

## ECAT Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	If $\cos\theta=0$ , then $\theta=$ _____	A. $n\pi$ B. $(2n + 1)\pi$ C. $(2n - 1)\pi$ D. $(4n + 1)\pi$
2	Question Image	
3	120° degrees are equal to how many radians?	
4	The angle of elevation of the top of a tree from a point 17 meters from its foot is 42°. The height of the tree is	A. 12m B. 21m C. 17m D. 15m
5	Question Image	A. The law of sines B. The law of cosines C. The law of tangents D. None of these
6	The law of sines is	
7	Question Image	A. $30^\circ$ B. $60^\circ$ C. $45^\circ$ D. None of these
8	Area of inscribed circle is	A. $\pi R^2$ B. $\pi \eta^2$ C. $\pi r^2$ D. $\pi r^2$
9	If the flag-staff 6 meters high placed on the top of a tower. Makes the shadow $2\sqrt{3}$ m on the ground, then the angle of elevation of the sun is	A. $30^\circ$ B. $35^\circ$ C. $45^\circ$ D. $60^\circ$
10	Question Image	
11	The angles of elevation of the top of a tower at the top and the foot of a pole of height 10 m are $30^\circ$ and $60^\circ$ respectively. The height of the tower is	A. 10 m B. 15 m C. 20 m D. None of these
12	Question Image	
13	If you are looking a high point from the ground, then the angle formed is	A. Angle of elevation B. Angle of depression C. Right angle D. Horizon
14	Question Image	
15	If $\triangle ABC$ is right. Law of cosine reduce to	A. Law of sine B. Law of tangent

16 Question Image

17 The longer side of a parallelogram is 10 cm and the shorter is 6 cm. If the longer diagonal makes an angles  $30^\circ$  with the longer side, the length of the longer diagonal is

18 A person standing on the bank of a river observes that the angle subtended by a tree of the opposite bank is  $60^\circ$ , when he retreats 40 m from the bank, he finds the angle to be  $30^\circ$ . The height of the tree and the breadth of the river are

19 A circle which touches one side of a triangle externally and the other two sides produced is called

20 E-radius corresponding to  $\angle C$  is

- A. In-circle
- B. Circumcircle
- C. e-circle
- D. Point circle