## **Artificial Intelligence 1**

Quiz #8 (propositional logic)

What is the difference between knowledge base and database?

What is the difference between entailment and inference?

Is there any relation between entailment and a model of the sentence?

Describe the relation between entailment and satisfaction of a formula.

What is the relation between enumeration and DPLL techniques?

Can any propositional formula be converted to a conjunctive normal form?

Can any propositional formula be converted to a disjunctive normal form?

Describe a method to decide satisfiability of a formula in DNF.

Which method of constraint satisfaction corresponds to the unit clause heuristic?

Describe how the propositional formula is simplified after assigning a value to a propositional variable.

What is a pure symbol?

What is a unit clause?

If we simplify a formula via unit clause heuristic, can we get a new pure symbol?

If we simplify a formula via pure symbols heuristic, can we get a new unit clause?

What is a phase transition?

Is resolution a special case of forward chaining?

Put a link between forward chaining and backward chaining on one side and data-driven and goal-driven inference methods.

What is the form of formula to which we can apply forward chaining?