ECAT Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	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	
2	Question Image	A. R B. 2R C. r D. 2r
3	If you are looking a high point from the ground, then the angle formed is	A. Angle of elevation B. Angle of depression C. Right angle D. Horizon
4	The quadratic equation $8 \sec 2\theta - 6 \sec\theta + 1 = 0$ has	A. Infinitely many roots B. Exactly two roots C. Exactly four roots D. No roots
5	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	
6	Question Image	
7	Question Image	A. 30° B. 60° C. 45° D. None of these
8	Question Image	
9	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
10	Question Image	
11	If a, b, c are the measures of the sides of a triangle then	
12	A triangle which is not right is called an _____ triangle	A. Acute B. Obtuse C. Oblique D. None of these
13	Question Image	
14	Question Image	
15	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is $45^\square$. The height of the tower is	A. 37m B. 97m C. 101m D. 70m
16	Question Image	
17	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. $57^\square$ B. $-48^\square$ C. $27^\square$ D. $53^\square$
18	Question Image	
19	Question Image	A. The law of consines B. The law of sines C. The law of tangents D. None of these
20	In-radius is denoted by	A. r B. η C. r2 D. R