ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	A pair of lines of homogeneous second degree equation $ax^2 + 2hxy + by^2 = 0$ are othogonal, if:	A. a - b = 0 B. a + b = 0 C. a + b > 0 D. a - b < 0
4	Equation of the line parallel to x + 3y - 9 = 0 is:	A. 3x - y - 9 = 0 B. 3x + 9y + 7 = 0 C. 2x - 6y - 18 = 0 D. x - 3y + 9 = 0
5	The point of a parabola which is closest to the focus in the:	A. Directrix B. Vertex C. Focus D. Chord
6	x = 4 is the solution of inequality:	A. x + 3 > 0 B. x - 3 < 0 C. -2x + 3 > 0 D. x + 3 < 0
7	If 2 and 2 are x and y-components of a vector, then its angle with x-axis is:	A. 30° B. 45° C. 60° D. 90°
8	A line perpendicular to a radial chord of a circle at the end-point (which lies on the circle) is a:	A. Secant B. Diameter C. Chord D. Tangent
9	Length of tangent from (a, 0) to the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	B. c C. 2g + 2f -c D. None
10	If the directed distances AP and PB have the opposite signs, i.e; p is beyond AB, then their ratio is negative and P is said to divide AB:	A. Internally B. May divide C. Externally D. None of these
11	y - ordinate of the centroid of triangle with vertices A(-2, 3) B(-4, 1), C(3, 2) is:	A. 3 B. 1 C. 2 D. 0
12	x = 4 is a line:	A. Parallel to x - axis B. Parallel to y - axis C. Perpendicular to y-axis D. None of these
13	$y^2 = 4ax$, is the standard equation of the:	A. Ellipse B. Parabola C. Hyperbola D. None of these
14	Question Image	A. Line B. Parabola C. Ellipse D. Hybperbola
15	Length of tangent from (0,1) to $x^2 + y^2 + 6x - 3y + 3 = 0$	A. 2 B. 1 C. 4 D. 3
16	The distance of any point P (x, y) from the origin O(0 , 0) is given by:	
17	Question Image	A. tan x B. cot x C. - tan x D. - cot x

18	The opening of the parabola $y^2 = -4ax$ is to the left of the:	A. x-axis B. x = 1 C. y-axis D. x = 0
19	The equi. of latus-rectum of the parabola $y^2 = -4ax$ is:	A. x = a B. x = -a C. y = a D. y = -a
20	Question Image	A. 0 B. 1 C. -1 D. 2