## Sample Midterm INFM289I, Spring 2010

Briefly define the following terms: (the actual test will have 8-10 of these questions)

Robustness

Degree

80/20 rule

Centrality



Answer the following questions for the graph above. (the actual test will have 7-10 of these questions)

Draw the degree distribution

How many nodes are there?

Which node has the highest degree?

Are there any bridges? If so, between which nodes?

Write the adjacency list:

Short Answer questions (the real test will have 5-7 of these)

Does information spread better over weak ties or strong ties? Why does it spread better on the type of ties you chose and why doesn't it spread well over the other type?

For the adjacency list below, draw a readable visualization of the network:

- a,b b,c b,d c,e c,f
- d,g
- d,ĥ

Describe the research questions and methodology (how the experiment was run) of # Eric Gilbert and Karrie Karahalios. 2009. Predicting Tie Strength With Social Media. Proceedings of CHI 2009. Your answer should be 1-2 paragraphs.

Describe Stanley Milgram's six degrees of separation experiment including how it was conducted and what the results were.