Department of Electrical \& Computer Engineering Page $1 / 1$

## HOMEWORK 8

Revision 0

## Note: Late HW is not accepted!

1. The contents of a 4 -bit register is initially 0000 . The register is shifted eight times to the left, with the sequence 00101011 as the serial input. The leftmost bit of the sequence is applied first. What is the content of the register after each shift?
2. Roth textbook problems:
$5^{\text {th }}, 6^{\text {th }}$ and $7^{\text {th }}$ edition: $12.2,12.7 \mathrm{a}, 12.7 \mathrm{~b}, 12.7$ but use a J-K FF for $\mathrm{Q}_{2}$, a T FF for $\mathrm{Q}_{1}$, and a D FF for $\mathrm{Q}_{0}, 12.9$
3. From the Lam book problems:
5.20
5.28 (a) Instead of (a) as given, make a Next State Truth Table with Q1 and Q0 the counter bits (b) As in book, but also write the logic equations.
