CSC444F'10 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. In the CMM for Software, name levels 2 and 3 and identify the single most important characteristic of each.

2. In Moore's technology adoption lifecycle model he draws a Bell curve. Describe the axes of the curve and in general terms what the vertical divisions overlaid on the curve represent.

3. Briefly argue why a Gantt chart may be considered harmful in early release planning. What is important in release planning? What is the difficult question?

4. In sizing features in ECDs, there are three contributing factors. What are they?

5. Describe how it happens that a software company typically has to correct defects in three maintenance streams.

6. What does the work factor, *w*, represent in release planning? Does *w* take into account the productivity of a worker, and why or why not?

7. If the estimate for F is considerably higher than the estimate for N*T, what release planning options are realistically available? Are there any options available that are less realistic, and if so, what are they and why are they less realistic?

8. The capacity constraint is expressed as $F=N\times T$. Explain under what circumstances this constraint holds true.

9. What are the perceived shortcomings of other software development processes that agile processes are claimed to correct?

10. In Requirements Engineering, describe a Goal Model and indicate why it is useful, and how it is used.