CS228(M) Peer Review 1

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September 11, 2020

Question 1.

Solution is correct.

Question 2.

Parse tree is correct.

Question 3.

Final answer is wrong. In the first two clauses, the s should actually be ¬s (might be a typo, but error regardless). Also, ψ is a horn formula is not mentioned.

Question 4.

Solution may be seen as incomplete and incorrect for two reasons. The statement $Res^1 = Res^0$ is not explained i.e. the fact that there is no literal of the form p and ¬p occurring simultaneously is not mentioned. Further, it is written that the formula is VALID, when it in fact is only satisfiable.

Question 5.

Answer is correct. Final proof is not completely written, but it could be argued that the references there to the earlier proofs is done in an accurate way.

Question 6.

Answer is correct, although a bit more explanation about how assignments and semantic entailment work together would have been better.

Question 7.

Solution is correct.

CS228(M) Peer Review 2

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Question 1.

Solution is correct. Fair argument.

Question 2.

Parse tree is correct.

Question 3.

Final ϕ is right, but instead of mentioning that ϕ is a Horn formula (which was asked), it is written that it is in CNF. A silly error maybe.

Question 4.

Final answer is correct.

Question 5.

Answer is correct. Final proof is not completely written, but it could be argued that the references there to the earlier proofs are done in a reasonably accurate way.

Question 6.

Answer is correct, although a bit more explanation about how assignments and semantic entailment work together would have been better. For example, explicitly mentioning the fact that there exist some assignments which make $\psi1$ true, but $\psi2$ false (and vice versa), and not just drawing the truth table and concluding, would be good to see.

Question 7.

Solution is correct. A good and well appreciated explanation given.