

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. A = B B. B = C C. A = C D. None of these
2	Question Image	
3	The line through the centre and perpendicular to the transverse axis is called the	A. Major axis B. Minor axis C. Focal axis D. Conjugate axis
4	The coefficient of $x^n$ in the expansion of $(1-2x)^{-1}$ is	A. $(-1)^n 2^n$ B. $2^n$ C. $(-1)^{(n+1)} x^n$ D. $(n+1) 2^n$
5	Question Image	
6	The only function which is both even and odd is	A. $f(x) = \alpha$ B. $f(x) = x$ C. $f(x) = 0$ D. Both A & B
7	Question Image	A. 0 B. 20 C. 90 D. 80
8	Question Image	A. $ab = -1$ B. $ab = 1$ C. $ab = 2$ D. None
9	The unit vector along y-axis is	D. none of these
10	Question Image	A. Orthogonal B. Involutary C. Idempotent D. Nilpotent
11	Sum of n terms of a geometric series if $ r  < 1$ is	
12	A set having only one element is called	A. An empty set B. Universal set C. A singleton set D. A power set
13	If A is a non singular matrix then $A^{-1} =$ _____	
14	Question Image	
15	A circle which touches one side of a triangle externally and the other two sides produced is called _____	A. In-circle B. Circum circle C. Escribed circle D. None of these
16	$A = B$ if	D. A is equivalent to B
17	The square matrix A is skew-symmetric when $A^t =$	A. -B B. -C C. -A D. -D
18	If $n(A) = n$ then $n(P(A))$ is	A. $2n$ B. $n^{2^2}$ C. $n/2$ D. $2^{n^2}$
19	If $\cos 20^\circ = K$ and $\cos x = 2K^2 - 1$ , then the possible values of x between $0^\circ$ and $360^\circ$ are	A. $140^\circ$ B. $50^\circ$ and $140^\circ$ C. $50^\circ$ and $130^\circ$ D. $40^\circ$ and $320^\circ$

The point R dividing externally the line joining the points  $P(x_1, y_1)$  and  $Q(x_2, y_2)$  in the ratio  $k_1: k_2$  has the coordinates