Week 6: Assignment 6

Due on 2018-09-19, 23:59 IST.

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1) A logical system is complete if and only if every true conclusion is provable in that system.
   a) True
   b) False

No, the answer is incorrect.
Score: 0
Accepted Answers:
   a)
   b)

2) In Conditional Proof procedure, when we are making more than one assumption, the order of discharge should be “first in last out”.
   a) True
   b) False

No, the answer is incorrect.
Score: 0
Accepted Answers:
   a)
   b)
'In every limited scope assumption procedure, the assumption is within its own scope.'

a) True
b) False

No, the answer is incorrect.
Score: 0
Accepted Answers: a)

The Strengthened version of Conditional proof is supposed to apply to only the arguments that have conditional statements as their conclusion.

a) True
b) False

No, the answer is incorrect.
Score: 0
Accepted Answers: b)
Which of the following claims about the given proof by Strengthened version of Conditional Proof is / are true?

Consider the proof:
1. \( P \supset (T \land S) \)
2. \( Q \supset (S \land W) \land (\neg T \land \neg W) \supset (\neg P \land \neg Q) \)

\[ \begin{align*}
3. & \quad \neg T \land \neg W \\
4. & \quad \neg T \\
5. & \quad \neg T \lor \neg S \\
6. & \quad \neg (T \land S) \\
7. & \quad \neg P \\
8. & \quad \neg W \land \neg T \\
9. & \quad \neg W \\
10. & \quad \neg W \lor \neg S \\
11. & \quad \neg S \lor \neg W \\
12. & \quad \neg (S \land W) \\
13. & \quad \neg Q \\
14. & \quad \neg P \land \neg Q \\
15. & \quad (\neg T \land \neg W) \supset (\neg P \land \neg Q) \\
\end{align*} \]

3-14, CP

a) Line 5 is obtained from line 4 by Conj.
b) On line 7, the justification is 1, 6 by MP.
c) The bent arrow closing line should be after line 13 and before line 14.
d) Line number 12 is obtained from line number 11 by De Morgan’s Theorem.

No, the answer is incorrect.
Score: 0

Accepted Answers:
d)

Consider the following argument and find out the correct answer from the following options:

1. \( P \therefore Q \lor (Q \supset R) \)

a) With the 19 rules and the Limited Scope Assumption Proofs, it is possible to prove this argument as valid.
b) With the 19 rules and the Limited Scope Assumption Proofs, it is not possible to prove this argument as valid.

a)
7) True or false?
   “From premises that contradict each other, any conclusion follows.”
   a) True
   b) False

No, the answer is incorrect.
Score: 0
Accepted Answers:

8) ‘The proofs of tautologies or theorems are called zero-premise proofs.’
   a) True
   b) False

No, the answer is incorrect.
Score: 0
Accepted Answers:

9) ‘The Reductio Ad Absurdum method begins with the rejection of a premise.’
   a) True
   b) False

No, the answer is incorrect.
Score: 0
Accepted Answers:

    a) True
    b) False
No, the answer is incorrect.
Score: 0
Accepted Answers:
b)