

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	x is a member of the set [-1, 0, 3, 5] y is a member of the set {-2, 1, 2, 4} which is possible?	A. $x - y = -6$ B. $x - y \leq -6$ C. $x - y \geq -6$ D. None
3	The set of first elements of the ordered pairs in a relation is called its	A. domain B. range C. relation D. function
4	A line segment whose end points lie on a circle is called	A. The secant of the circle B. The arc of the circle C. The chord of the circle D. The circumference of the circle
5	Question Image	D. none of these
6	If $n \in \mathbb{Z}^+$ then $(a+x)^n$ is $a^n$	A. Finite series B. Convergent series C. Infinite series D. Divergent series
7	For two events A and B if $P(A) = P(A/B) = 1/4$ and $P(B/A) = 1/2$ , then	A. A is sub-event of B B. A and B are mutually exclusive C. A and B are independent and $P(A/B) = 3/4$ D. None of these
8	The roots of the equation $ax^2 + bx + c = 0$ are complex/imaginary if	A. $b^2 - 4ac \leq 0$ B. $b^2 - 4ac = 0$ C. $b^2 - 4ac \geq 0$ D. None of these
9	If $ax^2 + bx + c = 0$ is satisfied by every value of x, then	A. $b = 0, c = 0$ B. $c = 0$ C. $b = 0$ D. $a = b = c = 0$
10	Which term of the A.P 5, 8, 11, 14, ..... is 320	A. 104th B. 106th C. 105th D. 64th
11	If $a = \{2m/2m < 9, m \in \mathbb{P}\}$ , the $(n A) =$	A. {2, 3, 4, 5, 6, 7, 8} B. {2, 4, 6, 8, ..... 16} C. {4, 6} D. {2, 3, 5, 7}
12	i =	
13	Number of ways of writing the letters of WORD taken all at a time is	A. 24 B. 4 C. 12 D. 6
14	$\cos^{-1}(\cos x) =$	A. x B. $\cos x$ C. $x = 1/x$ D. $\cos^{-2} x$
15	Question Image	A. -1 B. 1 C. 2 D. -2
16	Question Image	D. none of these
17	$(a + bi) - c(c + di) =$	A. $(a + b) = (c + d)$ B. $(a + c) + i(b + d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$

18	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
19	The quadratic equation $8 \sec^2 \theta - 6 \sec \theta + 1 = 0$ has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
20	Domain of $3 \sin x$ is _____	A. $[-3, 3]$ B. $\mathbb{R}$ C. Positive real numbers D. None of these