Quiz-3

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Q2):-

Given statement is "For every proposition α, if there is a tableau proof of α."

The negation of the statement can be expressed as follows:-

* If α is valid for every valuation then the valuation of α is False.
* There exists a proposition α for which there is no proof of α.

We can say that, the negation asserts that there is at least one proposition α for which no tableau proof exists. This is the opposite of the whole original statement, which claims that tableau proofs exists for all the proposition.

⇒ Negation of "Every proposition α" is there exists a proposition α.

⇒ Negation of "if there is a tableau proof α" is for which there is no tableau proof of α".

Finally, Negation makes the whole statement in to opposite form. Like. $T(\neg\alpha) \rightarrow F\alpha$.

Q1)

ii) Definition of "agree with":-

The valuation V is said to be "agree with" be an Entry E of a path p in a tableau. For every proposition \alpha in the Entry E, the value assigned to \alpha by V matches the truth value assigned to the \alpha in the tableau path P.

For every alpha in E V(\alpha) = (assigned truth value for \alpha in p).

i) Parameters for the Concept "agree with":

V (valuation): This parameter representing a Valuation.

E (Entry) :- This parameter representing the entry in the Tableau path.

P (path) :- This parameter Representing a path in the Tableau.

\alpha (proposition) :- This Representing the Parameter as Proposition.