Software Testing, Quality Assurance & Maintenance (ECE453/CS447/CS647/SE465): Final Outline
April 20, 2010

This open-book final has 7 questions worth 100 points. Answer the questions in your answer book. You may consult any printed material (books, notes, etc).

Question 1: Short Answer (10 points)

Fill in the blank (in your answer book). You shouldn't need more than about 15 words per answer. There may be more than one right answer.

1. Questions about regression tests, test requirements, web applications, usage models, software model checking, bug reporting, test plans.

Question 2: Graph Coverage (20 points)

Apply a graph coverage criterion to some code (which I provide).

Question 3: Logic Coverage (18 points)

Apply a logic coverage criterion to some code.

Question 4: Recycled Midterm Question (2 points)

Question 5: Mutation (20 points)

Give an example of a mutation and test cases which kill the mutation.

Question 6: Input-Space Testing (10 points)

I give you the input space. You give me some partition and test cases.

Question 7: Stub/mock Objects (20 points)

Understand when different stubs, mock objects, and other test doubles are best to use.