Name: **Id#**

Quiz# 2

Date: Saturday, Feb. 23

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

(i) $A B + \bar{B} C + A C D + A B \bar{D} + A C \bar{D}$

(ii) $\overline{\overline{(A + \bar{B} C)} . (A + \bar{C} \bar{D})} + \overline{AC}$

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

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

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