

## FSC Part 2 Mathematics Chapter 1 Test Online

Sr	Questions	Answers Choice
1	The term function was introduced by:	A. Euler B. Newton C. Lagrange D. Leibniz
2	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
3	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
4	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
5	Question Image	A. $f(x) > 2 + 1$ B. $f(x)$ D. $f(x) < 2$
6	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
7	Question Image	A. 0 B. 2 C. 1 D. 3
8	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
9	Question Image	A. 4, -4 B. 0 C. 2, -2 D. 0, 4
10	Question Image	A. $\mathbb{R}$ B. $\mathbb{R} - \{2\}$ C. $\mathbb{R} - \{2, -2\}$ D. $\mathbb{R} - \{-2\}$
11	The range of the function $f(x) =  x $	
12	Let $f(x) = x^2$ , then range of $f$ is the set of all:	A. Real numbers B. Non-negative real numbers C. Non-negative integers D. Complex numbers
13	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
14	If the degree of a polynomial function is -----, then it is called a linear function:	A. 0 B. 1 C. 2 D. 3
15	Which one is a constant function ?	A. $f(x) = x^2 + 1$ B. $f(x) = x$ C. $f(x) = x + 1$ D. $f(x) = 14$
16	Question Image	A. Constant B. Implicit C. Identity D. ...

		D. Inverse
17	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
18	Which one is an identity function ?	B. $f(x) = g(x)$ C. $f(x) = x$ D. $f(x) = 1$
19	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. $a = 0, b = 1$
20	A function, in which the variable appears as exponent (power), is called a / an ----- function.	A. Constant B. Explicit C. Exponential D. Inverse
21	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
22	Which one is not an exponential function ?	
23	Which one is an exponential function ?	
24	Question Image	A. Constant function B. Absolute linear function C. Linear function D. Quadratic function
25	Question Image	A. Implicit B. Explicit C. Exponential D. Logarithmic
26	Question Image	A. Common logarithmic B. Natural logarithmic C. Exponential D. None of these
27	If $f(x) =  x $ , $f(x)$ is a:	A. Constant function B. Absolute function C. Linear function D. Quadratic function
28	Question Image	A. $\sin x$ B. $\cos x$ C. $\sinh x$ D. $\cosh x$
29	$\tanh x =$	
30	$\cosh^2 x - \sinh^2 x =$	A. 1 B. -1 C. 2 D. -2
31	$\cosh^2 x + \sinh^2 x =$	A. $\cosh x^{\sup>2}$ B. $\cosh 2x$ C. $\sinh 2x$ D. $\tanh 2x$
32	Inverse hyperbolic functions are expressed in terms of natural:	A. Numbers B. Exponential C. Logarithms D. Sines
33	Question Image	A. Constant B. Implicit C. Explicit D. Inverse
34	Every relation, which can be represented by a linear equation in two variables, represents a:	A. Graph B. Function C. Cartesian product D. Relation
35	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. $f(x, y) = c$
36	Question Image	A. Line B. Circle

36	Parametric equations $x = a \cos t$ , $y = a \sin t$ represent the equation of:	C. Parabola D. Ellipse
37	Question Image	A. Parabola B. Hyperbola C. Ellipse D. Circle
38	Question Image	A. Line B. Parabola C. Ellipse D. Hyperbola
39	$x = 3 \cos t$ , $y = 3 \sin t$ represent	A. Line B. Circle C. Parabola D. Hyperbola
40	$x^2 + y^2 = 4$ is:	A. Function B. Not a function C. Ellipse D. Line
41	$f(x) = x \sec x$ , then $f(0) =$	A. -1 B. 0 C. 1
42	The function $y = \ln x$ is a/an ----- function of $x$ .	A. Constant B. Explicit C. Exponential D. Logarithmic
43	If $y = f(x)$ , then the variable $x$ is called ----- variable of a function $f$ .	A. Dependent B. Independent C. Image of $y$ D. None of these
44	$f(x)$ is odd function. If and only if:	A. $f(-x) = -f(x)$ B. $f(-x) = f(x)$ C. $f(x) = 3f(-x)$ D. $f(x) = -3f(-x)$
45	Question Image	A. Even B. Odd C. One-one D. Zero
46	$f(x) = \sin x + \cos x$ is ----- function:	A. Even B. Odd C. Composite D. Neither even nor odd function
47	Let $f(x) = \cos x$ , then $f(x)$ is an:	A. Even function B. Odd function C. Power function D. None of these
48	Let $f(x) = x^3 + \sin x$ , then $f(x)$ is:	A. Even function B. Odd function C. Power function D. None of these
49	Question Image	A. 1 B. 2 C. 3 D. 4
50	Question Image	
51	Question Image	A. Undefined B. $3a^{>2}$ C. $a^{>2}$ D. 0
52	Question Image	
53	$\cosh^{-1} x =$	
54	The area $A$ of a circle as a function of its circumference $C$ is:	
55	Question Image	A. 4 B. Does not exist
56	Question Image	A. Continuous at $x = 1$ B. Not continuous at $x = 1$ C. Both a and b D. none

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Question Image

- A. 0
- B. 1
- C. e
- D. Does not exist