

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Which of the following is not a unit vector	A. [1, 1, 1] B. [0, 1, 0] C. [0, 0, 1] D. [1, 0, 0]
2	$f(x)g(x) - \int g(x) f'(x) dx$ is equal to	A. $\int f(x)g'(x)dx$ B. $\int f'(x)g(x)dx$ C. $\int f'(x)g(x)'dx$ D. $\int f(x)g(x)dx$
3	The differential equations of all conis whose axes coincide with the co-ordinate axis is	
4	The slope of the normal at (4,3) to the circle $x^2+y^2=25$ is	A. 3/4 B. -3/4 C. 4/3 D. -4/3
5	The transport of a square matrix is a	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
6	Inequalities have _____ symbol	A. 2 B. 3 C. 4 D. 1
7	Question Image	A. $\operatorname{cosec} x + c$ B. $-\operatorname{cosec} x + c$ C. $-\sec x + c$ D. $\sec x + c$
8	Question Image	
9	Question Image	D. none of these
10	$\csc(-\pi/2) =$ _____;	A. 0 B. 1 C. -1 D. Undefined
11	$\Phi_{\text{set}}$ is the _____ of all sets?	A. Subset B. Union C. Universal D. Intersection
12	$f(x) = 3x^4 - 2x^2 + 7$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
13	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
14	Question Image	
15	How many 6-Digit number can be formed without repairing any digit from the digits 0,1,2,3,4,5	A. 720 B. 600 C. 120 D. 6-5!
16	Area of inscribed circle is	A. $\pi R^2$ B. $\pi r^2$ C. $\pi r^2$ D. $\pi r^2$
17	Domain of $\cot x$ is _____	
18	The sum of infinite numbers of terms of an arithmetic series is	A. Finite B. Infinite C. May or may not finite D. None of these

19       $\sin^{-1} x =$  \_\_\_\_\_

20      How many different 5-digit even numbers are possible form digit 1,2,4,6,8

A.  $4 \cdot 4!$

B.  $4!$

C.  $5!$

D.  $4! + 4!$