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

Sr	Questions	Answers Choice
1	if x∈ Dƒ and ƒ'(x) exists, then ƒ is said to be	A. zero at x B. Differentiable at x C. Continuous at x D. None of these
2	Question Image	
3	Question Image	
4	Question Image	
5	Question Image	
6	If f(x) = c then ƒ'(x) equals:	A. 1 B. 0 C. cx D. c
7	Question Image	
8	If ƒ(x) = x^{-100} the value of ƒ' (1) is:	A. 100 B. -100 C. 0 D. -101
9	Question Image	
10	If ƒ(x) = c then ƒ' (x0 equals:	A. 1 B. 0 C. cx D. c
11	if $y=x^2$ then dy/dx equals:	A. 2x B. x/2 C. 2x³ D. x³/2
12	Question Image	A. 2x B. x/2 C. 2x³ D. x³/2
13	d/dx (cosec x)	A. -sec x tan x B. sin x cos x C. -csc x cot x D. 2sin x cos x
14	If $y = (7x + 9)^2$, then dy/dx equals:	A. 98x +126 B. 14x C. 14x +18 D. 14x+81
15	Question Image	A. zero at x B. differentiable at x C. continuous at x D. none of these
16	Question Image	
17	If ƒ(x) = $x^5 + x^3 + x$ the value of ƒ'(1) is:	A. 0 B. 8 C. 5 D. 9
18	Question Image	D. None of these
19	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
20	Question Image	A. x²+ 2 B. 3x + 2

C. 3x²+ 5
D. 3x²+ 2