

# National University of Computer and Emerging Sciences, Lahore Campus



**Course:** Digital Logic Design  
**Program:** BS (Computer Science)  
**Duration:** 15 Minutes  
**Paper Date:** 10-June-20  
**Section:** E  
**Exam:** Quiz 4

**Course Code:** EE-227  
**Semester:** Spring 2020  
**Total Marks:** 10  
**Weight:** 2.5 %  
**Page(s):** 1  
**Reg. No.**

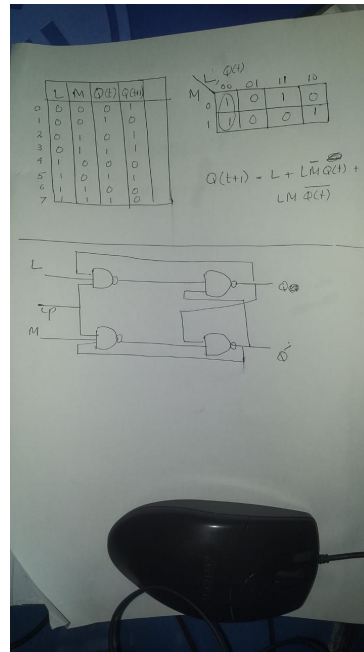
**Instruction/Notes:** Calculators are strictly not allowed in all exams  
 Plagiarism will be dealt seriously causing an F in course

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

**Characteristic Table of L-M Flip Flop**

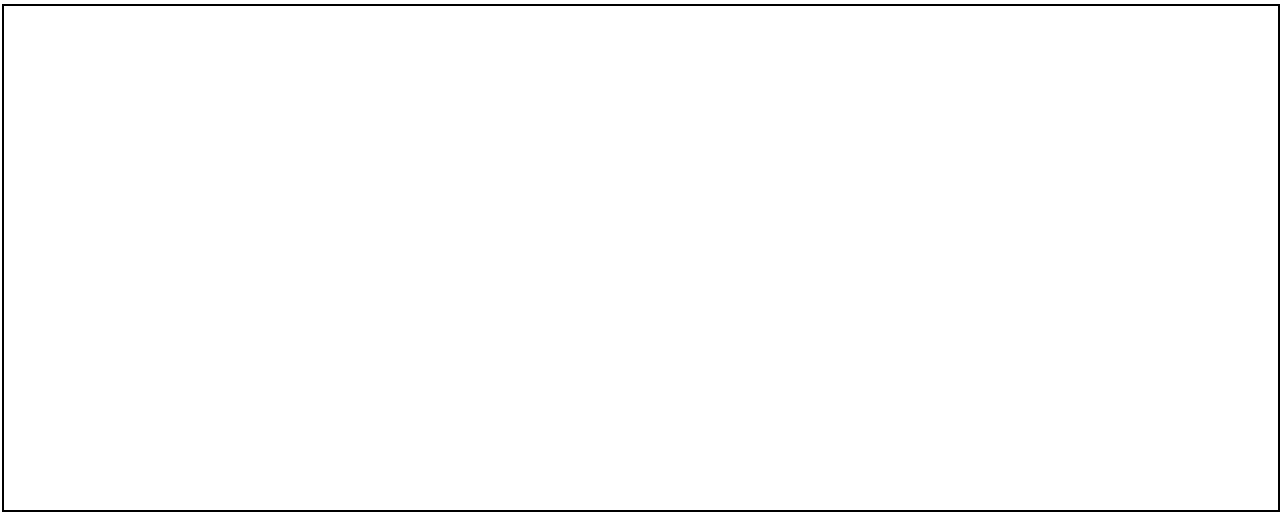
L	M	$Q(t+1)$
0	0	$Q'(t)$
0	1	1
1	0	$Q(t)$
1	1	0

**Circuit of LM Flip Flop:**



**Show your working here:**

Working on the same page



**Characteristic Equation:**

$$Q(t+1) = L + L.M'.Q(t) + L.M.Q(t)' \underline{\hspace{2cm}}$$