

**Switching Theory & Logic Design Laboratory**  
**CSE Department, IIT Kharagpur**  
***Spring Semester 2023-24***

**Module 1 : Combinational Logic Circuits**

**Assignment 2:**

- (a) Design a circuit to compute  $x \bmod 6$ , where  $x$  is a BCD number as 4-bit input.
- (b) Display the output on a 7-segment display using BCD-to-7-segment decoder driver IC. For example, if  $x = 1001$ , “3” will be displayed and if  $x$  is not a BCD number, “Blank” (No display) will be displayed.

(1 day)