# **Department of Computer Science and Engineering**

### **BRAC University**

### **CSE 260: Digital Logic Design**

# **Experiment # 1**

## ***Familiarization of Fundamental Logic Gates***

**Objective:**

* To get familiarized with fundamental logic gates and demonstrate the input output relationship of 2-input **AND (IC – 7408), OR (IC – 7432) and NOT (IC – 7404)** gates by constructing their truth tables.
* To get familiarized with other logic gates like **NAND (IC – 7400), NOR (IC – 7402)**, **XOR (IC – 7486)** and **XNOR (IC – 74266)**

**Procedure:**

* For each of the ICs’, place IC correctly on the trainer board
* Remember each IC’s pin 14 connected to “+5V” position of DC Power Supply of the trainer board, and pin 7 connected to “GND” position.
* Connect the inputs to Data switches and the output to any position of the LED Display.
* Find out the outputs for all possible combinations of input states.
* Write down the input-output in tabular form.

***Report:***

The report should cover the followings

1. Name of the Experiment
2. Objective
3. Required Components and Equipments
4. Experimental Setup
5. Results (Truth Table) and Discussions





