ECE 273 QUIZ 3

Name:
Honor Code: KEY

1. Write all consensus terms for

$abc + a'bc + ab'c + c'de + a'b'f$

$abc, a'bc \rightarrow \underline{bc}$
$abc, ab'c \rightarrow \underline{ac}$
$abc, c'de \rightarrow \underline{abde}$
$a'bc, c'de \rightarrow \underline{a'bde}$
$a'bc, a'b'f \rightarrow \underline{a'cf}$
$ab'c, c'de \rightarrow \underline{ab'de}$
$ab'c, a'b'f \rightarrow \underline{b'cf}$

2. Eliminate 1 term via the consensus theorem:

$(A+B+C)(A+B+D)(A+B+D')(C+D')$

- The consensus of $(A+B+D), (C+D')$ is $(A+B+C)$

alternatively,

The consensus of $(A+B+D)(A+B+D')$ is $(A+B)$
and this can be used to eliminate
$(A+B+C)$