

8.2

(a)

C D \ A B		A B			
		00	01	11	10
C D	00	1	1		
	01		1	1	
	11			1	1
	10			1	1

static 1-hazards:

$1101 \leftrightarrow 1111$ and $0100 \leftrightarrow 0101$

C D \ A B		A B			
		00	01	11	10
C D	00			0	0
	01	0			0
	11	0	0		
	10	0	0		

static 0-hazards:

$0001 \leftrightarrow 0011$ and $1000 \leftrightarrow 1001$

(b)

C D \ A B		A B			
		00	01	11	10
C D	00	1	1		
	01		1	1	
	11			1	1
	10			1	1

$$F^t = A'C'D' + A C + B C'D + A'BC' + ABD$$

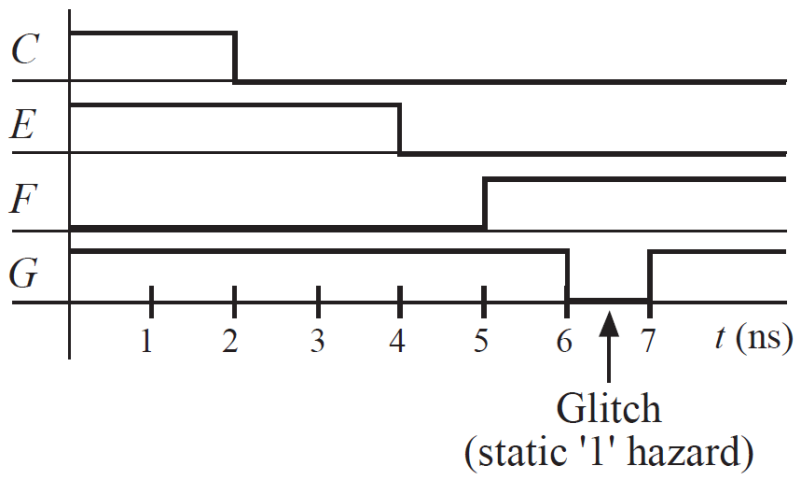
(c)

C D \ A B		A B			
		00	01	11	10
C D	00			0	0
	01	0			0
	11	0	0		
	10	0	0		

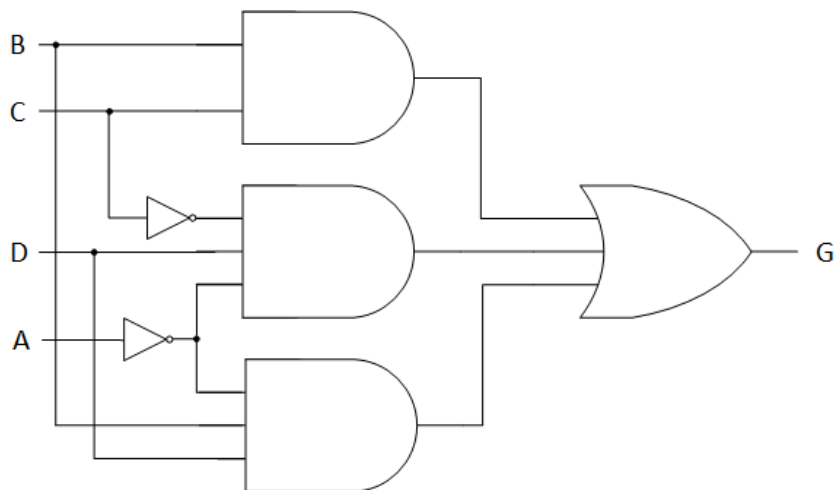
$$F^t = (A + C') (A' + C + D) (B + C + D') (A' + B + C) (A + B + D')$$

8.3

(a)



(b)



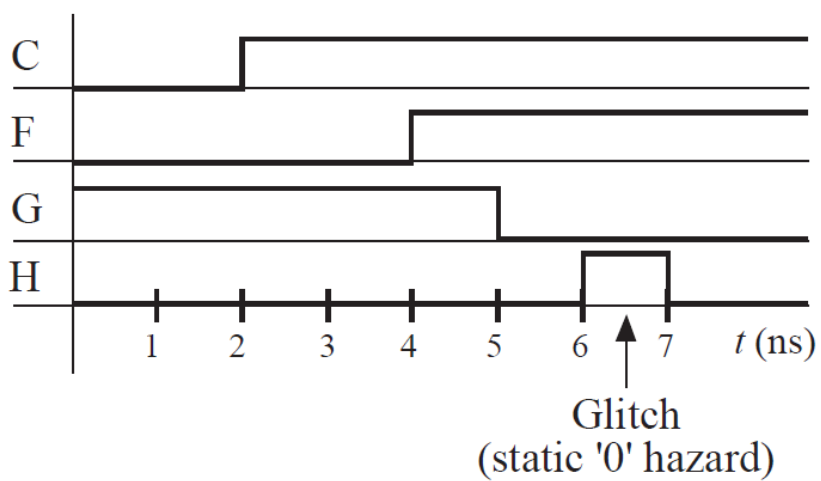
$$G = A'C'D + B C + A'BD$$

8.4

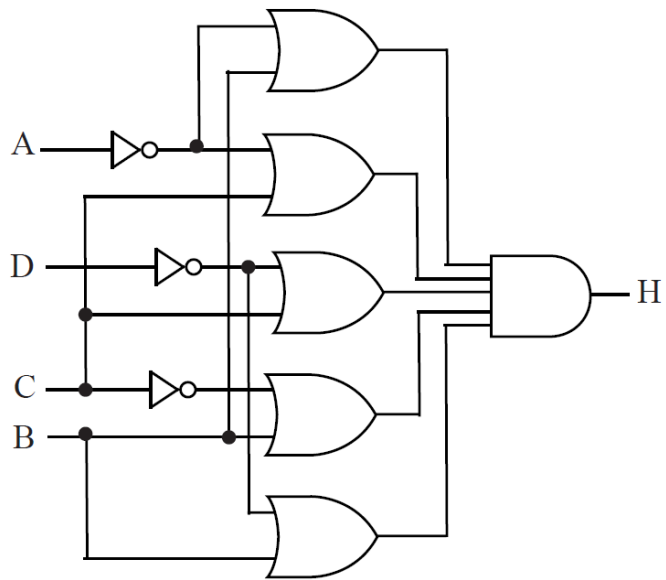
A = 1; B = Z; C = X; D = 1; E = X; F = 0; G = 0; H = X

8.6

(a)



(b)



8.10

