FSC Part 2 Mathematics Chapter 1 Test Online

Sr	Questions	Answers Choice
1	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
2	tanh x =	
3	Inverse hyperbolic functions are expressed in terms of natural:	A. Numbers B. Exponential C. Logarithms D. Sines
4	$\cosh^{-1}x$ =	
5	The linear function f(x) = ax + b is an identity function if:	A. a = 0, b = 1 B. a = 1, b = 0 C. a = 1, b = 1 D. a = 0, b = 1
6	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
7	If the degree of a polynomial function is ----------, then it is called a linear function:	A. 0 B. 1 C. 2 D. 3
8	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
9	A function, in which the variable appears as exponent (power), is called a / an -------- function.	A. Constant B. Explicit C. Exponential D. Inverse
10	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)
11	x = 3 cos t, y = 3 sin t represent	A. Line B. Circle C. Parabola D. Hyperbola
12	Question Image	A. Implicit B. Explicit C. Exponential D. Logarithmic
13	Question Image	A. 4, -4 B. 0 C. 2, -2 D. 0, 4
14	Question Image	A. Constant function B. Absolute linear function C. Linear function D. Quadratic function
15	Every relation, which can be represented by a linear equation in two variables, represents a:	A. Graph B. Function C. Cartesian product D. Relation
16	$x^2 + y^2 = 4$ is:	A. Function B. Not a function C. Ellipse D. Line

17	The range of the function f(x) = |x|	
18	Let f(x) = cos x, then f(x) is an:	A. Even function B. Odd function C. Power function D. None of these
19	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
20	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
21	If f(x) = |x|, f(x) is a:	A. Constant function B. Absolute function C. Linear function D. Quadratic function
22	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
23	Question Image	A. Constant B. Implicit C. Explicit D. Inverse
24	The area A of a circle as a function of its circumference C is:	
25	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
26	Question Image	A. 1 B. 2 C. 3 D. 4
27	Question Image	
28	Question Image	A. R B. R - {2} C. R - {2, -2} D. R - {-2}
29	Question Image	A. Parabola B. Hyperbola C. Ellipse D. Circle
30	Question Image	A. Even B. Odd C. One-one D. Zero
31	Question Image	A. Line B. Parabola C. Ellipse D. Hybperbola
32	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
33	$\cosh^2 x - \sinh^2 x =$	A. 1 B. -1 C. 2 D. -2
34	f(x) = sin x + cos x is ---------- function:	A. Even B. Odd C. Composite D. Neither even nor odd function
35	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
36	Let $f(x) = x^2$, then range of f is the set of all:	A. Real numbers B. Non-negative real numbers

36	Let f(x) = x², then range of f is the set of all:	C. Non-negative integers D. Complex numbers
37	Which one is not an exponential function ?	
38	Question Image	A. 4 B. Does not exist
39	Question Image	A. f(x² + 1) B. f(x) D. f(x²)
40	Question Image	A. Undefined B. 3a² C. a² D. 0
41	Question Image	A. Common logarithmic B. Natural logarthmic C. Exponential D. None of these
42	The function y = ln x is a/an ---------- function of x.	A. Constant B. Explicit C. Exponential D. Logarithmic
43	Question Image	A. sin x B. cos x C. sinh x D. cosh x
44	Question Image	A. 0 B. 2 C. 1 D. 3
45	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
46	Which one is a constant function ?	A. f(x) = x² B. f(x) = x C. f(x) = x + 1 D. f(x) = 14
47	$Cosh^2 x + Sinh^2 x =$	A. Cosh x² B. Cosh 2x C. Sinh 2x D. Tanh 2x
48	Question Image	A. Continuous at x = 1 B. Not continuous at x = 1 C. Both a and b D. none
49	Parametric equations x = a cos t, y = a sin t represent the equation of:	A. Line B. Circle C. Parabola D. Ellipse
50	The term function was introduced by:	A. Euler B. Newton C. Lagrange D. Leibniz
51	Let $f(x) = x^3 + \sin x$, then f(x) is:	A. Even function B. Odd function C. Power function D. None of these
52	Which one is an exponential function ?	
53	Which one is an identity function ?	B. f(x) = g(x) C. f (x) = x D. f(x) = 1
54	f (x) = x secx, then f(0)=	A. -1 B. 0 C. 1
55	Question Image	A. Constant B. Implicit C. Identity D. Inverse
56	Question Image	

57	Question Image	A. 0 B. 1 C. e D. Does not exist