

King Fahd University of Petroleum and Minerals
College of Computer Sciences and Engineering
Department of Computer Engineering

COE 202 – Fundamentals of Computer Engineering (T061)

Homework # 05 (due date & time: Monday 18/12/2006 during class period)

*** Show all your work. No credit will be given if work is not shown! ***

Problem # 1 (30 points): Solve problem 6-5 on page 301 of the textbook.

Problem # 2 (10 points): Solve problem 6-8 on page 301 of the textbook.

Problem # 3 (10 points): Solve problem 6-9 on page 301 of the textbook.

Problem # 4 (50 points): Solve problem 6-19 on page 304 of the textbook using the following:

- Part (a): Find the state diagram for the circuit.
- Part (b): In addition to the textbook requirements you need to provide a minimized state table.
- Part (c): Find an implementation of the circuit using *JK* flip-flops and logic gates.