

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	D. all
2	If $Z_1 = 1 + i$ , $Z_2 = 2 + 3i$ , then $ Z_1 - Z_2  = ?$	A. $\sqrt{5}$ B. $\sqrt{7}$ C. $-1 - 2i$ D. $\sqrt{3}$
3	$e$ is a	A. variable B. Positive constant C. Positive variable D. Directrix
4	Question Image	
5	If $n \in \mathbb{N}$ , then $n(n+3)$ is always	A. Multiple of 3 B. Multiple of 6 C. odd D. even
6	Question Image	
7	If $p$ and $q$ are two statements then their biconditional 'p if q' is denoted by	
8	Question Image	D. none of these
9	Find the geometric mean between 4 and 16	
10	Question Image	
11	$\cos^4\theta - \sin^4\theta =$	A. $\cos 4\theta$ B. $\cos 2\theta$ C. $-\sin 2\theta$ D. $\sin 2\theta$
12	$\theta$ and $2k\pi + \theta$ are the _____ angles	A. Quadrantal angles B. Coterminal C. Allied D. None
13	$\sqrt{x} =$ _____ if $x$ is a prime number	A. Rational no B. Natural no C. Irrational no D. Complex no
14	In a triangle ABC, if angle A = $72^\circ$ , angle B = $48^\circ$ and $c = 9$ cm then $\hat{C}$ is	A. $69^\circ$ B. $66^\circ$ C. $60^\circ$ D. $63^\circ$
15	If $Z = (1, 2)$ , then $Z^{-1} = ?$	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)

16	The set $\{1, -1, i, -i\}$	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Not closed under multiplication
17	$\tan \theta/2$	
18	No term of a harmonic sequence can be	A. 0 B. 1 C. 2 D. 3
19	Product of any n consecutive positive integers is divisible by	A. n B. $\sqrt{n}$ C. n! D. None
20	For any set X, $X \cup X$ is	A. X B. $X'$ C. $\Phi$ D. Universal Set