HOLY ANGEL UNIVERSITY
MATHEMATICS & SCIENCES DEPARTMENT

#1 Holy Angel Avenue, Sto. Rosario St., Angeles City 2009 Philippines

DIFFERENTIAL CALCULUS
OPRELIM/ OMIDTERM/ OFINAL EXAMINATION
2ND Semester AY 2023–2024

A N S W E R S H E E T

SCORE: 38/50

SET/TEST PAPER NO.: 20

NAME: KERVIN CLYDE S. PADILLA PROFESSOR: ENGR. M. C. A. SICAT

SECTION: CS 201 CLASS SCHEDULE: _____ DATE: MARCH 05, 2024

MULTIPLE CHOICE

1.	A●	BO	CO	DO
2.	AO	B●	CO	DO
3.	AO	B●	CO	DO
4.	AO	BO	CO	D●
5.	AO	BO	C●	DO
6.	AO	B●	CO	DO
7.	AO	B●	CO	DO
8.	AO	B●	CO	DO
9.	AO	BO	CO	D●
10.	AO	B●	CO	DO
11.	A●	BO	CO	DO
12.	AO	BO	CO	DO
13.	AO	B●	CO	DO
14.	AO	B●	CO	DO
15.	AO	BO	CO	D●
16.	AO	BO	C●	DO
17.	AO	B●	CO	DO
18.	AO	B●	CO	DO
19.	AO	BO	CO	D●
20.	AO	BO	CO	D●

*YOU MAY USE THE SPACE BELOW AND THE BACK PORTION FOR YOUR SOLUTION.

21] $f(x) = (7x-4)(3x+8)^4$

$f'(x) = (u)(v)^4 \cdot (u') \cdot (v')$

$= (7x-4)\,4(3x+8)^3 \cdot 7 \cdot 3$

$(7)(3)(7x-4)\,4(27x^3 + 162x^2 + 384x + 704)$

$28(7x-4)(108x^3 + 648x^2 + 1536x + 2816)$

$(147x-84)$

$15\,876x^4 + 95\,256x^3 + 225792x^2 + 413\,952x -$

$(9072x^3 + 129024x + 54432x^2 + 236544$

$f'(x) = 15876x^4 + 86184x^3 + 201360x^2 + 284928x + 236544$