ASSIGMENT 2: COMBINATIONAL CIRCUIT

1. Explain De-Morgan's Theorem
2. Simply 1. A'B+A'BC'+A'BCD+A'BC'D'E
   2. (P+Q+R)(P'+Q'+R')P
   3. Prove A'BC+AB'C+ABC' = AB+AC+BC
   4. Prove AB'C+A'BC+ABC = AC+BC
   5. XYZ+X'Y+XYZ'
   6. B'D+A'BC'+ACD+A'BC
   7. F(x,y,z) = (xy+z)(y+xz)
3. Convert the given expression in standard POS form
   Y= A (A+B+C).
4. Find the Boolean function using K-map and also its complement F(A,B,C,D) = £(1,2,3,4,6,8,9,10,11,12,14).
5. Simply the Boolean function using K-map
   F = A'B'C'+B'CD'+A'BCD'+AB'C'

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