

Department of Software Engineering

Course Code: SE 213

Course Title: Digital Electronics and Logic Design

Quiz 03

Time: 30 min

Total marks: 15

Q1. A Decimal-to-BCD encoder converts decimal inputs into their corresponding 4-bit BCD codes. 08

- a. Construct the truth table.
- b. Derive the simplified Boolean expressions for the output bits.
- c. Draw the corresponding logic circuit.

Q2, Implement the following Boolean function using a suitable decoder. Draw the complete logic circuit with all necessary connections. 07

$$F = AB + \bar{A}\bar{C} + B\bar{D}$$