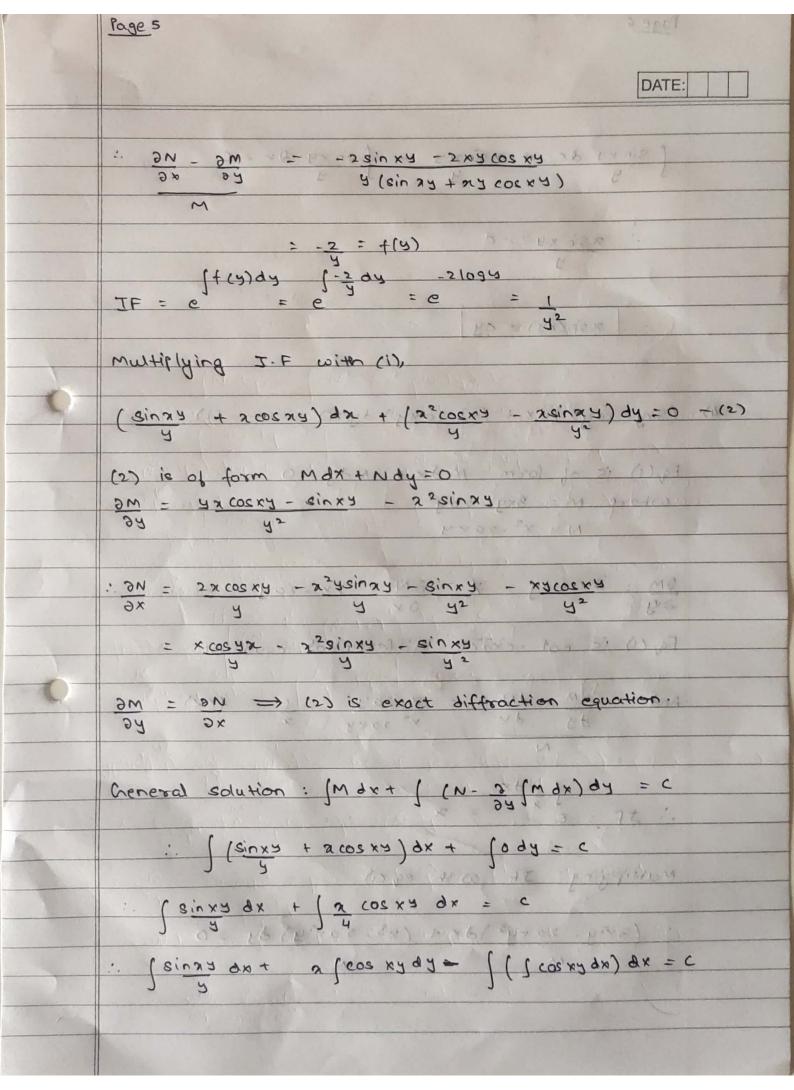
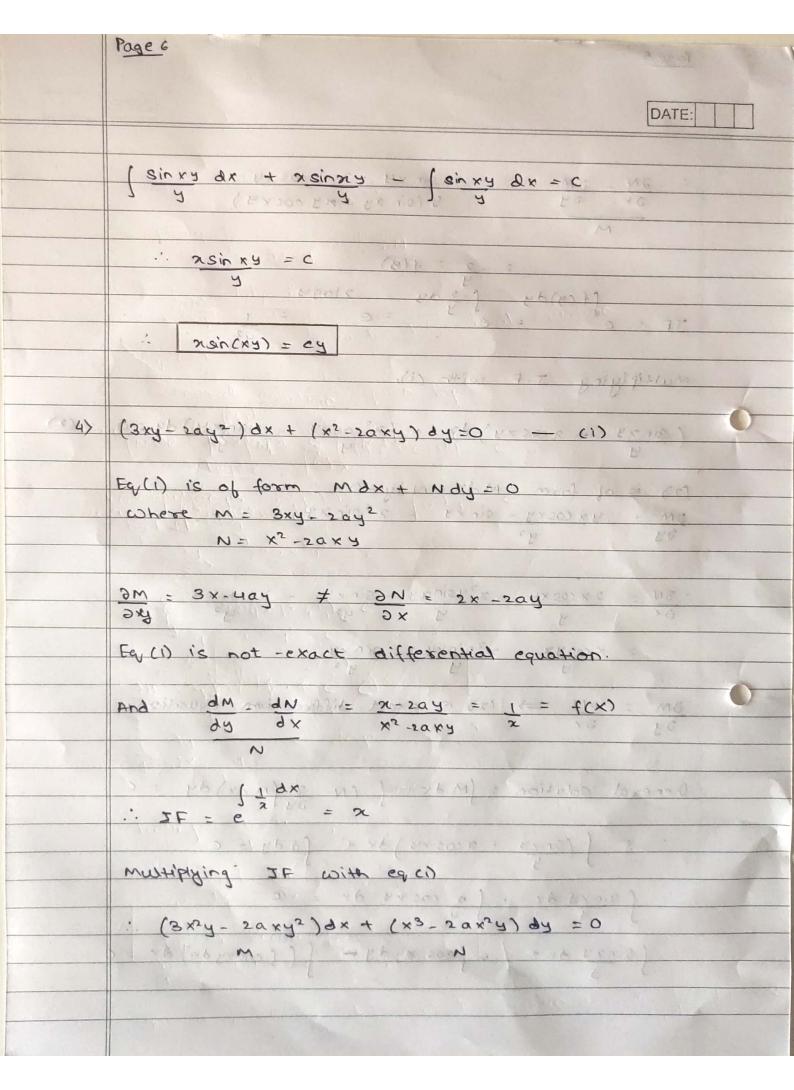


