

ECAT Mathematics Chapter 16 Solution of Trigonometric Functions Online Test

Sr	Questions	Answers Choice
1	Question Image	D. none of these
2	The solution of the equation $3 \tan^2 x = 1$ is _____	D. none of these
3	The solution set of the equation $4 \cos^2 x - 3 + 0$ is _____	D. none of these
4	The solution set of the equation $1 + \cos x = 0$ is _____	D. none of these
5	Question Image	D. none of these
6	Question Image	D. none of these
7	Question Image	D. none of these
8	Question Image	
9	Question Image	
10	Question Image	
11	Question Image	D. none of these A. l andlll quadrants B. l andllll quadrants C. ll quadrants D. llll quadrants
12	Question Image	

17	Question Image	D. all
18	Question Image	
19	Question Image	
20	Question Image	
21	Question Image	D. both a & c
22	Question Image	
23	Question Image	A. trigonometric equation B. conditional equation C. identity D. None
24	For Cosine Rule of any triangle ABC, b^2 is equal to	A. $a^2 + b^2 - 2ab \cos C$ B. $a^2 + b^2 + 2ab \cos C$ C. $a^2 + b^2 - 2ab \cos A$ D. $a^2 + b^2 + 2ab \cos A$
25	In a triangle ABC, if angle A = 72° , angle B = 48° and c = 9 cm then C is	A. 69° B. 66° C. 60° D. 63°
26	Considering Cosine Rule of any triangle ABC, possible measures of angle A includes	A. Angle A is obtuse B. Angle A is acute C. Angle A is right-angle D. All of above
27	Sine rule for a triangle states that	A. $a/\sin A = b/\sin B = c/\sin C$ B. $\sin A/a = \sin B/b = \sin C/c$ C. $a/\sin A + b/\sin B + c/\sin C$ D. $2a/\sin A = 2b/\sin B = 2c/\sin C$
28	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. $\sin 10^\circ = 0.1736$

D. $\sin 72^\circ = 0.1982$

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

30 Question Image

31 If $\sin A = \sin B$, $\cos A = \cos B$, then the value of A in terms of B is

32 The general solution of $\tan 3x = 1$ is

- A. 30°
B. 45°
C. 60°
D. 75°
-

34 If $4 \sin^2 \theta = 1$, then values of θ are

- A. No solution
B. One real solution
C. More than one real solution
D. None of these
-

35 Question Image

37 Question Image

38 $\cot \theta = \sin 2\theta$ if $\theta =$

39 $\cot \theta = \sin 2\theta$ if $\theta =$

40 Question Image

41 Question Image

42 The number of values of x in the interval $[0, 5\pi]$ satisfying the equation $3 \sin^2 x - 7 \sin x + 2 = 0$ is

- A. 0
B. 5
C. 6
D. 10
-

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

- A. 0
B. 1
C. 2
D. 3
-

45 Question Image

- A. A finite non-empty set
B. Null set
C. Both a and b
D. None of these
-

46 The smallest positive root of the equation $\tan x - x = 0$ lies on

47 General solution of $\tan 5\theta = \cot 2\theta$ is

48 One root of the equation $\cos x - x + 1/2 = 0$ lies in the interval

49 The solution of the equation $\cos^2 \theta + \sin \theta + 1 = 0$ lies in the interval

50 If $\sin(\pi \cos \theta) = \cos(\pi \sin \theta)$, then which of the following is correct?

- A. 7
B. 5
C. 6
D. None of these
-

52 Question Image

- A. From an empty set
B. 1
C. 2
D. >2
-

53 The general value of θ satisfying the equation $2 \sin^2 \theta - 3 \sin \theta - 2 = 0$ is

54 Question Image

55 Question Image

- A. 1
B. 2
C. 3
D. None of these

56 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