

Bangladesh University of Engineering and Technology

Department of Computer Science and Engineering

Course: CSE 206

Digital Logic Design Sessional

Experiment No. 4

[A2,C2]

Design and implement the circuit for the following problem using XOR gates and one 7483 IC. You are not allowed to use **inverter**. You can use the XOR gates for inverter functions if needed.

Input	Output
00	$X + Y$
01	$X + Y + 1$
10	$X - Y - 1$
11	$X - Y$

Here "+" means addition operation, "-" means subtraction operation and X and Y both are 4-bit numbers.