ECAT Mathematics Chapter 15 Inverse Trigonometric Functions

Sr	Questions	Answers Choice
1	The domain of the principle sine function is	
2	The value of $\sin^{-1}$ 5/13 is equal to	A. Cos 5/13 B. Tan⁻¹ 5/12 C. cos⁻¹5/12 D. 2 cos⁻¹4/5
3	Ifπ≤x≤2π, then cos-1 (cos x)=	A. cos x B. -x C. 1/x D. -x
4	Question Image	
5	$\tan^{-1}(1/4) + \tan^{-1}(2/9)$ is equal to	A. 1/2 cos⁻¹(3/5) B. 1/2 sin⁻¹(3/5) C. 1/2 tan⁻¹(3/5) D. tan⁻¹1/2
6	Question Image	
7	$\cos^{-1}(\cos x)$ =	A. x B. cos x C. x = 1/x D. cos⁻² x
8	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
9	Question Image	A. 0 B. 1 C. -1 D. None of these
10	Question Image	
11	Question Image	
12	Question Image	
13	Cos^{-1} 12/13 =	A. tan⁻¹ 3/5 B. cot⁻¹ 13/12 C. Sec⁻¹ 13/12 D. sin⁻¹ 5/13
14	$\text{Sec}^{-1}x$ =	A. Cos⁻¹1/x B. cosec⁻¹1/x C. Cos⁻¹(-x) D. Tan⁻¹x
15	The value of sin-1 24/25 is equal to	A. csc-1 25/24 B. sec-1 24/25 C. 2 tan-1 4/5 D. 2cos-1 24/25
16	Question Image	A. π / 3 B. π / 4 C. π / 6 D. 0
17	The value of cos(cos-1 1/2) is	A. 1/2 B. √3/2 C. -1/2 D. 1/√2
18	Cos-1(x)=	A. cos x B. x C. tan-1(-x)

		D. Sec-1 (1/x)
19	Sin -1 x=	A. sin(π/2-x) B. Sin-1 (π/2-x) C. π/2-cos-1x D. π/2 + cos-1x
20	Question Image	