Fall 2016 – CS2420
Homework 2
Due Date : September 21st , 2016
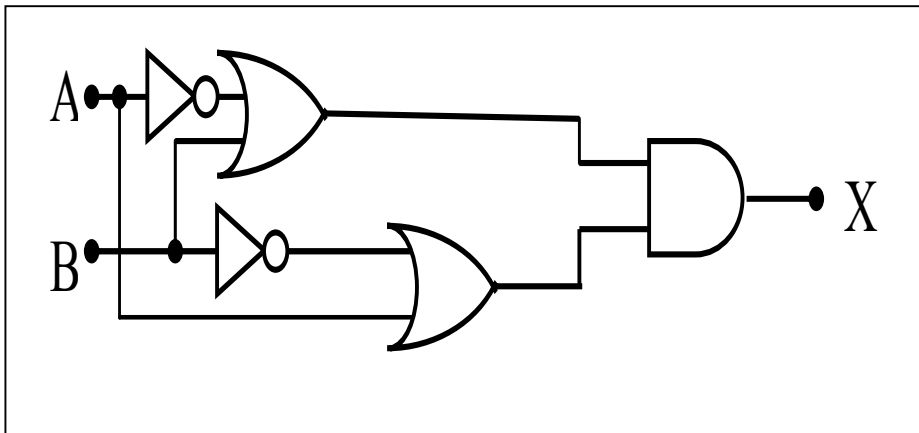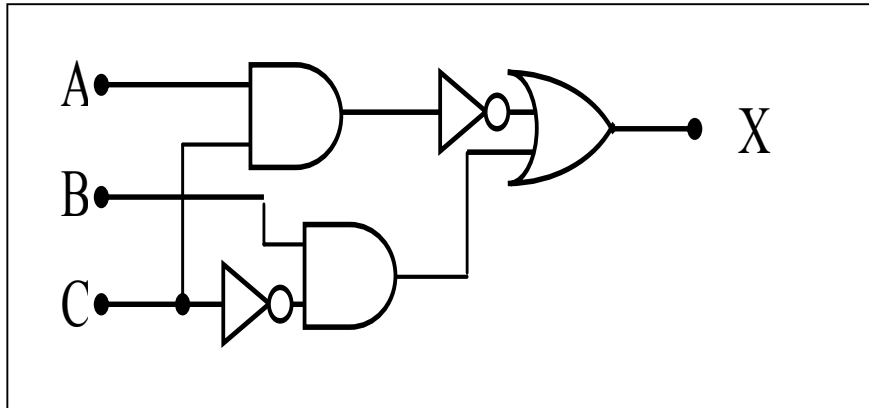
1)   In the circuit below:

V_s = 10 V	R_1 = 20 Ω

What is the current, I, through the circuit? What is the voltage, V_{out}? (10 pt).
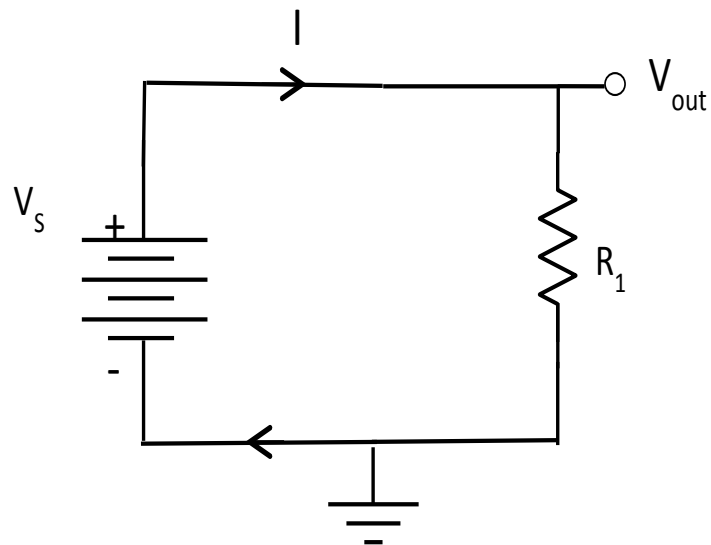
2) Construct the Boolean expression and the truth table for each of the following logic diagrams (20 pts)

3) Construct a logic diagram and a truth table for each of the following Boolean Expressions (20 pts)

$F = ((Y$ and $X)$ or $(Z'$ xor $y)')'$ and $(X$ or $X')$

$P = (A' + B)(A + B + C)C'$

Remarks :

- The homework does not have be typed, however , it must be written using **pencils** only . Include the following information on the top left hand side of the first page :-

  - Your Name :
  - Your Major :
  - Your Roster or Serial Number :
  - Homework Number : 2
  - Due Date : September 21st , 2016

- **Make sure that you write the question first then followed by your answer.**

- The homework must also be uploaded using homework upload no later than   the end of class time on the due date. Use the following name format for your   file name
  LastName_FirstName_CS2420-A2.zip   or
  LastName_FirstName_CS2420-A2.pdf   or
  LastName_FirstName_CS2420-A2.doc

- Must **show** all your work.

- <u>**Missing ANY of the above items from your assignment will result in deducting 30% of the assignment grade.   NO EXCEPTIONS.**</u>

- Turn in hard copy of your assignment no later than the end of class time on the due date. The hard copy must be **stapled**.   **No Late assignment will be accepted and a grade zero will be assigned.**

- <u>**Copying the assignment from others will result in grade ZERO.**</u>