CME1214 Logic Design Lab 1

Preliminary Work

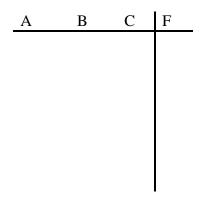
- Study Boolean Algebra and DeMorgan Theorems.
- Use Altera Max+Plus II software to implement your designs. Simulate your circuits and verify that they work correctly using the waveform.
- Prepare a preliminary report which should include logic diagrams, waveforms and all other preliminary works.
- The preliminary work and report are expected from each student **individually**.
- Bring the relevant datasheets with you to the lab, **1 per each group**.

Equipments

- Necessary gates for the experiments (AND IC 7408, OR IC 7432, NOT IC 7414, XOR IC 7486, NAND IC 7400 etc.)
- Breadboard, connection cables
- Any other equipments necessary for the experiments

Experiment 1

Construct the truth table and implement the equivalent logic circuit of $\overline{(A \land B)} \lor C$



Experiment 2

Design $NOR \overline{(A \lor B)}$ gate entirely from **NAND** and **NOT** gates.

Truth Table for NOT Gate				
A	F			
)	1			
1	0			
	A	A F 1		

Truth Table for NAND Gate				
	A	В	F	
	0	0	1	
	0	1	1	
	1	0	1	
	1	1	0	