

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If the lines $2x-3y-1=0$ , $3x-y-5=0$ and $3x+py+8=0$ meet at a unique point then	A. $p = -14$ B. $p = -1$ C. $p = 0$ D. $p = 12$
2	Question Image	
3	The sum of the odd coefficients in the expansion of $(a + x)^4$ is	A. 14 B. 12 C. 8 D. 4
4	The set $\{ \{a,b\} \}$ is	A. Infinite set B. Singleton set C. Two points set D. Empty set
5	The point of concurrency of the angle bisectors of a triangle is called	A. incentre B. circumcentre C. e-centre D. centroid
6	Question Image	
7	The graph of the quadratic equation is	A. Straight line B. Circle C. Parabola D. ellipse
8	Question Image	D. none of these
9	The conic is a parabola, when:	A. $e > 1$ B. $e < 1$ C. $e = 1$ D. $e = 0$
10	If $(2, 3)$ is the mid point of $(a, 3)$ and $(5, b)$ then	A. $a = 1, b = -3$ B. $a = -1, b = 3$ C. $a = 1, b = 3$ D. $a = -1, b = -3$
11	$2\cos^2 \frac{a}{2} =$ _____;	A. $1+\sin a$ B. $1-\sin a$ C. $1+\cos a$ D. $1-\cos a$
12	Question Image	
13	A chimney is such that on walking towards it 50 m in a horizontal line through its base the angular elevation of its top changes from $30^\circ$ to $45^\circ$ . The height of the chimney is	
14	Question Image	
15	Question Image	A. 1 B. -1
16	If $ a  =  b  =  a+b  = 1$ , then $ a-b $ is equal to:	A. 1 B. $\sqrt{3}$ C. $\sqrt{2}$ D. 7
17	Question Image	D. none of these
18	The additive inverse of $\frac{2}{3}$ is	A. $\frac{3}{2}$ B. $-\frac{2}{3}$ C. $-\frac{3}{2}$ D. 0
19	$9.8.7.6 =$ _____	
20	Derivative of $a$ w.r.t $x$ is	A. 0 B. 1 C. $x$ D. -

