

Mathematics ECAT Pre Engineering Chapter 14 Application of Trigonometry Online Test

Sr	Questions	Answers Choice
1	A triangle which is not right is called an _____ triangle	A. Acute B. Obtuse C. Oblique D. None of these
2	The angle AOP which the ray from an observer's eye at O to an object at P at a lower level makes with horizontal ray OA through O is called the	A. Angle of depression B. Angle of elevation C. Acute angle D. Obtuse angle
3	Question Image	
4	A person standing on the bank of a river finds that the angle of elevation of the top of a tower on the opposite bank is 45° . then which of the following statements is correct?	A. Breadth of the river is twice the height of the tower B. Breadth of the river an the height of the tower are the same C. Breadth of the river is half of the height of the tower D. None of these
5	E-radius corresponding to $\angle B$ is	
6	Area of inscribed circle is	A. πR^2 B. πr^2 C. πr^2 D. πr^2
7	Question Image	
8	AB is a vertical pole and C is its middle point. The end A is on the level ground and P is any point on the level ground other than A. the portion CB subtends an angle β at P. If $AP : AB = 2 : 1$ then $\beta =$	
9	Question Image	
10	PQ is a post of given height a, and AB is a tower at some distance; α and β are the angles of elevation of B, the top of the tower, at P and Q respectively. The height of the tower and its distance from the post are	
11	If $\triangle ABC$ is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Phthogorous theorem D. Hero's formula
12	Area of $\triangle ABC =$	A. $\frac{1}{2} ab \sin \alpha$ B. $\frac{1}{2} ab \sin \gamma$ C. $\frac{1}{2} ac \sin \alpha$ D. $\frac{1}{2} ac \sin \beta$
13	A triangle has six	A. side B. elements C. angle D. .

14	A chimney is such that on walking towards it 50 m in a horizontal line through its base the angular elevation of its top changes from 30° to 45° . The height of the chimney is	A. n B. $(2n + 1)$ C. $(2n - 1)$ D. $(4n + 1)$
15	If $\cos \theta = 0$, then $\theta =$ _____	A. π B. $\frac{\pi}{2}$ C. $\frac{\pi}{4}$ D. $\frac{\pi}{3}$
16	Question Image	A. The law of sines B. The law of tangents C. The law of cosines D. None of these
17	The angle of elevation of the tops of two towers at the middle point of the line joining the foots of the tower are 60° and 30° respectively. The the ratio of the heights of the tower is	A. 2 : 1 B. 3 : 1 C. 1 : 2 D. 1 : 3
18	The angle of depression of a point situated at a distance of 70 meters from the base of a tower is 45° . The height of the tower is	A. 70 m B. 85 m C. 35 m D. None of these
19	Question Image	
20	Question Image	