

ECE 2B – Winter 2006

HW #1 – Due January 26<sup>th</sup> by 3:30pm

1. In your own words, describe each of the following:
  - a. Intrinsic semiconductor
  - b. Covalent bonding
  - c. Holes
  
2. Do the following problems in Chapter 1:  
8, 15\*, 16\*, 17\*, 23, 25, 27, 28, 30, 35

\*For problems 15-17, since the voltage is less than the turn-on voltage of a Si diode, assume the ideality factor  $n = 2$ .