ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 1/x B. -x C. 2x D. 0.5 x
2	By expressing cos 113° in terms of trigonometrical ratios, answer will be	A. −cos 76° = -0.7093 B. −cos 65° = -0.4258 C. −cos 67° = -0.3907 D. −cos 62° = -0.8520
3	The ellipse and hyperbola are called	A. Concentric conics B. Central conics C. Both a b D. None
4	Question Image	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
5	the curve of the parabola $y^2 = -4ax$ is symmetric with respect to	A. x -axis B. y - axis C. Botha x and y- axis D. None of thes
6	A relation in which the equality is true only for some values of the unknown is called	A. An identity B. An equation C. A polynomial D. None
7	The different of tan x is	A. sec2 x B. ln |sec x| C. sec2 xdx D. -cos ec2 x
8	Write the first four terms of the sequence if $a_n = (-1)^n n^2$	A. -1, 4, -9, 16 B. 1, -4, 9, 16 C. 1, 4, 9, 16 D. None of these
9	The perpendicular bisector of any chord of a circle	A. Passes through the centre of the circle B. Does not pass through the centre of the circle C. May or may not pass through the centre of the circle D. None of these
10	Fifteen girls compete in a race. The first three places can be taken by them in	A. 3! ways B. 12! ways C. 15 x 14 x 13 ways D. 42 ways
11	The two different parts of the hyperbola are called its	A. Vertices B. Directrices C. Nappes D. Branches
12	The transport of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
13	Question Image	A. Biconditional B. Implication C. Antecedent D. Hypothesis
14	Question Image	
		A. 150□ 20'

15	If sided of□ABC are 16,20,and 33, then the value of the greatests angle to	B. 132□ 35' C. 101□ 25' D. 160□ 50'
16	sin(3π/2 -θ)=_____;	A. sinθ B. cosθ C. -sinθ D. -cosθ
17	Question Image	
18	Express the perimeter P of square as a function of its area A?	A. P = 4√A B. P =√A C. P = 2A D. P =π√A
19	An indicated sum of terms of a sequence is represented by	A. Sn B. an C. S(n) D. {Sn}
20	Question Image	A. -1 B. 0 C. 1 D. Undefined