

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	D. none of these
2	Question Image	A. Polynomial of degree 0 B. Polynomial of degree 2 C. Quadratic equation D. None of these
3	In an A.P, a + (n-a)d is	A. 1st term B. General term C. Last term D. None of these
4	Question Image	A. $1 + \tan^2 x + c$ B. $\tan x + c$ C. $-\tan x + c$ D. $\cot x + c$
5	The multiplicative inverse of x such that $x \neq 0$ is	A. -x B. does not exist C. $1/x$ D. 0
6	Question Image	A. 16 B. 256 C. 64 D. 1024
7	if one root of the equation $x^2 - 2(i + 1)x + (2 - i) = 0$ is $2 - i$ then the other root is	A. -i B. $2 + i$ C. i D. $2 - i$
8	Question Image	A. Conclusion B. Implication C. Antecedent D. Hypothesis
9	Range of $\sin \theta$ is	
10	Two circles $x^2 + y^2 + 8x - 9 = 0$ and $x^2 + y^2 + 6y + k = 0$ touch internally if the value of k is	A. $k = 9$ B. $k = \pm 9$ C. $k = -9$ D. $k = 11$
11	Question Image	A. 5 B. 10 C. 20 D. 30
12	Question Image	A. $\sin h x$ B. $\cos h x$ C. $\tan h x$ D. $\cot h x$
13	Matrices $A = [a_{ij}] 2 \times 3$ and $B = [b_{ij}] 3 \times 2$ are suitable for	A. BA B. $A^{2 \times 2}$ C. AB D. $B^{2 \times 2}$
14	If $kx^2 + 2hxy - 4y^2 = 0$ represents two perpendicular lines then	A. $k = 2$ B. $k = \pm 2$ C. $k = -2$ D. $k \neq 0$
15	The transpose of a row matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
16	Question Image	A. Additive property of inequality B. Commutative property C. Additive inverse D. Additive identity

17	$\cos 315^\circ = \underline{\hspace{2cm}}$	
18	The straight line passing through the focus and perpendicular to the directrix of the conic is known as its	A. Tangent B. axis C. Focal chord D. major or manor axis
19	$x = 1$ is in the solution of the inequality	A. $x + 1 > 0$ B. $x - 2 > 0$ C. $3x - 1 < 0$ D. $x + 2 < 0$
20	For a square matrix A, if $A = A^t$ , then A is called	A. matrix B. Transpose C. Symmetric D. Non-symmetric