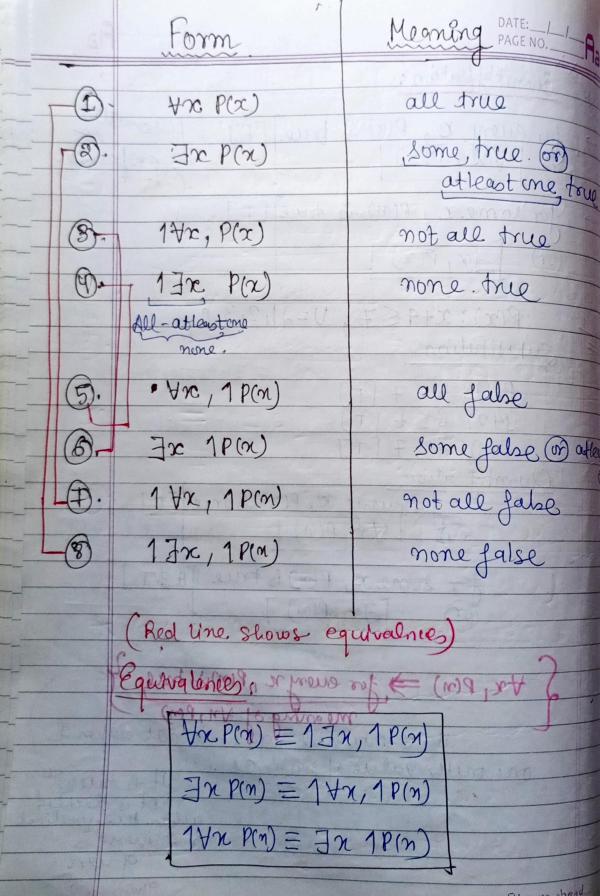
PAGE NO. Aa Predicates: (Open propositions) Predieatr & is a proposition except for the fact that it contains variables whose values are to be taken from some universe of discourse, of set x+2=7these are 2+4 < 8 (d) then 17 all proposition a love y ercent true re composely at time to Variables and ele value o is tellen from unhossel set. In English vandables Declarative ) they are called brediente Sendence O because the subject is Subject: present that's y it is called about welvely the asserbe is predicate. made ofen proposition her cure it open Bedicati. to hecome proposition by the property see futting the value of variable Subject has to requallo E(x): 2+2=7 hE - 1 less dum equel LE(214): 2+4 < 8. love (n,y): n Your y Canjos (x,y,t): n can Jost y at Hme to. predicate involving one variable is ealled Always shead ..

Mooning Quantification: conuited for every 2, P(x) is true [f] proposition for some x, P(n) is true [T] or). Ex, P(n) P(x): x+457, V=21,2,33 Substitution PU): 8557 (T) P12): 657 PT] P(3): 7 57 [T] Quentification forevery R, PM is true [T] Yr, P(n) for some re, P(m) is true Teg. T Red Line. Shows equivalence tr, P(n) => for every n, P(n) is mule earning of An, PM) it is unfueral organisal not defend on futh value of sentence It is brue or not is devided rules the predice and a design of the section of the & universe 13 Always ahead ..



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DATE:		5.
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$13 \times P(n) = \forall n, 1P(n)$	16	
	THE SAL	
TOTA. Negating quantified predicates	) .	
other. 14x P(n) = In 1P(n) 3007 19 100	16	(A)
6 two	-sided	
· Fr 1P(m) = 14x P(a).		
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Problems:		
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1 th p(n) -> g(n) =	4	
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8. 13rc[P(n) 10(n)]	d	
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= \n []p(m) \10(m)]	412	
$= \forall x [p(n) \rightarrow 10(n)]$	J. C.	1
[132(P(n)19(n)] = ∀x(P(n)→1	Q(4)	

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