

**Computer Science IV Final Exam Back paper
May 2017
Indian Statistical Institute**

Answer the following - 25 marks each

1. Design an NFA for $L =$ all strings over $\{0, 1\}$ that have at least two consecutive 0's or 1's. Write the transition table. - 25 marks

2. Give the automaton for the following two grammar productions - 25 marks
 1. $S \rightarrow 0S/1A/1$
 2. $A \rightarrow 0A/1A/0/1$