ECAT (Pre-Eng) Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	Question Image	
2	If sided of□ABC are 16,20,and 33, then the value of the greatests angle to	A. 150□ 20' B. 132□ 35' C. 101□ 25' D. 160□ 50'
3	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 and angleβat P. If AP : AB = 2 : 1 thenβ=	
4	E-radius corresponding to < A is	
5	A tower subtends an angleαat 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 isβ. The height of the tower is	A. b cotαtanβ B. b tanαtanβ C. b tanαcotβ D. None of these
6	For any equilateral r :R :η :r1 :r2 :r3 =	A. 1:2:3:4:5 B. 1:2:3:3:3 C. 1:2:4:4:4 D. 2:1 :2 :2 :2
7	An airplane flying at height of 300 meters above the ground passes vertically above another plane at an instant when the angle of elevation of the two planes from the same point on the ground are 60° and 45° respectively. Then the height of the lower plane from the ground is (in meters).	
8	e-radii are denoted by	A. η B. r2 C. r3 D. All of these
9	A circle passing through the vertices of any triangle is called	A. Circumcirle B. Incircle C. Escribed circle D. Unit circle
10	Area of inscribed circle is	A. π R2 B. π η2 C. π r22 D. π r2
11	Question Image	
12	Question Image	A. The law of sines B. The law of tangents C. The pythagorus theorem D. None of these
13	Question Image	
14	x = r2, y = 1 are the parametric equation of	A. Circle B. Hyperbola C. Ellipse

		D. Parabola
15	Area of$\triangle$ABC=	A. ab sinα B. 1/2 ab sinα C. 1/2 ac sinγ D. 1/2 ac sinβ
16	Question Image	
17	Question Image	
18	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
19	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° and 60° respectively. The height of the tower is	A. 10 m B. 15 m C. 20 m D. None of these
20	Question Image	