

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 1 B. 3 C. 2-i D. -1
2	Question Image	A. $\pi$ B. $\frac{\pi}{2}$ C. $\frac{\pi}{3}$ D. $\frac{\pi}{4}$
3	if $a_9 = 19, a_9 = 31$ are the 6th and 9th term of an AP. and $d=4$ is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75
4	Question Image	A. $6x - 2 + c$ B. $x^3 - x^2 + x + c$ C. $6x - x^2 + c$ D. $6x^3 - x^2 + c$
5	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
6	The law of cosines reduces to $a^2 + c^2 = b^2$ for	A. $\alpha = 90^\circ$ B. $\beta = 90^\circ$ C. $\gamma = 90^\circ$ D. $\alpha + \beta + \gamma = 180^\circ$
7	The 31 term of the A.P 5,2,-1.....is	A. -82 B. 82 C. 85 D. -85
8	(0,0) is in the solution of the inequality	A. $x + y > 3$ B. $x - y > 2$ C. $3x + 2y > 5$ D. $3x - 2y \leq 2$
9	Question Image	
10	Question Image	
11	Question Image	
12	a _____ quantity is one that possesses both magnitude and direction.	A. Scalar B. Vector C. Segment D. None of these
13	If for the matrix A, $A^5 = I$ , then $A^{-1} =$	A. $A^2$ B. $A^3$ C. A D. None of above
14	The standard form of the quadratic function $f(x) = -x^2 + 4x + 2$ , is	A. $(x-2)^2 + 6$ B. $-(x-2)^2 + 6$ C. $(x-3)^2 + 5$ D. $(x+4)^2 - 7$
15	Domain of $\sec x$ is _____	
16	For an arithmetic series to be convergent it is necessary that the series has	A. Finite terms B. $d \neq 0$ C. Infinite terms D. None of these
		A. 0

17	$\sec(-360^\circ) = \underline{\hspace{2cm}}$	B. 1 C. 2 D. 3
18	A square matrix $A = [a_{ij}]$ is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all $i > j$ D. $d_{ij} = 0$
19	The domain of the principle cos function is	
20	Which of the following is the subset of all sets	A. $\Phi$ B. $\{1,2,3\}$ C. $\{\Phi\}$ D. $\{0\}$