

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	All letters of the word "AGAIN" are permuted in all possible ways and the words so formed (with or without meaning) are written as in dictionary, then the 50th word is	A. NAAGI B. NAAIG C. IAANG D. INAGA
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	D. None of these
3	$(x + 3)(x + 4) = x^2 + 7x + 12$ is _____	A. Quadratic equation B. Linear equation C. Cubic equation D. Identity
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A, B, C are coincident B. A, B, C are collinear C. Both A and B D. None of these
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	$\cos^{-1}(\cos x) =$	A. x B. $\cos x$ C. $x = 1/x$ D. $\cos^{-2} x$
7	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplication identity C. Associative law of multiplication D. Multiplication inverse
8	The number of tangents to the circle $x^2 + y^2 - 8x - 6y + 9 = 0$ which pass through the point (3, -2) is	A. 2 B. 1 C. 0 D. None of these
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. -1 B. 0 C. 1 D. undefined
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 20 B. 10 C. 0 D. None of these
12	What is the number of elements of the power set of $\{0, 1\}$	A. 1 B. 2 C. 3 D. 4
13	The number of solution of the equation $\tan x + \sec x = 2 \cos x$ lying in the interval $[0, 2\pi]$ is	A. 0 B. 1 C. 2 D. 3
14	A point where two of its boundary lines intersect is called	A. Corner point B. Feasible point C. Vertex D. Feasible solution
15	The value of x which is unchanged by the mapping in the function defined by $f(x) = x^2 + 5x - 5$ for $x > 0$ is	A. 1 B. 5 C. -5 D. -1
16	If the st. line $3x + 4y = K$ touches the circle $x^2 + y^2 - 10x = 0$ then the value of K is	A. -1 or 20 B. -10 or 40 C. -2 or 20 D. 2 or 20
17	In R, the additive inverse of a is	A. 0 B. 1 C. -a D. 1/a

D.  $\frac{1}{a}$

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18 Two unbiased dice are thrown. The probability that the total score is  $> 5$  is

- A.  $\frac{1}{18}$
- B.  $\frac{7}{18}$
- C.  $\frac{13}{18}$
- D.  $\frac{11}{18}$

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19 The equation  $x^2 + y^2 = 0$  represents

- A. A circle
- B. A degenerate circle
- C. An empty set
- D. A st. line

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20 The sum of coefficients in the binomial expansion equals to

- A. 2
  - B.  $2^{n+1}$
  - C.  $2^{n-1}$
  - D.  $2^n$
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