

FSC Part 2 Mathematics Chapter 2 Online Test

Sr	Questions	Answers Choice
1	Question Image	
2	The Maclaurin series expansion is valid only if it is:	A. Convergent B. Divergent C. Increasing D. Decreasing
3	The small change in the value of $f(x)$, positive or negative is called the ----- of x .	A. Increment B. Differential C. Derivative D. none of these
4	Question Image	A. $\sinh x$ B. $\cosh x$ C. $-\sinh x$ D. $-\cosh x$
5	The derivative of x with respect to y is given by:	
6	Question Image	A. $-\operatorname{cosec} x \cot x$ B. $\operatorname{cosec}^2 x$ C. $-\operatorname{cosec}^2 x$ D. $\operatorname{cosec} x \cot x$
7	Question Image	
8	Question Image	A. $-\operatorname{cosec}^2 x$ B. $\operatorname{cosec}^2 x$ C. $-\operatorname{cosec} x \cot x$ D. $\operatorname{cosec} x \cot x$
9	Question Image	A. $x = a$ B. $x = 2$ C. $x = 0$ D. None
10	Question Image	A. $x = a$ B. for all x D. $x = 0$
11	Question Image	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech}^2 x$ C. $-\operatorname{sech} x \tanh x$ D. $\operatorname{sech}^2 x$
12	If s is the distance traveled by a body at time t , the velocity is given by the expression:	
13	Question Image	A. $1(1 - 4)$ B. $2x - 3$ C. $x - 3$ D. $x^3 - 3x$
14	Notation $Df(x)$ for derivative was used by:	A. Cauchy B. Newton C. Leibniz D. Lagrange
15	Question Image	A. $\tan x$ B. $\cot x$ C. $-\tan x$ D. $-\cot x$
16	Question Image	
17	Question Image	A. x with respect to y B. y with respect to y C. y with respect to x D. x with respect to x
18	Question Image	
19	Question Image	A. $\sin x$ B. $\cos x$ C. $-\sin x$

		D. $-\cos x$
20	The function $f(x) = 3x^2$ has minimum value at :	A. $x = 3$ B. $x = 2$ C. $x = 1$ D. $x = 0$
21	Question Image	A. c B. 0 C. 1 D. $-c$
22	Question Image	A. $2\cosh x$ B. $2\sinh x$ C. $2\sinh(2x)$ D. $-2\sinh(2x)$
23	If $y = f(u)$ and $u = F(x)$, then:	
24	Question Image	A. Lagrange B. Newtown C. Leibniz D. Cauchy
25	For a square of side x units, the rate of change of area with respect to the side is given by:	A. x B. x^2 C. $2x$ D. 2
26	Question Image	
27	Question Image	A. $\operatorname{sech} x \tanh x$ B. $-\operatorname{sech} x \tanh x$ C. $\operatorname{sech}^2 x$ D. $-\operatorname{sech}^2 x$
28	The instantaneous rate of change of y with respect to x is given by:	
29	Question Image	A. $\sec x \tan x$ B. $-\sec^2 x$ C. $-\sec x \tan x$ D. $\sec^2 x$
30	Question Image	
31	Question Image	A. $\sec x \tan x$ B. $\sec^2 x$ C. $-\sec x \tan x$ D. $-\sec^2 x$
32	If $f(x) = \cos x$ then $f'(0)$ is equal to:	A. 0 B. -1 C. 1
33	Question Image	
34	Question Image	A. $\sinh x$ B. $\cosh x$ C. $-\sinh x$ D. $-\cosh x$
35	Question Image	
36	Question Image	A. $x = a$ B. $x = 2$ C. $x = 0$ D. None
37	Question Image	A. $\sin x$ B. $-\cos x$ C. $-\sin x$ D. $\cos x$
38	Question Image	A. 0 B. 1 C. -1 D. 2
39	Sir Isaac Newton was a(an) ----- mathematician.	A. German B. French C. Swiss D. English
40	Question Image	
41	Question Image	

42

Question Image

- A. $\operatorname{cosech} x \coth x$
B. $-\operatorname{cosech}^2 x$
C. $-\operatorname{cosech} x \coth x$
D. $\operatorname{cosech}^2 x$

43

Question Image

44

Question Image

- A. $5 \sin x$
B. $\cosh (5x)$
C. $5 \cosh (5x)$
D. $-5 \cosh (5x)$

45

Gottfried Wilhelm Leibniz was a (an) ----- mathematician:

- A. German
B. English
C. Swiss
D. French

46

Question Image