FSC Part 2 Mathematics Chapter 3 Online Test

Sr	Questions	Answers Choice
1	Question Image	A. Integration B. Integrand C. Constant of integration D. None of these
2	Question Image	A. tan x + c B. -tan x + c C. sec x + c D. -sec x + c
3	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
4	Question Image	C. 2 D. 1
5	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
6	Question Image	A. integration by parts B. definite integral C. Differentiation D. None of these
7	Question Image	A. $e^{-x} \sin x + c$ B. $-e^{-x} \sin x + c$ C. $e^{-x} \cos x + c$ D. $-e^{-x} \sin x + c$
8	Question Image	A. equal to each other B. not equal to each C. nearly equal to each other D. none of these
9	Question Image	A. cos x + c B. - cos x + c C. sin x + c D. -sin x + c
10	If y = sin x then dy =	A. cosy dx B. cos x C. cosx dx D. cos xdy
11	Question Image	
12	Question Image	A. f(x) B. ln |f(x)| C. f'(x) D. ln |f'(x)|
13	Question Image	A. domain B. range C. lower limit D. upper limit
14	Question Image	A. $e^{2x} \sin x + c$ B. $e^{2x} \cos x + c$ C. $-e^{2x} \sin x + c$ D. $-e^{2x} \cos x + c$
15	An integral of $3x^2$ is:	A. $x^3 + c$ B. 3 C. 6x D. x^{2+c}
16	Question Image	A. Integration by parts B. Definite integral C. Differentiation D. None of these

17	Question Image	A. Derivative B. Differential C. Integral D. None of these
18	Area between x-axis and the curve:	A. 32 D. 16
19	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
20	Question Image	A. 0 B. 1 C. 2 D. 3
21	Question Image	A. ln |sin x| B. - ln |sin x| C. ln |cos x| D. -ln |cos x|
22	Question Image	A. Integration B. Integration w.r.t.x. C. Differentiation D. Differentiation w.r.t.x
23	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
24	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
25	Question Image	A. 36 B. 42 C. 48 D. 12
26	Question Image	
27	Question Image	A. 0 B. 1 C. 2 D. 4
28	Question Image	A. cot x B. - cot x C. cosec x cot x D. -cosec x cot x
29	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
30	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
31	If y = x^2 + 1 _____ x changes from 3 to 3.02 then dy = _____	A. 0.1204 B. .12 C. .02 D. 1.2
32	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
33	Question Image	A. Integral B. Indefinite integral C. Differential D. Definite integral
34	Question Image	A. a cosec (ax + b) D. cot (ax + b)
35	Question Image	A. e^{ax} B. f(x) C. $e^{ax}f(x)$ D. $e^{ax + f(x)}$

36	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
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