

# National University of Computer and Emerging Sciences, Lahore Campus



Course: Theory of Automata-I  
Program: BS (CS)  
Duration: 20 Minutes  
Paper Date:  
Section:  
Exam: Quiz 3

Course Code: CS301  
Semester: Fall 2020  
Total Marks: 10  
Weight  
Page(s): 1

**Instruction/Notes:** Attempt all questions on the question paper.

Name: \_\_\_\_\_ Roll Number: \_\_\_\_\_

1. [10]

Convert the following NFA-null (over the alphabet  $\Sigma = \{0, 1\}$ ) to a DFA using the **subset construction method**. Label each state of the DFA appropriately to indicate which states of the NFA it corresponds to. Show complete working.

