

**LNCT UNIVERSITY**

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Enroll No.....

Class Roll No.....

**First Mid Semester Examination, April 2024**

**DCES CS-203**

**Branch :CS Semester:2nd**

**Time 1:30 Hrs**

**Max. Marks 20**

**Note: All questions are compulsory.**

**Q.1 Write the equation using k map.  $\Sigma (0, 2, 3, 6)$  &  $d (5, 7)$  (CO 1 5marks)**

**OR**

**Q.1 Explain 3x8 Decoder with truth table and equations.**

**Q.2. Explain full Adder.**

**(CO1 5marks)**

**OR**

**Q.2. Explain serial adder.**

**Q.3. Explain SR Latch using NOR gate**

**(CO2 5 marks)**

**OR**

**Q.3 Distinguish between Transparent latch & Gated latch.**

**Q.4. Explain SR Flip Flop using NOR gate**

**(CO2 5 marks)**

**OR**

**Q.4 Explain the Latch input waveform. Which type of triggering used by Latches**