



**COMSATS University Islamabad (CUI), Lahore Campus**  
**Department of Electrical & Computer Engineering**

**Lab Assignment**

Name: \_\_\_\_\_

Registration No: \_\_\_\_\_

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Class: SP23-BCS-A  
Subject: Digital Logic Design  
Instructor: Sarmad Hassan

Marks: 10  
Due Date: 23-11-2023

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**INSTRUCTIONS**

- Do all the necessary workings and attach it with answer sheet.
- No marks will be given without complete working and complete simulation window screenshot.
- Add the screenshot of complete window, half/cropped screenshot is not acceptable.
- Copied assignments will be marked as zero.

**Question: 1**

- Design* a Half Adder and Half Subtractor using 74153 IC.
- Design* a Full Adder and Full Subtractor using 74153 IC.
- Implement the designed circuits in part A and B on proteus to verify the output.