

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

Sr	Questions	Answers Choice
1	<div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">Question Image</div>	<p>A. <div></div></p> <p>B. </p> <p>C. </p> <p>D. none of these</p>
2	<div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">Question Image</div>	
3	<p>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</p>	<p>A. 0 B. 5 C. 6 D. 10</p>
4	<p>General solution of $\tan 5\theta = \cot 2\theta$ is</p>	
5	<div style="border: 1px solid #ccc; padding: 2px; width: fit-content;">Question Image</div>	

6 For Cosine Rule of any triangle ABC, b^2 is equal to

- A. $a^2 + c^2 - 2ac \cos A$
 B. $a^2 + c^2 + 2ab \cos A$
 C. $a^2 + c^2 - 2ac \cos B$
 D. $a^2 + c^2 + 4bc \cos A$

7 Question Image

8 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

9 Question Image

10 The number of solution of the equation $\tan x + \sec x = 2 \cos x$ lying in the interval $[0, 2\pi]$ is

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

11 Question Image

12 Question Image

13 Question Image

D. none of these

14 Question Image

- A. 30°
 B. 45°
 C. 60°
 D. 75°

15 The solution set of $\sin x + \cos x = 0$ is

16 Question Image

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

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

18 $\cot \theta = \sin 2\theta$ if $\theta =$

19 The solution set of the equation $4 \cos^2 x - 3 = 0$ is

D. none of these

20 General solution of $1 + \cos x = 0$ is