ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	For any point (x, y) on x-axis:	A. $y = 1$ B. $y = 0$ C. $y = -1$ D. $y = 2$
2	The pair of lines of homogeneous second-degree equation $ax^2 + 2hxy + by^2 = 0$ are real and coincident, if:	A. $h^2 < ab$ B. $h^2 > ab$ C. $h^2 = ab$ D. None of these
3	If a straight line is perpendicular to y-axis, then its slope is:	A. 1 B. -1 C. 0 D. undefined
4	The point of intersection of the altitudes of a triangle is called:	A. Centroid B. Ortho-center C. Circums-center D. In-center
5	The function $y = \ln x$ is a/an -------------- function of x.	A. Constant B. Explicit C. Exponential D. Logarithmic
6	Question Image	A. sech x tanh x B. $-\text{sech}^2 x$ C. -sech x tanh x D. $\text{sech}^2 x$
7	A line segment joining two distinct points on a parabola is called a _____ of the parabola:	A. Chord B. Vertex C. Focus D. Directrix
8	The Maclaurin series expansion is valid only if it is:	A. Convergent B. Divergent C. Increasing D. Decreasing
9	Two arcs of two different circles are congruent if:	A. The circles are congruent B. The corresponding central angles are congruent C. Both a and b D. None of the above
10	The equi. of latus-rectum of the parabola $y^2 = -4ax$ is:	A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$
11	The feasible region is _____ if it can easily by enclosed within a circle.	A. Bounded B. Exist C. Unbounded D. None of these
12	Question Image	A. 5 sin x B. cosh (5x) C. 5 cosh (5x) D. -5 cosh (5x)
13	Which one is a constant function ?	A. $f(x) = x^2$ B. $f(x) = x$ C. $f(x) = x + 1$ D. $f(x) = 14$
14	Question Image	A. Line parallel to x - axis B. Line parallel to y - axis C. Inclined D. Both (a) and (b)
15	Question Image	A. Open B. Closed C. Open as well as closed D. None of these

16	The distance between the points (1, 2), (2, 1).	A. 1 D. 2
17	The graph of linear equation of the form ax + by = c is a line, which divides the plane into _____ disjoint regions, where a, b and c are constants and a, b are not both zero.	A. One B. Two C. Thre D. None of these
18	The set of all points in the plane that are equally distant from a fixed point is called a / an:	A. Circle B. Circular cone C. Ellipse D. Point circle
19	The number e denotes the _____ of the conic:	A. Directrix B. Vertex C. Focus D. Eccentricity
20	Question Image	