Quiz-2

① Complement :

$$AB(BC' + (C'D').(A'+C))$$

dual form :

$$(A+B)+((B+C').(C'+D')+(A'.C))$$

complement form :

$$(A'+B')+((B'+C).(C+D)+(AC'))$$

② $F(A,B,C) = \Sigma(0,4,6)$

$= \Sigma(000, 100, 110)$

$= A'B'C' + AB'C' + ABC'$

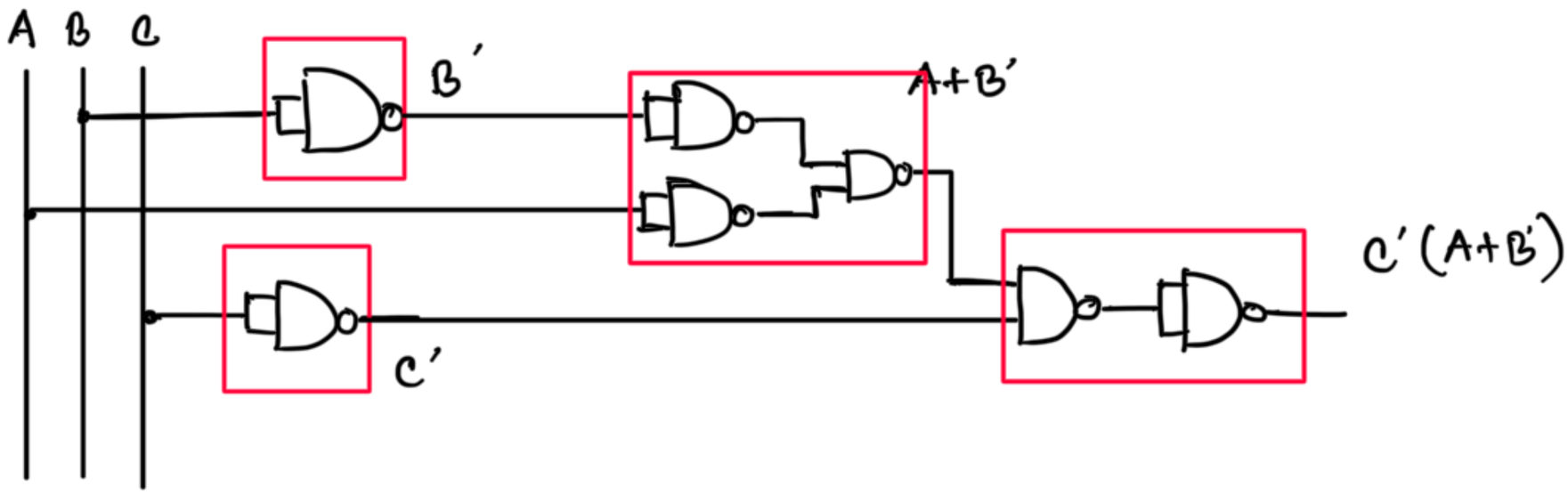
$= B'C'(A'+A) + ABC'$

$= B'C' + ABC'$

$= C'(B'+AB)$

$= C'(B'+A)(B'+B)$

$= C'(A+B')$



③ $F(A,B,C,D) = A+B'C$

$= (A+B')(A+C)$

$= (A+B'+CC'+DD')(A+C+BB'+DD')$

$= (A+B'+C+DD')(A+B'+C'+DD')$

$(A+B+C+DD')(A+B'+C+DD')$

$= (A+B'+C+D)(A+B'+C+D')(A+B'+C'+D)$

$(A+B'+C'+D')(A+B+C+D)(A+B+C+D')$

$(A+B'+C+D)(A+B'+C+D')$

$= 0100, 0101, 0110, 0111, 0000, 0001$

$= \Pi(4,5,6,7,0,1)$