

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

Sr	Questions	Answers Choice
1	If the lower limit of an integral is a constant and the upper limit is a variable, then the integral is a	A. Constant function B. Variable value C. Function of upper limit D. All
2	Question Image	
3	Question Image	
4	The area between the x-axis and the curve $y = x^2 + 1$ from $x = 1$ to 2 is:	A. 15/6 B. 15/4 C. 10/4 D. 10/3
5	Question Image	B. $\ln(x^2 - x + 1) + c$ D. $\ln(2x - 1) + c$
6	The differential equations of all conis whose axes coincide with the co-ordinate axis is	
7	Question Image	
8	Question Image	A. $\operatorname{cosec} x + c$ B. $-\operatorname{cosec} x + c$ C. $-\sec x + c$ D. $\sec x + c$
9	$\int f(x)$ is known as:	A. Definite itegral B. Indefinite integral C. Fixed integral D. Multiple integral
10	Question Image	
11	The area enclosed between the graph $y = x^2 - 4x$ and the x- axis is:	A. 20/3 B. 41/3 C. 32/3 D. 25/3
12	Question Image	A. $6x - 2 + c$ B. $x^3 - x^2 + x + c$ C. $6x - x^2 + c$ D. $6x^3 - x^2 + c$
13	Question Image	
14	An integral of $1/x$ dx is:	A. $1/x^2$ B. $1/x^2$ C. $1/\ln x$ D. $\ln x$
15	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
16	Question Image	A. $\sec 5x + c$ B. $-\sec 5x + c$
17	Question Image	
18	Question Image	
19	If the graph of f is entirely below the x-axis, then the value of definite integral is	A. = 0 B. $< 0$ C. $> 0$ D. None
20	$\sqrt[3]{8.6}$ is approximately equal to	A. 2.488 B. 2.48 C. 2.0488 D. 2.05

