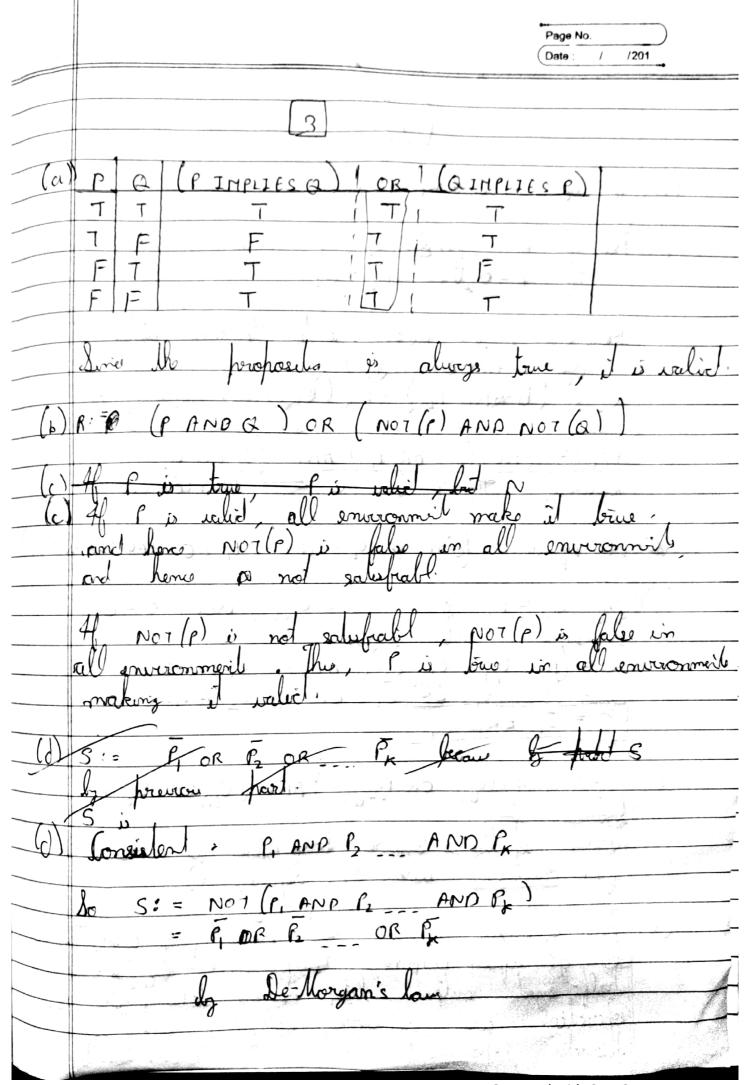
	Page No. Date: / 1201
~	
	Ne us proof by contradiction. Assume that log, 6 is salienal. Hence log, 6 = n for note sor
	n, d ∈ 2 d ≠0 and sin is lower torms. Then 6 = 4 \(\text{T} \) and 6 = 4 \(\text{T} \). Hence,
	This a compactueles lecaux 3/LHS but NOT (3/RHS). Therefore, log, 6 is irrational.
	2
	contractición By wop Che a minimin
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	$\frac{n^{2}3}{n^{2}4} = \frac{3^{3}}{3^{3}} = \frac{3}{3} > 3$
	Now $m-3 \leq 3^{\frac{m-3}{3}}$ as m is the minimum element of c $5^{\frac{m}{3}}m-3 \leq 3^{\frac{m}{3}}$ But $3^{\frac{m}{3}} \leq m$
	$\Rightarrow m-3 \leqslant m \Rightarrow 3m-9 \leqslant m$ $3 \Rightarrow m \leqslant 9$ 2
	This is a contraction to m > 5. Hence C must be emply, provide n & 3 mg Y n & M.
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

Scanned with CamScanner



	Page No. Date: / /201
	4
(a)	$f_0 = \overline{a_0}$, $C = a_0$
(b)	We If b=1 then o; = Pi and b=0, then o; = ai
	$\mathcal{H} b = 0, \text{ then } o_i = a_i$
,	Danslalis, the above entre logical statement
	O: = (DAND R) OR (BNOT (B) AND B)
	lecause, A P la Q => NoT(P) OR Q
(0)	An equivalail form is 0; = (bANPP;) OR (NOT(b) AND Q;)
(7)	Af con = 1 then C = C(2), else C = 0
: . : _{//} * ·	C = (NOT (C,) OR C, AND (C, OR O)
	C = C, AND C,
(6)	
	Jeanse de la company de la com
	from part (b) with constructed
(e)	Jor calculate C us new atmost to short and
2	half-sund outsit lite: somes late 4/89-2
j	operation are required der any one la
	provides exponented speedly our O(n) tou time.