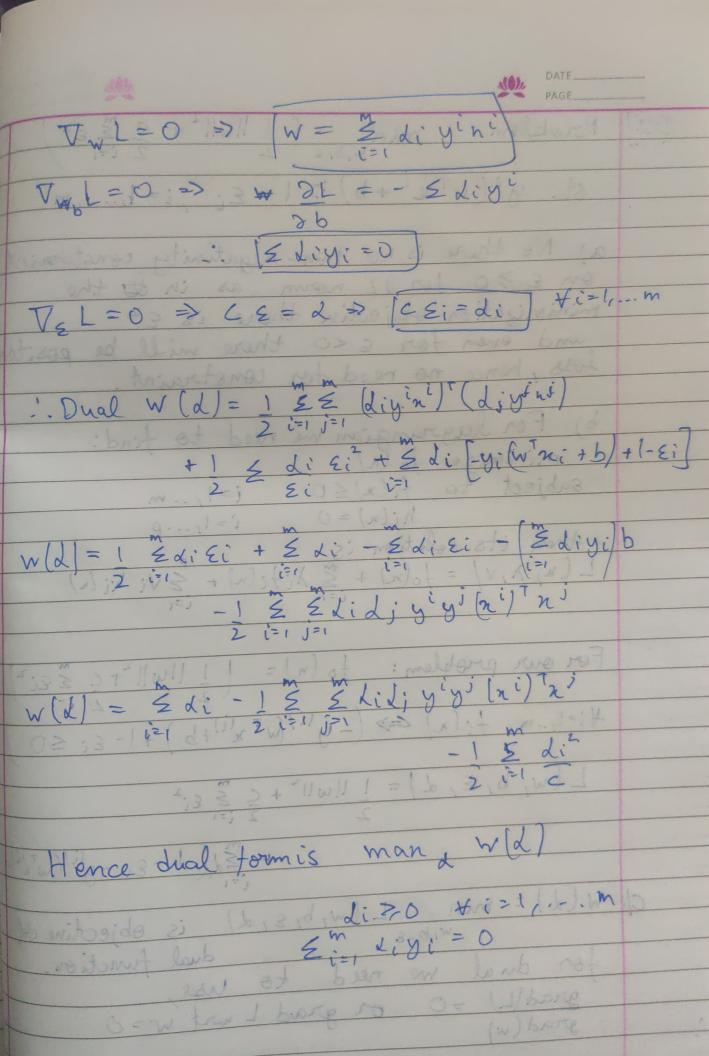
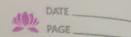
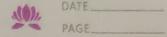


grad(w) =0 or grad L wit w=0





		PAGE	
(93)	a) Setting del # i=1,.	, m and b=0	
	For training sample i, dni, yis		
	$ +(ni)-yi = \frac{z}{z}y^{j}+(n^{j},yn^{i})-yi $ = $ z $		
	$m^{j=1}$ $\left(-\frac{(n^{j}-n^{i})^{2}}{2}\right)^{-1}$		
	= E y , e	-yi	
	$= \underbrace{z}_{j^{2}} ^{2^{2}-n(2^{2}-2)}$ $= \underbrace{z}_{j^{2}} ^{2^{2}-n(2^{2}-2)}$ $= \underbrace{z}_{j^{2}} ^{2^{2}-n(2^{2}-2)}$		
	= Zy'e	Let is possed remi	
*	Minh not 1764 x. W	[-(ni-ni)2/22)	
	≤ ₹ lyoe		
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
	E & \ y \ y \ . \ \ e		
	j‡i = (=e	122/	
	$j \neq i$ $\leq \neq \neq \times e$ $j \neq i$	(
	J+C		
	Assuming, Inj-ni) > Entition		
	bro 0 = (m-1)/e (-E ² /2 ²)		
160	white sorge of me have (n' 1 (m' n'+b)		
	(at taking man of all values)		
	-62/22		
	e 21/22 > m-1		
	e 21/22 > m-1		
	$\frac{\varepsilon^2}{7^2} > \log(m-1) \qquad \therefore m > 1$		
	2 ² > 2 ²		
	log(m-1)		
	or 22 < 22 Jog (m-		
	log (m-	1)	
	Hence tound.		



b) Yes the classifier will obtain O training rough The SVM mithout slack variables mill return a 0 error if there enists even a single solution and hence, will be of slack variables Letis tende consider it point such that y'(wTritb) for du'iyi) Now put b=0 for simplicity. We have constraint = yi (w'ni) Now ais + (ni) and yi have same sign
we get using large Li me have (yi) (wtni+b)>1
hence our solution.