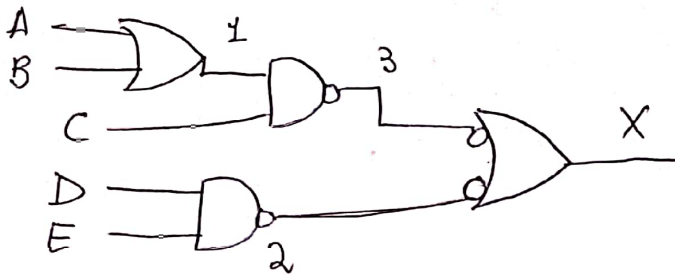
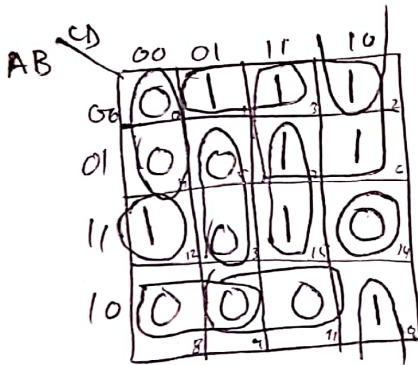


Q.1



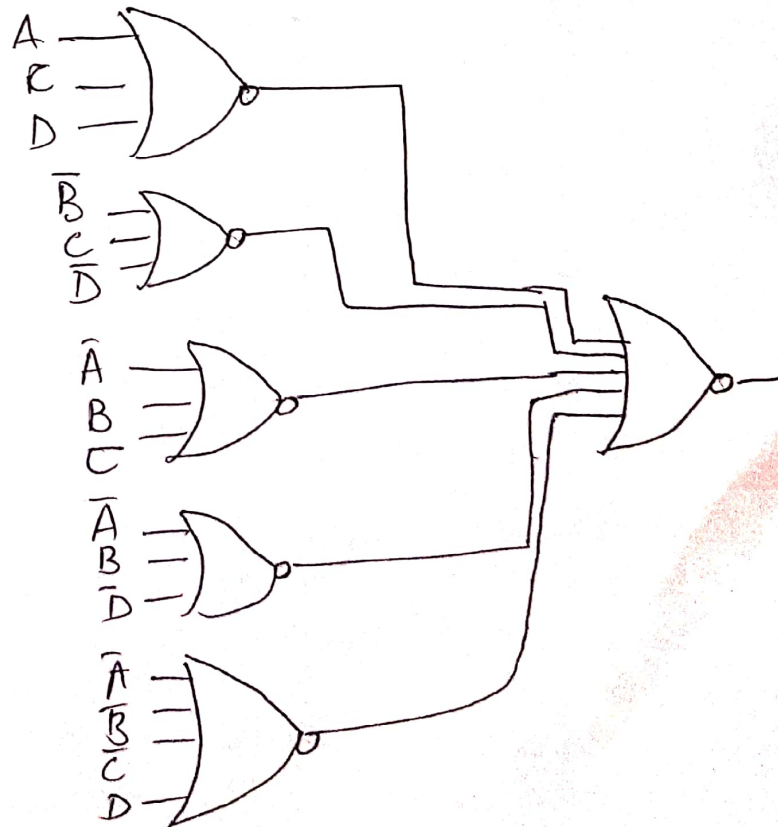
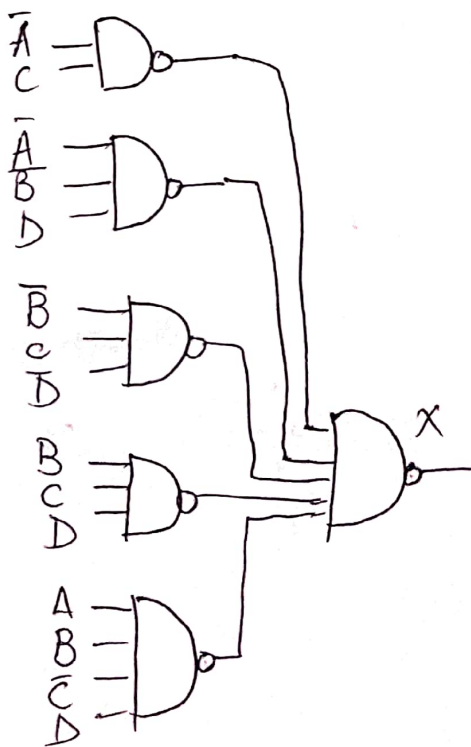
Output will be High only when
 A ~~or~~ B High and C High
 OR
 D and E both are High.

