

FSC Part 2 Mathematics Chapter 3 Online Test

Sr	Questions	Answers Choice
1	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
2	Question Image <input type="text"/>	A. $e^{-x} \sin x + c$ B. $-e^{-x} \sin x + c$ C. $e^{-x} \cos x + c$ D. $-e^{-x} \sin x + c$
3	Question Image <input type="text"/>	A. Integration B. Integrand C. Constant of integration D. None of these
4	Question Image <input type="text"/>	A. $\cos x + c$ B. $-\cos x + c$ C. $\sin x + c$ D. $-\sin x + c$
5	Area between x-axis and the curve:	A. 32 D. 16
6	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
7	Question Image <input type="text"/>	A. 0 B. 1 C. 2 D. 3
8	Question Image <input type="text"/>	A. Integration by parts B. Definite integral C. Differentiation D. None of these
9	Question Image <input type="text"/>	A. Derivative B. Differential C. Integral D. None of these
10	Question Image <input type="text"/>	A. $\cot x$ B. $-\cot x$ C. $\operatorname{cosec} x \cot x$ D. $-\operatorname{cosec} x \cot x$
11	Question Image <input type="text"/>	A. $f(x)$ B. $\ln f(x) $ C. $f'(x)$ D. $\ln f'(x) $
12	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
13	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
14	An integral of $3x^2$ is:	A. $x^3 + c$ B. 3 C. $6x$ D. $x^2 + c$
15	Question Image <input type="text"/>	A. 36 B. 42 C. 48 D. 12
		A. $e^{2x} \sin x + c$

16 Question Image B. $e^{2x} \cos x + c$
C. $-e^{2x} \sin x + c$
D. $-e^{2x} \cos x + c$

17 Question Image

18 Question Image A. equal to each other
B. not equal to each
C. **nearly equal to each other**
D. none of these

19 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**

20 Question Image