ECAT Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	Area ofΔABC=	A. ab sinα B. 1/2 ab sinα C. 1/2 ac sinγ D. 1/2 ac sinβ
2	The law of tangents is _____	
3	x = r2, y = 1 are the parametric equation of	A. Circle B. Hyperbola C. Ellipse D. Parabola
4	A tower subtends an angle of 30° at a point distant d from the foot of the tower and on the same level as the foot of the tower. At a second point, h vertically above the firs, the angle of depression of the foot of the tower, is 60°. The height of the tower is	A. h/3 B. h/3d C. 3h D. 3h / d
5	A circle drawn inside a triangle and touching its sides is called _____;	A. Circumcirle B. Incircle C. Escribed circle D. unit circle
6	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
7	The towers each 120 meters high are 800 meters apart. The measure of the angle of elevation from the base of one tower to the top of the other is	A. 12[□] B. 9[□] C. 7[□] D. -120[□]
8	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	
9	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
10	E-radius corresponding to < A is	
11	Question Image	A. 30° B. 60° C. 45° D. None of these
12	In ladder leaning against a vertical well makes an angle of 24□with the wall, Its foot is 5m from the wall, its length is	A. 5.47m B. 2m C. 7m D. 6.29m
13	A vertical pole is 8m high and the length of its shadow is 6m. The angle of elevation of the sun of the moment is	A. 57□ B. -48□ C. 27□

		D. 53□
14	If the flag-staff 6 meters high placed on the top of a tower. Makes the shadow 2√3 m on the ground, then the angle of elevation of the sun is	A. 30^o B. 35^o C. 45^o D. 60^o
15	A triangle which is not right is called an _____ triangle	A. Acute B. Obtuse C. Oblique D. None of these
16	IfΔABC is right, law of cosine reduce to	A. Law of sine B. Law of tangent C. Phthogorous theorem D. Hero's formula
17	Question Image	
18	The angle of depression of a point A on the ground from the top of the tower is 30□,then the angle of elevation of the top of the tower at the point A is	A. 60□ B. 40□ C. 41□ D. 30□
19	An observer on the top of a cliff 200 m above the sea level, observes the angles of depression of two ships on opposite sides of the cliff to be 45° and 30°, respectively. The distance between the ships if the line joining them points to the base of cliff is	
20	If the elevation of the sun is 30°, then the length of the shadow cast by a tower of 150 ft height is	