

SNS COLLEGE OF ENGINEERING Coimbatore – 641 107



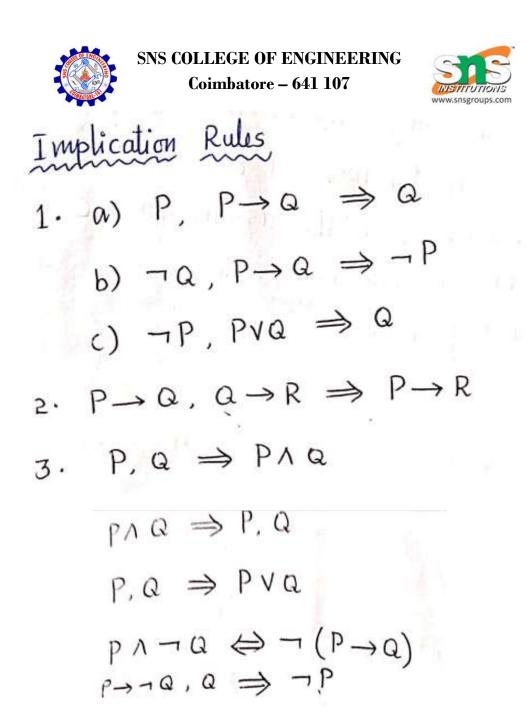
TOPIC:5-Inference theory of Statement Calculus & Rules of Inference

Theory of Inference Method of Contradiction In order to show that a conclusion C follows logically from the premises H1. H2,..., Hm, we assume that C is false and consider -c as an additional premises. If the new set of premises gives contradict value, then the assumption -c is true does not hold simultaneously with HINH2 A --- AHm being true. Method of contrapositive In order to prove $H_1 \wedge H_2 \wedge \cdots \wedge H_m \Longrightarrow C$, if we prove TC => T(HIAH2A...AHm) then the original problem follows. This method is called contrapositive method.





Rule of Interence Rule P: A premise may be introduced at anypoint in the derivation Rule T: A formula S may be introduced at anypoint in a derivation if S is tautologically implied by any one or more of the preceding formulas. Rule CP: If S can be derived from R and set of premises, then R→S can be derived from the set of premises alone.





SNS COLLEGE OF ENGINEERING

