

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Addition B. Subtraction C. Multiplication D. None of these
2	The set of natural numbers is a subset of	A. {1, 2, 3, .... 100} B. The set of whole numbers C. {2, 4, 6, 8, .....} D. None of these
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. The law of sines B. The law of tangents C. The pythagorus theorem D. None of these
5	If $y=f(x)$ is a function then $y$ is called	A. dependent variable B. independent variable C. constant D. none of these
6	$(51)^4$ is equal to	A. 7065201 B. 8065201 C. 6765201 D. 6565201
7	If $A$ and $B$ are skew-symmetric then $(AB)^t$ is	A. $A^t B^t$ B. $AB$ C. $-AB$ D. $BA$
8	The point $R$ dividing externally the line joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$ in the ratio $k_1: k_2$ has the coordinates	
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $R$ B. $2R$ C. $r$ D. $2r$
12	The third term of a G.P. is 4, The product of first five terms is	A. 43 B. 45 C. 46 D. None of these
13	The term involving $x^4$ in the expansion of $(3 - 2x)^7$ is	A. 120 B. 1512 C. 1250 D. 15120
14	Range of $\cos x$ is _____	A. $[-1, 1]$ B. $R$ C. Negative real numbers D. $R - \{x \mid -1 \leq x \leq 1\}$
15	The eccentricity of the conic $9x^2 - 16y^2 = 144$ is	A. $4/5$ B. $5/4$ C. $4/3$ D. $3/4$
16	The minimum value of the quadratic function $f(x) = 5x^2 - 11x + 1$ is	A. -11 B. 6 C. -7 D. 7
17	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 $f(f(x))$ is	A. $f$ B. 1 C. $c$ D. $c^2$

or  $x$ , then  $f$  is differentiable at every  $x$  and  $f'$  is defined by the equation  $f'(x)$

- C.  $\frac{1}{x}$
- D. 0

18  $f(x) = 3x^4 - 2x^2 + 7$  is:

- A. an even function
- B. an odd function
- C. an even and implicit function
- D. neither even nor a odd

19 The angle of depression of a point A on the ground from the top of the tower is  $30^\circ$ , then the angle of elevation of the top of the tower at the point A is

- A.  $60^\circ$
- B.  $40^\circ$
- C.  $41^\circ$
- D.  $30^\circ$

20 

- D. none of these