

## ICS Part 2 Mathematics Full Book Test Online

Sr	Questions	Answers Choice
1	The vertex of the parabola $x^2 = 4ay$ is:	A. (-a, 0) B. (0, a) C. (0, -a) D. (0, 0)
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Lagrange B. Newtown C. Leibniz D. Cauchy
3	An integral of $3x^2$ is:	A. $x^{3+c}$ B. 3 C. $6x$ D. $x^{2+c}$
4	The inequality $y > b$ is the open half plane to the _____ of the boundary line $y = b$ :	A. Above B. Left C. Below D. Right
5	If a variable $y$ depends on a variable $x$ in such a way that each value of $x$ determines exactly one value of $y$ , then $y$ is a _____ of $x$ .	A. Independent variable B. Not function C. Function D. None of these
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Unit vector B. Null vector C. Position vector D. None of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. 2 C. 3 D. 0
8	The center of circle $(x+3)^2 + (y-2)^2 = 16$ equals:	A. (-3, 2) B. (3, -2) C. (3, 2) D. (-3, -2)
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $x$ with respect to $y$ B. $y$ with respect to $y$ C. $y$ with respect to $x$ D. $x$ with respect to $x$
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech}^2 x$ C. $-\operatorname{sech} x \tanh x$ D. $\operatorname{sech}^2 x$
11	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. $a - b < 0$
12	The parabola $y^2 = 4ax$ lies in quadrants:	A. I and II B. III and IV C. II and III D. I and IV
13	The radius of circle $x^2 + y^2 + 2gx + 2fy + c = 0$ is:	
14	A quadrilateral having two parallels and two non-parallel sides is called:	A. Trapezium B. Rectangle C. Rhombus D. None of these
15	Let $f(x) = \cos x$ , then $f(x)$ is an:	A. Even function B. Odd function C. Power function D. None of these
16	$y = b$ is a horizontal line parallel to _____:	A. $x$ - axis B. $x$ - axis may be C. $y$ - axis

		D. None of these
17	The symbol $y = f(x)$ i.e. $y$ is equal to $f$ of $x$ , invented by Swiss mathematician-----:	A. Euler B. Cauchy C. Leibniz D. Newton
18	The directrix of the parabola $x^2 = -4ay$ is:	A. $x = a$ B. $x = -a$ C. $y = a$ D. $y = -a$
19	The graph of the parabola $y^2 = -4ax$ is symmetric about:	A. $x$ -axis B. $y = x$ C. $y$ -axis D. None of these
20	$ax + b < c$ is a inequality of:	A. One variable B. Two variable C. Three variable D. Four variable