

Department of Electronics & Communication Engineering

Faculty of Engineering, Integral University, Lucknow

Assignment Sheet 2

Semiconductor Device Modeling & Circuit Simulation (GEC 101)

Faculty : Shrish Bajpai

Due Date : February 20, 2013

Problems : 05

1. Define Micro model of a 741 Operational Amplifier.
2. Explain the advantage & disadvantage of Micro modeling of Operational Amplifier.
3. Write SPICE input file to plot the transfer characteristic of CMOS inverter.
4. Write SPICE input file to verify the functionality of the two input NAND gate.
5. Write SPICE input file to plot the transfer characteristic of MOSFET.