

FSC Part 2 Mathematics Chapter 3 Online Test

| Sr | Questions | Answers Choice |
|----|---|--|
| 1 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. 0 B. 1 C. 2 D. 3 |
| 2 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. domain B. range C. lower limit D. upper limit |
| 3 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. domain B. range C. lower limit D. upper limit |
| 4 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. $\tan x + c$ B. $-\tan x + c$ C. $\sec x \tan x + c$ D. $-\sec x \tan x + c$ |
| 5 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. 36 B. 42 C. 48 D. 12 |
| 6 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. $\operatorname{cosec} x + c$ B. $-\operatorname{cosec} x + c$ C. $\cot x + c$ D. $-\cot x + c$ |
| 7 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. Integral B. Indefinite integral C. Differential D. Definite integral |
| 8 | If $y = x^2 + 1$ _____ x changes from 3 to 3.02 then $dy =$ _____ | A. 0.1204 B. .12 C. .02 D. 1.2 |
| 9 | If $y = \sin x$ then $dy =$ | A. $\cos y \, dx$ B. $\cos x$ C. $\cos x \, dx$ D. $\cos x \, dy$ |
| 10 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | |
| 11 | 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 |
| 12 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. integration by parts B. definite integral C. Differentiation D. None of these |
| 13 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. $e^{-x} \sin x + c$ B. $-e^{-x} \sin x + c$ C. $e^{-x} \cos x + c$ D. $-e^{-x} \sin x + c$ |
| 14 | An integral of $3x^2$ is: | A. $x^3 + c$ B. 3 C. $6x$ D. $x^2 + c$ |
| 15 | 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 |
| 16 | Question Image <input style="width: 500px; height: 20px;" type="text"/> | A. $\operatorname{cosec} (ax + b)$ D. $\cot (ax + b)$ |

17

Question Image

- A. Integration
- B. Integration w.r.t.x
- C. Differentiation
- D. Differentiation w.r.t.x

18

Question Image

- A. $f(x)$
- B. $\ln |f(x)|$
- C. $f'(x)$
- D. $\ln |f''(x)|$

19

Question Image

- A. Integration
- B. Integrand
- C. Constant of integration
- D. None of these

20

Question Image

- A. $\cos x + c$
- B. $-\cos x + c$
- C. $\sin x + c$
- D. $-\sin x + c$