ECAT (Pre-Eng) Mathematics Chapter 18 Basic Concepts & Definitions

Sr	Questions	Answers Choice
1	Question Image	D. None of these
2	If $y=x^m$ then dy/dx equals:	A. mx B. x/m C. mx^{m-1} D. xm^{m-1}
3	Question Image	A. 1 B. 0 C. cx D. c
4	Question Image	
5	If $f(x) = c$ then f^1 (x0 equals:	A. 1 B. 0 C. cx D. c
6	Question Image	B. xⁿ⁻¹
7	Question Image	A. 2x B. x/2 C. 2x³ D. x³/2
8	Question Image	A. zero at x B. differentiable at x C. continuous at x D. none of these
9	If $3x + 4y + 7 = 0$, then $dy / dx =$	A. -1/2 B. -4/3 C. 7/2 D. -3/4
10	If $f(x) = 1/x-2$ then $f^1(0)$ equals:	A. -1/4 B. -3/2 C. -1/2 D. 1/5
11	$d/dx (\cos x^2) =$	A. -2x cos x B. -2x sin x² C. -2x tan x D. -2x sec² x
12	Question Image	
13	Question Image	A. x²+ 2 B. 3x + 2 C. 3x²+ 5 D. 3x²+ 2
14	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
15	If $f(x) = c$ then $f^1(x)$ equals:	A. 1 B. 0 C. cx D. c
16	$f(x) = ax^2-3x-5$, and $f^1(2) = 9$, a is equal to	A. 2 B. 3 C. -2 D. 4
17	Question Image	
18	If $f(x) = x^{-100}$ the value of $f^1(1)$ is:	A. 100 B. -100 C. 0 D. -101

19	Question Image	A. mx B. x/m C. mx^{m-1} D. xm^{m-1}
20	Question Image	