Experiment 3

CMOS Inverter Switching Characteristics

1. Design a symmetrical CMOS inverter, without load capacitor (C_L) and perform transient analysis. Measure the rise time (t_R), and fall time (t_F).

2. To the same symmetrical inverter, apply a suitable C_L, and measure t_{pHL}, and t_{pLH}.

3. Compute the average and worst-case propagation delay.