Assignment 2, CF, 1st Semester

Deadline: Monday, 5 November 2018, 2 pm

Assignment should be hand written.
Write your name, registration No. and section, or else your assignment may not be marked.
Copying is not allowed.
Write in your own words.
Staple your pages properly (binding is not required).

1. Perform the following conversions
   a. $(110110011100101)_2$ to decimal, octal and hexadecimal.
   b. $(375)_8$ to binary, decimal and hexadecimal.
   c. $(67D)_{16}$ to binary, octal and decimal.
   d. $(1011)_{10} = (\quad)_3 = (\quad)_6 = (\quad)_2$?
   e. $(11110111.111)_2 = (\quad)_{10}$?
2. Determine truth tables for the expressions below and draw the diagrams
   a. $\overline{(x \oplus y)}.(z + w)$
   b. $\overline{(\overline{x}.\overline{y}).(z.w)}$
   c. $(x + y) + (\overline{z.w})$
3. Find the answers without converting to decimal
   a. $(FDA)_{16} - (CFF)_{16}$
   b. $(101.001)_2 \times (11.1111)_2$
   c. $(1000000)_2 \div (100000)_2$