FA Part 2 Mathematics Chapter 3 Test Online

Sr	Questions	Answers Choice
1	If the graph of f is entirely below the x-axis, then the definite integral is:	A. Positive B. Positive or negative C. Negative D. Positive and negative
2	The term dy (or df) = f '(x) dx is called the _____ of the dependent variable y.	A. Differentiation B. Integration C. Differential D. None of these
3	Question Image	A. f(x) B. ln |f(x)| C. f'(x) D. ln |f'(x)|
4	Question Image	A. 0 B. 1 C. 2 D. 3
5	The general solution of differential equation of order n contains n arbitrary constants, which can be determined by ---------- initial value conditions.	A. 1 B. 0 C. 2 D. n
6	Question Image	A. domain B. range C. lower limit D. upper limit
7	Question Image	A. Integration by parts B. Definite integral C. Differentiation D. None of these
8	Question Image	A. Integration B. Integrand C. Constant of integration D. None of these
9	Question Image	C. 2 D. 1
10	Question Image	A. Derivative B. Differential C. Integral D. None of these
11	An integral of $3x^2$ is:	A. x³+c B. 3 C. 6x D. x^{2+c}
12	Question Image	A. ln |sec x + tan x | + c B. ln |cosec x - cot x | + c C. ln |sec x - tan x| + c D. ln |cosec x + cot x | + c
13	Area between x-axis and the curve:	A. 32 D. 16
14	Question Image	A. tan x + c B. -tan x + c C. sec x + c D. -sec x + c
15	Question Image	A. e^{-x} sin x + c B. -e^{-x} sin x + c C. e^{-x}cosx + c D. -e^{-x}sin x + c
16	Question Image	A. cot x B. - cot x C. cosec x cot x

		D. -cosec x cot x
17	If the upper limit is a constant and the lower limit is a variable, then the integral is a function of:	A. x B. y C. lower limit D. upper limit
18	Question Image	A. e^{2x} sin x + c B. e^{2x}cosx + c C. -e^{2x}sin x + c D. -e^{2x}cosx + c
19	Question Image	A. 0 B. 1 C. 2 D. 4
20	Question Image	A. cosec x + c B. -cosec x + c C. cot x + c D. - cot x + c
21	Question Image	
22	The technique or method to find such a function whose derivative is given involves the inverse process of differentiation called:	A. Differentiation B. Integration C. Differential D. None of these
23	Question Image	A. Integration B. Integration w.r.t.x. C. Differentiation D. Differentiation w.r.t.x
24	Question Image	
25	Question Image	
26	Question Image	A. ln |sin x| B. - ln |sin x| C. ln |cos x| D. -ln |cos x|
27	Question Image	A. equal to each other B. not equal to each other C. nearly equal to each other D. None of these
28	If the graph of f is entirely above the x-axis, then the definite integral is _____:	A. Positive B. Positive or negative C. Negative D. Positive and negative
29	Question Image	A. Integration B. Integrand C. Constant of integration D. None of these
30	Question Image	A. tan x + c B. - tan x + c C. sec x tan x + c D. - sec x tan x + c
31	Question Image	A. Integral B. Indefinite integral C. Differential D. Definite integral
32	If the lower limit is a constant and the upper limit is a variable, then the integral is a function of:	A. x B. y C. lower limit D. upper limit
33	Question Image	A. e^{ax} B. f(x) C. e^{ax}f(x) D. e^{ax + f(x)}
34	Question Image	A. 36 B. 42 C. 48 D. 12
35	If y = sin x then dy =	A. cosy dx B. cos x C. cosx dx D. cos xdy
		A. a cosec (ax + b)

36	Question Image	A. a cosec (ax + b) D. cot (ax + b)
37	Question Image	A. cos x + c B. - cos x + c C. sin x + c D. -sin x + c
38	Question Image	A. ln |sec x + tan x | + c B. ln |cosec x - cot x | + c C. ln |sec x - tan x | + c D. ln |cosec x + cot x | + c
39	Question Image	A. integration by parts B. definite integral C. Differentation D. None of these
40	Question Image	A. domain B. range C. lower limit D. upper limit
41	If $y = x^2 + 1$ _____ x changes from 3 to 3.02 then dy = _____	A. 0.1204 B. .12 C. .02 D. 1.2
42	Question Image	A. equal to each other B. not equal to each C. nearly equal to each other D. none of these