Assignment # 2.

Q.1. Convert these into their standard form:-

a) $y = \bar{a}b + abc + a\bar{c}$

b) $y = (a+b)(a+\bar{b}+\bar{c})\,b$

c) $y = a + \bar{a}\bar{b} + abc$

Q.2. Solve following using k-map:-

a) $y = \bar{a}b + ac$.

b) $y = \Sigma(0, 2, 5, 7, 8, 10, 11, 15)$

c) $y = \Pi(0, 1, 2, 4, 6)$

d) $y = \Sigma(0, 2, 4) + d(1, 6, 15)$

e) $y = \Sigma(0, 1, 2, 3, 4, 6, 12, 14, 15)$

f) $y = \Pi(0, 1, 2, 3, 4, 6, 8, 9, 10, 11, 12, 14)$

Q.3. Define Redundent terms in k-map.

Q.4. write SOP & POS eqn & Π & Σ notation for given truth table:-

a	b	c	y
0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	0
1	1	0	1
1	1	1	0