

## ECAT Mathematics Chapter 12 Trigonometric Functions and Identities

Sr	Questions	Answers Choice
1	The value of $2\pi/3$ in degree is	A. 120 B. 160 C. 150 D. 60
2	$16^{\circ}30' =$	A. 16.5 B. 16.2 C. 16.60 D. 19.9
3	Express $\cos 320^{\circ}$ between $0^{\circ}$ and $45^{\circ}$	A. $\cos 45^{\circ}$ B. $\cos 30^{\circ}$ C. $-\cos 40^{\circ}$ D. $\cos 40^{\circ}$
4	$56^{\circ} = \dots\dots\dots$ radians	A. 1.25 B. 2.56 C. 95 D. 0.98
5	The value of $7\pi/9$ in terms of degree is	A. 140 B. 130 C. 120 D. 45
6	The value of $300^{\circ}$ in term of $\pi$ is	A. $5\pi/3$ B. $2\pi/3$ C. $5\pi/2$ D. $5\pi$
7	If $\sin \theta = 12/13$ , and $\sin \theta > 0$ , then $\tan \theta =$	A. 2/5 B. 12/13 C. 13/5 D. 12/5
8	the value of $25\pi/36$ in degrees is	A. 120 B. 125 C. 60 D. 115
9	$56^{\circ} = \dots\dots\dots$ radians	A. 1.25 B. 2.56 C. 95 D. 0.98
10	$3/\pi = \dots\dots\dots$	A. 54.71 B. 21 C. 51 D. 29
11	if $\tan \theta = 8/15$ and $\cos \theta < 0$ , then $\csc \theta =$	A. -8/15 B. 15/8 C. 3/15 D. -17/8
12	The circular measure of the angle between the hands of a watch of 4 o'clock is	A. $\pi/2$ B. $\pi/4$ C. $2\pi/3$ D. $\pi/6$
13	$21.256^{\circ}$	A. $21^{\circ}15'21''$ B. $21^{\circ}20'56''$ C. $21^{\circ}25'1''$ D. $21^{\circ}25'6''$
14	$154^{\circ}20' =$	A. $2550/34401\pi$ B. $27721/22400\pi$ C. $2521/32400\pi$ D. $4125/32400\pi$

C.  $\frac{1}{2}$

15 The value of  $289^\circ$  in radians is

D.  $5.04$

<p>16 The value of <math>7\pi/9</math> in terms of degrees is</p>	<p>A. <math>150^\circ</math>          B. <math>130^\circ</math>          C. <math>135^\circ</math>          D. <math>140^\circ</math></p>
<p>17 If <math>\cos\theta = 9/41</math> and <math>\sin\theta &lt; 0</math>, the <math>\tan\theta =</math></p>	<p>A. <math>41/9</math>          B. <math>-40/9</math>          C. <math>9/10</math>          D. <math>3/20</math></p>
<p>18 If <math>l=1.5</math> cm and <math>r=2.5</math> cm, then <math>\theta =</math></p>	<p>A. <math>.3</math> radians          B. <math>.20</math> radians          C. <math>.5</math> radians          D. <math>.6</math> radians</p>
<p>19 radian is the measure of the angle subtended at the centre of the circle by an arc, whose length is equal to the</p>	<p>A. radius of the circle          B. circumference          C. arc length          D. tangent of the circle          E. none of these</p>
<p>20 Express <math>\cos 320^\circ</math> between <math>0^\circ</math> and <math>45^\circ</math></p>	<p>A. <math>\cos 45^\circ</math>          B. <math>\cos 30^\circ</math>          C. <math>-\cos 40^\circ</math>          D. <math>\cos 40^\circ</math></p>