Ariston L. Catipay BSCS-2A

Time In: 3:44

Time Out : 5:46

SET A

From Boolean Equation below draw the Boolean Diagram and write the variables that gives the value of 1.

$$AC\overline{B} + CAD\overline{B} = A$$

$$X\overline{YZ} + \overline{X} = X$$

$$\overline{GFH}\ \overline{HGF} = F$$

$$C\overline{AB} + AB = A$$

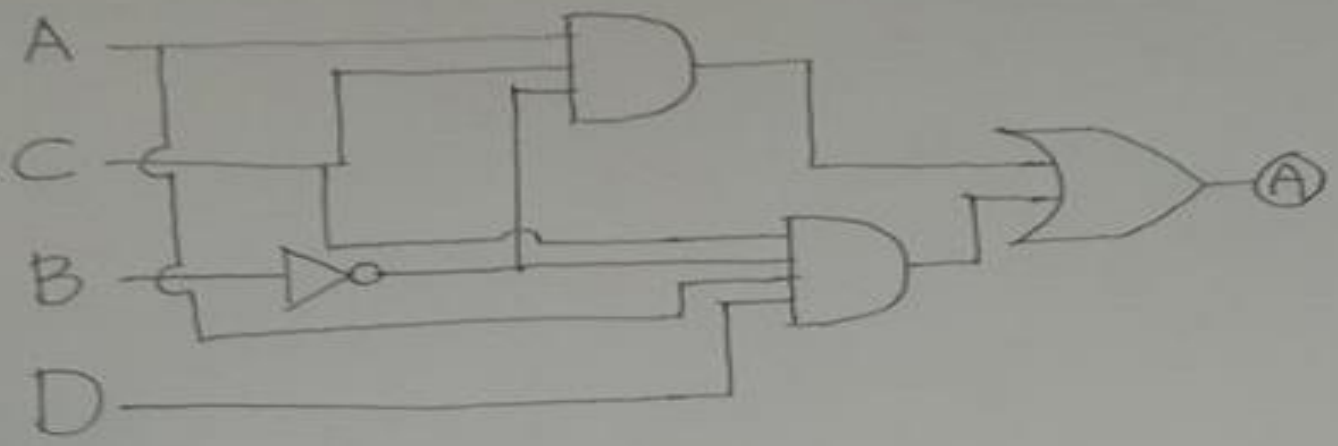
Pick one out of five Boolean expression and implement in the form of a digital logic circuit:

