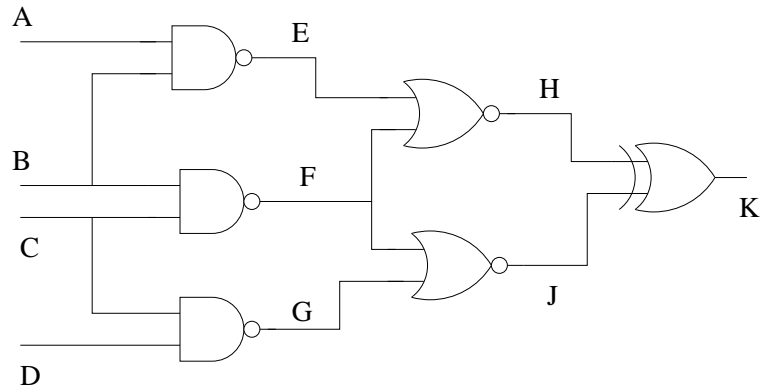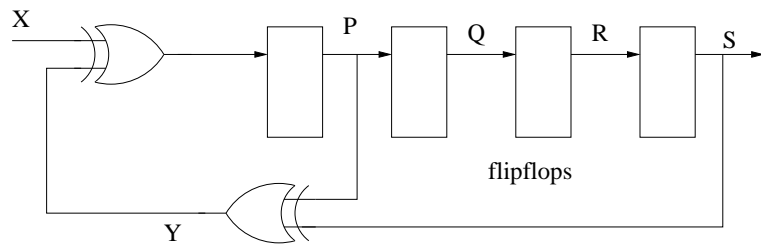# EE709 Assignment

Madhav P. Desai

March 31, 2023

1. Consider the following logic network:

(a) Calculate a product of sums formula (CNF) which describes this network.

(b) Using the minisat solver, find an input assignment such that the output K is 0.

(c) Using the minisat solver, find an input assignment such that the output K is 1.

2. Consider the sequential machine shown below:

(a) Suppose the machine starts in the state $P = Q = R = S = 1$. Using minisat, find a sequence of input values at X which will take the machine to the state $P = Q = R = S = 0$.