Homework Assignment No. 12

Due on Wednesday, April 20, 2005

1.) Problem P10.1 of the text

[Ans: For 0.18μm M5 Al – R_{wire} = 1.35kΩ, C_{wire} = 2pF, τ = 1.026ns].

2.) Problem P10.3 of the text.

[Ans. One point on the curve is 0.1fF at a spacing of 0.8μm]

3.) Problem P10.9 of the text.

[Ans: (a) ΔV_A= 1.125V and (b) C_L = 260fF]

4.) Problem P10.9 of the text.

[Ans: Between 1.8mm and 4.3mm]