

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. From an empty set B. 1 C. 2 D. $>2$
2	Which of the following is a vector.	A. distance B. temperature C. energy D. acceleration
3	Question Image	
4	If $c$ is a constant number and if $f$ is the function defined by the equation $f(x) = c$ for all values of $x$ , then $f$ is differentiable at every $x$ and $f'$ is defined by the equation $f'(x)$	A. $f$ B. 1 C. $C$ D. 0
5	Question Image	A. are real no B. both are not real C. are imaginary no D. both are imaginary
6	If $f(x) = ax^2$ , and $a > 0$ , then the lowest point on the parabola is called.	A. Vertex of parabola B. Co-ordinates of parabola C. Roots of the equation D. Coefficient of the equation
7	Question Image	
8	The order of the matrix $\begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ is	A. $1 \times 1$ B. $3 \times 3$ C. $3 \times 1$ D. $1 \times 3$
9	If origin is the mid point of $(a,3)$ and $(5,b)$ then	A. $a = -5, b = -3$ B. $a = 5, b = 3$ C. $a = -5, b = 3$ D. $a = 5, b = -3$
10	The number of terms in the expansion of $(a + x)^{12}$ is	A. 13 B. 12 C. 11 D. 10
11	The number of words that can be formed out of the letters of the word ASSASSINATION is	
12	Domain of $y = \sec x$ is	A. All real numbers except $\pi/2 + n\pi$ B. $R$ C. All negative integers D. None of these
13	Question Image	A. -1 B. 0 C. 1 D. undefined
14	The middle term in the expansion of $(a + x)^{12}$ is	A. 7th B. 8th C. 9th D. 6th
15	Question Image	A. $360^\circ$ B. $180^\circ$ C. $90^\circ$ D. None of these
16	If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$ , then the remainder is	A. 0 B. 7 C. -7 D. 5
17	Question Image	
18	Question Image	D. none of these

- 19 For what value of  $k$ ,  $3x - 2y + k = 0$  is tangent to the circle  $x^2 + y^2 + 6x - 4y = 0$
- A.  $k=0$   
B.  $k=0$  or  $26$   
C.  $k = 26$   
D.  $k=-13$

20 Question Image