Cpr E 281 LAB2
ELECTRICAL AND COMPUTER ENGINEERING
IOWA STATE UNIVERSITY

Lab 2 Answer Sheet

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PRELAB:

Q1. Read section 3.0 and fill in the truth table below for *lab2step1*. Then use it to construct the SOP expression and draw the resulting circuit using logic gates.

A	B	C	F
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0

SOP Logic Expression: A*B*C'=F

Circuit Diagram:

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Q2. Read section 4.0 and fill in the truth table below for *lab2step2*. Then use it to construct the SOP expression and draw the resulting circuit using logic gates.

Cabbage	Goat	Wolf	Alarm
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	00
1	0	1	
1	1	0	1
1	1	1	1

SOP Logic Expression: ((CG)+(WG)) = Logic1, ((CG)+(WG)) = Logic0, Logic0+Logic1=Alarm

Circuit Diagram:

LAB:

3.0 ModelSim results demonstrate a correct circuit.

4.0 ModelSim results demonstrate a correct circuit.