

Department of Electrical & Computer Engineering (ECE)

North South University

Course Code: 231, Section: 6

Course Title: Digital Logic Design

Fall 2018

Time: 15 Minutes

Marks: 15

Name:

Student ID:

Please answer all the following questions:

Q1. Perform the following binary subtraction using **2's complement**: (*Show the procedure in detail*)

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$$(10001000)_2 - (11111111)_2$$

Q2. Express the following output function $F(x, y, z)$ in **maxterms**:

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$$F(x, y, z) = x$$

Q3. Write the expression of **output function** $F(A, B, C, D)$ in **minterms** for the **XNOR** logic-gate.

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