CSE260 Assignment - 2

Deadline - 20th July, 11:59 PM

Marks: 25

Assignment must be handwritten. Scan and upload PDF in the given google form

1. Simplify the following Boolean expression **[5]**

   xyz' + x'yz + xyz + x'yz'

2. Find the complement of the expression **[5]**

   (a 'b + cd)e' + e

3. Find out POS for the following [You cannot use truth table to solve these]: **[5+5 = 10]**

   F(V,W,X,Y,Z) = WY+WX+X'Y

4. Draw the following functions using NAND gates only. Use a maximum of 2 inputs for each gate **[5]**

   F(A,B,C,D)=(ABCD + A'D' + (B'+D)')'

Ungraded Problems (Only for practice, Not required to submit with assignment):

1. Simplify the following boolean functions using laws of Boolean algebra and draw the simplified function using NAND gates only.

   F(a,b,c,d) = ∑(2,5,7,10,11,13)

2. Draw the following functions using NOR gates only:
   F(A,B,C,D)=(ABCD + A'D' + (B'+D)'