

NAME: _____

Study Sections 5.1 - 5.3.

Work through example 5.5 for a Si p-n junction with $N_D=10^{16} \text{ cm}^{-3}$ and $N_A=4 \times 10^{18} \text{ cm}^{-3}$. What is the value of the built-in potential, and what are the widths of the depletion regions on either side of the junction?