

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
2	There are 25 tickets bearing number from 1 to 25. One ticket is drawn at random. The probability that the number on it is a multiple of 5 or 6 is	A. 7 / 25 B. 9 / 25 C. 11 / 25 D. None of these
3	The exponent of x in 10th term in the expansion of (a+x) <sup>n</sup>	A. 10 B. 12 C. 11 D. 9
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 2 B. 4 C. 8 D. 16
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	If n is odd then the middle terms in the expansion of (a + x) <sup>n</sup> are	
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $\frac{\pi}{4}$ B. $\frac{\pi}{6}$ C. $\frac{\pi}{3}$ D. 0
8	The conic $ax^2+2hxy+by^2+2gx+2fy+c=0$ never represent a circle if	A. $a \neq b, h \neq 0$ B. $a=b$ C. $h \neq 0$ D. $h=0$
9	If n is a positive integer then n! is	A. $(n-1)(n-2) \dots 3, 2, 1$ B. $n(n-1)(n-2) \dots 3, 2, 1$ C. $n(n-1)(n-2) \dots 3$ D. None of these
10	$6! =$ _____	A. 360 B. 720 C. 6.5.4 D. None of these
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Additive property of inequality B. Commutative property C. Additive inverse D. Additive identity
12	The area enclosed between the graph $y = x^2 - 4x$ and the x- axis is:	A. 20/3 B. 41/3 C. 32/3 D. 25/3
13	Range of $\tan \theta$ is	A. Set of complex numbers B. Set of real numbers C. Set of odd numbers D. Set of positive integers only
14	Z is the set of integers, (Z, *) is a group with $a * b = a + b + 1$ , $a, b \in G$ . then inverse of a is	A. -a B. a + 1 C. -2 -a D. None of these
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Polynomial of degree 0 B. Polynomial of degree 2 C. Quadratic equation D. None of these
16	The locus of intersection of perpendicular tangents to the parabola $y^2 = 4ax$ is:	A. Axis of the parabola B. Focal chord of the parabolas C. The tangent at vertex of the

16. The locus of intersection of perpendicular tangents to the parabola  $y^2 = 4ax$  is.

C. The tangent at vertex of the parabola  
D. a directrix of the parabola

17.

Question Image

A.  $\sin h x$   
B.  $\cos h x$   
C.  $\sec h x$   
D.  $\operatorname{cosec} h x$

18.

Question Image

19.

Question Image

20.

Question Image