ICS Part 2 Mathematics Chapter 1 Test Online

Sr	Questions	Answers Choice
1	A function $P(x) = 6x^4 + 7x^3 + 5x + 1$ is called a polynomial function of degree -------- with leading coefficient -------.	A. 4, 6 B. 2, 7 C. 2, 3 D. 2, 5
2	If the degree of a polynomial function is ------------, then it is called a linear function:	A. 0 B. 1 C. 2 D. 3
3	$f(x) = x \sec x$, then $f(0) =$	A. -1 B. 0 C. 1
4	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
5	Which one is a constant function ?	A. $f(x) = x^2$ B. $f(x) = x$ C. $f(x) = x + 1$ D. $f(x) = 14$
6	Parametric equations $x = a \cos t$, $y = a \sin t$ represent the equation of:	A. Line B. Circle C. Parabola D. Ellipse
7	$\cosh^{-1} x =$	
8	Question Image	A. Continuous at $x = 1$ B. Not continuous at $x = 1$ C. Both a and b D. none
9	Question Image	A. R B. R - {2} C. R - {2, -2} D. R - {-2}
10	Question Image	A. Constant function B. Absolute linear function C. Linear function D. Quadratic function
11	$\cosh^2 x - \sinh^2 x =$	A. 1 B. -1 C. 2 D. -2
12	Question Image	A. 1 B. 2 C. 3 D. 4
13	Question Image	A. Constant B. Implicit C. Explicit D. Inverse
14	If y is an image of x under the function f, we denote it by:	A. $x = f(y)$ B. $x = y$ C. $y = f(x)$ D. $f(x, y) = c$
15	Question Image	A. Common logarithmic B. Natural logarithmic C. Exponential D. None of these
16	$\tanh x =$	
		A. Real numbers

17	Let f(x) = x^2, then range of f is the set of all:	B. Non-negative real numbers C. Non-negative integers D. Complex numbers
18	Let f(x) = x^2 + 3, then domain of f is:	A. Set of all integers B. Set of natural numbers C. Set of real numbers D. Set of rational numbers
19	Question Image	
20	x = 3 cos t, y = 3 sin t represent	A. Line B. Circle C. Parabola D. Hyperbola
21	Question Image	
22	Question Image	A. 0 B. 2 C. 1 D. 3
23	Question Image	A. 4 B. Does not exist
24	Inverse hyperbolic functions are expressed in terms of natural:	A. Numbers B. Exponential C. Logarithms D. Sines
25	The area A of a circle as a function of its circumference C is:	
26	Let f(x) = cos x, then f(x) is an:	A. Even function B. Odd function C. Power function D. None of these
27	A function, in which the variable appears as exponent (power), is called a / an -------- function.	A. Constant B. Explicit C. Exponential D. Inverse
28	Question Image	A. Implicit B. Explicit C. Exponential D. Logarithmic
29	Every relation, which can be represented by a linear equation in two variables, represents a:	A. Graph B. Function C. Cartesian product D. Relation
30	The term function was introduced by:	A. Euler B. Newton C. Lagrange D. Leibniz
31	If f(x) = |x|, f(x) is a:	A. Constant function B. Absolute function C. Linear function D. Quadratic function
32	Question Image	A. 4, -4 B. 0 C. 2, -2 D. 0, 4
33	Question Image	A. f(x^2 + 1) B. f(x) D. f(x^2)
34	The function y = ln x is a/an -------------- function of x.	A. Constant B. Explicit C. Exponential D. Logarithmic
35	A function, in which the variables are _____ numbers, then function is called a real valued function of real numbers.	A. Complex B. Rational C. Real D. None of these
36	$Cosh^2$ x + $Sinh^2$ x =	A. Cosh x^2 B. Cosh 2x C. Sinh 2x D. Tanh 2x
		A. a = 0, b = 1

37	The linear function f(x) = ax + b is an identity function if:	B. a = 1, b = 0 C. a = 1, b = 1 D. a = 0, b = 1
38	Which one is an exponential function ?	
39	Let f(x) = x^2, real valued function then domain of f is the set of all:	A. Real numbers B. Integers C. Positive numbers D. Natural numbers
40	Question Image	A. Parabola B. Hyperbola C. Ellipse D. Circle
41	Question Image	A. Even B. Odd C. One-one D. Zero
42	Which one is not an exponential function ?	
43	f(x) = sin x + cos x is ------------ function:	A. Even B. Odd C. Composite D. Neither even nor odd function
44	Question Image	A. Constant B. Implicit C. Identity D. Inverse
45	If x and y are so mixed up and y cannot be expressed in terms of the independent variable x, then y is called a/an ---- function of x.	A. Constant B. Explicit C. Implicit D. Inverse
46	Question Image	A. Line B. Parabola C. Ellipse D. Hybperbola
47	Let f(x) = x^3 + sin x, then f(x) is:	A. Even function B. Odd function C. Power function D. None of these
48	If a function f is from a set X to a set Y, then set X is called the _____ of f:	A. Domain B. Range C. Co-domain D. None of these
49	Question Image	A. Undefined B. 3a^2 C. a^2 D. 0
50	x^2 + y^2 = 4 is:	A. Function B. Not a function C. Ellipse D. Line
51	If y = (x), then the variable x is called --------- variable of a function f.	A. Dependent B. Independent C. Image of y D. None of these
52	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
53	Question Image	A. 0 B. 1 C. e D. Does not exist
54	Question Image	A. sin x B. cos x C. sinh x D. cosh x
55	f(x) is odd function. If and only if:	A. f(-x) = -f(x) B. f(-x) = f(x) C. f(x) = 3f(-x) D. f(x) = -3f(-x)
56	The range of the function f(x) = |x|	

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57	Which one is an identity function ?	B. f(x) = g(x) C. f (x) = x D. f(x) = 1