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| **National University of Computer and Emerging Sciences, Lahore Campus** | | | | |
| C:\Users\saif\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\final design.jpg | **Course:** | **Digital Logic Design** | **Course Code:** | **EE-227** |
| **Program:** | **BS (Computer Science)** | **Semester:** | **Spring 2020** |
| **Duration:** | **15 Minutes** | **Total Marks:** | **10** |
| **Paper Date:** | **10-June-20** | **Weight** | **2.5 %** |
| **Section:** | **E** | **Page(s):** | **1** |
| **Exam:** | **Quiz 4** | **Reg. No.** |  |
| **Instruction/Notes:** | **Calculators are strictly not allowed in all exams**  **Plagiarism will be dealt seriously causing an F in course** | | | |

Characteristic table of L-M Flip Flop is given below. Find its characteristic equation.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic Table of L-M Flip Flop**   |  |  |  | | --- | --- | --- | | **L** | **M** | **Q(t+1)** | | 0 | 0 | Q’(t) | | 0 | 1 | 1 | | 1 | 0 | Q(t) | | 1 | 1 | 0 | | **Circuit of LM Flip Flop:** |

**Show your working here:**

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|  |

**Characteristic Equation:**

**Q(t+1) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**