ECAT Mathematics Chapter 14 Application of Trigonometry

Sr	Questions	Answers Choice
1	The angle AOP which the ray from an observer's eye at O to an object at P at a lower level makes with horizontal ray OA through O is called the	A. Angle of depression B. Angle of elevation C. Acute angle D. Obtuse angle
2	Question Image	
3	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
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	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
6	The law of sines is	
7	If θ = 60° then	A. $\sin\theta$ = 1/2 B. $\tan\theta$ = cot 30° C. $\theta = \pi/4$ D. $\sec\theta$ = 4
8	If a, b, c are the measures of the sides of a triangle then	
9	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°
10	The triangle that does not have a right angle is called.	A. Isosceles triangle B. right angle triangle C. equivalent triangle D. oblique triangle
11	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

12	E-radius corresponding to < B is	
13	At a point 15 meters away from the base of a 15 meters high house, the angle of elevation of the top is	A. 90° B. 60° C. 30° D. 45°
14	Question Image	A. The law of of sines B. The law of tangents C. The law of consines D. None of these
15	E-radius corresponding to < C is	
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	A circle passing through the vertices of any triangle is called	A. Circumcirle B. Incircle C. Escribed circle D. Unit circle
18	Area of△ABC=	A. $ab \sin \alpha$ B. $\frac{1}{2} ab \sin \alpha$ C. $\frac{1}{2} ac \sin \gamma$ D. $\frac{1}{2} ac \sin \beta$
19	120° degrees are equal to how many radians?	
20	Question Image	