CSE3109

Digital system Design

1. Solve the quiz questions (this semester and previous semester).
2. Solve as many previous years' questions as possible.
3. You must practice the exercise problems given in each slide. Try to understand the logic behind every problem.
4. There will be questions covering all the topics taught in the class.
5. Follow the class lectures. The topics which are told 'important' in the class lectures contain higher importance.

- Now, as a little suggestion from my side, you will have a full set of question from the following topic:
  I. ALU
  II. SAP1 + Booth

Other question sets will contain mixed topics. However, Control Logic Design, All the three SAPs, Interfacing with I/O Systems are very important for you.

- For **Control Logic Design**, you need to do these:

- Understand equipment configurations, flowcharts, control state diagrams, block diagrams, microprogram controls
- Understand how to design control unit in a specific method
- Practice flowcharts, state diagrams

- For SAP, you need to solve the following **additional** problems (along with the slides):

- SAP-1: Malvino Book (Chapter 10 -> Examples Upto 10.6)
- SAP-2: Malvino Book (Chapter 11 -> Examples Upto 11.18)
- SAP-3: Malvino Book (Chapter 12 ->All the examples)

- Don't forget to practice K-map. You may need it if simplified version of your function is asked.
- Don't forget to practice all the versions of Booth's algorithm with different types of values. For modified booth, don't forget the rules. If the number of digits are even, add two extra zeros, if it's odd, add one.