June 27, 2021

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
Department of Computer Science and Engineering
January 2021 CSE 206 Online Assignment on
Advanced Counters (Section: A1 & B1)

Using flip-flops and basic gates, design and implement a synchronous binary UP counter with the following sequence. The sequence with the serial no. that matches your roll % 5 should be chosen from the below list:

1. **0 → 2 → 3 → 5 → 0**
2. **1 → 7 → 2 → 6 → 1**
3. **2 → 1 → 4 → 7 → 2**
4. **3 → 5 → 6 → 4 → 3**
5. **4 → 1 → 7 → 2 → 4**

Report:

Create a PDF document containing the truth tables, K-maps, circuit diagram etc. Submit the PDF file and the .circ file simulated in Logisim in a single zip file named <Roll_No>.zip.