Princeton University | Fall 2002
COS 487: Theory of Computation | Prof. Amit Sahai

# Assignment 6

*Released: 11 Nov - Due: 18 Nov* | *TA: Manoj M P*

Please limit each solution to at most *one page* (unless otherwise specified).

1. Problems from Chapter 6
   (a) Problem 6.2
   (b) Problem 6.15
   (c) Problem 6.7 (1-2 lines. Just give a language $J$. No need to prove that it works.)
2. Problem 7.13
3. Problem 7.20 (Also, see Problem 7.12; no need to turn that in.)
4. Problem 7.37
   (Hint: The implication ($x \implies y$) is equivalent to the clause ($\neg x \vee y$). Use this to represent a 2cnf-formula by a directed graph on literals. What property should a satisfying assignment have, in terms of the graph? What will prevent such an assignment from being present? Prove all your claims!)