Q.2



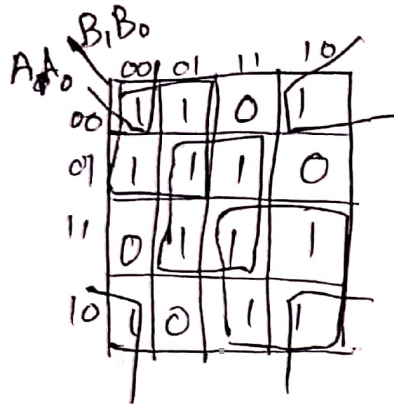
$$X = \bar{A}C + \bar{A}\bar{B}D + \bar{B}C\bar{D} + BCD + AB\bar{C}\bar{D}$$

$$X = (A+C+D)(\bar{B}+C+\bar{D})(\bar{A}+B+C)(\bar{A}+B+\bar{D})(\bar{A}+\bar{B}+\bar{C}+D)$$



0.3

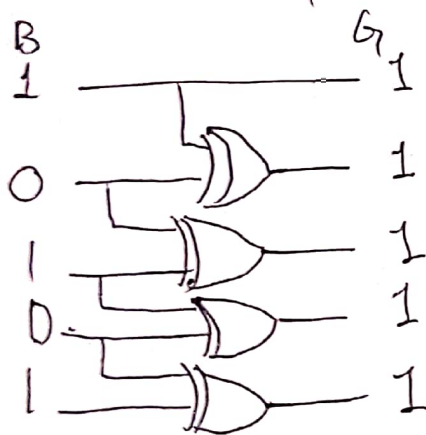
	A_1	A_0	B_1	B_0	X
0	0	0	0	0	1
1	0	0	0	1	1
2	0	0	1	0	1
3	0	0	1	1	0
4	0	1	0	0	1
5	0	1	0	1	1
6	0	1	1	0	0
7	0	1	1	1	1
8	1	0	0	0	1
9	1	0	0	1	0
10	1	0	1	0	1
11	1	0	1	1	1
12	1	1	0	0	0
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	1



$$X = \bar{A}_1 \bar{B}_1 + A_0 B_0 + A_1 B_1 + \bar{A}_0 \bar{B}_0$$

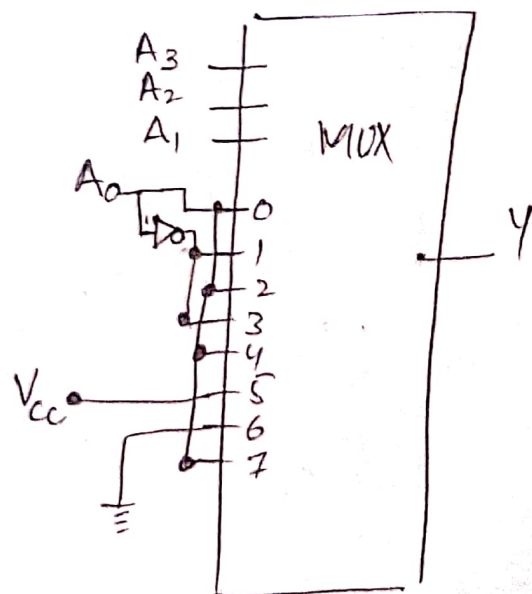
$$X = (A \oplus B_1) + (A_0 \oplus B_0)$$

