

Switching Circuit and Logic Design

Final Exam. 5/21/2008

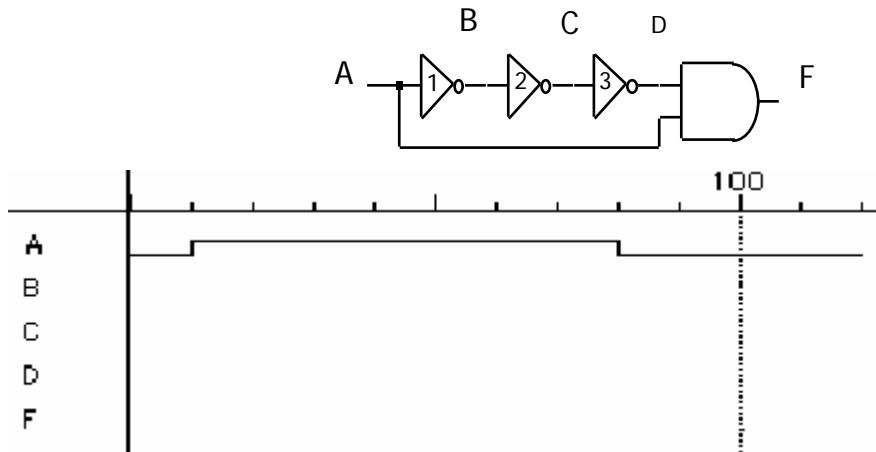
考試時間: 60 mins

姓名:

注意:作弊一律以零分計

學號:

- 一. (20pts) Complete the waveform for the circuit. All inverters have 1 unit delay.



- 二. (20 pts) Minimize $F(A,B,C,D) = \sum m(0,2,3,5,6,7,8,10,11,14,15) + d(13)$.

Is the solution unique? Why?

- 三. (30pts) Implement the logic function $F(A,B,C,D) = \sum m(4,5,6,7,8,11) + d(9,10)$

(a) using a 4: 1 Multiplexer

(b) using a 2: 1 Multiplexer

- 四. (30pts) For a RS-latch, draw the waveform of output signals Q and \bar{Q}

