

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The square root of every incomplete square is an	A. Rational numbers B. Even numbers C. odd numbers D. Irrational numbers
2	Question Image	
3	How many arrangements of the letters of the word MISSIPPI, taken all together can be made?	
4	Question Image	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
5	If the vertex of the parabola is the origin and directrix is $x+5 = 0$ . then its latus rectum is:	A. 10 B. 5 C. 0 D. 20
6	If a,b,c are sides of a triangle taken in order then $a \times b =$	A. $b \times c$ B. $b \times a$ C. $c \times a$ D. Both a & b
7	A kite flying at a height of 67.2 m is attached to a fully stretched string inclined at an angle of $53^\circ$ to the horizontal, the length of the string	A. 62m B. 82m C. 73m D. 57m
8	The locus of the point of intersection of tangents to an ellipse at two points, sum of whose eccentric angles is constant is	A. A parabola B. A circle C. An ellipse D. A st. line
9	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer
10	The differential equation representing the family of curves $y = A \cos (x + B)$ , where A, B are parameters, is	
11	The largest possible domain of the function: $y = \sqrt{x}$ is:	A. $(0, \infty)$ B. 12 C. $(3, 12)$ D. $(3, \infty)$
12	If $w+2$ is a root of $(x+1)(x+2)(x+3)(x+4) = k$ , then	A. $k=0$ B. $k=1$ C. $k=w$ D. $k=w^2$
13	Question Image	
14	$2\pi + \theta$ will have terminal side in Quad	A. I B. II C. III D. IV
15	If A is a non-singular matrix then adj A is	A. Non-singular B. Symmetric C. Singular D. Non defined
16	Question Image	A. 1 B. 2 C. 0 D. 4
17	Domain of $\cot \theta$ is	

Let the sequence  $1, 2, 2, 4, 4, 4, 4, 8, 8, 8, 8, 8, 8, 8, 8, \dots$  where  $n$  consecutive terms have

A.  $2^{n-1}$   
B.  $2^n$

18	Let the sequence 1, 2, 2, 4, 4, 4, 4, 0, 0, 0, 0, 0, 0, 0, ..... where n consecutive terms have the value n, then 1025th term is	<div>B. <math>2^{1025}</math></div> <div>C. <math>2^{11}</math></div> <div>D. <math>2^8</math></div>
19	The exterior angle of the interior angle C of the quadrilateral whose vertices are A(5,2), B(-2,3), C(-3,-4), D(4,-5) is	<div>A. <math>30^\circ</math></div> <div>B. <math>60^\circ</math></div> <div>C. <math>45^\circ</math></div> <div>D. <math>90^\circ</math></div>
20	If the st. line $3x + 4y = K$ touches the circle $x^2 + y^2 - 10x = 0$ then the value of K is	<div>A. -1 or 20</div> <div>B. -10 or 40</div> <div>C. -2 or 20</div> <div>D. 2 or 20</div>