

NAT I General Science Mathematics

Sr	Questions	Answers Choice
1	Period is $\tan x/5$ is	A. 5π B. 4π C. 2π D. $\pi/5$
2	$\sin(a+b) + \sin(a-b) =$	A. $\sin a \cos b$ B. $\sin a \sin b$ C. $\sin a + \cos b$ D. $\sin a - 2\cos b$
3	The value of $\cos(1/2 \cos^{-1} 1/2)$ is equal to	A. $\sqrt{3}/2$ B. $-3/4$ C. $1/16$ D. $1/4$
4	If $2 \sin x \cos 2x = \sin x$ then?	A. $X = n\pi + \pi/6$ B. $X = n\pi + \pi/3$ C. $X = n\pi + 1$ D. $X = n\pi + \pi/2$
5	If $\cos \alpha = 3/5$, $\cos \beta = 5/13$, then	A. $\cos(\alpha + \beta) = 33/65$ B. $\sin(\alpha + \beta) = 56/65$ C. $\sin 2(\alpha + \beta) = 1/65$ D. $\cos(\alpha + \beta) = 63/65$
6	In the triangle ΔABC , where C is the right angle $\tan A + \tan B =$	A. $A + B$ B. $C \cdot \frac{2}{AB}$ C. $A \cdot \frac{2}{BC}$ D. $B \cdot \frac{2}{AC}$
7	$\sin(2\pi - \theta) =$ _____.	A. $\cos \theta$ B. $-\sin \theta$ C. $-\sin \theta$ D. $-\cos \theta$
8	$\cot 360^\circ =$ _____.	A. Undefined B. 0.707 C. -0.5 D. 0
9	$\sin 720^\circ =$ _____	A. 1 B. 0 C. 2 D. 1/2
10	If $\sin \theta = 1$ then $\theta =$	A. $2n\pi + \pi/2$ B. $2n\pi$ C. $2\pi + n$ D. $n\pi + \pi/2$