علی صابور ۹۹۴۴۳۱۴۷ گزینه دوم ~~صحیح~~ امتحان آنلاین

الف)

$F(a,b,c,d) = \sum m(2,7,8,10,11,12,13) + d(3,15)$

ab \ cd	00	01	11	10
00	0	0	–	1
01	0	0	1	0
11	1	1	–	0
10	1	0	1	1

PI ها	EPI ها
$\bar{b}c$	$\bar{b}c$
cd	
$a\bar{b}$	
$a\bar{c}\bar{d}$	
$ab\bar{c}$	
~~b~~ abd	

+4 +1

-1 for missed EPI

-2 for incorrect PIs

$F = \bar{b}c + cd + ab\bar{c} + \begin{cases} a\bar{c}\bar{d} \\ a\bar{b} \end{cases}$

+2 -4

ج) با روش کوین - مک‌کلاسکی

Group	Pairs	Quads
✓ 2 ✓ 8	✓ (2, 3) 1 ✓ (2, 10) 8 (8, 10) 2 (8, 12) 4	(2, 3, 10, 11) (1, 8) ~~(2, 3, 12, 13) (1, 10)~~ ~~(2, 10, 3, 11) (8, 1)~~
✓ 3 ✓ 10 ✓ 12	✓ (3, 7) 4 ✓ (3, 11) 8 ✓ ~~(10, 11) 1~~ ~~(12, 13) 1~~	~~(8, 12, 3, 7)~~ (3, 7, 11, 15) (4, 8)
✓ 7 ✓ 11 ✓ 13	(7, 15) 8 ✓ (11, 15) 4 (13, 15) 2	
✓ 15		

+8

على صفايز

PI	2	7	8	10	11	12	13
$\bar{a}\bar{b}\bar{d}$	✓		✓	✓			
$a\bar{c}\bar{d}$	✓		✓	✓		✓	
bcd		✓					✓
abd							
$\bar{b}\bar{d}$	✓			✓	✓		
$ab\bar{c}$	✓					✓	✓
$\bar{a}d$		✓			✓		

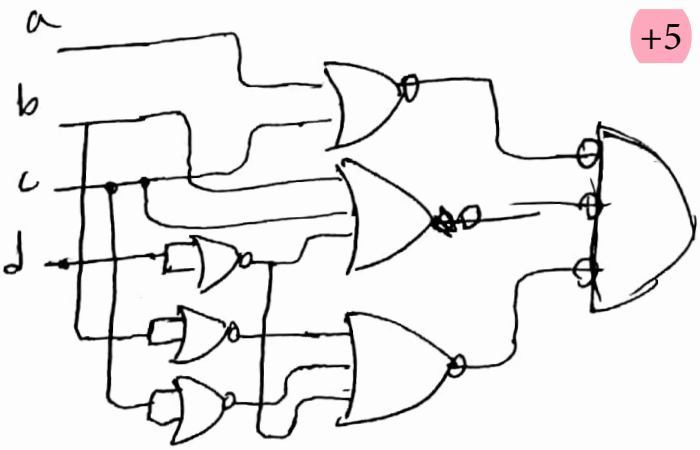
+1

b EPI: $\bar{b}\bar{d}$ -5

AND-OR-INV, NOR-6 (-

NOR - NOR (POS)

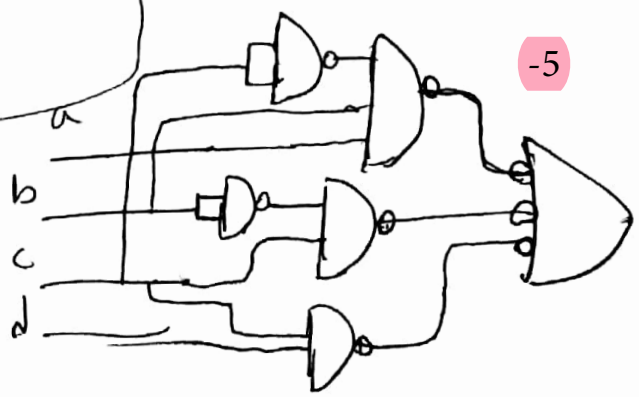
$F = (a+c)(b+c+\bar{d})(\bar{B}+\bar{C}+d)$



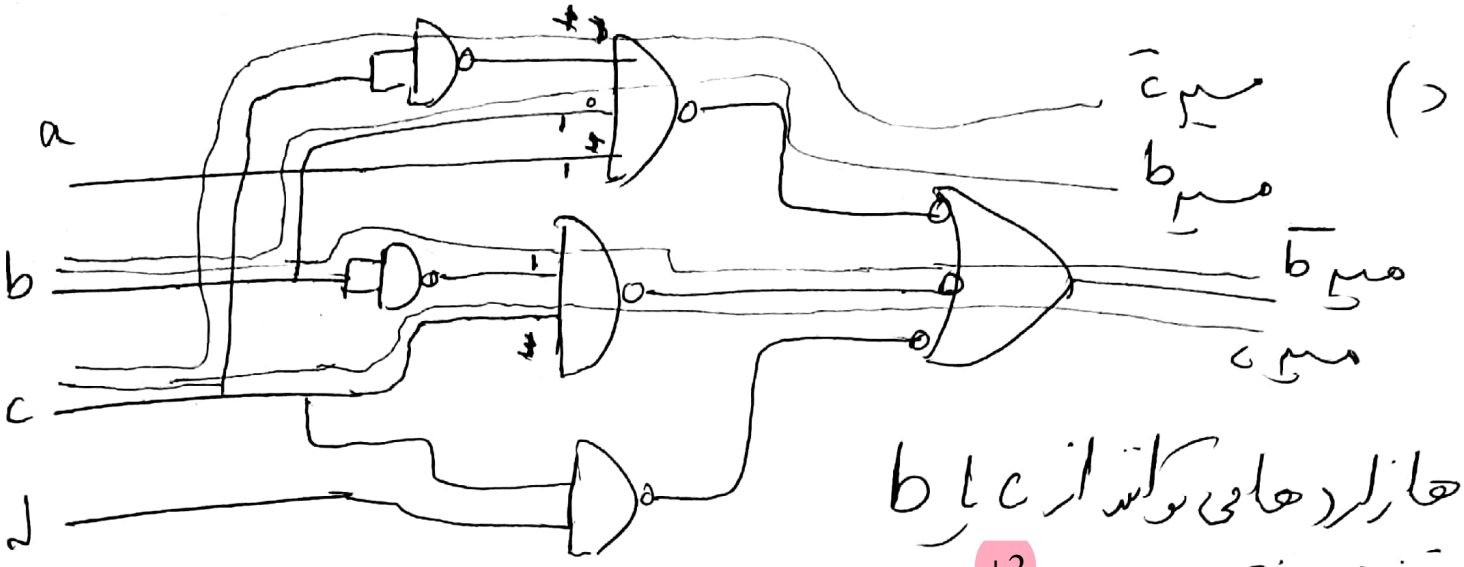
+5

AND - OR - INV (SOP)

$F = \bar{b}c + cd + ab\bar{c}$



-5



abcd

هازارد هایی که از c یا b

+2

ایجاد میشود:

در حالت b به تناقض می خوریم

در حالت d هم به تناقض می خوریم.

علی صفاپور

-4 for missed Table and states