

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The point of concurrency of the angle bisectors of a triangle is called	A. incentre B. circumcentre C. e-centre D. centroid
2	If $A = [a_{ij}]_{m \times p}$ and $B = [a_{ij}]_{p \times n}$ then order of $BA$ is	A. $m \times n$ B. $p \times n$ C. $n \times m$ D. None of these
3	Eight chairs are numbered 1 to 8. Two women and three men wish to occupy one chair each. First, the women choose the chairs from amongst the chairs marked 1 to 4 and then the men select the chairs from amongst the remaining. The number of possible arrangement is	A. ${}^6P_3 \times {}^3P_2$ B. ${}^4P_2 \times {}^4P_3$ C. ${}^4P_2 \times {}^3P_3$ D. None of these
4	Which of the following is a scalar.	A. force B. frequency C. weight D. acceleration
5	Question Image	
6	The probability that a slip of number divisible by 4 is picked from the slips bearing numbers 1, 2, 3, ...10 is	A. $\frac{1}{5}$ B. $\frac{1}{4}$ C. $\frac{1}{3}$ D. $\frac{1}{2}$
7	If $0 = \{1, 3, 5, \dots\}$ , then $n(0) =$	A. Infinite B. Even numbers C. odd integers D. 99
8	If $y = \sin(ax+b)$ then $y^4 =$ _____ :	A. $\sin^4(ax+b)$ B. $a^4 \sin(ax+b)$ C. $a^4 \cos(ax+b)$ D. None of these
9	The additive inverse of a matrix A is	D. None of these
10	The period of $2 \cos x$ is	A. $30\pi$ B. $7\pi$ C. $5\pi$ D. $2\pi$
11	Corner point of the system $x - y \leq 2, x + y \leq 4, 2x - y \leq 6, x \geq 0, y \geq 0$	A. (1,4) B. (4,2) C. (3,1) D. (4,1)
12	Question Image	A. 0 B. 1 C. -1 D. None of these
13	Question Image	
14	An equation of the form $ax + by = k$ is homogeneous linear equation when:	
15	The radius of the circle $(x - 1)^2 + (y + 3)^2 = 61$ is	A. 8 B. 4 C. 64 D. None of these
16	$w^{11} =$ _____	A. 0 B. 1 C. w D. $w^{22}$
17	Question Image	A. 0 B. 1 C. 2 D. 1/2

18	Name the property used in $1000 \times 1 = 1000$	A. additive inverse B. multiplicative inverse C. additive identity D. multiplicative identity
19	Period of $\sin 3x$ is _____	
20	The line $Ax + By + C = 0$ will touch the circle $x^2 + y^2 = \lambda$ when	A. $C^2 = A^2 + B^2$ B. $A^2 = C^2 + B^2$ C. $B^2 = A^2 + C^2$ D. None of these