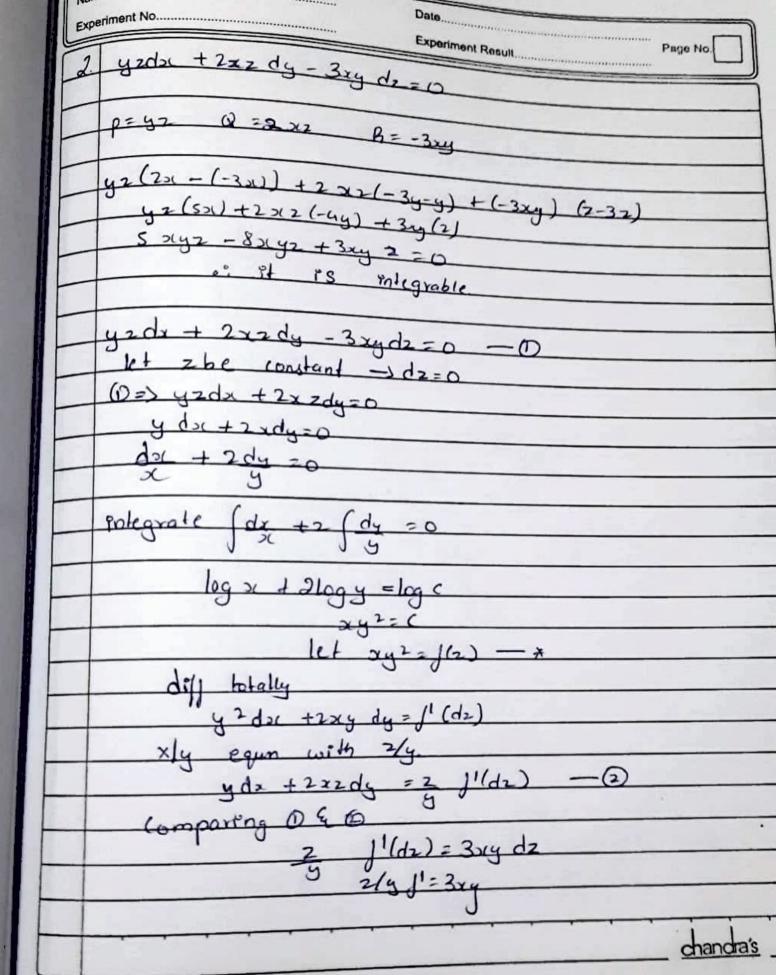
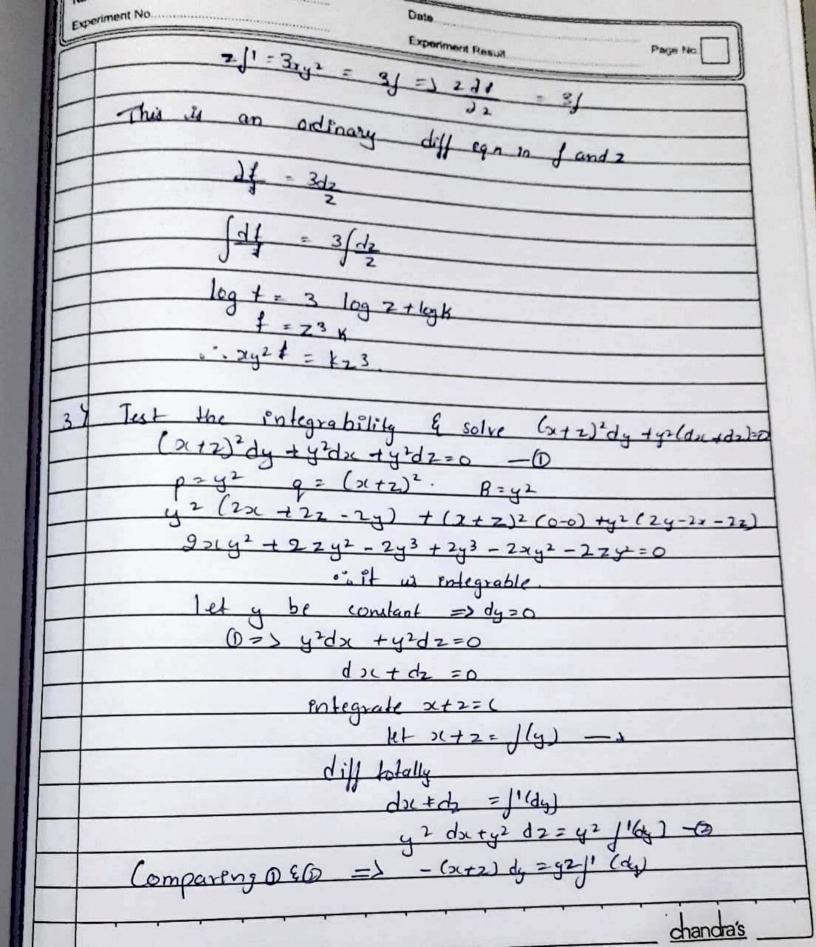
Experiment No	Experiment Results
TOTAL DIFFEREN	Experiment Result. Page No. 23
DIFFEREN	VILLE CAURTIONS
P. O.B. ave toute	the form Pdy + 94 . P. 1
JUDIK ON	the form Pdx + 9dy + Rdz, where of 3, 4, 2 is called Total differential eqn
Phiorem: - A necessary and	Sullivient . It
to be entigrable is	sufficient condition for Pax + ady + Rdz = 0
dz dy t Q dR	$\frac{-\partial P}{\partial z} + R \left(\frac{dP}{dy} - \frac{d\theta}{dx} \right) = 0$
Test the integrability of	und solve (y+2)dx + (z+>1)dy + (x+y)dz
20/	
$p = y + z$ $\frac{\partial p}{\partial y} = 1$	3 %2=1
$q = 2 + x$ $\frac{\partial Q}{\partial x} = 1$ $R = x + y$ $\frac{\partial R}{\partial y} = 1$	∂α/ ₃₂₌₁ ∂β/ ₂₋₁₂₌₁
7 ag -1	0.78.E=1
· - P (da - dR) + 0	
(12 04)	$\left[\frac{\partial s}{\partial s}\right] \left[\frac{\partial y}{\partial s}\right]$
y+2(1-1) +2+2(1	(1-1) + x + y(1-1) = 0
5 0	20100-610
. given egn us	THOTYAUTE
y do +2 do + 2 dy + x dy +	xdz tydz = 0
(4 dx +x d4) + (2 dx +x	(dz) + (2dy +y dz)20
d(yn)+d(zx)+d(zx)	1) = d(v)
xy+x2+29:	
	chandra's

Nam





Name of Experiment. Experiment No. Experiment Requit x+4+4 = x(x+4)4 Programe : from sympy import > x, 4, 7 = symbols (x 42) 1 = Semplify (p* (diff (B,2) - diff (R,y))+ a* (diff (R,y)) + a* (diff (P,y) - diff (Q,21))) elu: prent (The given equation is not integrable!