

CSCIU 210 – Computer Organization

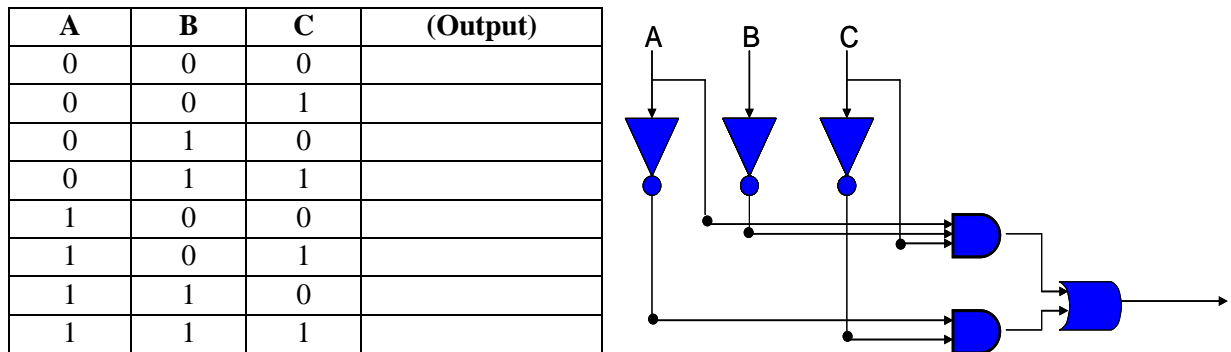
Homework-2, Weight: 50 points

Due on Wednesday, September 19, 2018 at the beginning of the lecture (Hard Copy)

Note: You need to include your calculation details to receive full credit!

Q1. [10 points] Draw the circuit diagram of $AC+AB+ABC'$ and also determine its truth table.

Q2. [5 points] Determine the truth table of the circuit illustrated below.



Q3. [10 points] Based on the following truth table, draw the corresponding logic circuit diagram.

A	B	C	F (Output)
0	0	0	1
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

Q4. [5 points] Convert 1011.1011_2 to a decimal number.

Q5. [5 points] Convert 152.875_{10} to a binary number.

Q6. [5 points] Convert 110000111101.11011101_2 to a hexadecimal number.

Q7. [5 points] Convert $12AC.EF_{16}$ to a binary number.

Q8. [5 points] How many bits of memory would be found in a personal computer that has the 16 MB of memory size?