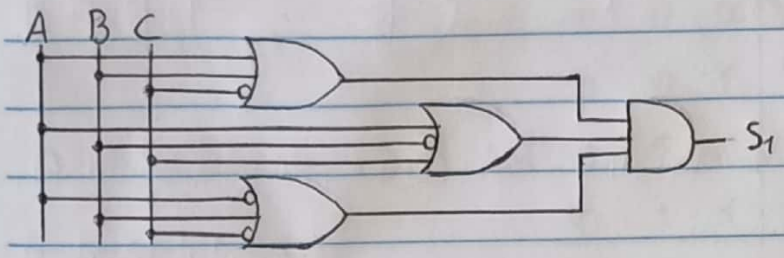
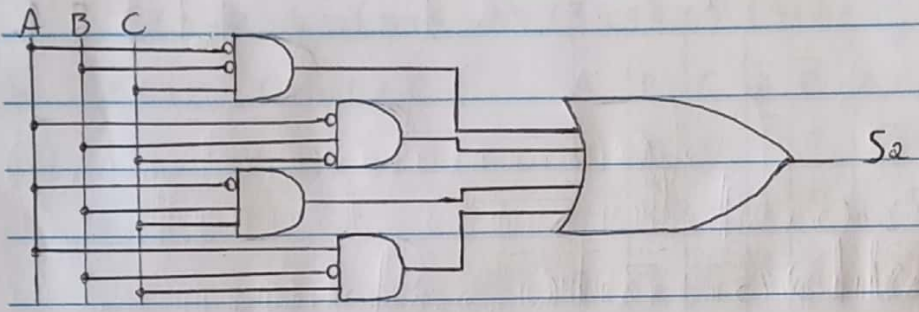
Lista 02

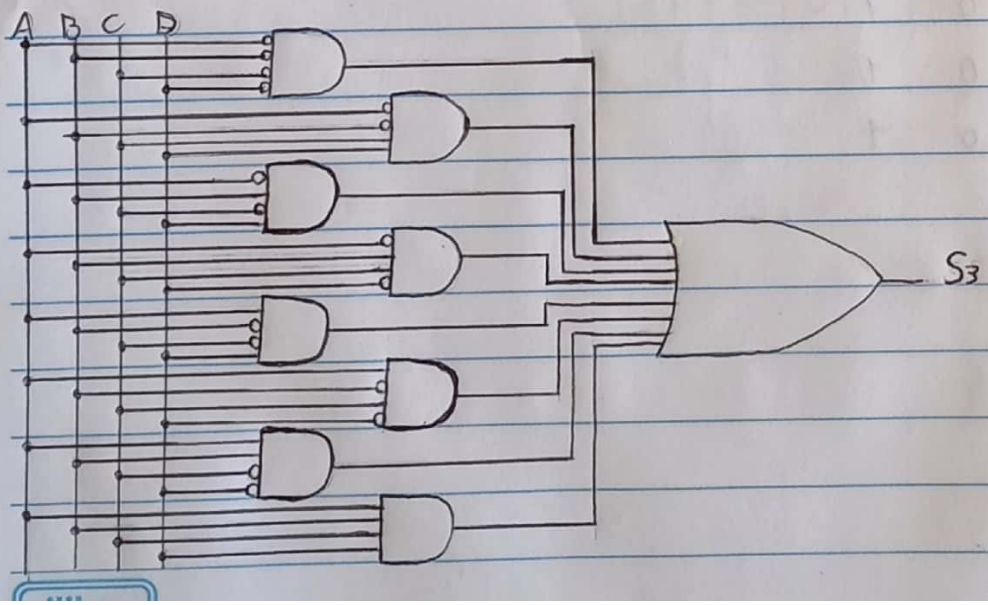
① a) $S_1 = (A + B + \bar{C}) \cdot (A + \bar{B} + C) \cdot (\bar{A} + \bar{B} + C)$



