


## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A diagonal matrix in which the diagonal elements are equal is called a	A. Null matrix B. Identity matrix C. Scalar matrix D. Row matrix
2	A die is thrown, the probability that the dots on the top are prime numbers or odd numbers is	A. $\frac{1}{2}$ B. $\frac{2}{3}$ C. $\frac{1}{3}$ D. $\frac{2}{5}$
3	If $a = 2i + 2j$ , $b = 3i - j$ and $c = 4i + 5j$ , the $3b - a - 2c =$	A. $-i - 15j$ B. $i - 15j$ C. $i - 3j$ D. None of these
4	$(0.90)^{1/2}$ is equal to	A. 0.99 B. 0.90 C. 0.80 D. 0.88
5	Three integers are chosen at random from the first 20 integers. Then probability that their product is even, is	A. $\frac{2}{19}$ B. $\frac{3}{29}$ C. $\frac{17}{19}$ D. $\frac{4}{19}$
6	Question Image	A. 0 B. 3 C. 9 D. -3
7	Additive inverse of $-a - b$ is	A. a B. $-a + b$ C. $a - b$ D. $a + b$
8	If all members of a sequence are real numbers then it is called	A. A.P B. Real Sequence C. G.P D. None of these
9	Given X, Y are any two sets such that number of elements in set X = 28, number of elements in set Y = 28, and number of elements in set $X \cup Y = 54$ , then number of elements in set $X \cap Y =$	A. 4 B. 3 C. 2 D. 1
10	Question Image	A. 1 B. -1 C. 5 D. 2
11	Question Image	
12	The statement that a group can have more than one identity elements is	A. True B. False C. Ambiguous D. Some times true
13	The multiplicative inverse of -1 in the set $\{1, -1\}$ is	A. 1 B. -1 C. $+-1$ D. 0
14	The roots of the equation $ax^2 + bx + c = 0$ are real and equal if	A. $b^2 - 4ac < 0$ B. $b^2 - 4ac = 0$ C. $b^2 - 4ac > 0$ D. None of these
15	If $A(x_1, y_1)$ , $B(x_2, y_2)$ and $C(x_3, y_3)$ are the vertices of a triangle then its centroid is	
16	An A.P. consists of n (odd terms) and its middle term is m. then the sum of the A.P. is	A. 2 mn B. $\frac{1}{2} mn$ C. mn D. $mn^2$

17	How many numbers are there between 103 and 750 which are divisible by 6	A. 120 B. 107 C. 108 D. 113
18	Question Image 	A. A B. B C. A' D. None of these
19	$\forall x, y \in R$ , either $x = y$ or $x > y$ or $x < y$ is	A. Transitive property B. Reflexive property C. Trichotomy property D. None of these
20	The n numbers $A_1, A_2, A_3, \dots, A_n$ are called an arithmetic means between a and b if $a, A_1, A_2, A_3, \dots, A_n, b$ is _____	A. An arithmetic series B. An arithmetic sequence C. A geometric sequence D. A harmonic sequence