Homework 6

(Due date: 2014/5/28)

This assignment covers <u>Ch12 and Ch13</u> of the textbook. The full credit is <u>100 points</u>. For each question, <u>detailed derivation processes</u> and <u>accurate numbers</u> are required to get full credit.

- 1) (10 points) <u>Problem 12.23(a-b)</u> of the textbook (p484).
- 2) (10 points) <u>Problem 12.31</u> of the textbook (p485).
- 3) (20 points) <u>Problem 12.40(a, c)</u> of the textbook (p486).
- (10 points) <u>Problem 13.13</u> of the textbook (p530), while the voltage source is changed from 20 V to 80 V.
- 5) (10 points) <u>Problem 13.19</u> of the textbook (p531), while the dependent current source is changed from $6i_{\beta}$ to i_{β} .
- 6) (10 points) <u>Problem 13.42</u> of the textbook (p534), while the current source is changed from 1.5u(t) A to 3u(t) A.
- (10 points) Problem 13.64 of the textbook (p538), while the capacitances in (a) is changed from 40 nF to 20 nF.

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8) (20 points) Problem 13.94(a,b,c) of the textbook (p543).