

Mathematics ECAT Pre Engineering Chapter 16 Solution of Trigonometric Equations Online Test

Sr	Questions	Answers Choice
1	The number of points of intersection of two curves $y = 2 \sin x$ and $y = 5x^2 + 2x + 3$ is	A. 0 B. 1 C. 2 D. None of these
2	Question Image	A. 1 B. 2 C. 3 D. None of these
3	Question Image	
4	The general value of θ satisfying the equation $2 \sin^2 \theta - 3 \sin \theta - 2 = 0$ is	
5	Question Image	A. From an empty set B. 1 C. 2 D. >2
6	Question Image	A. 7 B. 5 C. 6 D. None of these
7	If $\sin(\pi \cos \theta) = \cos(\pi \sin \theta)$, then which of the following is correct?	
8	The solution of the equation $\cos^2 \theta + \sin \theta + 1 = 0$ lies in the interval	
9	One root of the equation $\cos x - x + 1/2 = 0$ lies in the interval	
10	General solution of $\tan 5\theta = \cot 2\theta$ is	
11	The smallest positive root of the equation $\tan x - x = 0$ lies on	
12	Question Image	A. A finite non-empty set B. Null set C. Both a and b D. None of these
13	The number of solution of the equation $\tan x + \sec x = 2 \cos x$ lying in the interval $[0, 2\pi]$ is	A. 0 B. 1 C. 2 D. 3
14	If $\sin 6\theta + \sin 4\theta + \sin 2\theta = 0$, then $\theta =$	
15	The number of values of x in the interval $[0, 5\pi]$ satisfying the equation $3 \sin^2 x - 7 \sin x + 2 = 0$ is	A. 0 B. 5 C. 6 D. 10
16	Question Image	
17	Question Image	
18	$\cot \theta = \sin 2\theta$ if $\theta =$	
19	$\cot \theta = \sin 2\theta$ if $\theta =$	
20	Question Image	
21	Question Image	
22	Question Image	A. No solution B. One real solution C. More than one real solution D. None of these

- 23 If $4 \sin^2 \theta = 1$, then values of θ are
- A. 30°
 B. 45°
 C. 60°
 D. 75°
- 24 Question Image
- 25 The general solution of $\tan 3x = 1$ is
- 26 If $\sin A = \sin B$, $\cos A = \cos B$, then the value of A in terms of B is
- 27 Question Image
- 28 By expressing $\cos 113^\circ$ in terms of trigonometrical ratios, answer will be
- A. $\cos 76^\circ = -0.7093$
 B. $\cos 65^\circ = -0.4258$
 C. $\cos 67^\circ = -0.3907$
 D. $\cos 62^\circ = -0.8520$
- 29 By expressing $\sin 125^\circ$ in terms of trigonometrical ratios, answer will be
- A. $\sin 65^\circ = 0.9128$
 B. $\sin 55^\circ = 0.8192$
 C. $\sin 70^\circ = 0.5384$
 D. $\sin 72^\circ = 0.1982$
- 30 Sine rule for a triangle states that
- A. $a/\sin A = b/\sin B = c/\sin C$
 B. $\sin A/a = \sin B/b = \sin C/c$
 C. $a/\sin A + b/\sin B + c/\sin C$
 D. $2a/\sin A = 2b/\sin B = 2c/\sin C$