

## ECAT (Pre-Eng) Mathematics Chapter 19 Integration

Sr	Questions	Answers Choice
1	The area between the x-axis the curve $y = 4x - x^2$ is :	A. $32/2$ B. 15 C. 18 D. 21
2	$\int f(x)$ is known as:	A. Definite itegral B. Indefinite integral C. Fixed integral D. Multiple integral
3	Question Image <input type="text"/>	C. $\ln f(x) + c$ D. $f(x) - c$
4	Question Image <input type="text"/>	A. $4(x^{3/2} - 3x^{2/2}) + c$ B. $3x^{2/2} - 6x + c$
5	Question Image <input type="text"/>	A. $(x^{3/2} - 3x^{2/2}) + c$ C. $3x^{2/2} - 6x + c$
6	Question Image <input type="text"/>	
7	Question Image <input type="text"/>	A. $y + 1 = Ae^{x/c}$ B. $y + 1 = Axe^{x/c}$ C. $xe^{x/c} = C$ D. $y + xe^{x/c} = C$
8	Question Image <input type="text"/>	
9	The area bounded by $y = x(x^2 - 4)$ and below x - axis is	A. 4 B. 0 C. -4 D. 8
10	Question Image <input type="text"/>	
11	Archimedes approximate the function by horizontal function and the area under f by the sum of small	A. Parallelograms B. Squares C. Retangles D. Polygons
12	Question Image <input type="text"/>	A. $\operatorname{cosec} x + c$ B. $-\operatorname{cosec} x + c$ C. $-\sec x + c$ D. $\sec x + c$
13	$\int x \cos dx$ is equal to :	A. $x \cos x + \sin x$ B. $\cos x + x \sin x$ C. $x \cos x + x \sin x$ D. $x \sin x + \cos x$
14	Question Image <input type="text"/>	
15	Question Image <input type="text"/>	
16	$\int x/\sin^2 x dx$ is equal to:	A. $x \cot x + \ln \sin x $ B. $-x \cot x - \ln \sin x $ C. $x \cot x - \ln \sin x $ D. $x \tan x - \ln \sec x $
17	Question Image <input type="text"/>	
18	The arbitrary constants involving in the solution can be determined by the given conditions. Such conditions are called	A. Boundaries B. Variable separable C. Initial values D. None
19	Question Image <input type="text"/>	
20	$\int \sec^2(ax + b) dx$ is equal to:	A. $\tan^{2/2}(ax + b)$ B. $1/a \tan^{2/2}(ax + b)$ C. $1/a \tan(ax + b)$

