

The Midterm Exam will cover A#1, A#2, A#3, and A#4 topics. It will be a closed-book/notes exam and you may *not* use any electronic devices, including cell phone, iPad, calculators... While all the assignment (1, 2, 3, 4) questions may occur in the test, the following topics/questions should be more important than others:

- Assignment 1:
  - *All except* the following:
    - Q14, Q15, Q54
  - Pay attention to: logic circuits/true table, conversions between decimal, binary, octal, and hexadecimal, **2's complement** (and its arithmetic operation), **overflow**, **8-bit-floating-point format representation**, ...
- Assignment 2:
  - **ALL** are important!—except the bonus questions!!!!
  - Some section questions (from the textbook) which were covered in the class.
- Assignment 3:
  - Q3, Q4, Q5, Q9, Q11, Q14, Q16, and **Q17**.
- Assignment 4:
  - Q4, Q5, and the first sub-question of Q7 (i.e., Harvard architecture)
- Miscellaneous:
  - Give a RAM size, calculate the address of the last memory unit and how many bits/bytes.

There will be **123** point questions (the full score is **100** points); every question can be treated as a bonus question (some difficult questions are marked as “bonus” ones, though). Your scores will *not* be scaled down. The extras points above 100 points will be adjusted to be added to your final grade!!!