

## FSC Part 2 Mathematics Chapter 3 Online Test

Sr	Questions	Answers Choice
1	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. $n$
2	Question Image	A. 0 B. 1 C. 2 D. 3
3	Question Image	A. 0 B. 1 C. 2 D. 4
4	Area between $x$ -axis and the curve:	A. 32 D. 16
5	Question Image	C. 2 D. 1
6	Question Image	A. integration by parts B. definite integral C. Differentiation D. None of these
7	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
8	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
9	Question Image	A. 36 B. 42 C. 48 D. 12
10	Question Image	A. domain B. range C. lower limit D. upper limit
11	Question Image	A. domain B. range C. lower limit D. upper limit
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	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
14	Question Image	A. Integration by parts B. Definite integral C. Differentiation D. None of these
15	Question Image	A. $e^{2x} \sin x + c$ B. $e^{2x} \cos x + c$ C. $-e^{2x} \sin x + c$ D. $-e^{2x} \cos x + c$
16	Question Image	A. $e^{-x} \sin x + c$ B. $-e^{-x} \sin x + c$ C. $e^{-x} \cos x + c$ D. $-e^{-x} \cos x + c$

D.  $-e^{-x}\sin x + c$

17

Question Image

- A.  $e^{ax}$   
B.  $f(x)$   
C.  $e^{ax}f(x)$   
D.  $e^{ax+f(x)}$

18

Question Image

- A.  $\ln |\sin x|$   
B.  $-\ln |\sin x|$   
C.  $\ln |\cos x|$   
D.  $-\ln |\cos x|$

19

Question Image

- A.  $\ln |\sec x + \tan x| + c$   
B.  $\ln |\operatorname{cosec} x - \cot x| + c$   
C.  $\ln |\sec x - \tan x| + c$   
D.  $\ln |\operatorname{cosec} x + \cot x| + c$

20

Question Image

- A.  $\ln |\sec x + \tan x| + c$   
B.  $\ln |\operatorname{cosec} x - \cot x| + c$   
C.  $\ln |\sec x - \tan x| + c$   
D.  $\ln |\operatorname{cosec} x + \cot x| + c$