

ECAT Mathematics Chapter 19 Integration Online Test

Sr	Questions	Answers Choice
1	Question Image	B. $a^x \ln a + c$ C. $a^x + c$ D. $x a^x + c$
2	Question Image	A. $e^x + c$ B. $e^{-x} + c$ C. $x e^x + c$ D. not possible
3	Question Image	A. $\operatorname{cosec} x + c$ B. $-\operatorname{cosec} x + c$ C. $-\sec x + c$ D. $\sec x + c$
4	Question Image	A. $\operatorname{cosec} x + c$ B. $-\operatorname{cosec} x + c$ C. $-\sec x + c$ D. $\sec x + c$
5	Question Image	A. $\cot x + c$ B. $\tan x + c$ C. $-\cot x + c$ D. $-\tan x + c$
6	Question Image	A. $1 + \tan^2 x + c$ B. $\tan x + c$ C. $-\tan x + c$ D. $\cot x + c$
7	Question Image	A. $\sin x + c$ B. $-\sin x + c$ C. $\cos x + c$ D. $-\cos x + c$
8	Question Image	A. $\cos x + c$ B. $-\sin x + c$ C. $-\cos x + c$ D. $\sin x + c$
9	Question Image	
10	Question Image	
11	Question Image	
12	Question Image	A. $6x - 2 + c$ B. $x^3 - x^2 + c$ C. $6x - x^2 + c$ D. $6x^3 - x^2 + c$
13	Question Image	B. $6x + 2 + c$ C. $6x + x^2 + c$ D. $6x^3 + x^2 + c$
14	Question Image	A. $2x + 3$ B. $x^2 + 3 + c$
15	Question Image	
16	Question Image	D. none of these
17	The process of finding a function whose derivative is given is called a	A. Differentiation B. Integration C. Differential D. None
18	The set of all antiderivatives of $f(x) = \int f(x) dx$ is the	A. Definite integral B. Indefinite integral C. Integral D. Area

19	The function $\phi(x)$ is an anti derivative of function $f(x), x \in D_f$ if	A. $\phi'(x) = \int f(x) dx$ B. $\phi(x) = \int f(x) dx$ C. $\phi'(x) = f(x)$ D. $\phi(x) = \int' (x) dx$
20	The number of arbitrary constants in the general solution of a differential equation is equal to the different equation	A. Order B. Degree C. Variables D. All are correct
21	The approximate percentage increase in the volume of a cube if the length of its each edge changes from 5 to 5.02 is	A. 1.2% B. 1.5% C. 0.16% D. 100.16%
22	$\sqrt[3]{8.6}$ is approximately equal to	A. 2.488 B. 2.48 C. 2.0488 D. 2.05
23	The approximate increase in the area of a circular disc if its diameter increased from 44cm to 44.4cm is	A. 0.4cm B. 8.8π cm C. 17.6π cm D. 35.2π cm
24	$\int f(x)g(x) - \int g(x)f'(x) dx$ is equal to	A. $\int f(x)g'(x) dx$ B. $\int f'(x)g(x) dx$ C. $\int f'(x)g(x)' dx$ D. $\int f(x)g(x) dx$
25	The area bounded by $y = x(x^2 - 4)$ and below x - axis is	A. 4 B. 0 C. -4 D. 8
26	Archimedes approximate the function by horizontal function and the area under f by the sum of small	A. Parallelograms B. Squares C. Rectangles D. Polygons