ECAT Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	Question Image	A. The law of sines B. The law of consines C. The law of tangents D. None of these
2	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
3	Question Image	A. The law of sines B. The law of consines C. The law of tangents D. None of these
4	Question Image	
5	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
6	In-radius is denoted by	A. r B. η C. r2 D. R
7	Question Image	
8	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
9	e-radii are denoted by	A. η B. r2 C. r3 D. All of these
10	A triangle which is not right is called an _____ triangle	A. Acute B. Obtuse C. Oblique D. None of these
11	The law of sines can be used to solve oblique triangle when following information is given:	A. Two angles and a side B. Two sides and an angle opposite one of the given sides C. Two sides and the angle between two sided D. Option a and b
12	E-radius corresponding to < B is	
13	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle

		D. haxagon
14	Question Image	
15	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 angle β at P. If AP : AB = 2 : 1 then β=	
16	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	
17	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
18	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
19	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
20	A triangle has six	A. side B. elements C. angle D. tangents