ECAT Mathematics Chapter 18 Basic Concepts & Definitions

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	The derivative of $1/x^m$ is:	A. x^{m+1}/ m B. m(x)^{m-1} C. (m-1) x^{-m} D. m/x^{m+1}
4	Question Image	
5	$d/dx(x^3 + 2x + 3)=$	A. x²+ 2 B. 3x + 2 C. 3x²+ 5 D. 3x2 + 2
6	If c is a constant, then d/dx (c) =	A. 0 B. c C. cx D. 1
7	Question Image	A. 8 B. 1/8 C. 1/3 D. 2/3
8	Question Image	A. 2x B. x/2 C. 2x³ D. x³/2
9	Differentiation of sin x w.r.t. cot x is:	A. -sin² x sec x B. -cos x sin² x C. -cos² x tan x D. -sin² x
10	If $f(x) = c$ then f^1 (x0 equals:	A. 1 B. 0 C. cx D. c
11	If $f(x) = c$ then $f^1(x)$ equals:	A. 1 B. 0 C. cx D. c
12	Question Image	
13	Question Image	
14	Question Image	
15	Question Image	
16	If $f(x) = x^{2/3}$ then $f^1(x)$ at x = 8 equals:	A. 8 B. 1/8 C. 1/3 D. 2/3
17	Question Image	
18	d / dx (cot x) =	A. Sec x tan x B. -csc² x C. Sec² x D. 1/cot² x
19	If $x = at^2$ and y = 2at then dy/dx =	A. 2a/y B. y/2a C. -a/2y D. -2y/a
20	Question Image	