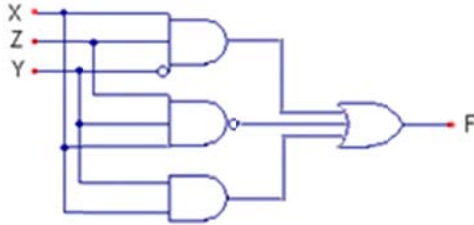


1. Analog – continuous values (e.g. air pressure). Digital – discrete values (e.g. computer).
2. See lecture notes.

3.

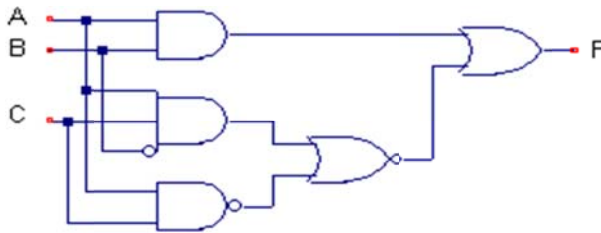


4.

$$F = \bar{R}.S.\bar{T} + R.\bar{S}.\bar{T} + R.\bar{S}.T$$

5. 1010

6.



A	B	C	F
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	1

7.

$$F = \overline{Z.(W + X).(X \oplus Y)}$$

8. Solutions may differ depending on your chosen assignment.

A => Alarm. '1' is activated.

M => Master Switch, '1' is on.

V => Vault. '1' is disturbed.

D => Door to bank. '1' is open.

S => Guards Key. '1' is switch operated.

For this assignment, $A = M.(V + D.\bar{S})$

