стр 36/8

б) $f(A,B,C,D) = A\bar{B} + C + \bar{A}\bar{C}D + B\bar{C}D$

$f = A\bar{B}(C+\bar{C})(D+\bar{D}) + (A+\bar{A})(B+\bar{B})C(D+\bar{D}) + \bar{A}(B+\bar{B})\bar{C}D + (A+\bar{A})B\bar{C}D =$

$= A\bar{B}\bar{C}\bar{D} + A\bar{B}\bar{C}D + A\bar{B}C\bar{D} + A\bar{B}CD + \bar{A}\bar{B}\bar{C}D + \bar{A}BCD + \bar{A}B\bar{C}D + \bar{A}\bar{B}\bar{C}D =$

$= A\bar{B}C\bar{D} + A\bar{B}CD + ABC\bar{D} + ABCD + A\bar{B}\bar{C}\bar{D} + \bar{A}BCD + \bar{A}B\bar{C}D + \bar{A}\bar{B}\bar{C}D$

1011 1010 1001 1000 0111 0110 0011 0010 0101 0001 1101

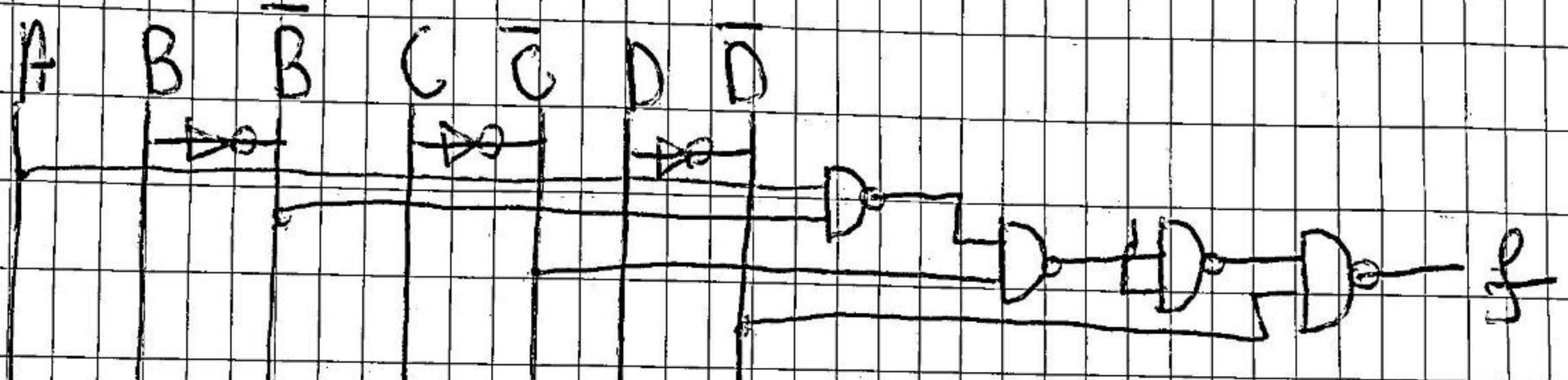
AB \ CD	00	01	11	10
00	1	1	1	1
01	1	1	1	1
11	1	1	1	1
10	1	1	1	1

функцията $f = A\overline{B} + \overline{C}D + CD + C\overline{D}$

$f = A\overline{B} + C + D$

Базис „И-НЕ" 2 - входови елементи

$f = A\overline{B} + C + D = \overline{A\overline{B}} \cdot \overline{C} \cdot \overline{D}$



$f(A,B,C,D) = ABC + AB\overline{D} + A\overline{C} + \overline{A}\overline{B}C\overline{D} + \overline{A}C$

$f = ABC(D+\overline{D}) + AB(C+\overline{C})\overline{D} + A(B+\overline{B})\overline{C}(D+\overline{D}) + \overline{A}\overline{B}\overline{C}\overline{D} + \overline{A}(B+\overline{B})C(D+\overline{D}) =$

$= ABCD + ABC\overline{D} + \cancel{ABC\overline{D}} + AB\overline{C}\overline{D} + AB\overline{C}D + \cancel{AB\overline{C}\overline{D}} + A\overline{B}\overline{C}D + A\overline{B}\overline{C}\overline{D} + \overline{A}\overline{B}\overline{C}\overline{D} + \overline{A}BCD + \overline{A}BC\overline{D} + \overline{A}\overline{B}CD + \overline{A}BCD$

1111 1110 1100 1101 1001 1000 = 0000 0111 0110 0011 0010

УУК

AB \ CD	00	01	11	10
00	1		1	1
01			1	1
11	1	1		
10	1	1		

$f_{МДНФ} = \bar{A}B\bar{D} + A\bar{C} + \bar{A}C + BC$

Базис „И-НЕ" 2-входови

$f = \overline{\bar{A}\,\bar{B}\,\bar{D} + A\bar{C} + \bar{A}C + BC} =$

$= \overline{\bar{A}\,\bar{B}\,\bar{D}} \cdot \overline{A\bar{C}} \cdot \overline{\bar{A}C} \cdot \overline{BC} =$