ECAT Mathematics Chapter 18 Basic Concepts & Definitions

Sr	Questions	Answers Choice
1	Question Image	
2	If $f(x) = 1/x-2$ then $f^1(0)$ equals:	A. -1/4 B. -3/2 C. -1/2 D. 1/5
3	If $y=x^m$ then dy/dx equals:	A. mx B. x/m C. mx^{m-1} D. xm^{m-1}
4	If $x =1 -t^2$ and $y =3t^2 - 2t^3$ then dy/dx =	A. (1-t) B. 3(1+t) C. 3(t-1) D. 3/1-t
5	Question Image	
6	Question Image	
7	Question Image	A. 100 B. -100 C. 0 D. -101
8	If $f(x) = x^{-100}$ the value of $f^1(1)$ is:	A. 100 B. -100 C. 0 D. -101
9	If $f(x) = 2x^3 + 1$ then $f^1(0)$ =	A. 0 B. 1 C. 6 D. None of these
10	Question Image	D. None of these
11	d/dx (cos x sin x) =	A. cos² x - sin² x B. 2cos²x + sin² x C. 2cos² x - sin² x D. 1 - sin²x
12	Question Image	A. 1 B. 0 C. cx D. c
13	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
14	if $y=x^2$ then dy/dx equals:	A. 2x B. x/2 C. 2x³ D. x³/2
15	$d/dx(x^3 + 2x +3)$=	A. x²+ 2 B. 3x + 2 C. 3x²+ 5 D. 3x2 + 2
16	Question Image	A. -2x B. x⁻³ D. -2x³
17	Question Image	
18	If f(x) = c then $f^1(x)$ equals:	A. 1 B. 0

18	If f(x) = c then $f'(x)$ equals:	C. cx D. c
19	Question Image	
20	If c is a constant, then d/dx (c) =	A. 0 B. c C. cx D. 1