

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$i$ is equal	A. (1, 0) B. (0, 1) C. (1, 1) D. (0, 0)
2	The point _____ is in the solution of the inequality $2x + 3y < 5$	A. (1,1) B. (2,2) C. (0,1) D. (0,2)
3	Cofactor of an element $a_{ij}$ denoted by $A_{ij}$ is	A. $(-2)^{i+j}$ B. $M_{ij}$ C. $(-1)^{i+j} M_{ij}$ D. None of above
4	Question Image	A. 1 B. 3 C. 2-i D. -1
5	The third term of a G.P. is the square of first term. If the second term is 8, then the 6th term is	A. 120 B. 124 C. 128 D. 132
6	The number of arbitrary constants in the general solution of a differential equation is equal to the different equation	A. Order B. Degree C. Variables D. All are correct
7	Question Image	A. 2 B. 5 C. 7 D. None of these
8	If $x, y$ are two positive distinct numbers then	A. $A > G > H$ B. $A < G < H$ C. $A = G = H$ D. None of these
9	A circle which touches one side of a triangle externally and the other two sides produced is called	A. In-circle B. Circumcircle C. e-circle D. Point circle
10	The general term in the expansion of $(a+x)^n$ is	A. $(r-1)$ th term B. $(r+1)$ th term C. $r$ th term D. none
11	Question Image	
12	$a + x$ is _____	A. A trinomial B. A binomial C. A monomial D. None of these
13	The sum of the focal distance from any point on the ellipse $9x^2 + 16y^2 = 144$ is	A. 32 B. 16 C. 18 D. 8
14	$n^2 - 1$ divisible by 8 when $n$ is	A. an odd integer B. an even integer C. Irrational D. Prime Number
15	Question Image	
16	Question Image	A. x C. y
17	The number of triplets $(x, y, z)$ satisfying $\sin^{-1}x + \cos^{-1}y + \sin^{-1}z = 2\pi$ is	A. 0 B. 2 C. 1

✓  
D. Infinite

18  $\Phi$  set is the \_\_\_\_\_ of all sets?

- A. Subset  
B. Union  
C. Universal  
D. Intersection

19 Domain of sec x is \_\_\_\_\_

20 Question Image

- A. Lies between 4 and 7  
B. Lies between 5 and 9  
C. Has no value between 4 and 7  
D. Has no value between 5 and 9