## CSC444F'09 Midterm Test

## 50 minutes – No Aids Allowed – 100 points total - 10 points per question

Answer all questions in the spaces provided. Use the backs if you run out of space. Write your name and student number on each sheet.

1. To conform to the ISO 9000 quality standard for software, what software development process must a company follow? How do auditors determine if the company is ISO compliant?

2. In Moore's technology adoption lifecycle model, describe "the chasm" and explain why it is dangerous.

3. What is an ECD? Why is it a useful concept?

4. In the formula for converting hours to ECD's a factor of 8 is used. Why?

5. If developer A can code the same feature twice as quickly as developer B, and developer B's work factor is 0.4, then what is developer A's work factor?

6. If the nominal workday is 9am-6pm with one hour for lunch, and a coder works for 6 hours each workday coding new features into the next release of the software, and works an additional 5 hours (total) each weekend, what is their work factor, *w*?

7. Say the coding phase of a release is planned to take 20 workdays; the ratio of the coding phase to all test phases is 2:1; and there are 5 coders working on this release each with a work factor of 0.6. If one of the coders leaves the team just before fork, how many workdays would you say the entire release should now take, from fork to GA?

8. If the previous release had poor quality as reported from the field, will adding more testers to the next release always improve the situation? Explain your answer.

9. Show how releases can be overlapped. Why is it a good idea to overlap releases?

10. Why do some software companies say that support will end on a feature release the day the feature release after the next is released?