Department of Electrical & Computer Engineering (ECE)

North South University

Course Code: 231, Section: 6

Course Title: Digital Logic Design

Fall 2018

Time: 20 Minutes Marks: 15

Name: Student ID:

Please answer all the following questions:

Q1. Implement the logic circuit to add three binary digits i.e. 0, 1, and 1 using half-adders.

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Q2. Implement the following logic circuits using **NAND** gate **only**.

(a)
$$F = (A \oplus B)C + AB$$

(b)
$$F = AB + C$$