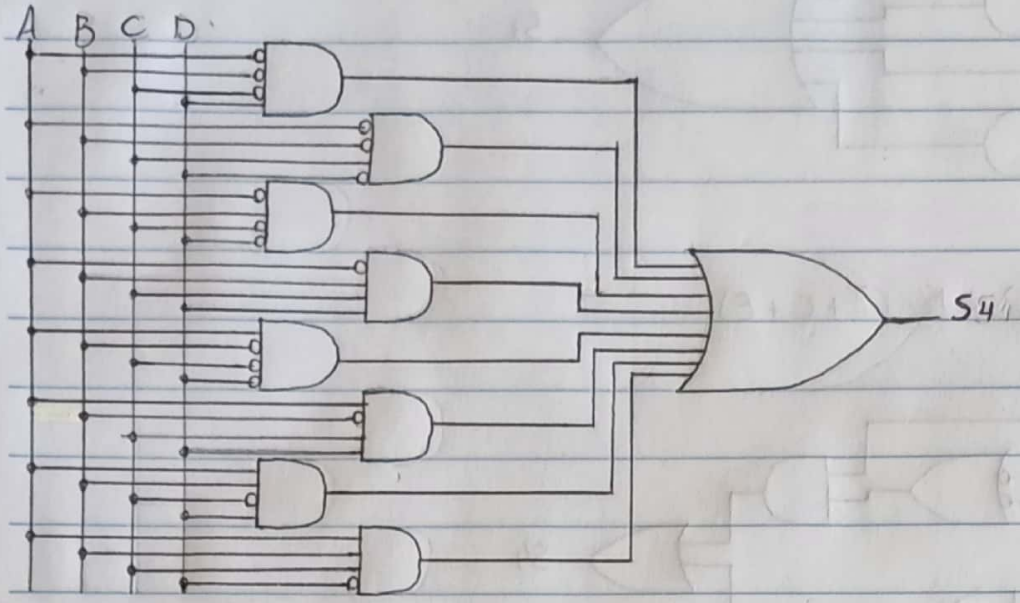
b) $S_2 = (\bar{A} \cdot \bar{B} \cdot C) + (\bar{A} \cdot B \cdot \bar{C}) + (\bar{A} \cdot B \cdot C) + (A \cdot \bar{B} \cdot C)$



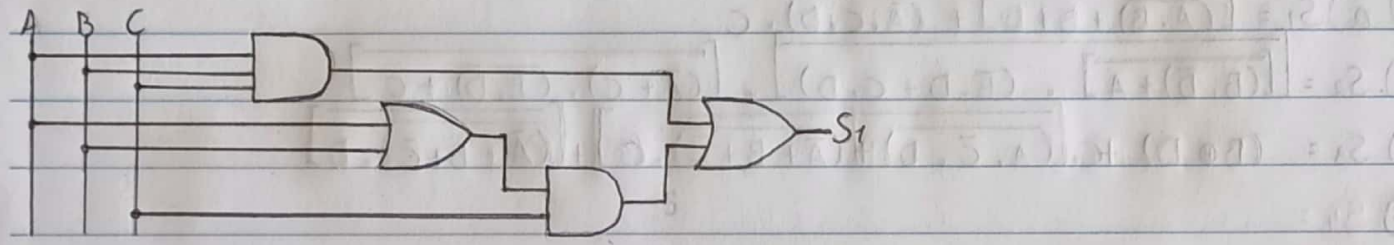
c) $S_3 = (\bar{A} \cdot \bar{B} \cdot \bar{C} \cdot \bar{D}) + (\bar{A} \cdot \bar{B} \cdot C \cdot D) + (\bar{A} \cdot B \cdot \bar{C} \cdot D) + (\bar{A} \cdot B \cdot C \cdot \bar{D}) + (A \cdot \bar{B} \cdot \bar{C} \cdot D) + (A \cdot \bar{B} \cdot C \cdot \bar{D}) + (A \cdot B \cdot \bar{C} \cdot \bar{D}) + (A \cdot B \cdot C \cdot D)$



