

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A tower subtends an angle of $30^\circ$ at a point distant $d$ from the foot of the tower and on the same level as the foot of the tower. At a second point, $h$ vertically above the first, the angle of depression of the foot of the tower, is $60^\circ$ . The height of the tower is	A. $h/3$ B. $h/3d$ C. $3h$ D. $3h/d$
2	Question Image	A. $-3 - 2i$ B. $3 + 2i$ C. $1 + 2i$ D. $1 - 2i$
3	$n(n - 1)(n - 2)$ in factorial form is	
4	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
5	Question Image	
6	The multiplicative inverse of $0$ is	A. $1$ B. $-1$ C. $0$ D. Does not exist
7	The trigonometric function are continuous whenever	A. They are defined B. their limit exist C. Their period is given D. All are incorrect
8	$\tan(-135^\circ) = \theta$	A. $0$ B. $1$ C. $2$ D. $3$
9	The angle of elevation of the tops of two towers at the middle point of the line joining the foots of the tower are $60^\circ$ and $30^\circ$ respectively. The the ratio of the heights of the tower is	A. $2 : 1$ B. $3 : 1$ C. $1 : 2$ D. $1 : 3$
10	Question Image	D. none of these
11	Write the first four terms of the arithmetic sequence $5, 2, -1, \dots$ is	A. $3$ B. $-4$ C. $7$ D. $1$
12	Question Image	A. A rational number B. A irrational number C. An even integer D. A factor of $36$
13	Question Image	A. $n$ if $n$ is even B. $0$ for any natural number $n$ C. $1$ if in odd D. None of these
14	If $f(x) =  x $ , then $(0,0)$ is the	A. Critical point B. Inflection point C. Stationary point D. None of these
15	Question Image	
16	The matrix $A = [a_{ij}]_{m \times n}$ with $m \neq n$ is	A. Rectangular B. Symmetric C. Square D. None
17	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule for fractions D. Rule for quotient of fractions
		A. $6$

18	The length of perpendicular from (3,1) to $4x + 3y + 20 = 0$ is	B. $\frac{7}{5}$ C. 3 D. 8
19	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
20	Question Image	D. none of these