

**Discrete Math**  
**Quiz 6**

Name: \_\_\_\_\_

You have 10 minutes to complete this quiz. You may not use any unauthorized sources and you may not communicate with others about the exam. If you have a question raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**. Show your work, and give adequate explanations.

1. Each of (a), (b), (c) contains a modified form of the proposition " $H \rightarrow C$ ". Use the first blank to identify the form using one of the words "contrapositive", "converse", or "inverse" of  $H \rightarrow C$ . In the second blank, indicate whether or not the form is logically equivalent to  $H \rightarrow C$ .

(a)  $C \rightarrow H$                       converse                      not L.E.

(b)  $(\neg H) \rightarrow (\neg C)$                       inverse                      not L.E.

(c)  $(\neg C) \rightarrow (\neg H)$                       contrapositive                      L.E.