

## NAT I General Science Mathematics

Sr	Questions	Answers Choice
1	Which is an explicit function	A. $y = x^{2/2} + 2x - 1$ B. $x^{2/2} + xy$ C. $xy^{2/2} - y + 9/xy = 1$ D. All are
2	Which is not included in the domain of $\cos^{-1} x$	A. 0 B. 1 C. -1 D. 2
3	$P(x) = 2x^4 - 3x^3 + 2x - 1$ is polynomial of degree	A. 1 B. 2 C. 3 D. 4
4	If $f(x) = x/x^2 - 4$ then which is not included in the domain of $f(x)$	A. 0 B. -2 C. 1 D. 4
5	If $f(x) = x^3 - 2x^2 + 4x - 1$ , then $f(-2) = ?$	A. 0 B. -25 C. 5 D. 45
6	Which of the following is the solution of $\cot^2 x = 1/\sqrt{3}$	A. $\pi/5$ B. $\pi/3$ C. $\pi/7$ D. $\pi/9$
7	Which of the following is solution of $\tan^2 x = 1/3$	A. $7\pi/6$ B. $5\pi/6$ C. $\pi/6$ D. All
8	If $x$ lies in $\{0, 2\pi\}$ and $\operatorname{Cosec} x = 2$ then $x =$	A. $\pi/6$ and $5\pi/6$ B. $\pi + 2n\pi$ C. $n\pi$ D. $2\pi/3$ and $\pi/3$
9	If $1 + \cos x = 0$ then $x =$	A. $\pi + 2n\pi$ B. $\pi + n\pi$ C. $\pi - n\pi$ D. $\pi/2$
10	If $\theta = 60^\circ$ then	A. $\sin \theta = 1/2$ B. $\tan \theta = \cot 30^\circ$ C. $\theta = \pi/4$ D. $\sec \theta = 4$