ECAT Mathematics Chapter 15 Inverse Trigonometric Functions

Sr	Questions	Answers Choice
1	The domain of the function y = sin x , is	A. -π/2≤ x≤ π/2 B. π/ ≤ x≤ π C. -2π ≤ x≤ 2π D. -1 ≤ x≤ 1
2	The principal value of $\sin^{-1}[-\sqrt{(\sqrt{3})}/2]$ is	A. 5π/3 B. -2π/3 C. - D. π/3
3	Question Image	A. π/ 4 B. π/ 6 C. π/ 3 D. 2π/ 3
4	$\tan^{-1}(1/4) + \tan^{-1}(2/9)$ 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
5	Question Image	
6	If cos (2 sin-1 x) = 1/9 , then what is the value of x?	A. 1/3 B. -2/3 C. 2/3 D. 2/3 , -2/3
7	Question Image	
8	Question Image	
9	Question Image	A. x = 3 B. x = 1/5 C. x = 0 D. None of these
10	Cos^{-1} 12/13 =	A. tan⁻¹ 3/5 B. cot⁻¹ 13/12 C. Sec⁻¹ 13/12 D. sin⁻¹ 5/13
11	The value of sin [arc cos (-1/2)] is	
12	Question Image	A. π/ 2 B. π/ 3 C. π/ 4 D. π
13	$\sin[\cot^{-1}\{\cos(\tan^{-1}x)\}]=$	
14	Question Image	
15	Question Image	
16	Question Image	

17	In the interval $0 \leq x \leq \pi$, the sine is	A. Not a function B. Not defined C. Infinity D. Not one-to-one function
18	Question Image	
19	sn (2sin-10.8)	A. 0.56 B. 0.69 C. -0.16 D. 0.96
20	$x = \sin^{-1} 3$, then the value of sin x is	A. $\sqrt{(3/2)}$ B. 3 C. Not possible D. -1