

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A relation in which the equality is true only for some values of the unknown is called	A. An identity B. An equation C. A polynomial D. None
2	The formula $a_n = a_{n-1}$ represents	A. nth term of G.P B. Sum of the first n terms C. G.M between a and b D. None of these
3	If one end of the diameter of the circle $2x^2 + 2y^2 - 8x - 4y + 2 = 0$ is (2, 3), the other end is:	A. (2, 1) B. (-2, 1) C. (2, -1) D. (1, -1)
4	(1, 1) is the in the solution of the inequality	A. $3x + 4y > 3$ B. $2x + 3y < 2$ C. $4x = 3y > 5$ D. $2c - 3y > 2$
5	If $x^2 - 7x + a$ has remainder 1 when divided by $x + 1$ , then $a =$ _____	A. -7 B. 7 C. 0 D. None of these
6	$\vec{O}(0,0)$ is called:	A. Position vector B. Free vector C. Unite vector D. Null vector
7	What is the circular measure of the angles between the hands of which at 4 o'clock	A. $\pi/6$ B. $3\pi/2$ C. $\pi/4$ D. $2\pi/3$
8	What is the period of $\cos 6x$ =?	A. $\pi/2$ B. $\pi/3$ C. $\pi/4$ D. $\pi$
9	Composition of functions is	A. Non-commutative ( $fg \neq gf$ ) B. non-associative $[8(fh) \neq (8f)h]$ C. Commutative ( $fg = gf$ ) D. $f \circ f \neq 1$
10	The sum of all even numbers less than 100 is	A. 2450 B. 2352 C. 2272 D. 2468
11	Question Image	
12	There is no integer n for which 3n is	A. Even B. Prime C. Odd D. Real
13	Question Image	
14	Question Image	B. $a f(x) + c$ C. $f(x) + a$
15	The set of all antiderivatives of $f(= \int f(x)dx)$ is the	A. Definite integral B. Indefinite integral C. Integral D. Area
16	Question Image	
17	Question Image	A. (3, 1, -2) B. (3, -2, 1) C. (2, -1, 3) D. (-1, -2, -3)

18	Derivative of $x^3$ w.r.t $x$ is	A. 0 B. 1 C. $3x^2$ D. $x^3$
19	If $c = 2i + j + k$ and $d = -1 + 4j + 2k$ , then $[c-d]=$	A. $\sqrt{7}$ B. $\sqrt{41}$ C. $\sqrt{19}$ D. $\sqrt{(2 \times 7)}$
20	The study conics, pappus used the method of:	A. analytic geometry Euclidean B. solid geometry C. Greek mathematicians D. None of these