

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. $4(x^3 - 3x^2 + 3x + c)$ B. $3x^2 - 6x + c$
2	$\cos(a-\beta) = \underline{\hspace{2cm}}$ ;	A. $\sin a \cos \beta + \cos a \sin \beta$ B. $\sin a \cos \beta - \cos a \sin \beta$ C. $\cos a \cos \beta + \sin a \sin \beta$ D. $\cos a \cos \beta - \sin a \sin \beta$
3	If $2x + y + \lambda = 0$ is normal to parabola $y^2 = -8x, \lambda = \underline{\hspace{2cm}}$	A. 12 B. 8 C. 24 D. -24
4	When the angle between the ground and the sun is $30^\circ$ , flag pole casts a shadow of 40 m long. the height of the top of the flag is	A. 25m B. 23m C. 12m D. 29m
5	$2\pi + \theta$ will have terminal side in Quad	A. I B. II C. III D. IV
6	Question Image	
7	Question Image	A. 0 B. 1 D. undefined
8	For a positive integer n	A. $n! = n(n+1)$ B. $n! = n(n+1)!$ C. $n! = n(n-1)$ D. $n! = n(n-1)!$
9	For what value of k, $3x - 2y + k = 0$ is tangent to the circle $x^2 + y^2 + 6x - 4y = 0$	A. $k=0$ B. $k=0$ or 26 C. $k=26$ D. $k=-13$
10	Question Image	D. none of these
11	Question Image	
12	Question Image	
13	Question Image	B. 1 C. 2 D. -2
14	Question Image	A. $P(A) + P(B)$ B. $P(A) - P(B)$ C. $P(A) \cdot P(B)$ D. $P(A) / P(B)$
15	The greatest integer which divides the number $101^{100} - 1$ is	A. 100 B. 1000 C. 10000 D. 100000
16	Question Image	
17	Question Image	A. $30^\circ$ B. $60^\circ$ C. $45^\circ$ D. None of these
18	Which of the vectors have opposite direction?	
19	The sum of first twenty odd integers in A.P is	A. 400 B. 397 C. 404 D. 408

