UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE AND ENGINEERING
FINAL EXAMINATION, December, 2006
CSC444H1 F – Software Engineering I
Examiner – D. Penny
2½ Hours - 50 marks total
Write all answers in the exam books provided.
No Aids Allowed

1. (5) Give the most important reason why multiple streams of development are necessary to a commercial software organization. In what ways does a source code control system facilitate multiple streams of development?

2. (5) Explain the reason for distinguishing the New and the Valid states in a defect workflow.

3. (5) What does it mean to have a fully reproducible build? What can go wrong if builds are not fully reproducible?

4.   (5) Why is automated testing often called "regression" testing?

5.   (5) What is the most important way in which having a release plan and following it helps to improve the quality of shipped software?

6. (5) What is UML used for in feature specification?

7.   (5) Give the most important four measures that can be taken to maintain and even improve the architecture of a product during a release cycle.

8. (5) When tracking effort expended in support of the release planning methodology, what effort metric should be gathered and what two planning variables are we seeking to improve our estimation accuracy on as a result?

9.   (5) How does a written software development process help us to make incremental improvements to the process?

10. (5) When writing a software development department business plan, define the baseline budget.