COE 202, Term 131
Digital Logic Design

Quiz# 2

Date: Thursday, Oct. 3

Q1. Simplify the following Boolean functions to the **minimum** number of literals <u>sum-of-product</u> expressions using algebraic manipulation:

(i) $x'y'z' + x'y'z + x'yz + xy'z + xyz$

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

Q2. Express the function $F(A, B, C, D) = A\,B + \bar{C} + D$ as:

(i) Sum of minterms $F(A, B, C, D) = \sum m(\ )$

(ii) Product of maxterms $F(A, B, C, D) = \prod M(\ )$