Name: Id#

COE 202, Term 162

Fundamentals of Computer Engineering

Quiz# 3 Solution

 Date: Thursday, March 23

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

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



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

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