Quiz Guide

CSC 28 – Discrete Structures for Computer Science

To maximize your quiz performance: attend lectures, do readings, start homework early, ask for help when you need it, review problems and solutions before the quiz. If anything in this assignment does not make sense, please ask for help.

1) Make sure you've done the assigned reading and have reviewed your notes. Some people find it useful to rewrite their notes into a second notebook, cleaning them up and correcting them as they go.

2) Any problem similar to the ones in the homework may be on the quiz. Study them until you completely understand. Some people find it useful to try to write their own problems and then have their classmates try to solve them.

3) Here are some of problems from old quizzes. There is no guarantee that the problems on your quiz will be like these, but it may be useful to see what I've asked in the past.

Consider the set of positive multiples of 5 (ie, 5, 10, 15, etc). Specify this set three different ways.

Let $A = \{x \in \mathbb{Z} : -1 < x \leq 4\}$ and $B = \{x \in \mathbb{R} : -1 \leq x < 4\}$. What are $A \cup B$, $A \cap B$, $A - B$, and $\overline{B}$? Show your work and give your answers in any set notation we have seen in class.

Draw a Venn diagram for each of $A \cap (B \cup C)$ and $(A \cup B) \cap (A \cup C)$. What conclusion can you draw about whether these two sets are equal? Explain.

For each of the following, write "True" or "False", and give a one sentence explanation.

$\emptyset \in \{1, 2, \{\emptyset\}\}$

$\{\emptyset\} \in \{1, 2, \{\emptyset\}\}$

$\emptyset \subseteq \{1, 2, \{\emptyset\}\}$

$\{\emptyset\} \subseteq \{1, 2, \{\emptyset\}\}$

Show $(A \cup B) - C = (A - C) \cup (B - C)$ by drawing two Venn diagrams, shading each component set differently, and identifying clearly the regions of the resulting set.