CME1214 Logic Design
Lab 1

Preliminary Work

- Study Boolean Algebra and DeMorgan Theorems.
- Use Quartus 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.
- See the Instructions at the end of the document.

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 $\overline{(A \vee B)} \wedge C$

A	B	C	F

Experiment 2

Design *OR (A+B)* gate entirely from **NAND** gates.

Truth Table for NAND Gate

A	B	F
0	0	1
0	1	1
1	0	1
1	1	0

Instructions:

- You should only *one* "**pdf**" file that contains both **your prelab screenshots** and **photos of experiments**.
- **The file path of your screenshots** should be **visible**, otherwise your work won't get any point.
- **Your student card** should in **the photos of the experiments**, otherwise your work won't get any point.

Your "pdf" file name should be "studentNo_name_surname.pdf"