**North South University**

Department of Computer Science and Engineering

Quiz-6, Section – 5, Fall-2016

Course No: **CSE 231** Course Title: **Digital Logic Design**

Time: 20 min Full Marks: 10

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| 1. | Consider a sequential circuit with two JK flip flop A and B and using two input E and x. If E=0 the circuit remains in the same state regardless of the value of x. When E=1 and x=1 the circuit goes through the state transitions from 00 to 01 to 10 to 11 to 00 and repeats. When E=1 and x=0 the circuit goes through the state transitions from 00 to 11 to 10 to 01 to 11 and repeats.  a. Draw the state diagram  b. identify state table  c. write down Boolean expressions | 10 |
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