COE 202, Term 162
Fundamentals of Computer Engineering

Quiz# 3

Date: Thursday, March 23

Q1. Simplify the following Boolean function **F** together with the don`t care condition **d** in (1) <u>sum-of-products</u> and (2) <u>product-of-sums</u> form. In your solution, identify prime implicants and essential prime implicants for each case.

F(W, X, Y, Z)=Σ m(0, 1, 2, 3, 7, 8, 10), d(W, X, Y, Z)=Σ m(5, 6, 11, 15)

Q2. Convert the circuit given below using minimum number of only 2-input NOR gates and inverters.