

**READING ASSIGNMENT 1 (INDIVIDUAL READING/GROUP DISCUSSION) in preparation for the first quiz 1.**

**DUE DATE: January 22, 2020 (Deliverables: NOTHING, ASSESSMENT: 10 minutes CLASS QUIZ)**

**BOOK:** *Digital Electronics (Principles, Devices and Applications)* by Anil K. Maini, 2007

**READING ASSIGNMENTS (INDIVIDUAL)**

- ⇒ Individual students should read Chapter 1 and Chapter 2 and the group must meet to discuss the areas enumerated below.
- ⇒ NB: The group meeting day, time and place must be communicated at least 1 day ahead to the TA to help him offer supervisory role (including random roll call).

**Group Discussion Assignment**

1. Understand some common number systems (binary, decimal, octal, hexadecimal, etc)
2. Understand Number Representation in Binary (Signed and Unsigned Bits, 1's complement and 2's complements)
3. Understand conversion from any number system to decimal (Binary to decimal, octal to decimal, hexadecimal to decimal, etc) and vice-versa including fractions (numbers after decimal point).
4. Get comfortable with the four axioms
5. Understand Floating point representations
6. Understand BCD, Excess-3 code, Gray codes, Alphanumeric Codes, Seven-segment Display Code, Error Detection and Correction Codes.