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Assignment-3 TAshwani kr. Chaidhay J Torg BCT-AJ

10) 5 1/2 log (02-(0)20+b2sin20) d0

I= 1 1/2 log (02(0020 + 62 sin20) d0 -(1)

assuming ~, B.>0

diff. both side io. r.t. - 0 we key

di - 1 1/2 1 20 (0520 d 8)

da Jo - a2(0520 + b25in20)

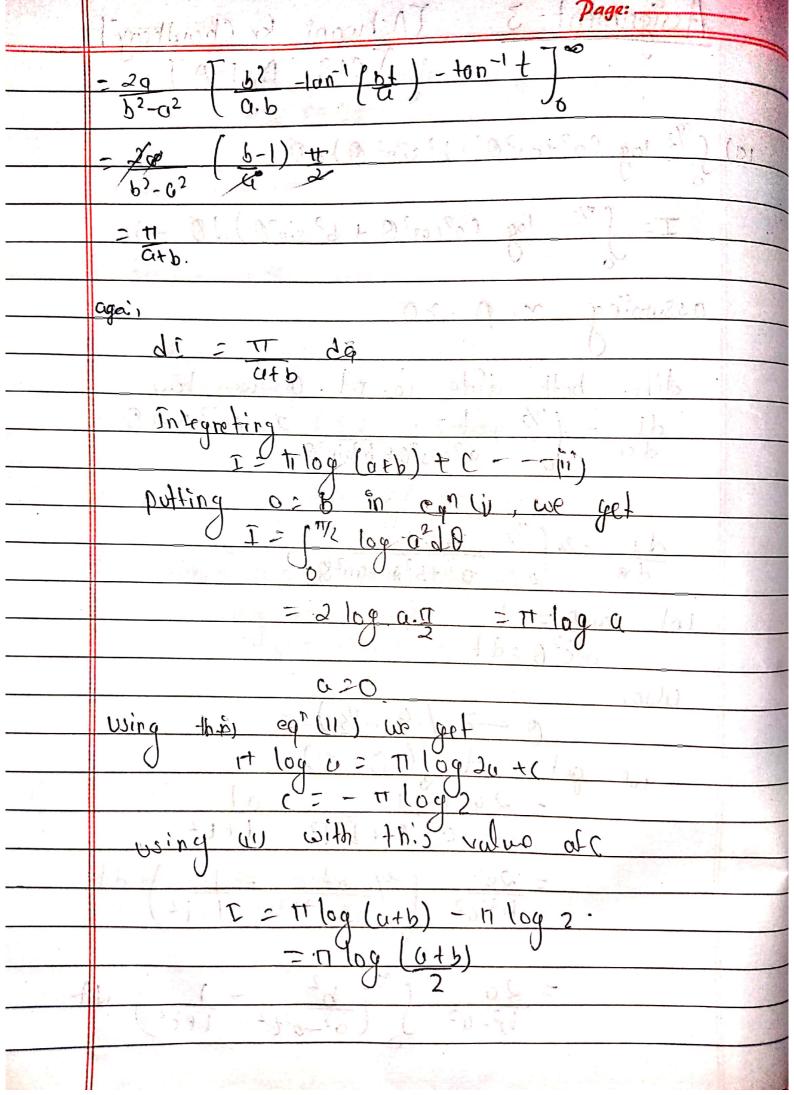
 $\frac{dI}{dR} = 2a \int_{0}^{\frac{\pi}{2}} \frac{d\theta}{(x^2 + h^2)^2 + 4an^2 \theta}$

10t tan0 = t 50220 = dt

 $0 = \frac{1}{2} \left(\begin{array}{c} 0 & \frac{1}{2} \\ 0 & \frac{1}{2} \end{array} \right)$ $= \frac{2}{2} \left(\begin{array}{c} 0 & \frac{1}{2} \\ 0 & \frac{1}{2} \end{array} \right)$ $= \frac{2}{3} \left(\begin{array}{c} 0 & \frac{1}{2} \\ 0 & \frac{1}{2} \end{array} \right)$ $= \frac{2}{3} \left(\begin{array}{c} 0 & \frac{1}{2} \\ 0 & \frac{1}{2} \end{array} \right)$

