

Mathematics ECAT Pre Engineering Chapter 15 Inverse Trigonometric Functions Online Test

Sr	Questions	Answers Choice
1	$\tan^{-1} 1/x = \underline{\hspace{2cm}}$	A. $\sin x$ B. $\sec^{-1} X$ C. $\cot^{-1} X$ D. None of these
2	$\sin^{-1}[-1/2] = \underline{\hspace{2cm}}$	
3	The number of triplets (x, y, z) satisfying $\sin^{-1} x + \cos^{-1} y + \sin^{-1} z = 2\pi$ is	A. 0 B. 2 C. 1 D. Infinite
4	If $\tan^{-1} 3 + \tan^{-1} x = \tan^{-1} 8$, then x=	A. 5 B. $1/5$ C. $5/14$ D. $14/5$
5	Question Image	
6	Question Image	
7	Question Image	A. $\pi / 3$ B. $\pi / 4$ C. $\pi / 6$ D. 0
8	Question Image	A. $\pi / 2$ B. $\pi / 3$ C. $\pi / 4$ D. $\pi / 6$
9	$\sin[\cot^{-1}\{\cos(\tan^{-1} x)\}] =$	
10	$\tan(\cot^{-1} x)$ is equal to	A. $\cot^{-1} x$ B. $\tan x$ C. $\sec x$ D. None of these
11	Question Image	A. $\pi / 4$ B. $\pi / 6$ C. $\pi / 3$ D. 0
12	Question Image	A. $\pi / 3$ B. $\pi / 4$ C. $\pi / 2$ D. π
13	Question Image	A. $16 / 7$ B. $6 / 17$ C. $7 / 16$ D. None of these
14	The solution set of the equation $\tan^{-1} x - \cot^{-1} x = \cos^{-1}(2 - x)$ is	A. [0, 1] B. [-1, 1] C. [1, 3] D. None of these

15	Question Image	A. 2 B. 5 C. 7 D. None of these
16	Question Image	A. 20 B. 10 C. 0 D. None of these
17	Question Image	A. 1 B. 0 C. 3 D. -3
18	Question Image	
19	$\tan^{-1}x > \cot^{-1}x$ holds for	A. $x > 1$ B. $x < 1$ C. $x = 1$ D. All values of x
20	Question Image	A. 1/3 B. 1 C. 3 D. None of these
21	Question Image	A. $\cos 2x = \sin 4y$ B. $\cos 4y = \cos 2x$ C. $\cos 3y = \sin 4x$ D. None of these
22	Question Image	
23	Question Image	A. 0 B. 1 C. -1 D. None of these
24	Question Image	A. 1 B. -1 C. 0 D. None of these
25	Question Image	A. $x = 3$ B. $x = 1/5$ C. $x = 0$ D. None of these
26	Question Image	
27	If $\cos^{-1}p + \cos^{-1}q + \cos^{-1}r = \pi$ then $p^2 + q^2 + r^2 + 2pqr$ is equal to	A. 3 B. 1 C. 2 D. -1
28	Question Image	A. 1 B. 7 C. 4 D. None of these
29	Question Image	A. <i>π</i> / 4 B. <i>π</i> / 6 C. <i>π</i> / 3 D. <i>2π</i> / 3
		A. <i>2π</i> / 3

size: 24px; color: rgb(34, 34, 34);
text-align: center; background-color:
rgb(255, 255, 248);"><i> π </i>
/ 2

B. <span style="font-family:
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text-align: center; background-color:
rgb(255, 255, 248);"><i> π </i>
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C. <span style="font-family:
"Times New Roman"; font-
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text-align: center; background-color:
rgb(255, 255, 248);"><i> π </i>
/ 4

D. <span style="font-family:
"Times New Roman"; font-
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text-align: center; background-color:
rgb(255, 255, 248);"><i> π </i>
