## 1.SOP

a)Escreva a SOP Padrao

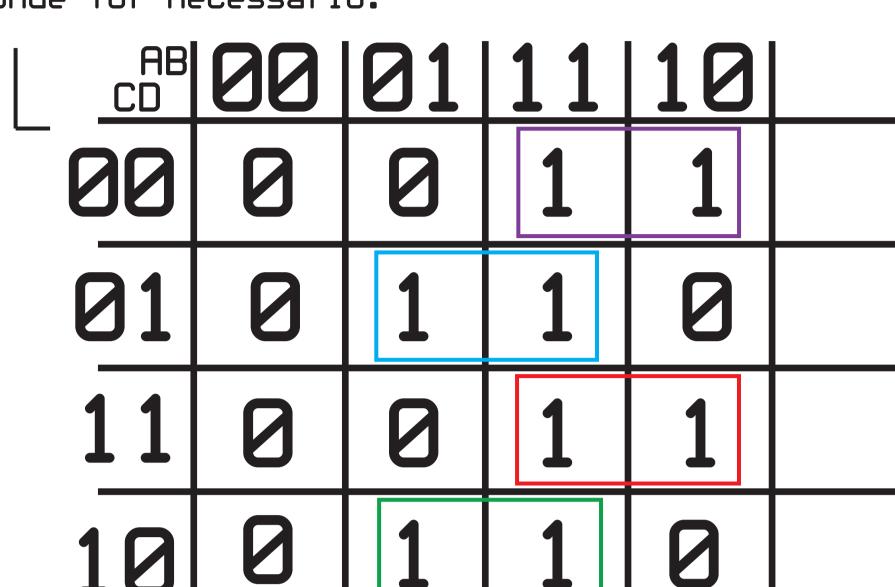
f(A, B, C) = (m5+m6+m8+m11+m12+m13+m14+m15)

b) Apresente o K-map para SOP Padrao

| – AB | 00 | 01 | 11 | 10 |  |
|------|----|----|----|----|--|
| 00   | 0  | 0  | 1  | 1  |  |
| 01   | 0  | 1  | 1  | 0  |  |
| 11   | 0  | 0  | 1  | 1  |  |
| 10   | 0  | 1  | 1  | 0  |  |

Tabela Verdade

c) Marque as aglutinacoes possiveis no K-map, empregando replicacoes onde for necessario.



d)Obtenha a SOP minima, a partir do K-map.

• 
$$A=1/0$$
  $B=1$   $C=0$   $D=1$   $B.\overline{C}.D$ 

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

## 2. POS

a)Escreva a POS Padrao f(A, B, C) = (M0.M1.M2.M3.M4.M7.M9.M10)

b) Apresente o K-map para POS Padrao

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| <u>CD</u>   | שט |   | <b>T</b> T | 10 |  |  |  |
|---|----|---|------------|----|--|--|--|
| 00  | 0  | 0 | 1          | 1  |  |  |  |
| 01  | 0  | 1 | 1          | 0  |  |  |  |
| 11  | 0  | 0 | 1          | 1  |  |  |  |
| 10  | 0  | 1 | 1          | 8  |  |  |  |
| c)Marque as aglutinacoes possiveis no K-map, empregando replicacoes |    |   |            |    |  |  |  |

onde for necessario.

| CD | <b>UU</b> |   |   | 10 |   |
|----|-----------|---|---|----|---|
| 00 | 0         | 0 | 1 | 1  | 8 |
| 01 | 0         | 1 | 1 | 0  | 0 |
| 11 | 0         | 0 | 1 | 1  | 0 |
| 10 |           | 1 | 1 | 0  | 0 |
|    | 8         | 8 | 1 | 1  | 8 |
|    |           |   |   |    |   |

d)Obtenha a POS minima, a partir do K-map.

• A=0 B=0/1 C=1 D=1 A+
$$\overline{C}$$
+ $\overline{D}$ 

$$\bullet$$
 A=0/1 B=0 C=1 D=0 B+ $\overline{C}$ +D

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