

Department of Electronics & Communication Engineering

Faculty of Engineering, Integral University, Lucknow

Quiz 2

Semiconductor Device Modeling & Circuit Simulation (GEC-101)

Candidate Name :

Date : April 15, 2013

Maximum Marks : 10

Group: First Year M.Tech Part Time

Note :

1. A Si PN junction has $N_a = 10^{17} \text{ c. m.}^{-3}$ on the p side and $N_d = 10^{16} \text{ c. m.}^{-3}$ on the n side. At 300 K
 - (a) Calculate Fermi levels and draw the equilibrium band diagram and find V_0 from the draw diagram.