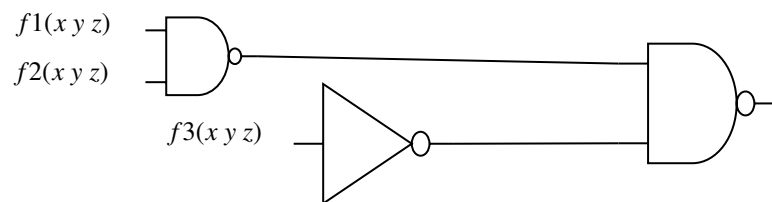


## GATE QUES - CS 2002 SOLUTION

### 1 QUES

1. Consider the following logic circuit where inputs are functions  $f_1, f_2, f_3$  and output is ?:



TRUTH - TABLE

x	y	z	y(output)
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0

C \ AB				
	00	01	11	10
0	0	0	0	0
1	0	0	0	1

The final expression is of output is  $Y = F(x,y,!z)$

Logic for the code will be  $Y = X \& \& Y \& \& !Z$