

## NAT I General Science Mathematics

Sr	Questions	Answers Choice
1	The parametric equation of a curve are $x = t^2$ , $y = t^2$ then	A. $dy/dx = 3t/2$ B. $dy/dx = t^{5/2}$ C. $dy/dx = 5t^{4/2}$ D. None
2	In the function $V = \frac{4}{3}\pi r^3$ , V is a function of	A. $3/4$ B. $r$ C. $v$ D. $\pi$
3	$F(x) = xx$ decreases in the interval	A. $(0,e)$ B. $(0,1)$ C. $(-\infty,0)$ D. None
4	The area of circle of unit radius=	A. 0 B. 1 C. 4 D. $\pi$
5	Domain of $Y = \csc x$ is	A. $R - n\pi, n \in I$ B. $R$ C. $R - n\pi/2, n \in I$ D. All negative Integers
6	Graph of the equation $x^2 + y^2 = 4$ is	A. a circle B. an ellipse C. a parabola D. A square
7	The range of inequality $x + 2 > 4$ is	A. $(-1,2)$ B. $(-2,2)$ C. $(1,\infty)$ D. None
8	A function $F(x)$ is called even if	A. $F(x) = F(-x)$ B. $F(x) = F(-x)$ C. $F(x) = -F(x)$ D. $2F(x) = 0$
9	The Domain of $f(x) = \log x$ is	A. $[0,\infty]$ B. $(0,\infty)$ C. $[0,\infty[$ D. $[\infty, \infty]$
10	If $f(x) : A \rightarrow B$ and $g(x) : A \rightarrow B$ then $\text{Dom } [f(x) + g(x)]$ is	A. $\text{Dom } f(x) \cap \text{Dom } g(x)$ B. $\text{Dom } f(x) \cup \text{Dom } g(x)$ C. $[\text{Dom } f(x)]^{>2} - [\text{Dom } g(x)]^{>2}$ D. $[\text{Dom } g(x)]^{>2} - [\text{Dom } f(x)]^{>2}$