image	
5	If n is add the expansion $(a + x)^n$ has middle terms	A. 2 B. 3 C. 4 D. 5
6	The first three terms in the expansion of $(1 + x)^{-2}$ are _____	A. $1 - 2x + 3x^2$ B. $1 - 2x - 3x^2$ C. $1 + 2x + 3x^2$ D. $-2 - 2x + 3x^2$
7	A function which is to be maximized or minimized is called an	A. Explicit function B. Implicit function C. Objective function D. None
8	The circle $(x - 2)^2 + (y + 3)^2 = 4$ is not concentric with the circle	A. $(x - 2)^2 + (y + 3)^2 = 9$ B. $(x + 2)^2 + (y - 3)^2 = 4$ C. $(x + 2)^2 + (y - 3)^2 = 8$ D. $(x - 2)^2 + (y + 3)^2 = 5$
9	Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is	A. 375 B. 500 C. 625 D. 150
10	Question Image	
11	If (0, 0) and (-1, 0) are end points of a diameter, then the equation of the circle is	
12	The set which has no proper subset is	A. {0} B. {} C. {∅} D. None of these
13	If a tangent line touches the function $y = f(x)$ in more than one point then $y = f(x)$ is	A. Periodic B. Surjective C. Bijective D. Injective
14	Question Image	A. Conclusion B. Implication C. Antecedent D. Hypothesis
15	Question Image	
16	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
17	Question Image	A. Zero matrix B. Diagonal matrix C. Column matrix

C. Column matrix

D. Scalar matrix

18 If $a > 0$, $b > 0$, $c > 0$, then the roots of the equation $ax^2 + bx + c = 0$ are

A. Real and negative

B. Non-real with negative real parts

C. Real and positive

D. Nothing can be said

19 If $x^3 - x^2 + 5x + 4$ is divided by $x - 2$, then the remainder is

A. 0

B. 2

C. 18

D. 14

20 The range of the principle cot function is