CS 350 Theory of Computation

Assignment 2 (8 marks)

Question 1 (2 marks)

(1.1) Problem 1.6.j, 1.6.l (page 84— all the questions are referred to the 2nd edition of the textbook).
(1.2) Problem 1.7.c, 1.7.d (page 84).

Question 2 (1 marks)

Problem 1.16.b (page 86).

Question 3 (2 marks)

Problem 1.19.a, 1.19.b (page 86).

Question 4 (1 marks)

Problem 1.21.b (page 86).

Question 5 (2 marks)

Prove the following languages are not regular.
(5.1) $A = \{a^{n^3} | n \geq 0\}$. Here a^x means a string of x a's.
(5.2) $B = \{0^n 1^m 0^n | m, n \geq 0\}$.

Date Due: before the end of class on **Thursday, Feb 19, 2009.** No late assignment will be accepted.