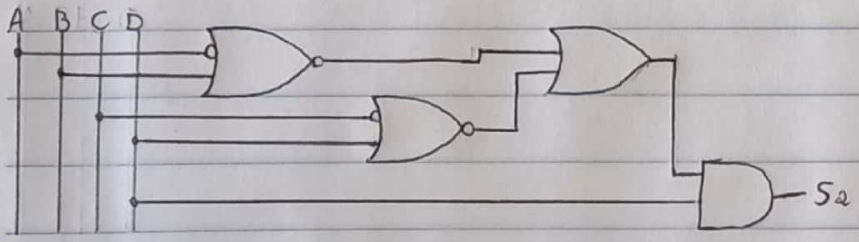
d) $S_4 = (\bar{A}.\bar{B}.\bar{C}.D) + (\bar{A}.\bar{B}.C.\bar{D}) + (\bar{A}.B.\bar{C}.\bar{D}) + (\bar{A}.B.C.D) + (A.\bar{B}.\bar{C}.\bar{D}) + (A.\bar{B}.C.D) + (A.B.\bar{C}.D) + (A.B.C.\bar{D})$



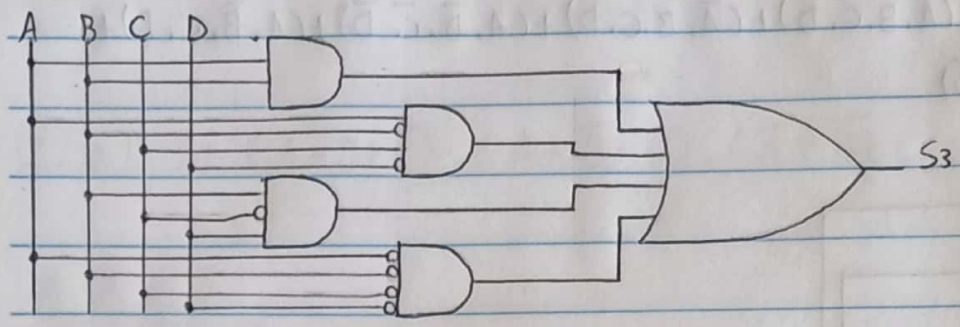
② a) $S_1 = A.B.C + (A+B).C$



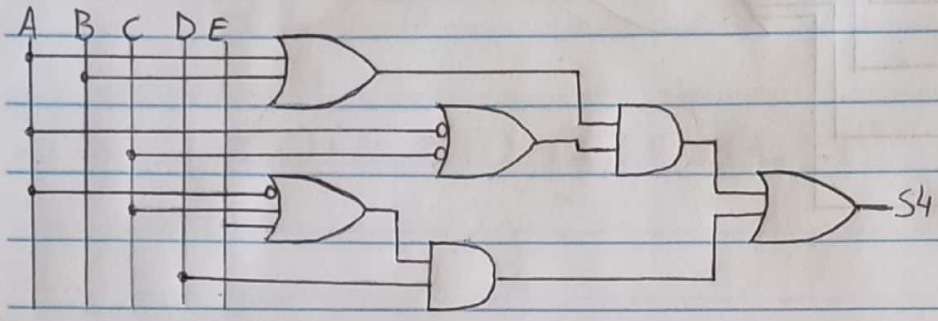
b) $S_2 = [\overline{(\bar{A}+B)} + \overline{(\bar{C}.D)}].\bar{D}$



c) $S_3 = A.B + (A.\bar{B}.C.\bar{D}) + (B.\bar{C}.D) + (\bar{A}.\bar{B}.\bar{C}.\bar{D})$



d) $S_4 = (A + B) \cdot (\bar{A} + \bar{C}) + D \cdot (\bar{A} + C + E)$



③ a) $S_1 = \overline{[\overline{(A \cdot B)} + B + D]} + \overline{(\bar{A} \cdot C \cdot D)} \cdot C$

b) $S_2 = \overline{[\overline{(B \cdot \bar{D})} + A] \cdot (\bar{B} \cdot D + C \cdot D)} \cdot \overline{[\overline{(\bar{A} + C) \cdot (B \cdot \bar{D})} + C]}$

c) $S_3 = (B \oplus D) + \overline{[\overline{(A \cdot \bar{C} \cdot D)} + \overline{(\bar{A} + B + \bar{C})} \cdot C]} + \overline{[\overline{(\bar{A} + B + \bar{C})} \cdot D]}$

d) $S_4 =$