



UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

IS 1202 - Computer System

Tutorial (Activity) 05

Introduction To Boolean Algebra And Logic Operators

- Do the Tutorial Individually and Upload.
- Rename the file with your temporary index number and upload as a PDF file.

Simplify the Following Boolean Expression using Karnaugh maps.

1. $F = AB + A'B$
2. $F = AB + AB'$
3. $F = AB + A'B'$
4. $F = AB + AB' + A'B'$
5. $F = A'B + AB' + A'B'$
6. $F = AB + A'B + AB' + A'B'$
7. $F = A'B'C' + A'B'C$
8. $F = A'BC' + A'BC$
9. $F = AB'C' + AB'C$
10. $F = ABC' + ABC$
11. $F = A'B'C' + A'B'C + A'BC'$
12. $F = A'BC' + A'BC + AB'C'$
13. $F = AB'C' + AB'C + ABC'$
14. $F = AB'C + ABC' + ABC$
15. $F = A'B'C' + A'B'C + A'BC' + AB'C'$
16. $F = A'BC' + A'BC + AB'C' + AB'C$
17. $F = AB'C' + AB'C + ABC' + ABC$
18. $F = A'B'C' + A'B'C + A'BC' + A'BC + AB'C' + AB'C$
19. $F = A'BC' + A'BC + AB'C' + AB'C + AB'C' + AB'C + ABC' + ABC$
20. $F = A'B'C' + A'B'C + A'BC' + A'BC + AB'C' + AB'C + AB'C' + AB'C + ABC' + ABC$