0.4

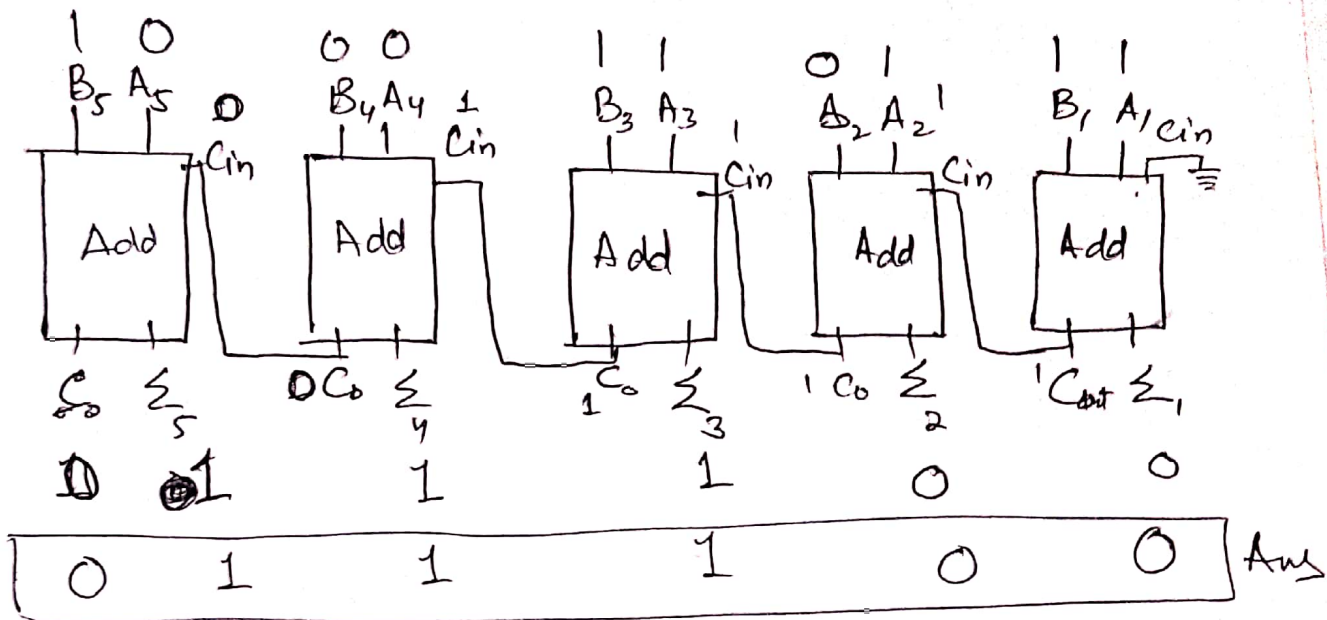


0.5

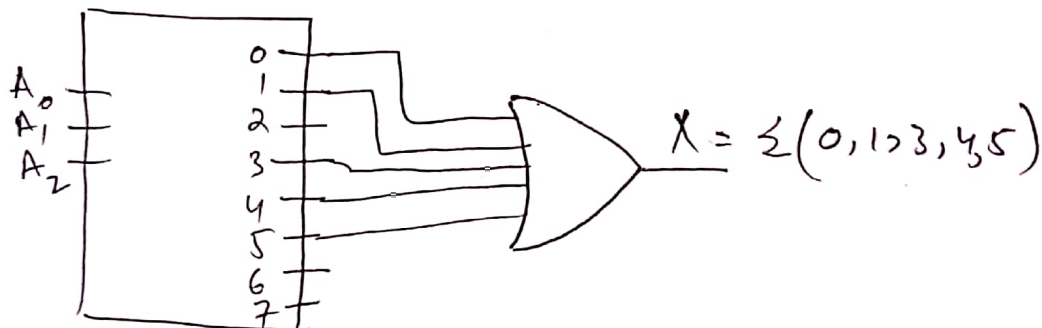
	A_3	A_2	A_1	A_0	Y
0			0	0	$Y = A_0$
1			0	1	$Y = \bar{A}_0$
2			0	0	$Y = A_0$
3			0	1	$Y = \bar{A}_0$
4			0	0	$Y = A_0$
5			0	1	$Y = 1$
6			0	0	$Y = 0$
7			0	1	$Y = A_0$



Q.6



Q.7



Q.8