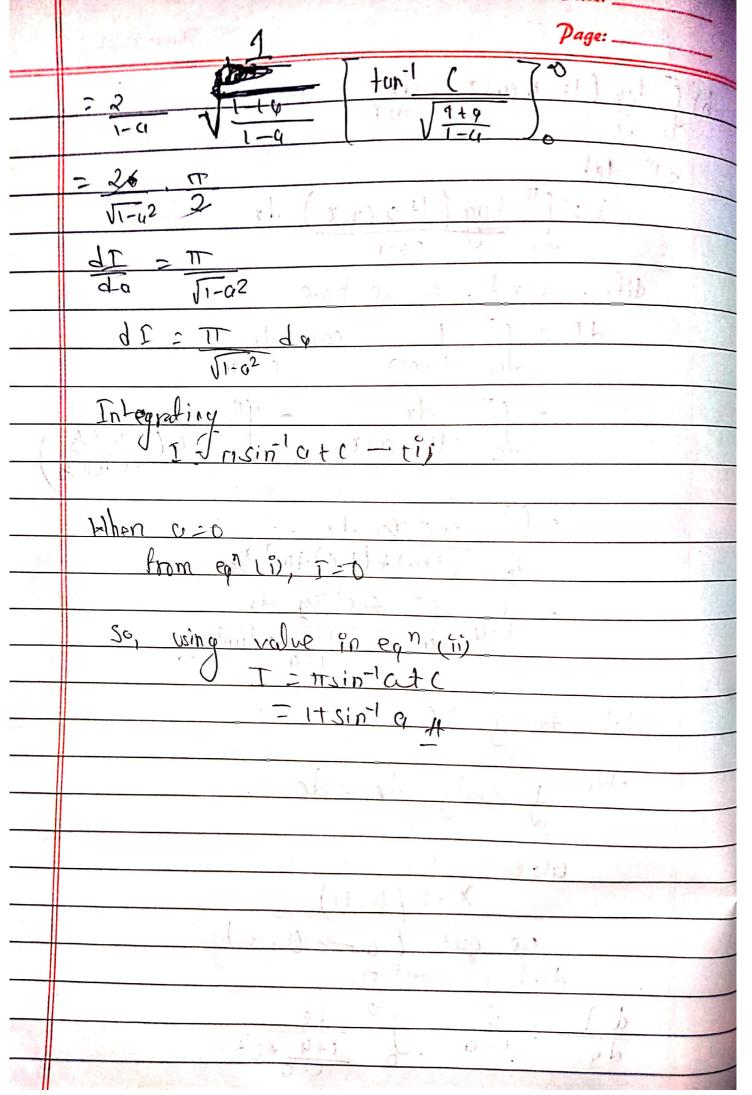
 $\frac{-2q}{b^2-a^2} \int_{a}^{\infty} \frac{b^2}{a^2+b^2t^2} \frac{-1}{1+t^2} dt$

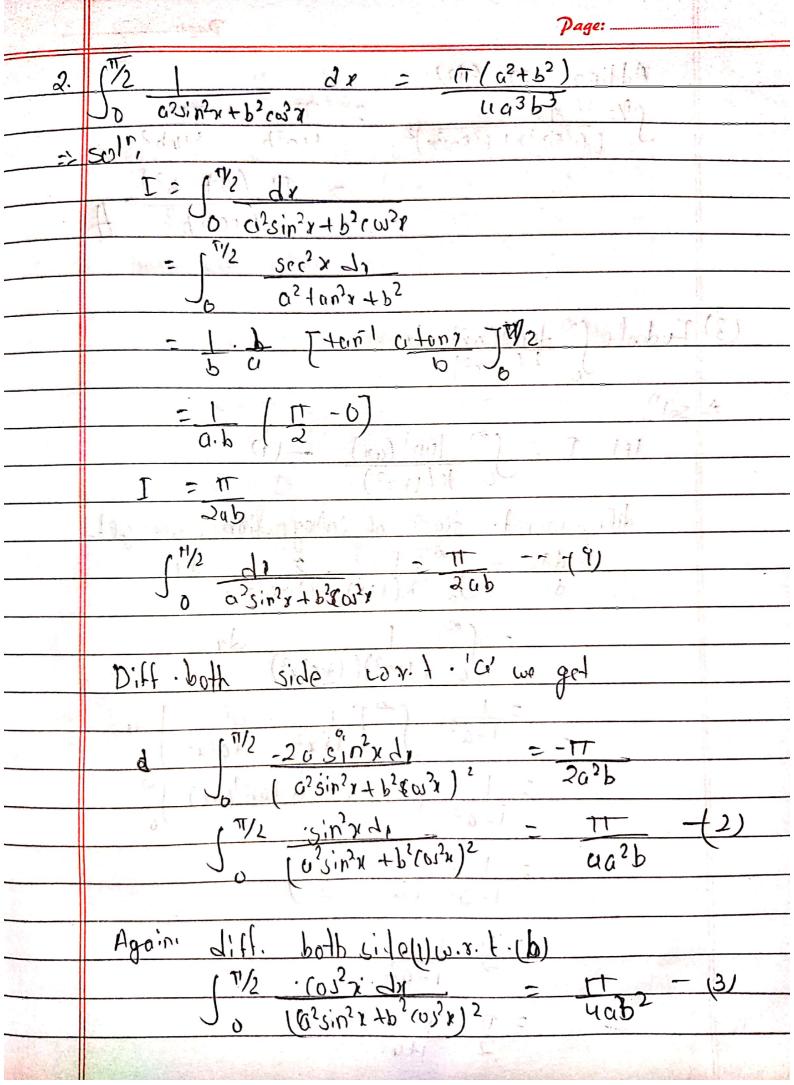
 $= 20 \quad \left(\frac{9}{5^2 + b^2 t^2} - \frac{1}{1 + t^2} \right) dt$

