UNIVERSITY OF TEXAS AT DALLAS Department of Electrical Engineering

EE/CE 3311 – Electronic Circuits

Assignment I

Problem 1.1

Repeat Example 1.11 in Fundamentals of Microelectronics if a resistor of value R1 is added between the top terminal of vin and the output node.

Problem 1.2

Consider the circuit below where $I_s = 2 \times 10^{-15} A$. Calculate V_{D1} and I_X for $V_X = 0.5V$, 0.8V, 1V, and 1.2V. Note the change in V_{D1} is very small for $V_X \ge 0.8$.