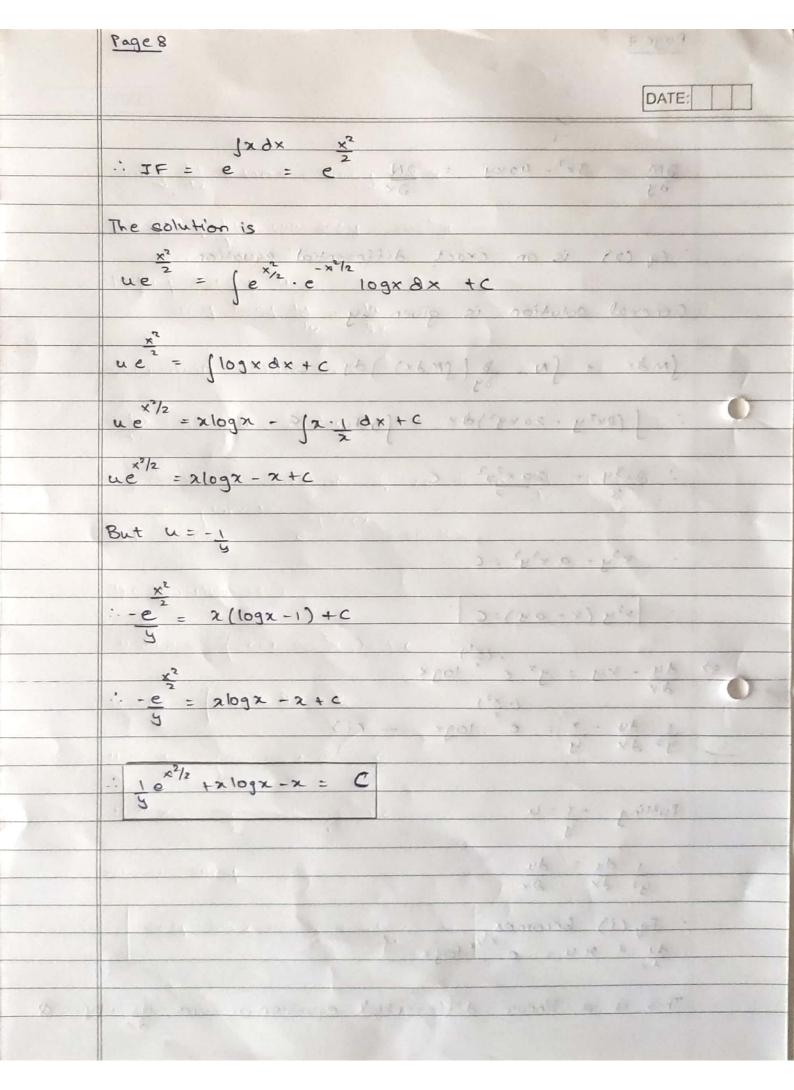
	Page 3
	DATE:
	This general equation is given by
	In ay + (m-(2 (ndy) dx = 0
	Sinady + f-20 dx = C = po + and mo
	. MS - 418 *
133	$\frac{y_{sinn}-2(-1)}{n}=c$
1	100000000000000000000000000000000000000
	$\frac{1}{2} \frac{y \sin x}{x} + \frac{1}{2} = C$
19	The general equation is quer by
2>	(xy3+y)dx + 2 (x2y2+2+y4)dy +0 - (1)
	It is of the form Mdx + Ndy = 0
	where M = Xy3+y
	$N = 2x^2y^2 + 2x + 2y^4$
	$\partial M = 2xu^2 + 1 \neq \partial N = 42u^2 + 2$
($\frac{\partial M}{\partial y} = \frac{3xy^2 + 1}{2x} \neq \frac{\partial N}{\partial x} = \frac{4xy^2 + 2}{2x}$
(1)	and 1-9W + 9N = - (3xA3+1) + AxA, +5
	sh 9x XA3+A
	M TO MAINTENANT MINOT STATE TO 21 27
	$= \frac{x \cdot x_3 + 1}{x} = \frac{1}{x} = $
	The state of the contraction of the state of
	11dy
	J104 = e1094 = 4
2011	use Let a region to be de la
	Name of the second seco





Page 7 $\frac{\partial M}{\partial M} = 3x^2 - 40xy = \frac{\partial X}{\partial M}$: Eq (2) is an exact differential equation. Dr xexpor out a General solution is given by: [max + [n - 3 ((max)) as = c x p x log) :] (8x2y - 20xy2) 0x + 10dy = C DIX Keals 315 : 3x3y - 20x2y2 - C - x3y - a x2y2 = C 5 × (1 - x(d) x - 3 + 6 .. x2y (x-ay)=c 5> $\frac{dy}{dx} - xy = y^2 \cdot e^{-\frac{(x^2)}{2}} \log x$ $\frac{1}{y^2} \frac{dy}{dx} - x = e^{-\frac{(x^2)}{2}} \log x - (i)$ D & MANDERS OF Putting -1 = 4 1. 1 dy = du in Eq (i) becomes

du + ru = e x2/2 logx This is a linear differential equation of form dy 184 - 8



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	DATE:
6>	tany dy + tanx = cosy · cos3x.
	secytany dy + tanx secy = cos3 x
	Putting secy = a
	isecy.tany.dy = du dx dx
	·· Equation reduce to,
0	du + tanx.u = cos3x
	dx direction of the state of th
	It is linear equation of the form dy + Py = Q
	IF = e = e = secx
	JF = e = e = secx
	The solution is,
	the solution is,
	$u \sec x = \int \sec x \cdot \cos^3 x dx + c$
0	usecx = (cos2xdx + C
	usecx = (1+cos22 &x+c
	$usecx = \frac{x + sin2x + c}{2}$
	But u= secy
	but a seey
	secy secx = x + sin2x + C