



SUBJECT: 2DIFFCALC
OPRELIM/ OMIDTERM/ OFINAL EXAMINATION
2ND Semester SY 2023-2024

ANSWER SHEET

SET/TEST PAPER NO.: 20

SCORE: 40/50

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PROFESSOR: ENGR. SICAT

SECTION: CS-201

CLASS SCHEDULE: _____

DATE: 25/01/24

MULTIPLE CHOICE

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

16. A● BO CO DO
17. A● BO CO DO
18. AO Bφ CO D●
19. AO BO Cφ D●
20. A● BO CO DO
21. AO B● Cφ DO
22. AO B● CO DO
23. AO BO CO D●
24. AO B● CO DO
25. AO B● Cφ DO
26. AO BO CO DO
27. AO BO CO DO
28. AO BO CO DO
29. AO BO CO DO
30. AO BO CO DO

20 X 2

Quiz Score!

20
+ 26
46
55

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

$$\begin{aligned} 21) \lim_{x \rightarrow -2} (x^2 - 3x + 1) \\ ((-2)^2 - 3(-2) + 1) \\ 4 + 6 + 1 \\ = 11 \end{aligned}$$

as x approaches -2
the limit reaches 11

$$24) \lim_{x \rightarrow \infty} \frac{2x^3 - 5x + 2}{x^3}$$

→ same degree of 3
 $\frac{2}{1} = 2$

as x approaches ∞
the limit approaches 2

$$\begin{aligned} 22) \lim_{x \rightarrow 3} \frac{2x - 6}{x^2 - 2x - 3} \\ \frac{2(x-3)}{(x-3)(x+1)} \\ \frac{2}{(x+1)} = \frac{2}{(3+1)} = \frac{2}{4} \\ = \frac{1}{2} \end{aligned}$$

as x reaches 3
the limit approaches 1/2

$$25) \lim_{x \rightarrow 2} \frac{\sqrt{2x-3} - 1}{x - 2}$$

USED SHIRT SOLVE: 7

$$\begin{aligned} 23) \lim_{x \rightarrow 9} \frac{\sqrt{x} - 3}{x - 9} \cdot \frac{\sqrt{x} + 3}{\sqrt{x} + 3} \\ = \frac{\sqrt{x} - 3}{(\sqrt{x} - 3)(\sqrt{x} + 3)} \cdot \frac{\sqrt{x} + 3}{\sqrt{x} + 3} \\ = \frac{1}{\sqrt{x} + 3} = \frac{1}{3+3} \\ = \frac{1}{6} \end{aligned}$$

as x approaches 9
the limit approaches 1/6

26!