Mathematics ECAT Pre Engineering Online Test

Sr	Questions	Answers Choice
1	$\cos^{-1}(\cos x) =$	A. x B. cos x C. x = 1/x D. cos⁻² x
2	Cos-1(x)=	A. cos x B. x C. tan-1(-x) D. Sec-1 (1/x)
3	Cos-1 (-x) =	A. -x B. 1/x C. tan-1 x D. π-cos-1 x
4	If$\pi \leq x \leq 2\pi$, then cos-1 (cos x)=	A. cos x B. -x C. 1/x D. -x
5	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
6	Cos (cos4π/3)=	A. π/2 B. π/3 C. 2π/3 D. -π/3
7	The exact degree value of the function sin-1(-√3/2) is	A. 70^o B. 50^o C. 90^o D. 60^o
8	What is the value of cos (cos-1 2) ?	A. √2 B. 1/2 C. undefine D. 0
9	The value of cos(cos-1 1/2) is	A. 1/2 B. √3/2 C. -1/2 D. 1/√2
10	What is the value of cos-1(1/2)?	A. π/3 B. π/4 C. 3π/2 D. π/6
11	$\sin^{-1} x =$	A. tan⁻¹ x B. Cosec⁻¹ x C. Cosec x D. cosec⁻¹(1/x)
12	Sin-1(-x)=	A. x B. -x C. -sin-1 x D. cos-1 x
13	sin -1(sin2π/3) =	A. π/2 B. 2π/3 C. -3π/2 D. π/3
14	sn (2sin-10.8)	A. 0.56 B. 0.69 C. -0.16 D. 0.96
15	Sin -1 x=	A. sin(π/2-x) B. Sin-1 (π/2-x) C. π/2-cos-1x D. π/2 + cos-1x

16	sin ($\sin^{-1}(1/2)$)=	A. 0 B. 2 C. ∞ D. 1/2
17	The principal value of $\sin^{-1}[-\sqrt{(\sqrt{3})}/2]$ is	A. 5π/3 B. -2π/3 C. -<img width="9" height="19" src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip1/01/clip_image002.png" v:shapes="_x0000_i1025">π/3 <!--[endif]--><o:p></o:p> D. π/3
18	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
19	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
20	The Principal value of sin-1 (-1/1/2)	A. π/2<o:p></o:p> B. -π/2<o:p></o:p> C. π<o:p></o:p> D. -π<o:p></o:p>
21	In the interval 0≤ x ≤ π, the sine is	A. Not a function B. Not defined C. Infinity D. Not one-to-one function
22	x = $\sin^{-1}$ 3, then the value of sin x is	A. √(3/2) B. 3 C. Not possible D. -1
23	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
24	The principal value of $\sin^{-1}$ (-1/2)	A. π/3 B. π/4 C. π/6 D. -π/6
25	The principal value of sin-1√(3/2) is	A. -π/3 B. π/3 C. 2π/3 D. π/2
26	The law of sines can be used to solve oblique triangle when following information is given:	A. Two angles and a side B. Two sides and an angle opposite one of the given sides C. Two sides and the angle between two sided D. Option a and b
27	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle D. haxagon
28	If sided of□ABC are 16,20,and 33, then the value of the greatests angle to	A. 150□ 20' B. 132□ 35' C. 101□ 25' D. 160□ 50'
29	IfΔABC is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Phthogorous theorem D. Hero's formula
30	In triangle ABC, in which b=95, c=34, a =52□then the value of a=	A. 18 cm B. 18.027 cm C. 20.7 cm D. 19 cm