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

Sr	Questions	Answers Choice
1	The angle of elevation of a tower from a point A due south of it is x and from a point B due east of A is y. If AB = 1, then the height h of the tower is given by	
2	Question Image	
3	Question Image	
4	If the elevation of the sun is 30°, then the length of the shadow cast by a tower of 150 ft height is	
5	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
6	Question Image	
7	E-radius corresponding to < A is	
8	Question Image	
9	A man of height 6 ft observes the top of a tower and the foot of the tower at angles of 45° and 30° of elevation and depression respectively. The height of the tower is	
10	Question Image	A. The law of consines B. The law of sines C. The law of tangents D. None of these
11	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
12	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	
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	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
15	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
16	Question Image	
17	E-radius corresponding to < B is	
18	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
19	E-radius corresponding to < C is	
20	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle D. haxagon