

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$\forall a, b, c \in \mathbb{R}, a > b \wedge b > c \Rightarrow a > c$ is	A. Trichotomy property B. Transitive property C. Symmetric property D. Additive property
2	If A is a non singular matrix then $A^{-1} =$ _____	
3	Question Image	A. Addition B. Subtraction C. Multiplication D. None of these
4	24 can be written as a product of	A. Odd factors B. Even factors C. Whole factors D. Prime factors
5	Question Image	A. 0 B. 1
6	If $\triangle ABC$ is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Phythogorous theorem D. Hero's formula
7	Range of cosec x is _____	A. $\{-1, 1\}$ B. $\mathbb{R}$ C. Negative real numbers D. $\mathbb{R} - \{x \mid -1 \leq x \leq 1\}$
8	$y = -a$ is the equation of the directrix of	A. $y^2 = 4ax$ B. $x^2 = -4ay$ C. $x^2 = 4ay$ D. $y^2 = -4ax$
9	The maximum value of the quadratic function $f(x) = 2x^2 - 4x + 7$ , is	A. 3 B. 5 C. -3 D. -5
10	The value of x for which the polynomials $x^2 - 1$ and $x^2 - 2x + 1$ vanish simultaneously is	A. 2 B. 1 C. -1 D. -2
11	The set $\{ \{a, b\} \}$ is	A. Infinite set B. Singleton set C. Two points set D. Empty set
12	Composition of functions is	A. Non-commutative ( $fg \neq gf$ ) B. non-associative $[8(fh)] \neq (8f)h$ C. Commutative ( $fg = gf$ ) D. $f \circ f \neq 1$
13	The point R dividing internally 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	
14	Total number of subsets that can be formed out of the set $\{a, b, c\}$ is	A. 1 B. 4 C. 8 D. 12
15	Question Image	A. 2 B. $-3/2$ C. 1 D. 0
16	Question Image	A. Additive property of inequality B. Commutative property C. Additive inverse D. Additive identity
17	Question Image	

18	The point of concurrency of the medians of a triangle is called	A. incentre B. circumcentre C. e-centre D. centroid
19	If G is the centroid of the triangle, then $GA + GB + GC =$	A. 0 B. 1 C. -1 D. 3
20	How many different 5-digit even numbers are possible form digit 1,2,4,6,8	A. 4 : 4! B. 4! C. 5! D. 4!+4!