University of Portland School of Engineering

EE 261/Fall 2011/A. Inan

Homework # 5

(Assigned on October 24, 2011; <u>Due date: Palindrome day 11022011!</u>) These problems are assigned from *Introduction to Electric Circuits* by Dorf/Svoboda (John Wiley, 8th edition, 2010, ISBN# 978-0-470-52157-1, pages 294-310):

P 7.2-8. Voltage-current relationship of a capacitor.
P 7.2-14. First-order capacitive circuit.
P 7.4-3. Multi-capacitor circuit.
P 7.4-7. Capacitors connected in parallel and in series.
P 7.5-13. First-order inductive circuit.
P 7.7-7. Inductors connected in parallel and in series.
Exercise 8.3-2. A first-order *RL* switching circuit. (p. 327)
P 8.3-1. A first-order *RC* switching circuit.
P 8.3-15*. A first-order *RL* switching circuit.
P 8.4-6*. Electronic flash of a camera.

Please follow these guidelines for providing your homework solutions:

- 1) On the first sheet, at the top, indicate in the middle that this is <u>EE 261/Fall 2011/HW #5</u> Solutions and provide your full name on the right upper corner of the sheet.
- 2) Solve each problem on a separate sheet unless there is a solution which is very short.
- 3) Do not use the back of the sheets unless you have to.
- 4) <u>Staple your solutions in the above order before you turn them in.</u>

Please turn in your homework on time. The solutions for each homework assignment will be provided as a separate handout on the due date.

