

Department of Software Engineering

Course Code: SE 213

Course Title: Digital Electronics and Logic Design

Quiz 02

Time: 30 min

Total marks: 15

Q1. Given the following given Boolean function:

$$AB + A'C + BC + AB'C$$

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- Draw the logic diagram
- Simplify the function to a minimum number of literals using Boolean theorems.

Q2, Given the following Boolean function:

$$F = A'B'C'D' + A'B'C'D + A'B'CD' + A'BC'D + A'BCD + AB'C'D' + AB'C'D + AB'CD' + ABC'D$$

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- Using K-Map find the simplified function
- Verify your answer using the truth table

Q3. Show the implementation of a 6-bit parallel Adder

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