BACK

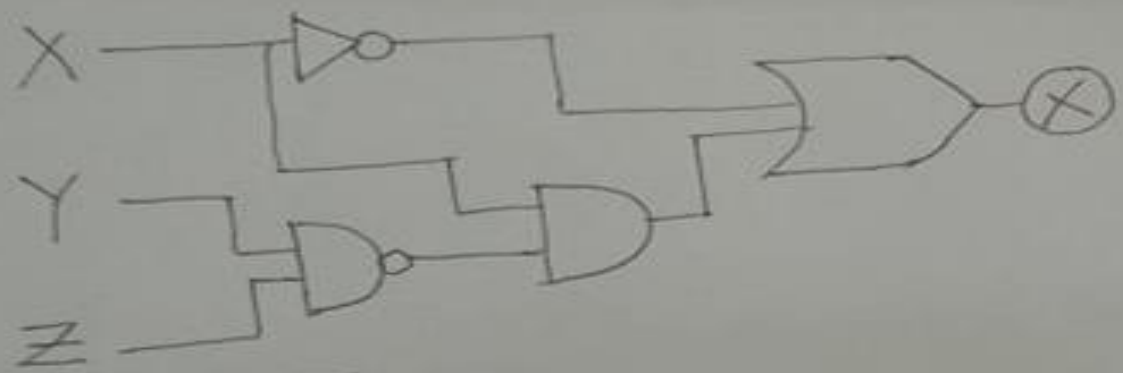
Boolean Diagram

Ariston L. Catipay BSCS-2A

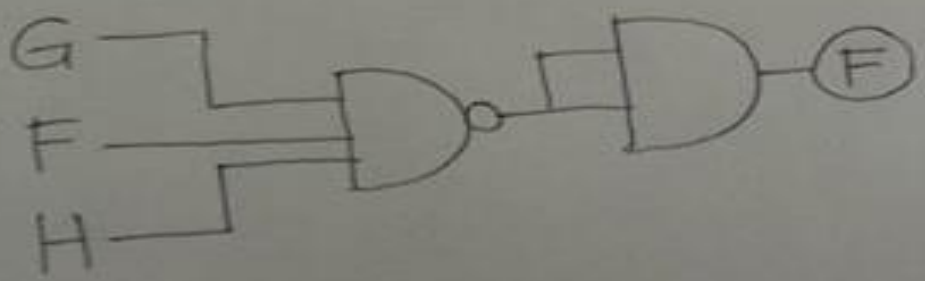
1. $AC\bar{B} + CA\bar{D}\bar{B} = A$

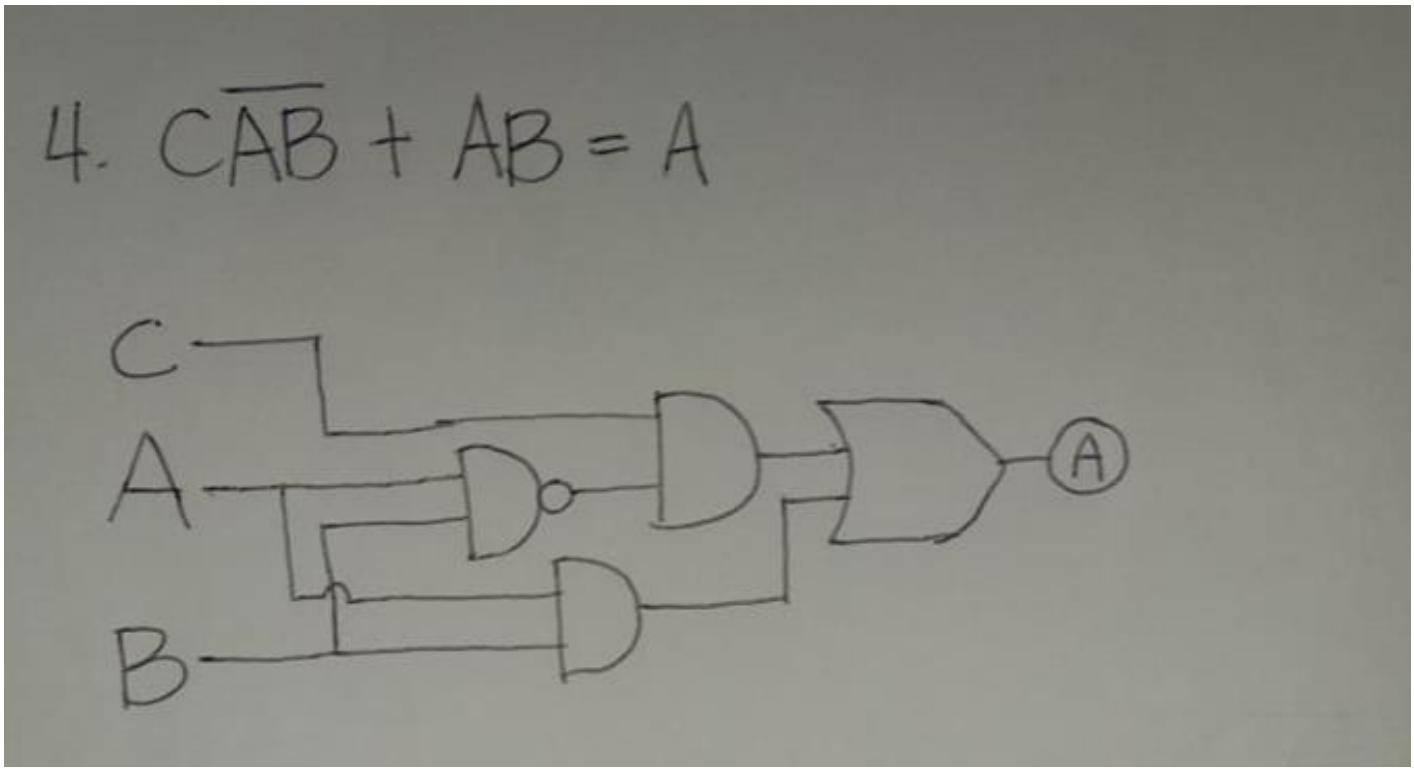


2. $X\overline{YZ} + \bar{X} = X$



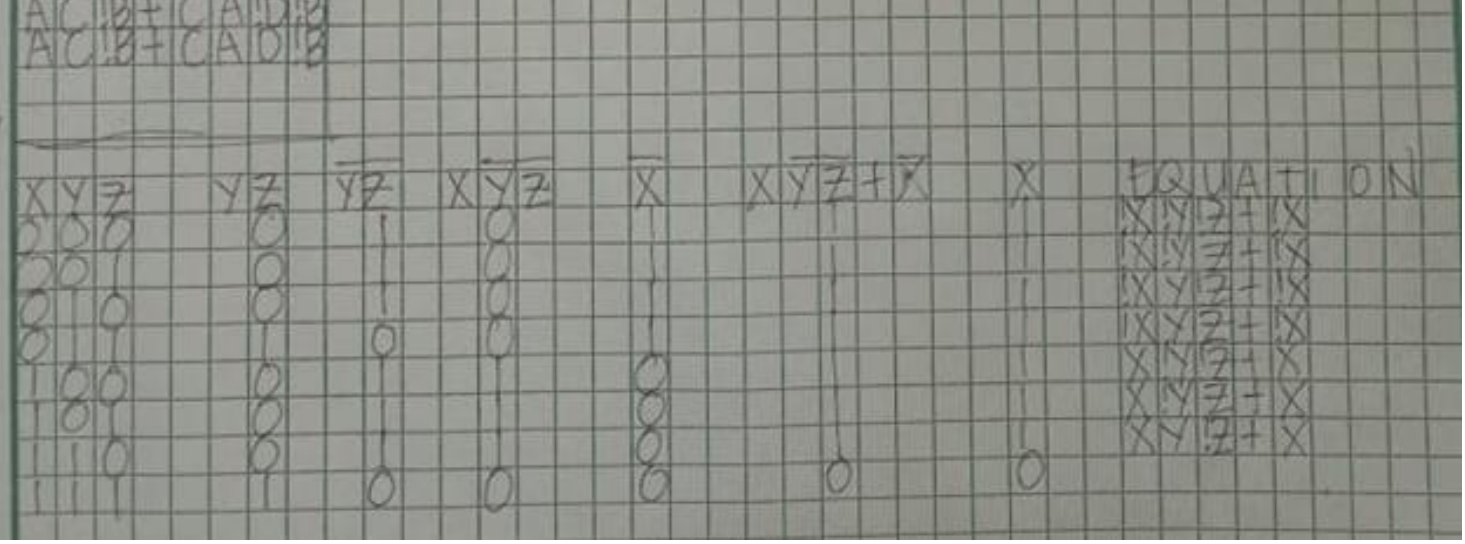
3. $\overline{GFH}\ \overline{HGF} = F$





Variables that give the value of 1.

Ariston L. Catipay BSCS-2A



3.

G	F	H	GF	GFH	$\overline{GFH}$	HG	HGF	$\overline{HGF}$	$\overline{GFH}$	$\overline{HGF}$
0	0	0	0	0	1	0	0	1		
0	0	1	0	0	1	0	0	1		
0	1	0	0	0	1	0	0	1		
0	1	1	0	0	1	0	0	1		
1	0	0	0	0	1	0	0	1		
1	0	1	0	0	1	0	0	1		
1	1	0	0	0	1	0	0	1		
1	1	1	1	0	0	1	0	0	0	0

F

EQUATION

I

N

A

L

O

4.

C	A	B	AB	$\overline{AB}$	$C\overline{AB}$	$\overline{C\overline{AB}}$	AB	A	EQUATION
0	0	0	0	1	1	0	0	0	
0	0	1	0	1	1	0	0	0	
0	1	0	0	1	1	0	0	0	
0	1	1	1	0	1	0	1	0	$C\overline{AB}+AB$
1	0	0	0	1	1	0	0	1	$C\overline{AB}+AB$
1	0	1	0	1	1	0	0	1	$C\overline{AB}+AB$
1	1	0	0	1	1	0	0	1	$C\overline{AB}+AB$
1	1	1	0	1	0	1	0	1	$C\overline{AB}+AB$