FSC Part 2 Mathematics Chapter 2 Online Test

Sr	Questions	Answers Choice
1	Sir Isaac Newton was a(an) --------- mathematician.	A. German B. French C. Swiss D. English
2	Gottfried Whilhelm Leibniz was a (an) ----- mathematician:	A. German B. English C. Swiss D. French
3	The small change in the value ofx, positive or negative is called the -------- of x.	A. Increment B. Differential C. Derivative D. none of these
4	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
5	Question Image	A. Lagrange B. Newtown C. Leibniz D. Cauchy
6	Notation Df(x) for derivative was used by:	A. Cauchy B. Newton C. Leibniz D. Lagrange
7	Question Image	
8	The instantaneous rate of change of y with respect to x is given by:	
9	The derivative of x with respect to y is given by:	
10	Question Image	A. $x = a$ B. for all x D. $x = 0$
11	Question Image	A. $x = a$ B. $x = 2$ C. $x = 0$ D. None
12	Question Image	A. $x = a$ B. $x = 2$ C. $x = 0$ D. None
13	Question Image	A. c B. 0 C. 1 D. -c
14	Question Image	
15	Question Image	A. 1 (1 - 4) B. $2x - 3$ C. $x - 3$ D. $x^3 - 3x$
16	Question Image	
17	Question Image	
18	If $y = f(u)$ and $u = F(x)$, then:	
19	If s is the distance traveled by a body at time t, the velocity is given by the expression:	
20	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

#	Question	Options
21	Question Image	A. sin x B. cos x C. -sin x D. -cos x
22	Question Image	A. sin x B. -cos x C. -sin x D. cos x
23	Question Image	A. - cosec^2 x B. cosec^{2}x C. - cosec x cot x D. cosec x cot x
24	If f(x) = cos x then f'(0) is equal to:	A. 0 B. -1 C. 1
25	Question Image	
26	Question Image	
27	Question Image	
28	Question Image	
29	Question Image	
30	Question Image	
31	Question Image	
32	Question Image	A. 0 B. 1 C. -1 D. 2
33	Question Image	A. sinh x B. cosh x C. -sinh x D. -cosh x
34	Question Image	A. sinh x B. cosh x C. -sinh x D. -cosh x
35	Question Image	A. 2cosh x B. 2sinh x C. 2sinh (2x) D. -2sinh (2x)
36	Question Image	A. sech x tanh x B. -sech x tanhx C. sech^2 x D. -sech^{2}x
37	Question Image	A. 5 sin x B. cosh (5x) C. 5 cosh (5x) D. -5 cosh (5x)
38	Question Image	A. sech x tanh x B. -sech^{2}x C. -sech x tanh x D. sech^{2}x
39	Question Image	A. cosech x coth x B. -cosech^{2}x C. -cosech x coth x D. cosech^{2}x
40	Question Image	
41	Question Image	A. tan x B. cot x C. - tan x D. - cot x
42	The Maclaurin series expansion is valid only if it is:	A. Convergent B. Divergent C. Increasing D. Decreasing

43	The function $f(x) = 3x^2$ has minimum value at :	A. x = 3 B. x = 2 C. x = 1 D. x = 0
44	Question Image	A. sec x tan x B. $\sec^2 x$ C. -sec x tan x D. $-\sec^2 x$
45	Question Image	A. -cosec x cotx B. $\csc^2 x$ C. $-\csc^2 x$ D. cosec x cotx
46	Question Image	A. sec x tan x B. $-\sec^2 x$ C. -sec x tan x D. $\sec^2 x$