*1-Given the following functions represented in the maps,*

*simplify these functions into sum of products and product of*

*sums forms.*

c-F(ABC) =

A 0 1

BC

|  |  |
| --- | --- |
| 1 | 1 |
| 1 | 1 |
|  |  |
| 1 |  |

00 ==> B’ + A’C’

01 ==> (B’+C’) . (A’+B’)

11

10

c-F(ABCD)

AB 00 01 11 10

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | 1 | 1 | 1 |
| 1 |  |  |  |
|  | 1 |  |  |
| 1 | 1 | 1 | 1 |

CD

00 ==> D’ + A’BC + A’B’C’

01 ==>(A’+D’).(B’+C+D’)

.(B+D’+C’)

11

10

*2-Represent the following functions in Karnaugh map then*

*simplify them.*

*c-F (a,b,c)= ∑ (0,1,2,3,7)*

a 0 1

bc

|  |  |
| --- | --- |
| 1 |  |
| 1 |  |
| 1 | 1 |
| 1 |  |

00 ==> a’ + bc

01

11

10

*d-F (x,y,z)= ∑ (3,5,6,7)*

x 0 1

yz

|  |  |
| --- | --- |
|  |  |
|  | 1 |
| 1 | 1 |
|  | 1 |

00 ==> xz + xy + yz

01

11

10

*Thank you*