

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$x = \sin^{-1} 3$ , then the value of $\sin x$ is	A. $\sqrt{3/2}$ B. 3 C. Not possible D. -1
2	The set Q	A. Forms a group under addition B. Does not form a group C. Contains no additive identity D. Contains no additive inverse
3	Two coins are tossed twice each. The probability that the head appears on the first toss and the same forces appear in the two tosses is	A. 1/4 B. 1/2 C. 1/3 D. 1/7
4	Which of the following is a vector.	A. work B. time C. density D. electric field
5	$f(x) = x$ is	A. trigonometric function B. exponential function C. quadratic function D. identify function
6	If $ a  =  b  =  a+b  = 1$ , then $ a-b $ is equal to:	A. 1 B. $\sqrt{3}$ C. $\sqrt{2}$ D. 7
7	Question Image	
8	If $z_1 = \sqrt{-36}$ , $z_2 = \sqrt{-25}$ , $z_3 = \sqrt{-16}$ then	A. 15 B. $15i$ C. $-15i$ D. -15
9	The familiar plane curves, namely circle, ellipse, parabola and hyperbola are called:	A. cones B. conics C. nappes D. apex
10	Question Image	
11	A second degree equation in which coefficients of $x^2$ and $y^2$ are equal and there is no product term $xy$ represents:	A. a parabola B. a circle C. an ellipse D. a pair of lines
12	Question Image	D. none of these
13	Question Image	A. A onto B B. both a & c C. A into B D. none of these
14	$u, v$ , and $u \times (v \cdot w)$ are	A. Equal B. Parallel C. Additive immense of each other D. Meaningless
15	Question Image	A. $\cos 2x = \sin 4y$ B. $\cos 4y = \cos 2x$ C. $\cos 3y = \sin 4x$ D. None of these
16	A monoid $(G, *)$ is said to be group if	A. have identity element B. is commutative C. have inverse of each element D. None of these
17	A point of a solution region where two of its boundary lines intersect, is called	A. Boundary B. Inequality C. Half plane D. Vertex

D. Vertex

18 The  $\sqrt{\quad}$  is used for the

- A. Positive square root
- B. Negative square root
- C. +ve and -ve square root
- D. Whole number

19 Matrices  $A = [a_{ij}] 2 \times 3$  and  $B = [b_{ij}] 3 \times 2$  are suitable for

- A.  $BA$
- B.  $A^2$
- C.  $AB$
- D.  $B^2$

20 Domain of  $3 \sin x$  is \_\_\_\_\_

- A.  $[-3, 3]$
- B.  $\mathbb{R}$
- C. Positive real numbers
- D. None of these