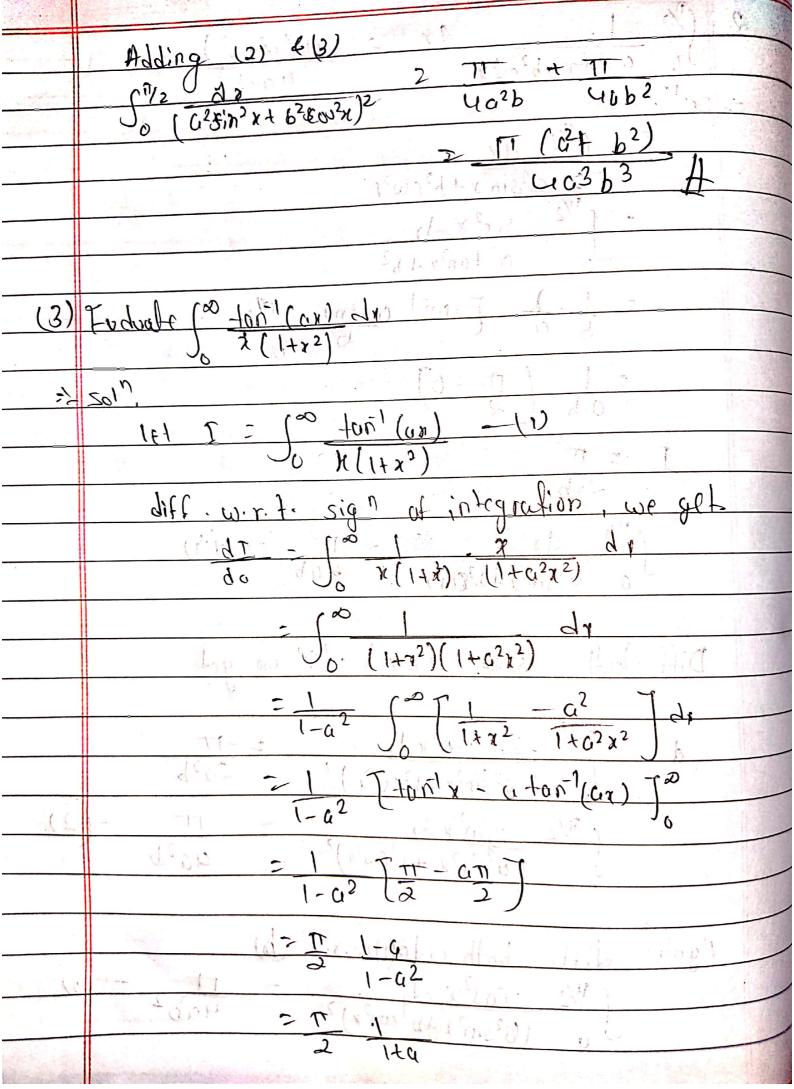


Date: ____ Page: b) [" log (1) a (05x) dr 1 = [T | log (1+a (osx) dx diff. W.r.t. a we have d1 = 1 (0) r (0) de (0) = 1 dx - 1 dp 1+a (1-ton2) = (" sec2 x) dr = 1-4 5ec2 2/2 d)

1-4 = f(in2 1/2) tel ton y :> (+W, I SELY dx >dc







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b)		a,	e X	d	•
_:	-	-00	1+02x		

Since 0 % on interior point of
$$(-\infty, \infty)$$

$$\int_{-\infty}^{\infty} \frac{e^{\gamma}}{1+e^{2\gamma}} J_{\gamma}$$

$$= \int_{\infty}^{0} \frac{e^{\gamma} \int_{1} + \int_{0}^{\infty} e^{\gamma t} dx}{1 + e^{2\gamma}}$$

$$\lim_{\alpha \to \infty} \left[\frac{\tau - 4u n^{1} (e^{24})}{b^{-7} \omega} \right] + \lim_{\beta \to \infty} \left[\frac{4u n^{1} e^{b} - \frac{4u}{b}}{b^{-7} \omega} \right]$$