

کوشیزہ نوم - بیٹا دلاور - ۹۷۴۶۳۱۶۶

ص 1

سوال 2:

$$F(a, b, c, d) = \sum m(0, 1, 2, 3, 4, 5, 6, 8, 10) + d(11, 12)$$

قیمت الف:

		\bar{c}		c	
		00	01	11	10
\bar{a}	00	1 m_0	1 m_1	1 m_3	1 m_2
	01	1 m_4	1 m_5		1 m_6
a	11	X m_{12}	X m_{13}		
	10	1 m_8		X m_{11}	1 m_{10}
		\bar{d}		d	\bar{d}

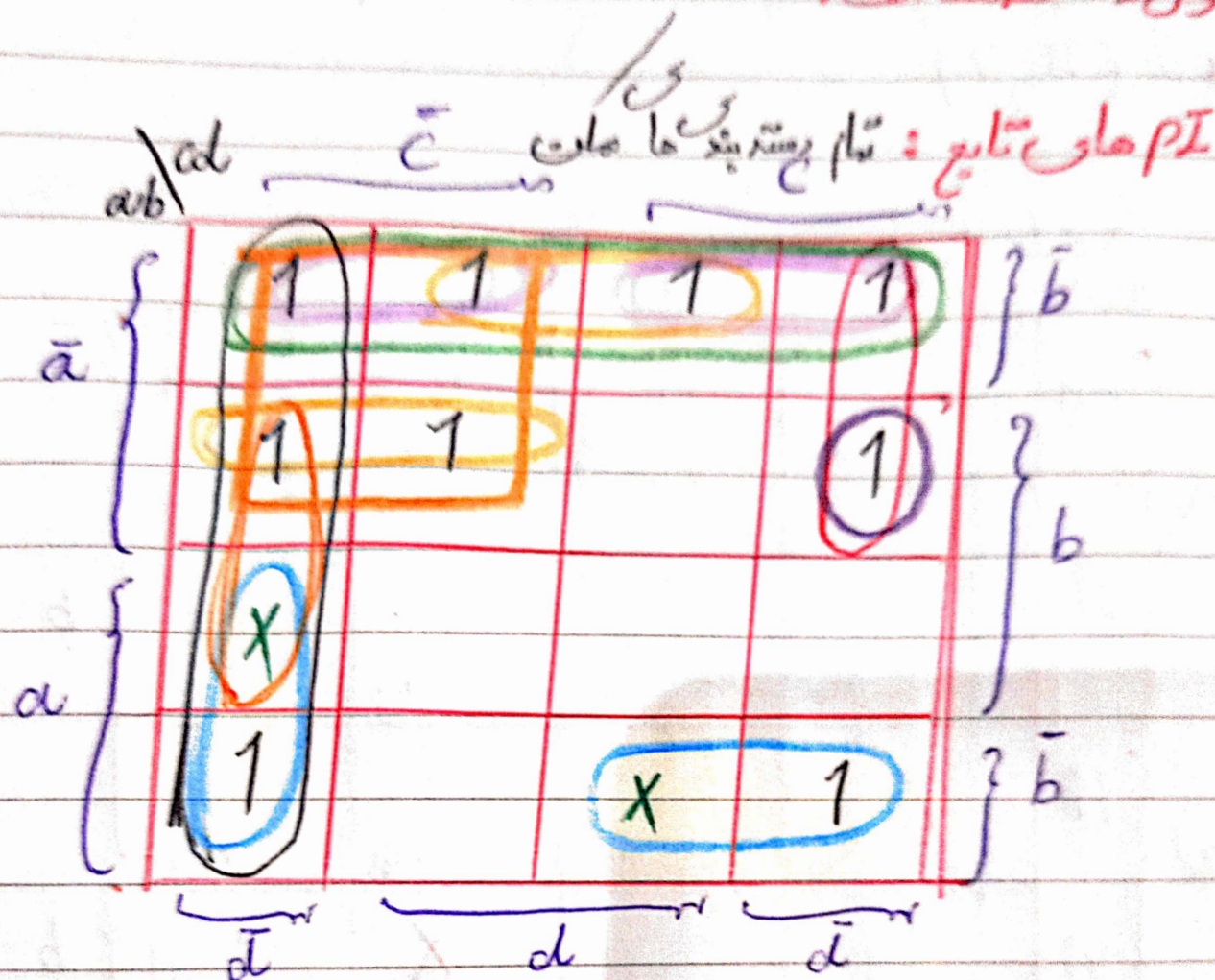
Groupings: $\bar{a}\bar{c}$ (orange), $\bar{a}b$ (green), $\bar{a}c$ (blue), $a\bar{c}$ (blue), $a\bar{b}$ (blue), $a\bar{d}$ (blue), $a\bar{b}c$ (blue), $a\bar{b}cd$ (blue), $a\bar{b}cd$ (blue), $a\bar{b}cd$ (blue).

$$SOP \Rightarrow \bar{a}\bar{c} + \bar{a}\bar{b} + \bar{c}\bar{d} + a\bar{b}c + \bar{a}bcd + \bar{a}\bar{c} + \bar{a}\bar{b} + \bar{a}bcd + \bar{c}\bar{d} + a\bar{b}c + d(\bar{c} + \bar{b} + bcd) + \bar{c}\bar{d} + a\bar{b}c$$

-6

PI: تمام دستاویزات
EPI: تمام دستاویزات

سوال 1 - قسمت الف :



PI :

EpI : $\bar{a}\bar{b}cd$

-2

- | | |
|------------------------|----------------------------|
| 1) $\bar{a}\bar{c}$ | 7: $b\bar{c}\bar{d}$ |
| 2) $\bar{a}\bar{b}$ +2 | 8: $\bar{a}b\bar{c}$ |
| 3) $\bar{c}\bar{d}$ | 9: $\bar{a}\bar{b}\bar{c}$ |
| 4) $\bar{a}\bar{b}c$ | 10: $\bar{a}\bar{b}d$ |
| 5) $\bar{a}bcd$ | 11: $a\bar{c}\bar{b}$ |
| 6) $a\bar{c}\bar{d}$ | 12: $\bar{a}\bar{c}d$ |

-2 for missed
PIs and
surplus wrong
PIs

سوال 2 - قسمت 1 :

3

$$d(\bar{c} + \bar{b} + bcd) + \bar{c}\bar{d} + ab\bar{c}$$

-5

