

Mathematics ECAT Pre Engineering Chapter 14 Application of Trigonometry Online Test

Sr	Questions	Answers Choice
1	E-radius corresponding to < B is	
2	The longer side of a parallelogram is 10 cm and the shorter is 6 cm. If the longer diagonal makes an angles 30° with the longer side, the length of the longer diagonal is	
3	Question Image	
4	Question Image	
5	A circle which touches one side of a triangle externally and the other two sides produced is called	A. In-circle B. Circum cirle C. Escribed circle D. None of these
6	A person standing on the bank of a river observes that the angle of elevation of the top of a tree on the opposite bank of the river is 60° and when he retires 40 meters away from the tree the angle of elevation becomes 30°. The breadth of the river is	A. 40 m B. 30 m C. 20 m D. 60 m
7	Question Image	
8	Question Image	
9	A circle passing through the vertices of any triangle is called	A. In circle B. Circum circle C. Escribed circle D. None of these
10	The upper 3/4 the portion of a vertical pole subtends an angle tan ⁻¹ 3/5 at a point in the horizontal plane through its foot and at a distance 40 m from the foot. A possible height of the vertical pole is	A. 20 m B. 40 m C. 60 m D. 80 m
11	A tower subtends an angle $lpha$ at a point on the same level as the root of the tower and at a second point, b meters above the first, the angle of depression of the foot of the tower is eta . The height of the tower is	A. b cot <i style="text-align: center;">α</i> tan <i>β</i>ti>j<i>β</i>ti>j<i>q<i)< i="">tinsing: center; background-color: rgb(255, 255, 248);"><i>β</i>ti>j<i>panh B. b tan<i style="text-align: center;">α</i>tan<i>β</i>ti>j<i>pan>tyle="text-align: center;">α</i>cot<i>β</i> D. None of these</i></i)<></i>
12	If the angle of a triangle are in the ratio 2 : 3 : 7, the triangle is	A. Obtuse B. Acute C. Right angle D. Isosceles
13	Question Image	
	The angle AOP which the ray from an observer's eye at O to an object at P at a lower level	A. Angle of depression B. Angle of elevation
14	makes with horizontal ray OA through O is called the	C. Acute angle D. Obtuse angle
15	A person standing on the bank of a river observes that the angle subtended by a tree of the opposite bank is 60°, when he retreats 40 m from the bank, he finds the angle to be 30°. The height of the tree and the breadth of the river are	-
16	Question Image	

7	Question Image	A. The law of of sines B. The law of tangents C. The law of consines D. None of these
8	The angle of elevation of the top of a tree from a point 17 meters from is foot is 42^\square The height of the tree is	A. 12m B. 21m C. 17m D. 15m
9	Question Image	
20	At a point 15 meters away from the base of a 15 meters high house, the angle of elevation of the top is	A. 90° B. 60° C. 30° D. 45°