

Doon Public School

A Senior Secondary School
Sector- 21, Panchkula. Ph: 0172- 2590514

Assignment– 4

Subject: Computer Science

Class: XI

Date: 22-08-2018

INSTRUCTIONS:

- Do the given assignment in your assignment note book.

Q1) Simplify

- i) $\overline{ABC} + \overline{ABC} + \overline{ABC} + \overline{ABC}$
- ii) $\overline{AB}(A + B)(B + B)$

Q2) Identify each of these logic gates by name, and complete their respective truth tables:



A	B	Output
0	0	
0	1	
1	0	
1	1	



A	B	Output
0	0	
0	1	
1	0	
1	1	



A	B	Output
0	0	
0	1	
1	0	
1	1	



A	B	Output
0	0	
0	1	
1	0	
1	1	



A	B	Output
0	0	
0	1	
1	0	
1	1	



A	Output
0	
1	



A	B	Output
0	0	
0	1	
1	0	
1	1	

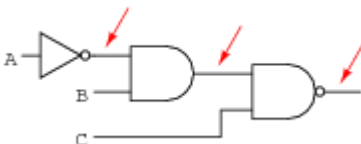


A	B	Output
0	0	
0	1	
1	0	
1	1	



A	B	Output
0	0	
0	1	
1	0	
1	1	

Q3) Convert the following logic gate circuit into a Boolean expression, writing Boolean sub-expressions next to each gate output in the diagram:



Q4) Use Boolean algebra to simplify the following logic gate circuit:

