









## ECAT (Pre-Eng) Mathematics Chapter 16 Solution of Trigonometric Equations

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	The general solution of $\tan 3x = 1$ is	
3	If $\sin(\pi \cos \theta) = \cos(\pi \sin \theta)$ , then which of the following is correct?	
4		
5		D. all
6	Sine rule for a triangle states that	A. $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$ B. $\sin A/a = \sin B/b = \sin C/c$ C. $\frac{a}{\sin A} + \frac{b}{\sin B} + \frac{c}{\sin C}$ D. $2a/\sin A = 2b/\sin B = 2c/\sin C$
7	The general value of $\theta$ satisfying the equation $2 \sin^2 \theta - 3 \sin \theta - 2 = 0$ is	
8		A. trigonometric equation B. conditional equation C. identity D. None
9	In a triangle ABC, if angle $A = 72^\circ$ , angle $B = 48^\circ$ and $c = 9$ cm then $\hat{C}$ is	A. $69^\circ$ B. $66^\circ$ C. $60^\circ$ D. $63^\circ$
10		
11		D. none of these
12	General solution of $1 + \cos x = 0$ is	
13		A. A finite non-empty set B. Null set C. Both a and b D. None of these
14	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. $\sin 72^\circ = 0.1982$
15	One root of the equation $\cos x - x + 1/2 = 0$ lies in the interval	
16		A. 7 B. 5 C. 6 D. None of these
17		A. No solution B. One real solution C. More than one real solution D. None of these

18 If  $\sin 6\theta + \sin 4\theta + \sin 2\theta$ , then  $\theta =$

19 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.  $\cos 62^\circ = -0.8520$

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