CSE260 Assignment 2

Section 14
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Ans: to: que: no: 1

1] a] $x'yz' + x'yz + xyz + x'yz'$

$= x'yz' + x'yz + xyz$

$= x'y(z'+z) + xyz$

$= x'y + xyz$

$= y(x' + xz)$

$= y(x'+x)(x'+z)$

$= y(x'+z)$

b] $(x'+y')(x+y)$

$= x.x' + x'y + xy' + y.y'$

$= x'y + xy' + 0$

$= x'y + xy'$

c] $(a'+b)'(a+b')'$

$= \cancel{(a')' + (b)'}.($

$= (a)'.(b)'.(a).(b')'$

$= a.b'.a'.b$

$= 0$

Ans: to que : no : 2

2] a) $F = x'y' + xy'$

$= y'(x' + x)$

$= y'$

After complimanting F we get,

$F' = y$ (Ans)

2] b) $F = (x' + y + z')(x' + y')(x + z')$

After complimanting F we get,

$F' = ((x' + y + z')(x' + y')(x + z'))'$

$= (x' + y + z')' + (x' + y')' + (x + z')'$

$= xy'z + xy + x'z$

$= x(y + y'z) + x'z$

$= x(y + y')(y + z) + x'z$

$= x(y + z) + x'z$

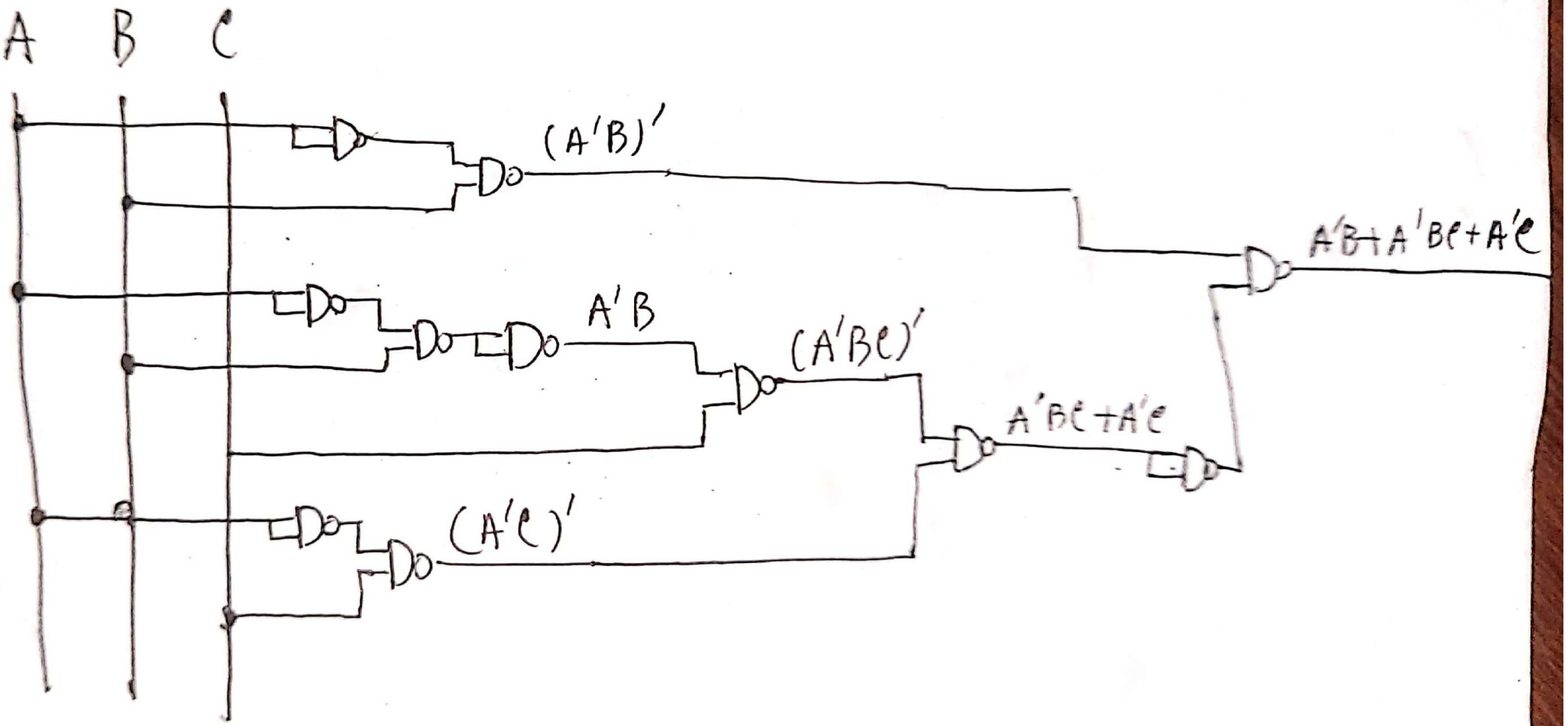
$= xy + xz + x'z$

$= xy + z(x + x')$

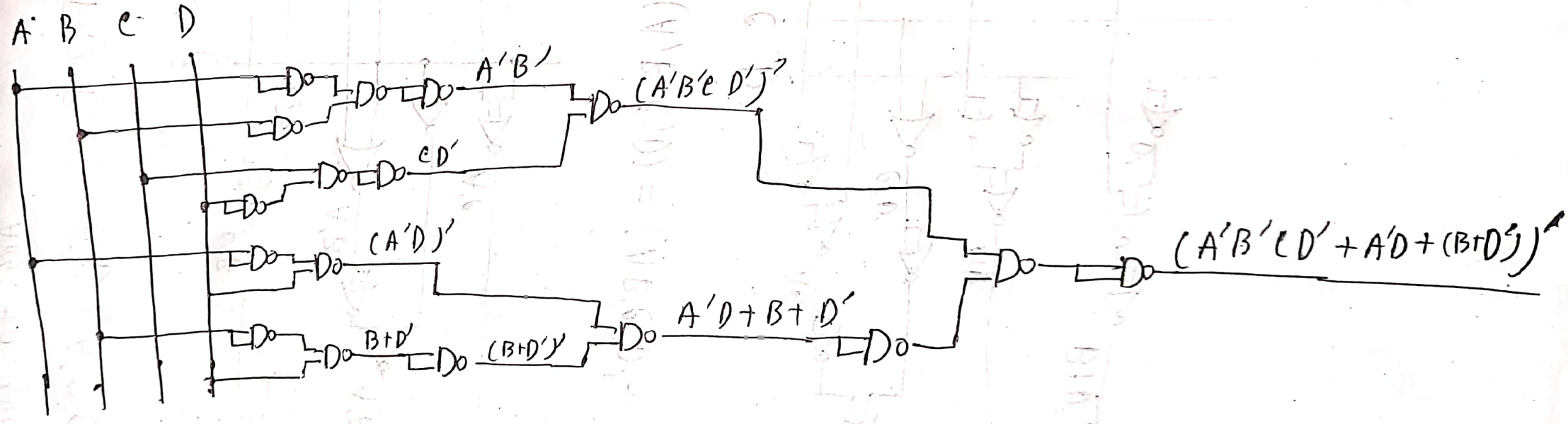
$= xy + z$ (Ans)

Ans: to: que: no: 3

3] a] $F(A, B, C) = A'B + A'BC + A'C$

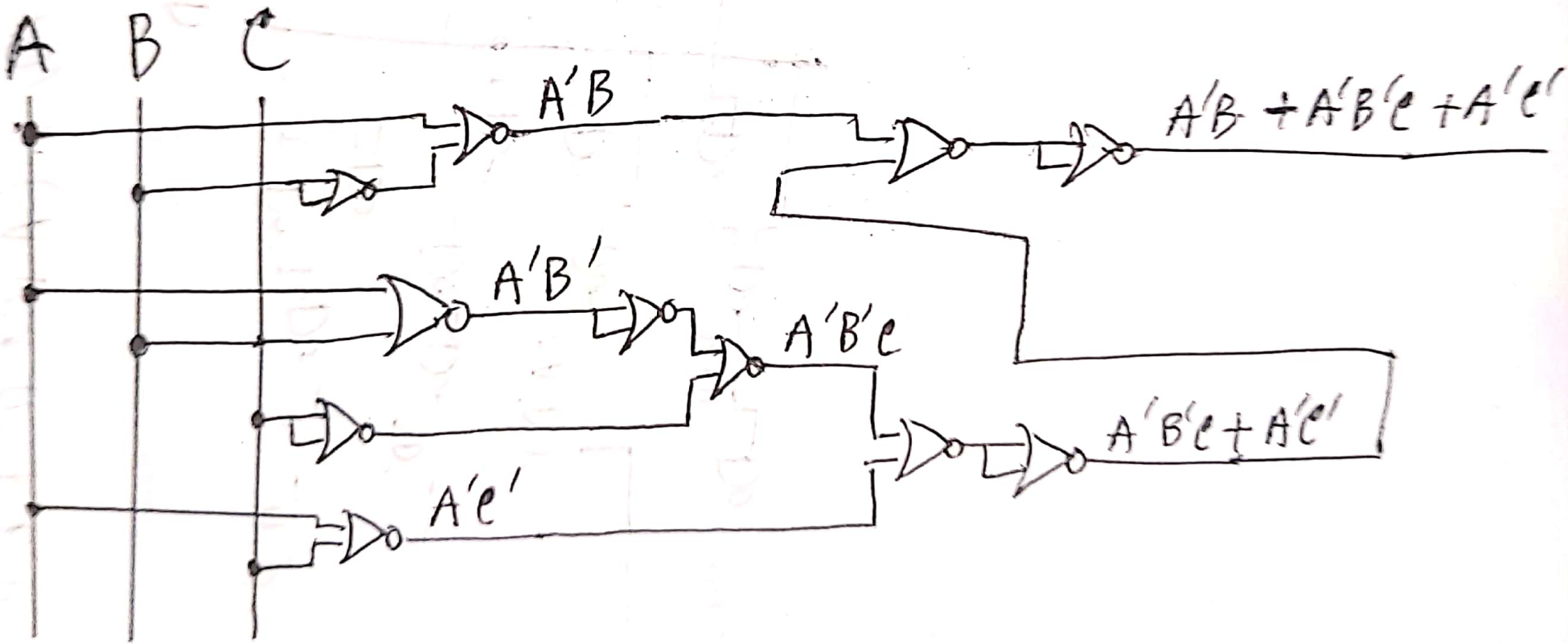


b] $F(A,B,C,D) = (A'B'C D' + A'D + (B+D'))'$



Ans: to: que: no: 4

4a] $F(A,B,C) = A'B + A'B'C + A'C'$



4b] $F(A,B,C,D) = (AB'C'D' + AD + (B+D'))'$